DICTIONARY,

PRACTICAL, THEORETICAL, AND HISTORICAL,

COMMERCE

COMMERCIAL NAVIGATION.

ILLUSTRATED WITH MAPS AND PLANS.

BY

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MEMBER OF THE INSTITUTE OF FRANCE.

A NEW EDITION,

CORRECTED THROUGHOUT, ENLARGED, AND IMPROVED.

Tutte le invenzioni le più benemerite del genere umano, e che hanno sviluppato l' ingegno e la facoltà dell' animo nostro, sono quelle che accostano l' uomo all' uomo, e facilitano la communicazione delle idee, dei bisogni, dei sentimenti, e riducano il genere umano a massa.

VERRI.

LONDON:

PRINTED FOR

LONGMAN, BROWN, GREEN, AND LONGMANS.

MDCCCXLIV.

"Though immediately and primarily written for the merchants, this Commercial Dictionary will be of use to every man of business or of curiosity. There is no man who is not in some degree a merchant; who has not something to buy and something to sell, and who does not therefore want such instructions as may teach him the true value of possessions or commodities. The descriptions of the productions of the earth and water which this volume contains, may be equally pleasing and useful to the speculatist with any other Natural History. The descriptions of ports and cities may instruct the geographer as well as if they were found in books appropriated only to his own science; and the doctrines of funds, insurances, currency, monopolies, exchanges, and duties, is so necessary to the politician, that without it he can be of no use either in the council or the senate, nor can speak or think justly either on war or trade.

"We, therefore, hope that we shall not repent the labour of compiling this work, nor flatter ourselves unreasonably, in predicting a favourable reception to a book which no condition of life can render useless, which may contribute to the advantage of all that make or receive laws, of all that buy or sell, of all that wish to keep or improve their possessions, of all that desire to be rich, and all that desire to be wise."

JOHNSON, *Preface to Rolt's Dict.*

PREFACE

TO

THIS EDITION.

The last edition of this work that underwent a complete revision was published in 1834. Since that epoch several considerable impressions have been exhausted; the more important changes in the commercial laws and regulations of this and other countries, and in the channels of commercial intercourse, that took place in the interval, having been specified in successive Supplements. These, however, notwithstanding the limited plan on which they were compiled, had become rather voluminous; and the changes made in our commercial policy by the Tariff Act of 1842, and the late acts for regulating the corn and colonial trades, &c., were so very important, and affected so many articles and interests, that it would have been difficult to notice them and the other subjects that required to be brought under the reader's eye in a new Supplement, without extending it to something like the size of the original work, which would thus have been rendered clumsy, costly, and inconvenient. Under these circumstances, we had no choice, except to abandon the work altogether, or to undertake the laborious task of its reconstruction. Having determined upon the latter, we have endeavoured to make it a Digest and Repertory of the most useful and authentic information respecting the past and present state of the commerce of this and most other countries, including the means and devices resorted to for facilitating commercial operations, and the laws and regulations under which they have been carried on. The various details are brought down to the latest period; and such additional subjects and statements have been introduced as had been overlooked in the former editions, or have since come into existence or grown of importance. We have tried to effect these improvements without adding, very materially, to the size of the work, by subjecting it to an unsparing retrenchment, and rejecting whatever was superseded by late changes, or appeared to be unnecessary.

It must, however, be admitted of works of this description, that they are less susceptible than most others of being improved in successive editions. An error in a bygone statement may, of course, be detected and rectified; but few comparatively of those who refer to a Commercial Dictionary care for historical notices or theoretical discussions. The practical details belonging to the present moment are the prime objects of interest with most men of business; and the same difficulties recur in attempting to give an account of commerce and commercial legislation in 1842 and 1843 that had to be encountered in describing their state in 1832 and 1833. The subject is not stationary but progressive, and variable in the extreme. The information, too, to which we have been compelled to resort, has been often very deficient; and when more abundant, it has not unfrequently been obscure, contradictory, and but little to be depended upon. And even though it had been of a less ques-

tionable description, the all but endless variety of subjects we have had to notice, and the perpetual and often unmarked changes to which most of them are subject, prevent our flattering ourselves with the notion that we have been much more successful on this than on former occasions in avoiding mistakes. We have, however, resorted to every means within our reach by which accuracy was likely to be attained; and can honestly affirm that, in attempting to render our work worthy of the public confidence, we have shrunk from no labour nor grudged any reasonable expense.

Except in one or two instances, we have seen no reason to modify any general principle laid down in the previous editions. The freedom of industry and of trade appears to us, speaking generally, to be the only sound foundation on which the commercial legislation of any country can safely or permanently rest. But we are not of the number of those who think that this is a principle to which there can be no exception, and that it is to be enforced at all times, without regard to existing interests, or to the peculiar situation of the branches of industry to which it may be proposed to be applied. There are, in truth, no absolute principles; that is, there are no principles that can be safely and advantageously carried out to their full extent, at all hazards and under all circumstances, either in Commercial Economy or any thing else. In conducting national affairs, the interests, and even the unreasonable prejudices, of great classes must be consulted; and governments should frequently, or, perhaps, we might say, generally, adopt that line of conduct which may seem to be on the whole best fitted to conciliate and promote the varying interests of those for whom they legislate, in preference to that which may be more in accordance with principle. A policy of this sort, while it is consistent with the effectual reform of every abuse, makes all changes be carefully considered, and cautiously introduced; and provides for the permanent advantage of the community with as little immediate injury as possible to individuals.

It is not, therefore, as many appear to suppose, enough to prove that a rule or regulation is wrong, that it interferes with the absolute freedom of industry or of trade. Such interference may be justifiable or unjustifiable, according to the peculiar exigencies of the case. The decisions of men of sense are not to be guided, on topics of this sort, by clamour, or by a cuckoo-cry in favour of any general principle, however well-established, but by a comprehensive investigation of what is under the circumstances the wisest and best course of policy to be adopted. Who can doubt that the regulations with respect to the truck system, the exclusion of females from mines, and the employment of young people in factories, though interfering to a considerable extent with the freedom of industry, are highly judicious, and necessary for the protection of the largest and not least important portion of society?

It may be doubted whether the commercial code of any country was ever so much liberalised and improved in the same space of time as ours has been between the important reforms begun by Mr. Huskisson in 1825, and those effected by Sir Robert Peel in 1842. The more ardent reformers allege, indeed, that these were not sufficiently extensive, that they were introduced slowly and with greater diffidence than necessary, and that many abuses are still unredressed. But those who reflect on the difficulty, in an extremely artificial state of society, of correctly appreciating the remote influence of any considerable change, and the impossibility of retracing any false step, will probably be disposed to applaud the prudence manifested in effecting these reforms. The progress already made has, however, paved the way for farther advances; and the reforms that still remain to be undertaken may now be

attempted with comparatively little risk. The greater number of these are, we believe, pointed out in this work; and we have endeavoured to show how they may be best introduced, and the advantages which may be fairly anticipated from their being carried into effect.

Some of the most important subjects of which we have had to treat are, unfortunately, much mixed up with party politics, and the agitation of the day. But our pages, we trust, are not polluted by any factious or partisan taint. We have endeavoured to treat the subjects in question in the spirit of lookers on who have no wish to participate in the game, and not in that of the players, who may, perhaps, have staked their all on the result; and are not conscious of having been biassed by political or personal predilections.

We firmly adhere to the opinion we have endeavoured to establish in the former editions of this work and elsewhere, that it would be sound policy to permit the importation of foreign corn at all times, under a moderate fixed duty accompanied by a corresponding drawback. A duty of this sort would not interpose any serious obstacle to our getting supplies of foreign corn when necessary; at the same time that it would tend to prevent any sudden shock being given to agriculture by the opening of the ports to free importation, and would countervail the peculiar burdens the agriculturists at present sustain, or which, at all events, they would most certainly have to sustain, were the ports open to importation without any duty. It appears to us that justice to all parties — to the manufacturers and merchants on the one hand, and to the agriculturists on the other, requires that some such method of settling this *vexata quæstio* should be attempted. It has been truly said, that what a mercantile country like Great Britain most requires is the adoption of "a decided and unflinching course of commercial policy." This is necessary to give those engaged in agricultural and commercial pursuits that feeling of security which lies at the bottom of all steady, vigorous, and prolonged exertion; and to make all classes bring their industry and capital into full activity. Unluckily, however, the most formidable obstacles appear to stand in the way of our entering upon such a course; and so long as one great class claim every thing, and another great class will concede nothing, our policy can inspire but little confidence. But we would fain hope that both parties, or at least that the more reasonable and considerate portions of both, may become sensible of the many pernicious consequences which cannot fail to result from prolonging the agitation with respect to the corn laws; and that these laws may be finally settled so as to reconcile and secure the just rights and interests of all classes. Unfounded anticipations of advantage on the one hand, and unfounded anticipations of loss on the other, are the only real obstacles to some such arrangement being effected; and it will be much to be deplored should the great interests of the empire be sacrificed to such delusions, and to the sinister designs of those who represent them as real, and exaggerate their magnitude.

We have thought it necessary to say thus much; for, though our work, being a Commercial Dictionary, might be supposed to be beyond the sphere of politics, we have been reluctantly compelled, on various occasions, in consequence of the way in which commercial and political questions are now mixed up, to engage in what may be called political discussion. And when such has been the case, we have not scrupled freely to state our opinions, and to censure such principles, laws, or regulations, as we believe to be injurious. But we have not done this wantonly, or without briefly stating the grounds on which we have presumed to found our conclusions. We have, also, as on former occasions, taken care to separate the theoretical and historical from the practical and legal parts of the

work. Those by whom it is consulted merely for mercantile information need not, therefore, trouble themselves about the other matters embodied in it. They are not forced on their attention; but they may easily be found, if, at any time, they should think it worth while to refer to them.

In preparing this edition we have met, as on former occasions, with every assistance from numerous official and private gentlemen. We are especially indebted to the Earl of Aberdeen for allowing us the perusal of many valuable consular Reports. To Mr. Porter, of the Board of Trade, so advantageously known by his statistical works, we owe various unpublished documents belonging to his department. Mr. Wood, the able and efficient chairman of the Board of Excise, Mr. Mayer, of the Colonial Office, and Mr. Walcott, secretary to the Emigration Commissioners, have, also, discovered on every occasion an anxious desire to add to the utility of our work, and have enriched it with various important returns. We regret our inability to notice the numerous private gentlemen who have, without regard to trouble or expense, exerted themselves to supply us with information not otherwise attainable. But, while we beg to return our best thanks to all, we cannot forbear mentioning the names of James Cook, Esq., of Mincing Lane; Archibald Hastie, Esq., M. P.; Jacob Herbert, Esq., of the Trinity House; Joshua Milne, Esq., of the Sun Life Assurance Office; William Ellis, Esq., of the Marine Indemnity Insurance Office; Robert Slater, Esq., of Fore Street; John Brown, Esq., of Liverpool; C. B. Fripp, Esq., of Bristol; David Maitland, Esq., of New York; and William Mure, Esq., of New Orleans; to all of whom we are under the greatest obligations. In fact, it is only by the assistance of individuals engaged in different lines of business, in different parts of the empire and of the world, that a work of this sort can be rendered of any real value. No diligence of inquiry can derive satisfactory information respecting the state of commerce from books and official returns, even when these exist and are accessible, which is frequently not the case: it can only be learned, if it is to be learned at all, from the communications of intelligent individuals engaged in and familiar with its details.

We do not presume to conjecture whether we may be again called upon to prepare another edition of this work, or whether, if called upon, we may be able or willing to undertake so onerous a task. It is now considerably more than twenty years since we began making preparations for this Dictionary, which has since continued to engross the greater portion of our time, so that we have but too much ground for saying in the words of Forcellini, *adoleseens manum admovi, senex, dum perficerem, factus sum.* But we intend to follow the same plan with this that we did with the last edition; and to publish from time to time, as they may appear to be required, Supplements containing notices of such changes as may take place either in the materials and channels of commercial intercourse, or in the laws and regulations under which it is conducted. We are most anxious to have the means of perfecting these supplements, of correcting the errors into which we may have fallen, and of modifying such statements as the course of events may render inapplicable. These improvements, however, can only be effected by mercantile gentlemen apprising us of the changes that are constantly taking place in commercial matters. This information, so important to the trading world, might sometimes be communicated with but little trouble, and will always be most gratefully received by us.

London, February, 1844.

PREFACE

TO

THE SECOND EDITION.

THE first impression of this Dictionary, consisting of 2,000 copies, was entirely sold off in less than nine months from the date of its publication. We feel very deeply indebted to the public for this unequivocal proof of its approbation; and we have endeavoured to evince our gratitude, by labouring to render the work less undeserving a continuance of the favour with which it has been honoured. In the prosecution of this object, we have subjected every part of it to a careful revision; have endeavoured to eradicate the errors that had escaped our notice; to improve those parts that were incomplete or defective; and to supply such articles as had been omitted. We dare not flatter ourselves with the idea that we have fully succeeded in these objects. The want of recent and accurate details as to several important subjects, has been an obstacle we have not, in all cases, been able to overcome; but those in any degree familiar with such investigations will not, perhaps, be disposed severely to censure our deficiencies in this respect.

The changes in the law bearing upon commercial transactions have been carefully specified. Copious abstracts of the late Customs Acts are contained in the articles COLONIES AND COLONY TRADE, IMPORTATION AND EXPORTATION, NAVIGATION LAWS, REGISTRY, SMUGGLING, WAREHOUSING, &c.

The abolition of the East India Company's commercial monopoly, and the great and growing interest* that has in consequence been excited amongst all classes respecting the commercial capabilities and practices of India, China, and other Eastern countries, have made us bestow peculiar attention to this department. The articles BANGKOK, BATAVIA, BOMBAY, BUSHIRE, BUSSORAH, CALCUTTA, CANTON, COLUMBO, EAST INDIA COMPANY AND EAST INDIES, INDIGO, MACAO, MADRAS, MANILLA, MAULMAIN, MOCHA, MUSCAT, NANGASACKI, OPIUM, RANGOON, SINGAPORE, TATTA, TEA, &c. contain, it is believed, a greater mass of recent and well-authenticated details as to the commerce of the vast countries stretching from the Arabic Gulph to the Chinese Sea, than is to be found in any other English publication.

The article BANKING is mostly new. Besides embodying the late act prolonging the charter of the Bank of England, and the more important details given in the Report of the Select Committee on the Renewal of the Bank Charter, this article contains some novel and important information not elsewhere to be met with. No account of the issues of the Bank of England has hitherto been published, that extends farther back than 1777. But this deficiency is now, for the first time, supplied; the Directors having obligingly furnished us with an

* The recent events in China have added greatly to this interest, and have made us enter, in this edition, into several additional details.

account of the issues of the Bank on the 28th of February and the 31st of August of each year, from 1698, within four years of its establishment, down to the present time. We have also procured a statement, from authority, of the mode of transacting business in the Bank of Scotland; and have been able to supply several additional particulars, both with respect to British and to foreign banks.

We have made many additions to, and alterations in, the numerous articles descriptive of the various commodities that form the materials of commerce, and the historical notices by which some of them are accompanied. We hope the will be found more accurate and complete than formerly.

The Gazetteer department, or that embracing accounts of the principal foreign emporiums with which this country maintains a direct intercourse, was, perhaps, the most defective in the old edition. If it be no longer in this predicament, the improvement has been principally owing to official co-operation. The sort of information we desired as to the great sea-port towns could not be derived from books, nor from any sources accessible to the public; and it was necessary, therefore, to set about exploring others. In this view we drew up a series of queries, embracing an investigation of imports and exports, commercial and shipping regulations, port charges, duties, &c., that might be transmitted to any port in any part of the world. There would, however, in many instances, have been much difficulty in getting them answered with the requisite care and attention by private individuals; and the scheme would have had but a very partial success, had it not been for the friendly and effectual interference of Mr. Poulett Thomson. Alive to the importance of having the queries properly answered, he voluntarily undertook to use his influence with Lord Palmerston to get them transmitted to the Consuls. This the Noble Lord most readily did; and answers have been received from the greater number of these functionaries. There is, of course, a considerable inequality amongst them; but they almost all embody a great deal of valuable information, and some of them are drawn up with a degree of skill and sagacity, and display an extent of research and a capacity of observation, that reflect the highest credit on their authors.*

The information thus obtained, added to what we received through other but not less authentic channels, supplied us with the means of describing twice the number of foreign sea-ports noticed in our former edition; and of enlarging, amending, and correcting the accounts of such as were noticed. Besides much fuller details than have ever been previously published of the nature and extent of the trade of many of these places, the reader will, in most instances, find a minute account of the regulations to be observed respecting the entry and clearing of ships and goods, with statements of the different public charges laid on shipping, the rates of commission and brokerage, the duties on the principal goods imported and exported, the prices of provisions, the regulations as to quarantine, the practice as to credit, banking, &c., with a variety of other particulars. We have also described the ports; and have specified their depth of water, the course to be steered by vessels on entering, with the rules as to pilotage, and the fees on account of pilots, light-houses, &c. As it is very difficult to convey a sufficiently distinct idea of a sea-port by any description, we have given plans, taken from the latest and best authorities, of about a dozen of the principal foreign ports. Whether we have succeeded, is more than we can venture to say; but we hope we have said enough to satisfy the reader, that we have spared no pains to furnish him with authentic information in this important department.

* The returns furnished by the Consuls at Hamburg, Trieste and Venice, Naples, Dantzic, Bordeaux, Christiania, Amsterdam, Elsineur, New York, Charleston, &c. are particularly good.

The TARIFF, or Table of Duties on Imports, &c., in this edition, is peculiarly valuable. It is divided into three columns: the first containing an account of the existing duties payable on the importation of foreign products for home use, as the same were fixed by the Act of last year, 3 & 4 Will. IV. cap. 56.; the next column exhibits the duties payable on the same articles in 1819, as fixed by the Act 59 Geo. III. cap. 52.; and the third and last column exhibits the duties as they were fixed in 1787 by Mr. Pitt's Consolidation Act, the 27 Geo. III. cap. 13. The duties are rated throughout in Imperial weights and measures; and allowances have been made for differences in the mode of charging, &c. The reader has, therefore, before him, and may compare together, the present customs duties with the duties as they stood at the end of the late war, and at its commencement. No similar Table is to be met with in any other work. We are indebted for it to J. D. Hume, Esq., of the Board of Trade, at whose suggestion, and under whose direction, it has been prepared. Its compilation was a work of much labour and difficulty; and could not have been accomplished by any one not well acquainted with the Customs Acts, and the various changes in the mode of assessing the duties.

On the whole, we trust it will be found that the work has been improved throughout, either by the correction of mistakes, or by the addition of new and useful matter. Still, however, we are well aware that it is in various respects defective; but we are not without hopes that those who look into it will be indulgent enough to believe that this has been owing as much to the extreme difficulty, or rather, perhaps, the impossibility, of obtaining accurate information respecting some of the subjects treated of, as to the want of care and attention on our part. Even as regards many important topics connected with the commerce and manufactures of Great Britain, we have had to regret the want of authentic details, and been obliged to grope our way in the dark. The condition and habits of the English and Scotch are so very different from those of the Irish, that conclusions deduced from considering the trade or consumption of the United Kingdom *en masse*, are frequently of little value; and may, indeed, unless carefully sifted, be the most fallacious imaginable; while, owing to the want of any account of the cross-channel trade between the two great divisions of the empire, it is not possible accurately to estimate the consumption of either, or to obtain any sure means of judging of their respective progress in wealth and industry. As respects manufactures, there is a still greater deficiency of trustworthy details. The articles relating to them in this work have been submitted to the highest practical authorities; so that we incline to think they are about as accurate as they can well be rendered in the absence of official returns. It is far, however, from creditable to the country, that we should be obliged, in matters of such importance, to resort to private and irresponsible individuals for the means of coming at the truth. Statistical science in Great Britain is, indeed, at a very low ebb; and we are not of the number of those who suppose that it will ever be materially improved, unless government become more sensible, than it has hitherto shown itself to be, of its importance, and set machinery in motion, adequate to procure correct and comprehensive returns.

The statistical Tables published by the Board of Trade embrace the substance of hundreds of accounts, scattered over a vast mass of Parliamentary papers. They seem to be compiled with great care and judgment, and are a very valuable acquisition. We have frequently been largely indebted to them. But their arrangement, and their constantly increasing number and bulk, make them quite

unfit for being readily or advantageously consulted by practical men. Most part of the returns relating to the principal articles given in this work, go back to a much more distant period than those published by the Board of Trade.

We have seen no reason to modify or alter any PRINCIPLE OF COMMERCIAL POLICY advanced in our former edition. In some instances, we have varied the exposition a little, but that is all. In every case, however, we have separated the practical, legal, and historical statements from those of a speculative nature; so that those most disposed to dissent from our theoretical notions will, we hope, be ready to admit that they have not been allowed to detract from the practical utility of the work.

The maps given with the former edition have been partially re-engraved, and otherwise improved. Exclusive of the plans already referred to, the present edition contains two new maps: one, of the completed and proposed canals and railroads of Great Britain and Ireland; exhibiting, also, the coal fields, the position of the different light-houses, &c.: the other map exhibits the mouths of the rivers Mersey and Dee, and the country from Liverpool to Manchester, with the various lines of communication between these two great and flourishing emporiums. Care has been taken to render them accurate.

We are under peculiar obligations to many official, mercantile, and private gentlemen in this and other countries, who have favoured us with communications. We hardly ever applied to any one, however much engaged in business, for any information coming within his department, which he did not readily furnish. We have not met with any mystery, concealment, or affectation of concealment. Every individual seemed disposed to tell us all that he knew; and several gentlemen have taken a degree of trouble with respect to various articles in this work, for which our thanks make but a poor return.

PREFACE

TO

THE FIRST EDITION.

It has been the wish of the Author and Publishers of this Work, that it should be as extensively useful as possible. If they be not deceived in their expectations, it may be advantageously employed, as a sort of *vade mecum*, by merchants, traders, ship-owners, and ship-masters, in conducting the details of their respective businesses. It is hoped, however, that this object has been attained without omitting the consideration of any topic, incident to the subject, that seemed calculated to make the book generally serviceable, and to recommend it to the attention of all classes.

Had our object been merely to consider commerce as a science, or to investigate its principles, we should not have adopted the form of a Dictionary. But commerce is not a science only, but also an *art* of vast practical importance, in the prosecution of which a very large proportion of the population of every civilised country is actively engaged. Hence, to be generally useful, a work on commerce should combine practice, theory, and history. Different readers may resort to it for different purposes; and every one should be able to find in it clear and accurate information, whether his object be to make himself familiar with details, to acquire a knowledge of principles, or to learn the revolutions that have taken place in the various departments of trade.

The following short outline of what this Work contains may enable the reader to estimate the probability of its fulfilling the objects for which it has been intended: —

1. It contains accounts of the various articles which form the subject matter of commercial transactions. To their English names are, for the most part, subjoined their synonymous appellations in French, German, Italian, Russian, Spanish, &c.; and sometimes, also, in Arabic, Hindoo, Chinese, and other Eastern languages. We have endeavoured, by consulting the best authorities, to make the descriptions of commodities as accurate as possible; and have pointed out the tests or marks by which their goodness may be ascertained. The places where they are produced are also specified; the quantities exported from such places; and the different regulations, duties, &c. affecting their importation and exportation, have been carefully stated, and their influence examined. The prices of most articles have been given, sometimes for a lengthened period. Historical notices are inserted illustrative of the rise and progress of the trade in the most important articles; and it is hoped that the information embodied in these notices will be found to be as authentic as it is interesting.

II. The Work contains a general article on Commerce, explanatory of its nature, principles, and objects, and embracing an inquiry into the policy of restrictions intended to promote industry at home, or to advance the public interests by excluding or restraining foreign competition. Exclusive, however, of this general

article, we have separately examined the operation of the existing restrictions on the trade in particular articles, and with particular countries, in the accounts of those articles, and of the great sea-port towns belonging to the countries referred to. There must, of course, be more or less of sameness in the discussion of such points, the principle which runs through them being identical. But in a Dictionary this is of no consequence. The reader seldom consults more than one or two articles at a time; and it is of infinitely more importance to bring the whole subject at once before him, than to seek to avoid the appearance of repetition by referring from one article to another. In this Work such references are made as seldom as possible.

III. The articles which more particularly refer to commercial navigation are AVERAGE, BILLS OF LADING, BOTTOMRY, CHARTERPARTY, FREIGHT, INSURANCE (MARINE), MASTER, NAVIGATION LAWS, OWNERS, REGISTRY, SALVAGE, SEAMEN, SHIPS, TONNAGE, WRECK, &c. These articles embrace a pretty full exposition of the law as to shipping: we have particularly endeavoured to exhibit the privileges enjoyed by British ships; the conditions and formalities, the observance of which is necessary to the acquisition and preservation of such privileges, and to the transference of property in ships; the responsibilities incurred by the masters and owners in their capacity of public carriers; and the reciprocal duties and obligations of owners, masters, and seamen. In this department, we have made considerable use of the treatise of Lord Tenterden on the Law of Shipping,—a work that does honour to the learning and talents of its noble author. The Registry Act and the Navigation Act are given with very little abridgment. To this head may also be referred the articles on the COD, HERRING, PILCHARD, and WHALE fisheries.

IV. The principles and practice of commercial arithmetic and accounts are unfolded in the articles BOOK-KEEPING, DISCOUNT, EXCHANGE, INTEREST AND ANNUITIES, &c. The article BOOK-KEEPING has been furnished by one of the official assignees under the new Bankrupt Act. It exhibits a view of this important art as actually practised in the most extensive mercantile houses in town. The tables for calculating interest and annuities are believed to be more complete than any hitherto given in any work not treating professedly of such subjects.

V. A considerable class of articles may be regarded as descriptive of the various means and devices that have been fallen upon for extending and facilitating commerce and navigation. Of these, taking them in their order, the articles BANKS, BROKERS, BUOYS, CANALS, CARAVANS, CARRIERS, COINS, COLONIES, COMPANIES, CONSULS, CONVOY, DOCKS, FACTORS, FAIRS AND MARKETS, LIGHT-HOUSES, MONEY, PARTNERSHIP, PILOTAGE, POST-OFFICE, RAIL-ROADS, ROADS, TREATIES (COMMERCIAL), WEIGHTS AND MEASURES, &c. are among the most important. In the article BANKS, the reader will find, besides an exposition of the principles of banking, a pretty full account (derived principally from official sources) of the Bank of England, the private banks of London, and the English provincial banks; the Scotch and Irish banks; and the most celebrated foreign banks: to complete this department, an account of Savings Banks is subjoined, with a set of rules which may be taken as a model for such institutions.* There is added to the article COINS, a Table of the assay, weight, and sterling value of the principal foreign gold and silver coins, deduced from assays made at the London and Paris Mints, taken, by permission, from the last edition of Dr. Kelly's *Cambist*. The article COLONIES is one of the most extensive in the work: it contains a sketch of the ancient and modern systems of colonisation; an examination of the principles of colonial policy; and a view of the extent, trade, population,

* Some of the improvements made on this article are noticed in the Preface to the Second Edition.

and resources of the colonies of this and other countries. In this article, and in the articles CAPE OF GOOD HOPE, COLUMBO, HALIFAX, QUEBEC, SYDNEY, and VAN DIEMEN'S LAND, recent and authentic information is given, which those intending to emigrate will find worth their attention. The map of the British possessions in North America is on a pretty large scale, and is second to none, of those countries, hitherto published in an accessible form. The article COLONIES is also illustrated by a map of Central America and the West Indies. An engraved plan is given, along with the article DOCKS, of the river Thames and the docks from Blackwall to the Tower; and the latest regulations issued by the different Dock Companies here and in other towns, as to the docking of ships, and the charges on that account, and on account of the loading, unloading, warehousing, &c. of goods, are given verbatim. The statements in the articles LIGHT-HOUSES and PILOTAGE have been mostly furnished by the Trinity House, or derived from papers printed by order of the Admiralty, and may be implicitly relied upon. In the article WEIGHTS AND MEASURES the reader will find tables of the equivalents of wine, ale, and Winchester measures, in Imperial measure.

VI. Besides a general article on the constitution, advantages, and disadvantages of Companies, accounts are given of the principal associations existing in Great Britain for the purpose of conducting commercial undertakings, or undertakings subordinate to and connected with commerce. Among others (exclusive of the Banking and Dock Companies already referred to) may be mentioned the EAST INDIA COMPANY, the GAS COMPANIES, the INSURANCE COMPANIES, the MINING COMPANIES, the WATER COMPANIES, &c. The article on the East India Company is of considerable length; it contains a pretty complete sketch of the rise, progress, and present state of the British trade with India; an estimate of the influence of the Company's monopoly; and a view of the revenue, population, &c. of our Indian dominions. We have endeavoured, in treating of insurance, to supply what we think a desideratum, by giving a distinct and plain statement of its principles, and a brief notice of its history; with an account of the rules and practices followed by individuals and companies in transacting the more important departments of the business; and of the terms on which houses, lives, &c. are commonly insured. The part of the article which peculiarly respects marine insurance has been contributed by a practical gentleman of much knowledge and experience in that branch.

VII. In addition to the notices of the Excise and Customs regulations affecting particular commodities given under their names, the reader will find articles under the heads of CUSTOMS, EXCISE, IMPORTATION AND EXPORTATION, LICENCES, SMUGGLING, WAREHOUSING, &c. which comprise most part of the practical details belonging to the business of the Excise and Customs, particularly the latter. The most important Customs Acts are given with very little abridgment, and being printed in small letter, they occupy comparatively little space. The article TARIFF contains an account of the various duties, drawbacks, and bounties, on the importation and exportation of all sorts of commodities into and from this country.—We once intended to give the tariffs of some of the principal Continental states; but, from the frequency of the changes made in them, they would very soon have become obsolete, and would have tended rather to mislead than to instruct. But the reader will notwithstanding find a good deal of information respecting foreign duties under the articles CADIZ, HAVRE, NAPLES, NEW YORK, TRIESTE, &c.

VIII. Among the articles of a miscellaneous description, may be specified ALIENS, APPRENTICE, AUCTIONEER, BALANCE OF TRADE, BANKRUPTCY, CONTRABAND, CREDIT, HANSEATIC LEAGUE, IMPORTS AND EXPORTS, IM-

PRESSMENT, IONIAN ISLANDS, MARITIME LAW, PASSENGERS, PATENTS, PAWNBROKING, PIRACY, POPULATION, PRECIOUS METALS, PRICES, PRIVATEERS, PRUSSIAN OR GERMAN COMMERCIAL UNION, PUBLICANS, QUARANTINE, REVENUE AND EXPENDITURE, SLAVES AND SLAVE TRADE, TALLY TRADE, TRUCK SYSTEM, &c.*

IX. Accounts are given, under their proper heads, of the principal emporiums with which this country has any immediate intercourse; of the commodities usually exported from and imported into them; of their monies, weights, and measures; and of such of their institutions, customs, and regulations, with respect to commerce and navigation, as seemed to deserve notice. There are occasionally subjoined to these accounts of the great sea-ports, pretty full statements of the trade of the countries in which they are situated, as in the instances of ALEXANDRIA, AMSTERDAM, BORDEAUX, BUENOS AYRES, CADIZ, CALCUTTA, CANTON, COPENHAGEN, DANTZIC, GALACZ, GALVESTON, HAVANNAH, HAVRE, LIMA, MONTEVIDEO, NAPLES, NEW YORK, ODESSA, PALERMO, PETERSBURG, RIO DE JANEIRO, SMYRNA, STOCKHOLM, TRIESTE, VALPARAISO, VERA CRUZ, &c.* To have attempted to do this systematically would have increased the size of the Work beyond all reasonable limits, and embarrassed it with details nowise interesting to the English reader. The plan we have adopted has enabled us to treat of such matters as might be supposed to be of importance in England, and to reject the rest. We believe, however, that, notwithstanding this selection, those who compare this work with others, will find that it contains a much larger mass of authentic information respecting the trade and navigation of foreign countries than is to be found in any other English publication.

The reader may be inclined, perhaps, to think that it must be impossible to embrace the discussion of so many subjects in a single octavo volume, without treating a large proportion in a very brief and unsatisfactory manner. But, in point of fact, this single octavo contains about as much letter-press as is contained in two ordinary folio volumes, and more than is contained in Macpherson's Annals of Commerce, in four large volumes quarto, published at 8*l.* 8*s.*! This extraordinary condensation has been effected without any sacrifice of beauty or distinctness. Could we suppose that the substance of the book is at all equal to its form, there would be little room for doubt as to its success.

Aware that, in a work of this nature, accuracy in matters of fact is of primary importance, we have rarely made any statement without mentioning our authority. Except, too, in the case of books in every one's hands, or Dictionaries, the page or chapter of the works referred to is generally specified; experience having taught us that the convenient practice of stringing together a list of authorities at the end of an article is much oftener a cloak for ignorance than an evidence of research.

Our object being to describe articles in the state in which they are offered for sale, we have not entered, except when it was necessary to give precision or clearness to their description, into any details as to the processes followed in their manufacture.

Besides the maps already noticed, the work contains a map of the world, on Mercator's projection, and a map of Central and Southern Europe and the Mediterranean Sea. These maps are on a larger scale than those usually given with works of this sort; and have been carefully corrected, and compared with the best authorities.

Such is a rough outline of what the reader may expect to meet with in this

* Several of these articles have been inserted for the first time in this (the third complete) edition of the work; but we thought it most convenient to enumerate them with the others.

Dictionary. We do not, however, flatter ourselves with the notion that he will consider that all that has been attempted has been properly executed. In a work embracing such an extreme range and diversity of subjects, respecting many of which it is exceedingly difficult, if not quite impossible, to obtain accurate information, no one will be offended should he detect a few errors. At the same time we can affirm that neither labour nor expense has been spared to entitle the Work to the public confidence and patronage. The author has been almost incessantly engaged upon it for upwards of five years; and he may be said to have spent the previous part of his life in preparing for the undertaking. He has derived valuable assistance from some distinguished official gentlemen, and from many eminent merchants; and has endeavoured, wherever it was practicable, to build his conclusions upon official documents. But in very many instances he has been obliged to adopt less authentic data; and he does not suppose that he has had sagacity enough always to resort to the best authorities, or that, amidst conflicting and contradictory statements, he has uniformly selected those most worthy of being relied upon, or that the inferences he has drawn are always such as the real circumstances of the case would warrant. But he has done his best not to be wanting in these respects. Not being engaged in any sort of business, nor being under any description of obligation to any political party, ther was nothing to induce us, in any instance, to conceal or pervert the truth. We have, therefore, censured freely and openly whatever we considered wrong; but the grounds of our opinion are uniformly assigned; so that the reader may always judge for himself as to its correctness. Our sole object has been to produce a work that should be generally useful, particularly to merchants and traders, and which should be creditable to ourselves. Whether we have succeeded, the award of the public will show; and to it we submit our labours, not with "frigid indifference," but with an anxious hope that it may be found we have not misemployed our time, and engaged in an undertaking too vast for our limited means.

The following notices of some of the most celebrated Commercial Dictionaries may not, perhaps, be unacceptable. At all events, they will show that there is at least room for the present attempt.

The *Grand Dictionnaire de Commerce*, begun and principally executed by M. Savary, Inspector of Customs at Paris, and completed by his brother, the Abbé Savary, Canon of St. Maur, was published at Paris in 1723, in two volumes folio: a supplemental volume being added in 1730. This was the first work of the kind that appeared in modern Europe; and has furnished the principal part of the materials for most of those by which it has been followed. The undertaking was liberally patronised by the French government, who justly considered that a Commercial Dictionary, if well executed, would be of national importance. Hence a considerable, and, indeed, the most valuable, portion of Savary's work is compiled from Memoirs sent him, by order of government, by the inspectors of manufactures in France, and by the French consuls in foreign countries. An enlarged edition of the *Dictionnaire* was published at Geneva in 1750, in six folio volumes. But the best edition is that of Copenhagen, in five volumes folio; the first of which appeared in 1759, and the last in 1765.

More than the half of this work consists of matter altogether foreign to its proper object. It is, in fact, a sort of Dictionary of Manufactures as well as of Commerce; descriptions being given, which are, necessarily perhaps, in most instances exceedingly incomplete, and which the want of plates often renders unintelligible, of the methods followed in the manufacture of the commodities described. It is also filled with lengthened articles on natural history, the

bye laws and privileges of different corporations, and a variety of subjects nowise connected with commercial pursuits. No one, however, need look into it for any development of sound principles, or for enlarged views. It is valuable as a repertory of facts relating to commerce and manufactures at the commencement of last century, collected with laudable care and industry; but it is pervaded by the spirit of a customs officer, and not of a merchant or a philosopher. "*Souvent dans ses réflexions, il tend plutôt à égarer ses lecteurs qu'à les conduire, et des maximes nuisibles au progrès du commerce et de l'industrie obtiennent presque toujours ses éloges et son approbation.*"

The preceding extract is from the Prospectus, in one volume octavo, published by the Abbé Morellet, in 1769, of a new Commercial Dictionary, to be completed in five or probably six volumes folio. This Prospectus is a work of sterling merit; and from the acknowledged learning and talent of its author, and his capacity for laborious exertion, there can be no doubt that, had the projected Dictionary been completed, it would have been infinitely superior to that of Savary. It appears (Prospectus, pp. 353—373.) that Morellet had been engaged for a number of years in preparations for this great work; and that he had amassed a large collection of books and manuscripts relative to national economy, and the commerce, navigation, colonies, arts, &c. of France and other countries. The enterprise was begun under the auspices of M. Trudaine, Intendant of Finance, and was patronised by Messrs. L'Averdy and Bertin, Comptrollers General. But whether it were owing to the gigantic nature of the undertaking, to the author having become too much engrossed with other pursuits, the want of sufficient encouragement, or some other cause, no part of the proposed Dictionary ever appeared. We are ignorant of the fate of the valuable collection of manuscripts made by the Abbé Morellet. His books were sold at Paris within these few years.

A Commercial Dictionary, in three volumes 4to, forming part of the *Encyclopédie Méthodique*, was published at Paris in 1783. It is very unequally executed, and contains numerous articles that might have been advantageously left out. The editors acknowledge in their Preface that they have, in most instances, been obliged to borrow from Savary. The best parts of the work are copied from the edition of the *Traité Général du Commerce* of Ricard, published at Amsterdam in 1781, in two volumes 4to.*

The earliest Commercial Dictionary published in England was compiled by Malachy Postlethwayt, Esq., a diligent and indefatigable writer. The first part of the first edition appeared in 1751. The last edition, in two enormous folio volumes, was published in 1774. It is chargeable with the same defects as that of Savary, of which, indeed, it is for the most part a literal translation. The author has made no effort to condense or combine the statements under different articles, which are frequently not a little contradictory; at the same time that many of them are totally unconnected with commerce.

In 1761, Richard Rolt, Esq. published a Commercial Dictionary in one pretty large folio volume. The best part of this work is its Preface, which was contributed by Dr. Johnson. It is for the most part abridged from Postlethwayt; but it contains some useful articles purloined from other works, mixed, however, with many alien to the subject.

In 1766, a Commercial Dictionary was published, in two rather thin folio volumes, by Thomas Mortimer, Esq., at that time Vice-Consul for the Netherlands. This is a more commodious and better arranged, but not a more valuable work than that of Postlethwayt. The plan of the author embraces, like that of his predecessors, too great a variety of objects; more than half the work being

* This, when published, must have been a very valuable work. It is now, however, in a great measure obsolete.

filled with geographical articles, and articles describing the processes carried on in different departments of manufacturing industry; there are also articles on very many subjects, such as architecture, the natural history of the ocean, the land-tax, the qualifications of surgeons, &c., the relation of which to commerce, navigation, or manufactures, it seems difficult to discover.

In 1810, a Commercial Dictionary was published, in one thick octavo volume, purporting to be by Mr. Mortimer. We understand, however, that he had but little, if any thing, to do with its compilation. It is quite unworthy of the subject, and of the epoch when it appeared. It has all the faults of those by which it was preceded, with but few peculiar merits. Being not only a Dictionary of Commerce and Navigation, but of Manufactures, it contains accounts of the different arts: but to describe these in a satisfactory and really useful manner, would require several volumes, and the co-operation of many individuals: so that, while the accounts referred to are worth very little, they occupy so large a space that room has not been left for the proper discussion of those subjects from which alone the work derives whatever value it possesses. Thus, there is an article of twenty-two pages technically describing the various processes of the art of painting, while the general article on commerce is comprised in less than *two* pages. The articles on coin and money do not together occupy four pages, being considerably less than the space allotted to the articles on engraving and etching. There is not a word said as to the circumstances which determine the course of exchange; and the important subject of credit is disposed of in less than *two lines!* Perhaps, however, the greatest defect in the work is its total want of any thing like science. No attempt is ever made to explain the principles on which any operation depends. Every thing is treated as if it were empirical and arbitrary. Except in the legal articles, no authorities are quoted; so that very little dependence can be placed on the statements advanced.

In another Commercial Dictionary, republished within these few years, the general article on commerce consists of a discussion with respect to simple and compound demand, and simple and double competition: luckily the article does not fill quite a page; being considerably shorter than the description of the kaleidoscope.

Under these circumstances, we do think that there is room for a new Dictionary of Commerce and Commercial Navigation: and whatever may be thought of our Work, it cannot be said that in bringing it into the field we are encroaching on ground already fully occupied.

Besides this Dictionary, Mr. M'CULLOCH has published the following Works, viz.: —

1. A DICTIONARY, GEOGRAPHICAL, STATISTICAL, AND HISTORICAL, of the various Countries, Places, and principal Natural Objects in the World. 2 thick vols. 8vo. Illustrated with Maps. London, 1841.

2. A STATISTICAL ACCOUNT OF THE BRITISH EMPIRE, exhibiting its Extent, Physical Capacities, Population, Industry, and Civil and Religious Institutions. Second Edition. 2 vols. 8vo. London, 1839.

3. SMITH'S WEALTH OF NATIONS; with a Life of the Author, Notes, and Supplemental Dissertations. Second Edition, 1 vol. 8vo. double columns. London, 1839.

4. THE PRINCIPLES OF POLITICAL ECONOMY; with some Inquiries respecting their Application, and a Sketch of the Rise and Progress of the Science. Third Edition, 1 vol. 8vo. Edinburgh, 1843.

And he has in the press,

A TREATISE ON THE PRINCIPLES AND PRACTICE OF TAXATION AND THE FUNDING SYSTEM.

DICTIONARY

OF

COMMERCE

AND

COMMERCIAL NAVIGATION.

AAM, Aum, or Anm, a measure for liquids, used at Amsterdam, Antwerp, Hamburgh, Frankfort, &c. At Amsterdam it is nearly equal to 41 English wine gallons, at Antwerp to 36¼ ditto, at Hamburgh to 38¼ ditto, and at Frankfort to 39 ditto.

ABANDONMENT, in commerce and navigation, is used to express the abandoning or surrendering of the ship or goods insured to the insurer.

It is held, by the law of England, that the insured has the right to abandon, and to compel the insurers to pay the whole value of the thing insured, in every case "where, by the happening of any of the misfortunes or perils insured against, the voyage is lost, or not worth pursuing, and the projected adventure is frustrated; or where the thing insured is so damaged and spoiled as to be of little or no value to the owner; or where the salvage is very high; or where what is saved is of less value than the freight; or where further expense is necessary, and the insurer will not undertake to pay that expense," &c. — (*Marshall*, book i. cap. 13. § 1.)

Abandonment very frequently takes place in cases of capture: the loss is then total, and no question can arise in respect to it. In cases, however, in which a ship and cargo are recaptured *within such a time that the object of the voyage is not lost*, the insured is not entitled to abandon. The mere *stranding* of a ship is not deemed of itself such a loss as will justify an abandonment. If by some fortunate accident, by the exertions of the crew, or by any borrowed assistance, the ship be got off and rendered capable of continuing her voyage, it is not a total loss, and the insurers are only liable for the expenses occasioned by the stranding. It is only where the stranding is followed by *shipwreck*, or in any other way renders the ship incapable of prosecuting her voyage, that the insured can abandon.

It has been decided, that damage sustained in a voyage to the extent of forty-eight per cent. of the value of the ship did not entitle the insured to abandon. If a cargo be damaged in the course of a voyage, and it appears that what has been saved is less than the amount of freight, it is held to be a total loss. — (*Park on Insurance*, cap. 9.)

When by the occurrence of any of the perils insured against the insured has acquired a right to abandon, he is at liberty either to abandon or not, as he thinks proper. He is in no case bound to abandon; but if he make an election, and resolve to abandon, he must abide by his resolution, and has no longer the power to claim for a partial loss. In some foreign countries specific periods are fixed by law within which the insured, after being informed of the loss, must elect either to abandon or not. In this country, however, no particular period is fixed for this purpose; but the rule is, that if the insured determine to abandon, he must intimate such determination to the insurers within a *reasonable period* after he has got intelligence of the loss, — any unnecessary delay in making this intimation being interpreted to mean that he has decided not to abandon.

No particular form or solemnity is required in giving notice of an abandonment. It may be given either to the underwriter himself, or the agent who subscribed for him.

The effect of an abandonment is to vest all the rights of the insured in the insurers. The latter become the legal owners of the ship, and as such are liable for all her future outgoings, and entitled to her future earnings. An abandonment, when once made, is irrevocable.

In case of a shipwreck or other misfortune, the captain and crew are bound to exert themselves to the utmost to save as much property as possible; and to enable them to do this without prejudice to the right of abandonment, our policies provide that, "in case of any loss or misfortune, the insured, their factors, servants, and assigns, shall be at liberty to sue and labour about the defence, safeguard, and recovery of the goods, and merchandises, and ship, &c., without prejudice to the insurance, to the charges whereof the insurers agree to contribute, each according to the rate and quantity of his subscription."

"From the nature of his situation," says Mr. Serjeant Marshall, "the captain has an implied authority, not only from the insured, but also from the insurers and all others interested in the ship or cargo, in case of misfortune, to do whatever he thinks most conducive to the general interest of all concerned, and they are all bound by his acts. Therefore, if the ship be disabled by stress of weather, or any other peril of the sea, the captain may hire another vessel for the transport of the goods to their port of destination, if he think it for the interest of all concerned that he should do so; or he may, upon a capture, appeal against a sentence of condemnation, or carry on any other proceedings for the recovery of the ship and cargo, provided he has a probable ground for doing so; or he may, upon the loss of the ship, invest the produce of the goods saved in other goods, which he may ship for his original port of destination; for whatever is recovered of the effects insured, the captain is accountable to the insurers. If the insured neglect to abandon when he has it in his power to do so, he adopts the acts of the captain, and he is bound by them. If, on the other hand, the insurers, after notice of abandonment, suffer the captain to continue in the management, he becomes their agent, and they are bound by his acts."

As to the sailors, when a misfortune happens, they are bound to save and preserve the merchandise to the best of their power, and while they are so employed they are entitled to wages, so far, at least, as what is saved will allow; but if they refuse to assist in this, they shall have neither wages nor reward. In this the Rhodian law, and the laws of Oleron, Wisby, and the Hanse Towns, agree.

The policy of the practice of abandonment seems very questionable. The object of an insurance is to render the insurer liable for whatever loss or damage may be incurred. But this object does not seem to be promoted by compelling him to pay as for a total loss, when, in fact, the loss is only partial. The captain and crew of the ship are selected by the owners, are their servants, and are responsible to them for their proceedings. But in the event of a ship being stranded, and so damaged that the owners are entitled to abandon, the captain and crew become the servants of the underwriters, who had nothing to do with their appointment, and to whom they are most probably altogether unknown. It is admitted that a regulation of this sort can hardly fail of leading, and has indeed frequently led, to very great abuses. We, therefore, are inclined to think that abandonment ought not to be allowed where any property is known to exist; but that such property should continue at the disposal of the owners and their agents, and that the underwriters should be liable only for the damage really incurred. The first case that came before the British courts with respect to abandonment was decided by Lord Hardwicke, in 1744. Mr. Justice Buller appears to have concurred in the opinion now stated, that abandonment should not have been allowed in cases where the loss is not total.

For further information as to this subject, see the excellent works of Mr. Serjeant Marshall (book i. cap. 13.), and of Mr. Justice Park (cap. 9.) on the Law of Insurance.

ABATEMENT, or REBATE, is the name sometimes given to a discount allowed for prompt payment; it is also sometimes used to express the deduction that is occasionally made at the custom-house from the duties chargeable upon such goods as are damaged, and for loss in warehouses. This allowance is regulated by the act 3 & 4 Will. 4. c. 52. § 32. No abatement is made from the duties charged on coffee, currants, figs, guinea-grains, lemons, opium, oranges, raisins, pepper, tobacco, and wine.

ACACIA. See GUM ARABIC.

ACAPULCO, a celebrated sea-port on the western coast of Mexico, in lat. 16° 50′ 29″ N., long. 99° 46′ W. Pop. 4,000 (?). "It is," says Captain Hall, "the very *beau ideal* of a harbour. It is easy of access; very capacious; the water not too deep; the holding ground good; quite free from hidden dangers *; and as secure as the basin in the centre of Portsmouth dockyard." — (*South America*, ii. 172.) Previously to the emancipation of Spanish America, a galleon or large ship, richly laden, was annually sent from Acapulco to Manilla, in the Philippine Islands, and at her return a fair was held, which was much resorted to by strangers. But this sort of intercourse is no longer carried on, the trade to Manilla and all other places being now conducted by private individuals. The exports consist of bullion, cochineal, cocoa, wool, indigo, &c. The

* This is not quite accurate. There is one shoal on which a vessel was lost in 1781; but being laid down in the charts it is easily avoided. — (*Humboldt, Nouvelle Espagne*, iv. 90.)

imports principally consist of cotton goods, hardware, articles of jewellery, raw and wrought silks, spices, and aromatics. Acapulco is extremely unhealthy; and though it be the principal port on the west coast of Mexico, its commerce is but inconsiderable. The navigation from Acapulco to Guayaquil and Callao is exceedingly tedious and difficult, so that there is but little intercourse between Mexico and Peru. The monies, weights, and measures are the same as those of Spain; for which see CADIZ.

ACIDS, are a class of compounds which are distinguished from all others by the following properties. They are generally possessed of a very sharp and sour taste; redden the infusions of blue vegetable colours; are often highly corrosive, and enter into combination with the alkalies, earths, and metallic oxides; forming compounds in which the characters of the constituents are entirely destroyed, and new ones produced differing in every respect from those previously existing. The quality or strength of an acid is generally ascertained either by its specific gravity, which is found by means of the hydrometer, if the acid be liquid, or by the quantity of pure and dry subcarbonate of potass or soda, or of carbonate of lime (marble), which a given weight of the acid requires for its exact neutralisation. This latter process is termed Acidimetry, or the ascertaining the quantity of *real* acid existing in any of the liquid or crystallised acids.

The principal acids at present known are, the Acetic, Benzoic, Boracic, Bromic, Carbonic, Citric, Chloric, Cyanic, Fluoric, Ferroprussic, Gallic, Hydrobromic, Hydriodic, Iodic, Lactic, Malic, Margaric, Meconic, Muriatic or Hydrochloric, Nitrous, Nitric, Oleic, Oxalic, Phosphoric, Prussic or Hydrocyanic, Purpuric, Saccholactic, Suberic, Sulphurous, Sulphuric, Tartaric, Uric, and many others which it would be superfluous to detail. It is the most important only of these, however, that will be here treated of, and more particularly those employed in the arts and manufactures.

Acetic or pyroligneous acid.—This acid, in its pure and concentrated form, is obtained from the fluid matter which passes over in distillation, when wood is exposed to heat in close iron cylinders. This fluid is a mixture of acetic acid, tar, and a very volatile ether; from these the acid may be separated, after a second distillation, by saturating with chalk, and evaporating to dryness; an acetate of lime is thus procured, which, by mixture with sulphate of soda (Glauber's salt), is decomposed, the resulting compounds being an insoluble sulphate of lime, and a very soluble acetate of soda; these are easily separated from each other by solution in water and filtration; the acetate of soda being obtained in the crystalline form by evaporation. From this, or the acetate of lime, some manufacturers employing the former, others the latter, the acetic acid is obtained by distillation with sulphuric acid (oil of vitriol); as thus procured, it is a colourless, volatile fluid, having a very pungent and refreshing odour, and a strong acid taste. Its strength should be ascertained by the quantity of marble required for its neutralisation, as its specific gravity does not give a correct indication. It is employed in the preparation of the acetate of lead (sugar of lead), in many of the pharmaceutical compounds, and also as an antiseptic.

Vinegar is an impure and very dilute acetic acid, obtained by exposing either weak wines or infusions of malt to the air and a slow fermentation; it contains, besides the pure acid, a large quantity of colouring matter, some mucilage, and a little spirit; from these it is readily separated by distillation. The impurities with which this distilled vinegar is sometimes adulterated, or with which it is accidentally contaminated, are oil of vitriol, added to increase the acidity, and oxides of tin or copper, arising from the vinegar having been distilled through tin or copper worms. These may be easily detected; the oil of vitriol by the addition of a little solution of muriate of barytes to the distilled vinegar, which, should the acid be present, will cause a dense white precipitate; and the oxides of tin or copper by the addition of water impregnated with sulphureted hydrogen. Vinegar is employed in many culinary and domestic operations, and also very largely in the manufacture of the carbonate of lead (white lead).

Benzoic acid—exists naturally, formed in the gum benzoin, and may be procured either by submitting the benzoin in fine powder to repeated sublimations, or by digesting it with lime and water, straining off the clear solution, and adding muriatic acid, which enters into combination with the lime, and the benzoic acid, being nearly insoluble in water, falls as a white powder; this may be further purified by a sublimation. Benzoic acid is of a beautiful pearly white colour when pure, has a very peculiar aromatic odour, and an acrid, acid, and bitter taste; it is used in making pastilles and perfumed incense. This acid also occurs in the balsams of Tolu and Peru, and in the urine of the horse and cow.

Boracic acid—is found in an uncombined state in many of the hot springs of Tuscany, as also at Sesso in the Florentine territory, from whence it has received the name of Sessolin. In Thibet, Persia, and South America, it occurs in combination with soda, and is imported from the former place into this country in a crystalline form, under the name of Tincal. These crystals are coated with a rancid, fatty substance, and require to be purified by repeated solutions and crystallisations; after which it is sold under the appellation of borax (bi-borate of soda); from a hot solution of this salt the boracic acid is readily obtained, by the addition of sulphuric acid in slight excess; sulphate of soda is formed, and the boracic acid crystallises as the solution cools. When pure, these crystals are white, and have an unctuous greasy feel; they are soluble in alcohol, communicating a green tinge to its flame; when fused it forms a transparent glass, and has been found by Mr. Faraday to unite with the oxide of lead, producing a very uniform glass, free from all defects, and well adapted for the purpose of telescopes and other astronomical instruments. Borax is much employed in the arts, particularly in metallurgic operations as a flux; also in enamelling, and in pharmacy. (See BORAX.)

Carbonic acid.—This acid occurs very abundantly in nature, combined with lime, magnesia, barytes, aerial acid, fixed air, mephitic acid; from any of these it is easily separated by the addition of nearly any of the other acids. In its uncombined form it is a transparent, gaseous fluid, having a density of 1·53, atmospheric air being unity; it is absorbed to a considerable extent by water, and when the water is rendered slightly alkaline by the addition of carbonate of soda, and a large quantity of gas forced into it by pressure, it forms the well-known refreshing beverage soda water. This gas is also formed in very large quantities during combustion, respiration, and fermentation. Carbonic acid gas is destructive of animal life and combustion, and from its great weight accumulates in the bottoms of deep wells, cellars, caves, &c., which have been closed for a long period, and numerous fatal accidents arise frequently to persons entering such places incautiously; the precaution should always be taken of introducing a lighted candle prior to the descent or entrance of any one; for should the candle be extinguished, it would be dangerous to enter until properly ventilated. The combinations of carbonic acid with the alkalies, earths, and metallic oxides are termed carbonates.

Citric acid—exists in a free state in the juice of the lemon, lime, and other fruits, combined, however, with mucilage, and sometimes a little sugar, which renders it, if required to be preserved for a long period, very liable to ferment; on this account the crystallised citric acid is to be preferred. It is pre-

pared by saturating the lemon juice with chalk: the citric acid combines with the lime, forming an insoluble compound, while the carbonic acid is liberated; the insoluble citrate, after being well washed, is to be acted upon by dilute sulphuric acid, which forms sulphate of lime, and the citric acid enters into solution in the water; by filtration and evaporation the citric acid is obtained in colourless transparent crystals. The chief uses to which it is applied are as a preventive of sea scurvy, and in making refreshing acidulous or effervescing drinks; for which latter purposes it is peculiarly fitted from its very pleasant flavour.

Fluoric acid—is found in the well-known mineral fluor spar in combination with lime; from which it is procured in the liquid form by distillation with dilute sulphuric acid in a leaden or silver retort; the receiver should be of the same material as the retort, and kept cool by ice or snow.

This acid is gaseous in its pure form, highly corrosive, and intensely acid; it is rapidly absorbed by water, communicating its properties to that fluid. Its chief use is for etching on glass, which it corrodes with great rapidity. For this purpose a thin coating of wax is to be melted on the surface of the glass, and the sketch drawn by a fine hard-pointed instrument through the wax; the liquid acid is then poured on it, and after a short time, on the removal of the acid and coating, an etching will be found in the substance of the glass. A very excellent application of this property, possessed by fluoric acid, is in the roughing the shades for table lamps. All the metals, except silver, lead, and platina, are acted upon by this acid.

Gallic acid.—The source from which this acid is generally obtained is the nut gall, a hard protuberance produced on the oak by the puncture of insects. The most simple method of procuring the acid in its pure form is to submit the galls in fine powder to sublimation in a retort, taking care that the heat be applied slowly and with caution; the other processes require a very long period for their completion. When pure, gallic acid has a white and silky appearance, and a highly astringent and slightly acid taste. The nut galls, which owe their properties to the gallic acid they contain, are employed very extensively in the arts, for dyeing and staining silks, cloths, and woods of a black colour; this is owing to its forming with the oxide of iron an intense black precipitate. Writing ink is made on the same principle: a very excellent receipt of the late Dr. Black's is, to take 3 oz. of the best Aleppo galls in fine powder, 1 oz. sulphate of iron (green vitriol), 1 oz. logwood finely rasped, 1 oz. gum arabic, one pint of the best vinegar, one pint of soft water, and 8 or 10 cloves; in this case the black precipitate is kept suspended by the gum.

Hydriodic acid,—a compound of iodine and hydrogen,—in its separate form is of very little importance in the arts; its combinations with potass, soda, and other of the metallic oxides, will be treated of hereafter.

Malic acid—exists in the juices of many fruits, particularly the apple, as also in the berries of the service and mountain ash.

Meconic acid—is found in opium, in combination with morphia, forming the meconate of morpoia, on which the action of opium principally depends.

Muriatic acid, or spirits of salts.—This acid (the hydrochloric of the French chemists) is manufactured from the chloride of sodium (dry sea salt), by the action of sulphuric acid (oil of vitriol). The most economical proportions are 20 pounds of fused salt, and 20 pounds of oil of vitriol previously mixed with an equal weight of water; these are placed in an iron or earthen pot, to which an earthen head and receiver are adapted, and submitted to distillation; the muriatic acid passes over in the vaporous form, and may be easily condensed. The liquid acid thus obtained should have a specific gravity of 1·17, water being equal to 100; it has a strong acid taste, and a slight yellow colour; this is owing to a small quantity of oxide of iron. By redistillation in a glass retort at a low temperature, it may be obtained perfectly pure and colourless. It sometimes contains a little sulphuric acid; this is detected by a solution of muriate of barytes. Muriatic acid, in its uncombined state, is an invisible elastic gas, having a very strong affinity for water; that fluid absorbing, at a temperature of 40° Fahrenheit, 480 times its volume, and the resulting liquid acid has a density of 1·21. So great is this attraction for water, that when the gas is liberated into the air, it combines with the moisture always present in that medium, forming dense white vapours. Its combinations with the alkalies, &c., are termed muriates; those of the greatest importance are the muriates of tin, ammonia, barytes, and sea salt. The test for the presence of muriatic acid in any liquid is the nitrate of silver (lunar caustic), which causes a curdy white precipitate.

Nitric acid, or aquafortis.—This, which is one of the most useful acids with which the chemist is acquainted, is prepared by acting upon saltpetre (nitric or nitrate of potass) with oil of vitriol: the proportions best suited for this purpose are three parts by weight of nitre and two of oil of vitriol; or 100 nitre, and 60 oil of vitriol previously diluted with 20 of water; either of these proportions will produce a very excellent acid. When submitted to distillation, which should be conducted in earthen or glass vessels, the nitric acid passes over in the form of vapour, and a bisulphate of potass (sal mixum) remains in the retort.

Nitric acid of commerce has usually a dark orange-red colour, giving off copious fumes, and having a specific gravity of 150, water being 100. It is strongly acid and highly corrosive. It may be obtained perfectly colourless by a second distillation, rejecting the first portion that passes over. It is much employed in the arts, for etching on copper-plates for engraving; also, for the separation of silver from gold, in the process of quartation. In pharmacy and surgery it is extensively used, and is employed for destroying contagious effluvia. Combined with muriatic acid, it forms aqua regia (nitro-muriatic acid), used as a solvent for gold, platina, &c. This acid is frequently contaminated with the muriatic and sulphuric acids; these may be detected by the following methods.—A portion of the suspected acid should be diluted with three or four times its volume of distilled water, and divided into two glasses; to one of which nitrate of silver (lunar caustic in solution) is to be added, and to the other nitrate of barytes: if muriatic acid be present, a white curdy precipitate will be thrown down by the former; and if sulphuric, a white granular precipitate by the latter.

Oxalic acid—occurs in combination with potass as binoxalate of potass in the different varieties of sorrel, from whence the binoxalate of potass has been termed salt of sorrel. This acid is usually prepared by the action of nitric acid upon sugar, evaporating the solution, after the action has ceased, to the consistence of a syrup, and redissolving and recrystallising the crystals which are thus procured.

It is sold in small white acicular crystals, of a strongly acid taste and highly poisonous, and sometimes in its external appearance bears a strong similarity to Epsom salts (sulphate of magnesia), which it has been unfortunately frequently mistaken for. It is instantly distinguished from Epsom salts by placing a small crystal upon the tongue; when its strong acid taste, compared with the nauseous bitter of the sulphate of magnesia, will be quite a sufficient criterion. In cases of poisoning, however, by this acid, lime or chalk, mixed with water to form a cream, should be immediately administered, the combinations of oxalic acid with these substances being perfectly inert. It is employed in removing ink-stains, iron moulds, &c. from linen and leather; the best proportions for these purposes are 1 oz. of the acid to a pint of water. The most delicate test of the presence of oxalic acid is a salt of lime or lime-water, with either of which it forms a white precipitate, insoluble in water, but soluble in acids. Its combinations are termed oxalates.

Phosphoric acid—is of very little importance in a commercial point of view, except as forming with lime the earth of bones (phosphate of lime). It is prepared by heating bones to whiteness in a furnace; from this phosphoric acid is obtained by the action of sulphuric acid, still combined, however, with a small quantity of lime. The action of nitric acid upon phosphorus, the latter being added gradually and in small pieces, yields this acid in a state of purity; its combinations are termed phosphates.

Prussic acid, or hydrocyanic acid.—This acid, which is the most virulent and poisonous acid known, is contained in peach blossoms, bay leaves, and many other vegetable productions, which owe their peculiar

odour to the presence of prussic acid. For the purposes of medicine and chemistry, this acid is prepared either by distilling one part of the cyanuret of mercury, one part of muriatic acid of specific gravity 1·15, and six parts of water, six parts of prussic acid being collected; or, by dissolving a certain weight of cyanuret of mercury, and passing a current of sulphureted hydrogen through the solution, until the whole of the mercury shall be precipitated; if an excess of sulphureted hydrogen should be present, a little carbonate of lead (white lead) will remove it; on filtering, a colourless prussic acid will be obtained. By the first process, which is the one followed at Apothecaries' Hall, the acid has a density 995, water being equal to 1000; by the latter, it may be procured of any required strength, depending on the quantity of cyanuret of mercury dissolved. The best test for the presence of this acid is, first to add a small quantity of the protosulphate of iron (solution of green vitriol), then a little solution of potassa, and lastly diluted sulphuric acid; if prussic acid be present, prussian blue will be formed. Its combinations are called prussiates or hydrocyanates; when in its concentrated form, it is so rapid in its effects that large animals have been killed in the short space of 80 seconds, or from a minute to a minute and a half.

Sulphurous acid—is formed whenever sulphur is burnt in atmospheric air; it is a suffocating and pungent gas, strongly acid, bleaches vegetable colours with great rapidity, and arrests the process of vinous fermentation. For these purposes it is therefore very much employed, especially in bleaching woollen goods and straws. Fermentation may be immediately arrested by burning a small quantity of sulphur in casks, and then racking off the wine while still fermenting into them; this frequently gives the wine a very unpleasant taste of sulphur, which is avoided by the use of sulphate of potass, made by impregnating a solution of potass with sulphurous acid gas.

Sulphuric acid, or oil of vitriol—called oil of vitriol from its having been formerly manufactured from green vitriol (sulphate of iron). In some parts of the Continent this process is still followed. The method generally adopted in this country is to introduce nine parts of sulphur, intimately mixed with one part of nitre, in a state of active combustion, into large leaden chambers, the bottoms of which are covered with a stratum of water. Sulphurous and nitrous acid gases are generated, which entering into combination form a white crystalline solid, which falls to the bottom of the chamber; the instant that the water comes in contact with it, this solid is decomposed with a hissing noise and effervescence, sulphuric acid combines with the water, and nitrous gas is liberated, which combining with oxygen from the air of the chamber is converted into nitrous acid gas, again combines with sulphurous acid gas, and again falls to the bottom of the chamber: this process continues as long as the combustion of the sulphur is kept up, or as long as atmospheric air remains in the chamber; the nitrous acid merely serving as a means for the transference of oxygen from the atmosphere to the sulphurous acid to convert it into sulphuric acid. The water is removed from the chamber when of a certain strength, and replaced by fresh. These acid waters are then evaporated in leaden boilers, and finally concentrated in glass or platina vessels. As thus manufactured, sulphuric acid is a dense oily fluid, colourless, intensely acid, and highly corrosive, and has a specific gravity of 1,846, water being equal to 1,000. This acid is the most important with which [illegible] acquainted; it is employed in the manufacture of the nitric, muriatic, acetic, phosphoric, citric, tartaric, and many other acids; also in the preparation of chlorine, for the manufacture of the bleaching powder (oxymuriate of lime or chloride of lime), for the preparation of sulphate of mercury, in the manufacture of calomel and corrosive sublimate, and in innumerable other chemical manufactures. In the practice of physic it is also very much employed. It usually contains a little oxide of lead, which is readily detected by diluting the acid with about four times its volume of water, and allowing the sulphate of lead to subside. Its combinations are denominated sulphates. The fuming sulphuric acid, as manufactured at Nordhausen, contains only one half the quantity of water in its composition.

Tartaric acid.—This acid is procured from the cream of tartar (bitartrate of potass), obtained by purifying the crust which separates during the fermentation of wines by solution and crystallisation. When this purified bitartrate is dissolved, and lime or carbonate of lime added, an insoluble tartrate of lime falls, which after washing should be acted upon by sulphuric acid; sulphate of lime is thus formed, and the tartaric acid enters into solution, and may be obtained by evaporation and crystallisation. It is employed very much in the arts, in calico-printing, as also in making effervescing draughts and powders in pharmacy.

Uric acid—is an animal acid of very little importance, except in a scientific point of view: it exists in the excrement of serpents, to the amount of 95 per cent., and forms the basis of many of the urinary calculi and gravel.

N. B. *This article, and that on alkalies, has been furnished by an able practical chemist.*

ACORNS (Ger. *Eicheln, Eckern;* Fr. *Glands;* It. *Ghiande;* Sp. *Bellotas;* Rus. *Scheludii*; Lat. *Glandes*), the seed or fruit of the oak. Acorns formed a part of the food of man in early ages, and frequent allusion is made in the classics to this circumstance (*Virgil, Georg.* lib. i. lin. 8.; *Ovid, Met.* lib. i. lin. 106, &c.). In some countries they are still used, in periods of scarcity, as a substitute for bread. With us they are now rarely used except for fattening hogs and poultry. They are said to make, when toasted, with the addition of a little fresh butter, one of the best substitutes for coffee. Their taste is astringent and bitter.

ACRE, a measure of land. The Imperial or standard English acre contains 4 roods, each rood 40 poles or perches, each pole 272¼ square feet; and consequently each acre = 43,560 square feet. Previously to the introduction of the new system of weights and measures by the act *5* Geo. 4. cap 74., the acres in use in different parts of England varied considerably from each other and from the standard acre; but these customary measures are now abolished. The Scotch acre contains four roods, each rood 40 falls, and each fall 36 ells; the ell being equal to 37·06 Imperial inches. Hence the Imperial is to the Scotch acre nearly as 1 to 1¼, one Scotch acre being equal to 1·261 Imperial acres. The Irish acre is equal to 1 acre, 2 roods, and 19$\frac{21}{121}$ poles; 30¼ Irish being equal to 49 Imperial acres. (See WEIGHTS and MEASURES.)

ADJUSTMENT, in commercial navigation, the settlement of a loss incurred by the insured.

In the case of a total loss, if the policy be an *open* one, the insurer is obliged to pay the goods according to their *prime cost;* that is, the invoice price, and all duties and expenses incurred till they are put on board, including the premium of insurance. Whether they might have arrived at a good or a bad market, is held by the law of England to be immaterial. The insurer is supposed to have insured a constant and not a variable sum; and in the event of a loss occurring, the insured is merely to be put into the same situation in which he stood before the transaction began. If the policy be a *valued* one, the practice is to adopt the valuation fixed in it in case of a total loss, unless the insurers can show that the insured had a colourable interest only, or that the goods were greatly over-valued. In the case of all partial losses, the value of the goods must be proved.

"The nature of the contract between the insured and insurer is," says Mr. Justice Park, "that the goods shall come safe to the port of delivery; or, if they do not, that the insurer will indemnify the owner to the amount of the value of the goods stated in the policy. Wherever then the property insured is lessened in value by damage received at sea, justice is done by putting the merchant in the same condition (relation being had to the prime cost or value in the policy) in which he would have been had the goods arrived free from damage; that is, by paying him such proportion of the prime cost or value in the policy as corresponds with the proportion of the diminution in value occasioned by the damage. The question then is, how is the proportion of the damage to be ascertained? It certainly cannot be by any measure taken from the prime cost; but it may be done in this way: — Where any thing, as a hogshead of sugar, happens to be spoiled, if you can fix whether it be a third, a fourth, or a fifth worse, then the damage is ascertained to a mathematical certainty. How is this to be found out? Not by any price at the port of shipment, but it must be at the port of *delivery*, when the voyage is completed and the whole damage known. Whether the price at the latter be high or low, it is the same thing; for in either case it equally shows whether the damaged goods are a third, a fourth, or a fifth worse than if they had come sound; consequently, whether the injury sustained be a third, fourth, or fifth of the value of the thing. And as the insurer pays the whole prime cost if the thing be wholly lost, so if it be only a third, fourth, or fifth worse, he pays a third, fourth, or fifth, not of the value for which it is sold, *but of the value stated in the policy*. And when no valuation is stated in the policy, the invoice of the cost, with the addition of all charge, and the premium of insurance, shall be the foundation upon which the loss shall be computed."

Thus, suppose a policy to be effected on goods, the prime cost of which, all expenses included, amounts to 1,000*l.*; and suppose further, that these goods would, had they safely reached the port of delivery, have brought 1,200*l.*, but that, owing to damage they have met with in the voyage, they only fetch 800*l.*; in this case it is plain, inasmuch as goods that would otherwise have been worth 1,200*l.* are only worth 800*l.*, that they have been deteriorated *one third*; and hence it follows, conformably to what has been stated above, that the insurer must pay one third of their *prime cost* (1,000*l.*), or 333*l.* 6*s.* 8*d.* to the insured.

In estimating the value of goods at the port of delivery, the *gross* and not the *nett* proceeds of the sales are to be taken as the standard.

A ship is valued at the sum she is worth at the time she sails on the voyage insured, including the expenses of repairs, the value of her furniture, provisions, and stores, the money advanced to the sailors, and, in general, every expense of the outfit, to which is added the premium of insurance.

When an adjustment is made, it is usual for the insurer to indorse upon the policy "adjusted this loss at (so much) per cent.," payable in a given time, generally a month, and to sign it with the initials of his name. This is considered as a note of hand, and as such is *prima facie* evidence of the debt not to be shaken, but by proving that fraud was used in obtaining it, or that there was some misconception of the law or the fact upon which it was made. See, for a further discussion of this subject, the article MARINE INSURANCE, *Park on the Law of Insurance* (cap. 6.), and *Marshall* (book 1. cap. 14.).

ADMEASUREMENT. See TONNAGE.

ADVANCE, implies money paid before goods are delivered, or upon consignment. It is usual with merchants to advance from a half to two-thirds of the value of goods consigned to them, on being required, on their receiving invoice, bill of lading, orders to insure them from sea risk, &c.

ADVERTISEMENT, in its general sense, is any information as to any fact or circumstance that has occurred, or is expected to occur; but, in a commercial sense, it is understood to relate only to specific intimations with respect to the sale of articles, the formation and dissolution of partnerships, bankruptcies, meetings of creditors, &c.

Previously to 1833 a duty of 3*s.* 6*d.* was charged upon every advertisement, long or short, inserted in the Gazette, or in any newspaper, or literary work published in parts or numbers. This duty added about 100 per cent. to the cost of advertising, for the charge (exclusive of the duty) for inserting an advertisement of the ordinary length in the newspapers rarely exceeds 3*s.* or 4*s.*; and having been in consequence much objected to, it was reduced in the above-mentioned year to 1*s.* 6*d.* We ventured in the former edition of this work, to express our conviction that this reduction would not be productive of any very serious injury to the revenue, and the result has not disappointed our expectations. In 1832, the last year of the high duty, the revenue from advertisements amounted to 170,650*l.*, and in 1841 it amounted to 131,604*l.* The measure has, therefore, been eminently successful. It were, however, much to be wished that the duty could be dispensed with. Its operation is necessarily most unequal, and in many instances oppressive. Can any thing be more unjust than to impose the same duty on a notice of the publication of a sixpenny pamphlet, or of a servant being out of place, as on an intimation of the sale of a valuable estate? But as it is altogether impossible to impose the duty on an *ad valorem* principle, this injustice cannot be obviated so long as it is maintained. In a commercial country, a duty on advertisements is peculiarly objectionable, inasmuch as it checks the circulation of information of much importance to mercantile men. We, therefore, hope that means may be found of repealing the tax. For an account of its operation on literature, see BOOKS.

ADVICE, is usually given by one merchant or banker to another *by letter*, informing him of the bills or drafts drawn on him, with all particulars of date, or sight, the sum, to whom made payable, &c. Where bills appear for acceptance or payment, they are frequently refused to be honoured for *want of advice*. It is also necessary to give advice, as it prevents forgeries: if a merchant accept or pay a bill for the honour of any other person, he is bound to advise him thereof, and this should always be done under *an act of honour* by a notary public.

AGATE (popularly CORNELIAN), Ger. *Achat*; Du. *Achaat*; Fr. *Agate*; It. *Agata*; Rus. *Ayat*; Lat *Achates*). A genus of semi-pellucid gems, so called from the Greek ἀχάτες, because originally found on the banks of the river of that name in Italy. It is never wholly opaque like jasper, nor transparent as quartz-crystal; it takes a very high polish, and its opaque parts usually present the appearance of dots, eyes, veins, zones, or bands. Its colours are yellowish, reddish, bluish, milk-white, honey-orange, or ochre-yellow, flesh-blood, or brick-red, reddish brown, violet blue, and brownish green. It is found in irregular rounded nodules, from the size of a pin's head to more than a foot in diameter. The lapidaries distinguish agates according to the colour of their ground; the finer semi-transparent kinds being termed oriental. The most beautiful

agates found in Great Britain are commonly known by the name of *Scotch pebbles*, and are met with in different parts of Scotland, principally on the mountain of Cairngorm; whence they are sometimes termed Cairngorms. The German agates are the largest. Some very fine ones have been brought from Siberia and Ceylon. They are found in great plenty at the eastern extremity of the settlement of the Cape of Good Hope; and are still met with in Italy. But the principal mines of agate are situated in the little principality of Rajpepla, in the province of Gujrat, fourteen miles distant from the city of Broach, where they are cut into beads, crosses, snuff-boxes, &c. They are exported in considerable quantities to other parts of India, and to this country; and hence, perhaps, the jewellers' term "broach."

AGENT. See FACTOR.

AGIO, a term used to express the difference, in point of value, between metallic and paper money; or between one sort of metallic money and another.

ALABASTER (Ger. *Alabaster*; It. *Alabastro*; Fr. *Albâtre*; Rus. *Alabastr*; Lat. *Alabastrites*). A kind of stone resembling marble, but softer. Under this name are confounded two minerals, the *gypseous* and *calcareous* alabasters; they are wholly distinct from each other when pure, but in some of the varieties are occasionally mixed together. The former, when of a white or yellowish or greenish colour, semi-transparent, and capable of receiving a polish, is employed by statuaries. It is very easily worked, but is not susceptible of a polish equal to marble. Calcareous alabaster is heavier than the former; it is not so hard as marble, but is notwithstanding susceptible of a good polish, and is more used in statuary. The statuaries distinguish alabaster into two sorts, the common and oriental. Spain and Italy yield the best alabaster. That produced at Montania, in the papal states, is in the highest esteem for its beautiful whiteness. Inferior sorts are found in France and Germany. Alabaster is wrought into tables, vases, statues, chimney-pieces, &c.

ALCOHOL (ARDENT SPIRIT), (Fr. *Esprit de Vin*; Ger. *Weingeist*; It. *Spirito ardente, Spirito di Vino, Acquarzente*), the name given to the *pure spirit* obtainable by distillation, and subsequent rectification, from all liquors that have undergone the vinous fermentation, and from none but such as are susceptible of it. It is light, transparent, colourless; of a sharp, penetrating, agreeable smell; and a warm stimulating taste. It is quite the same, whether obtained from brandy, wine, whisky, or any other fluid which has been fermented. The specific gravity of alcohol when perfectly pure is from ·792 to ·800, that of water being 1,000; but the strongest spirit afforded by mere distillation is about ·820; alcohol of the shops is about ·835 or ·840. Alcohol cannot be frozen by any known degree of cold. It boils at 174°. It is the only dissolvent of many resinous substances; and is extensively used in medicine and the arts. —(*Drs. A. T. Thomson, Ure*, &c.)

ALDER, the *Betula alnus* of botanists, a forest tree abundant in England and most parts of Europe. It thrives best in marshy grounds and on the banks of rivers. It rarely attains to a very great size; its wood is extremely durable in water or in wet ground; and hence it is much used for piles, planking, pumps, pipes, sluices, and generally for all purposes where it is kept constantly wet. It soon rots when exposed to the weather or to damp; and when dry, it is much subject to worms. The colour of the wood is reddish yellow, of different shades, and nearly uniform. Texture very uniform, with larger septa of the same colour as the wood. It is soft, and works easily. —(*Tredgold's Principles of Carpentry.*)

ALE and BEER, well known and extensively used fermented liquors, the principle of which is extracted from several sorts of grain, but most commonly from barley, after it has undergone the process termed malting.

1. *Historical Notice of Ale and Beer.*—The manufacture of ale or beer is of very high antiquity. Herodotus tells us, that owing to the want of wine the Egyptians drank a liquor fermented from barley (lib. ii. cap. 77.). The use of it was also very anciently introduced into Greece and Italy, though it does not appear to have ever been very extensively used in these countries. Mead, or metheglin, was probably the earliest intoxicating liquor known in the North of Europe. Ale or beer was, however, in common use in Germany in the time of Tacitus (*Morib. Germ.* cap. 23.). "All the nations," says Pliny, "who inhabit the West of Europe have a liquor with which they intoxicate themselves, made of corn and water (*fruge madida*). The manner of making the liquor is somewhat different in Gaul, Spain, and other countries, and it is called by many various names; but its nature and properties are every where the same. The people of Spain, in particular, brew this liquor so well that it will keep good for a long time. So exquisite is the ingenuity of mankind in gratifying their vicious appetites, that they have thus invented a method to make water itself intoxicate." (*Hist. Nat.* lib. xiv. cap. 22.) The Saxons and Danes were passionately fond of beer; and the drinking of it was supposed to form one of the principal enjoyments of the heroes admitted to the hall of Odin. —(*Mallet's Northern Antiquities*, cap. 6, &c.) The manu-

facture of ale was early introduced into England. It is mentioned in the laws of Ina, King of Wessex; and is particularly specified among the liquors provided for a royal banquet in the reign of Edward the Confessor. It was customary in the reigns of the Norman princes to regulate the price of ale; and it was enacted, by a statute passed in 1272, that a brewer should be allowed to sell two gallons of ale for a penny in cities, and three or four gallons for the same price in the country.

The use of hops in the manufacture of ale and beer seems to have been a German invention. They were used in the breweries of the Netherlands, in the beginning of the fourteenth century; but they do not seem to have been introduced into England till 200 years afterwards, or till the beginning of the sixteenth century. In 1530, Henry VIII. enjoined brewers not to put hops into their ale. It would, however, appear that but little attention was paid to this order; for in 1552 hop plantations had begun to be formed. — (*Beckmann's Hist. Invent.* vol. iv. pp. 336 — 341. Eng. ed.) The addition of hops render ale more palatable, by giving it an agreeable bitter taste, while, at the same time, it fits it for being kept much longer without injury. Generally speaking, the English brewers employ a much larger quantity of hops than the Scotch.

2. *Distinction between Ale and Beer, or Porter.* — This distinction has been well elucidated by Dr. Thomas Thomson, in his article on Brewing, in the Encyclopædia Britannica: — "Both ale and beer are in Great Britain obtained by fermentation from the malt of barley; but they differ from each other in several particulars. Ale is light-coloured, brisk, and sweetish, or at least free from bitter; while beer is dark-coloured, bitter, and much less brisk. What is called *porter* in England is a species of beer; and the term 'porter' at present signifies what was formerly called *strong beer*. The original difference between ale and beer was owing to the malt from which they were prepared. Ale malt was dried at a very low heat, and consequently was of a pale colour; while beer or porter malt was dried at a higher temperature, and had of consequence acquired a brown colour. This incipient charring had developed a peculiar and agreeable bitter taste, which was communicated to the beer along with the dark colour. This bitter taste rendered beer more agreeable to the palate, and less injurious to the constitution than ale. It was consequently manufactured in greater quantities, and soon became the common drink of the lower ranks in England. When malt became high-priced, in consequence of the heavy taxes laid upon it, and the great increase in the price of barley which took place during the war of the French revolution, the brewers found out that a greater quantity of wort of a given strength could be prepared from pale malt than from brown malt. The consequence was that pale malt was substituted for brown malt in the brewing of porter and beer. We do not mean that the whole malt employed was pale, but a considerable proportion of it. The wort, of course, was much paler than before; and it wanted that agreeable bitter flavour which characterised porter, and made it so much relished by most palates. The porter brewers endeavoured to remedy these defects by several artificial additions. At the same time various substitutes were tried to supply the place of the agreeable bitter communicated to porter by the use of brown malt. Quassia, cocculus indicus, and we believe even opium, were employed in succession; but none of them was found to answer the purpose sufficiently. Whether the use of these substances be still persevered in we do not know; but we rather believe that they are not, at least by the London porter brewers."

3. *Adulteration of Ale and Beer — substitution of Raw Grain for Malt.* — The use of the articles other than malt, referred to by Dr. Thomson, has been expressly forbidden, under heavy penalties, by repeated acts of parliament. The act 56 Geo. 3. c. 58. has the following clauses: —

"No brewer or dealer in or retailer of beer shall receive or have in his possession, or make, or use, or mix with, or put into any worts or beer, any liquor, extract, calx, or other material or preparation for the purpose of darkening the colour of worts or beer; or any liquor, extract, calx, or other material or preparation other than brown malt, ground or unground, as commonly used in brewing; or shall receive, or have in his possession, or use, or mix with, or put into any worts or beer, any molasses, honey, liquorice, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, or opium, or any extract or preparation of molasses, honey, liquorice, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, or opium, *or any article or preparation whatsoever for or as a substitute for malt or hops*, upon pain that all such liquor, extract, calx, molasses, honey, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, opium, extract, article, and preparation as aforesaid, and also the said worts and beer, shall be forfeited, together with the casks, vessels, or other packages, and may be seized by any officer of excise; and such brewer of, dealer in, or retailer of beer, so offending, shall for each offence forfeit 200*l.*

"No druggist or vender of or dealer in drugs, or chemist, or other person whatever, shall sell, send, or deliver to any licensed brewer of, or dealer in, or retailer of beer, knowing him to be so licensed, or reputed to be so licensed, or to any other person for, or on account of, or in trust for, or for the use of such brewer, dealer, or retailer, any colouring, from whatever material made, or any other material or preparation other than *unground brown malt*, for the purpose of darkening the colour of worts or beer; or any liquor or preparation heretofore or hereafter made use of for darkening the colour of worts or beer, or any molasses or other articles, as mentioned in the first section, for or as a substitute for malt or hops respectively; and if any druggist, or vender of or dealer in drugs, or any chemist, or other person whatever, shall so do, all such liquor called colouring, and material or preparation for the purpose aforesaid, and liquor and preparation used for darkening the colour of worts or beer, molasses, and article or pre-

paration to be used as a substitute for malt or hops, shall be forfeited, and may be seized by any officer of excise; and the druggist, vender, dealer, chemist, or other person so offending, shall forfeit 500*l.*

By the act 1 Will. 4. c. 51. for the repeal of the ale and beer duties, it is enacted (§ 17.), "that no brewer shall have in his brewery, or in any part of his entered premises, or in any mill connected with such brewery, any raw or unmalted corn or grain; and all unmalted corn or grain which shall be found in such brewing premises or mill, and all malted corn or grain with which such unmalted corn or grain may have been mixed, shall be forfeited, and may be seized by any officer, together with all vessels or packages in which such raw or unmalted corn or grain shall be contained, or in which such unmalted corn or grain, and the malted corn or grain with which the same may have been mixed, shall be contained; and every brewer shall for every such offence forfeit 200*l.*"

4. *Descriptions of Ale and Beer.* — Previously to 1823 there were only two sorts of beer allowed to be brewed in England, viz. *strong beer*, that is, beer of the value of 16*s.* and upwards the barrel, exclusive of the duty; and *small beer*, or beer of the value of less than 16*s.* a barrel, exclusive of the duty. In 1823, however, an act was passed (4 Geo. 4. c. 51.) authorising the brewing, under certain conditions, of an *intermediate* beer. But this sort of beer was either not suited to the public taste, or, which is more probable, the restrictions laid on the brewers deterred them from engaging extensively in its manufacture.

This limitation and classification of the different sorts of ale and beer, according to their strength, originated in the duties laid upon them; and now that these duties have been repealed, ale and beer may be brewed of any variety or degree of strength.

The brewing of ale has long constituted a principal, or rather, perhaps, we might say the principal, manufacturing employment carried on in Edinburgh. The best Edinburgh ale is of a pale colour, mild, glutinous, and adhesive. It is much stronger and more intoxicating than porter, from 4 to 5 bushels of malt being generally used in brewing a barrel of ale, with about 1 lb. of hops to a bushel of malt. At present (1843) the produce of the ale breweries of Edinburgh may be estimated at about 195,000 barrels a year. Very good ale is also made at Preston Pans, Alloa, and other Scotch towns. Considerable quantities of Edinburgh ale are sent to London; though this trade has latterly been decreasing. Very good ale may be produced by brewers on a small scale, but it is doubtful whether this be the case with porter; at all events the best porter is all produced in very large establishments.

Formerly it was not supposed that really good porter could be made any where except in London. Of late years, however, Dublin porter has attained to high and not unmerited reputation; though we certainly are not of the number of those who consider it equal to the best London porter.

Large quantities of a light, pale, and highly-hopped variety of ale have been for some considerable time past exported to the East Indies, where it is in high estimation; and it is now, also, rather extensively used in summer in this country.

5. *Regulations as to the Manufacture of Ale and Beer.* — Since the abolition of the beer duties, these regulations are very few and simple; and consist only in taking out a licence, entering the premises, and abstaining from the use of any article, other than malt, in the preparation of the beer. A brewer using any place, or mash-tun, for the purpose of brewing, without having made an entry thereof at the nearest excise office, forfeits for every such offence 200*l.*; and all the worts, beer, and materials for making the same, together with the mash-tun, are forfeited, and may be seized by any officer. — Brewers obstructing officers shall, for every such offence, forfeit 100*l.* — (1 *Will.* 4. c. 51. §§ 15, 16.)

6. *Licence Duties.* — *Number of Brewers.* — The licence duties payable by brewers of ale and beer, and the numbers of such licences granted during the years 1841 and 1842 were as follows: —

Account showing the Number of Licences issued to Brewers in the Years 1841 and 1842, with the Rates of Duty charged thereon (supplied by the Excise).

	Sums charged for Licences.	Number of Licences granted.	
		1841.	1842.
	L. *s.* *d.*		
Common brewers of strong beer, not exceeding 20 barrels	0 10 6	8,180	8,123
Exceeding 20 and not exceeding 50 barrels	1 1 0	8,789	8,833
— 50 — 100 —	1 11 6	9,818	9,712
— 100 — 1000 —	2 2 0	16,130	15,407
— 1000 — 2000 —	3 3 0	708	694
— 2000 — 5000 —	7 17 6	606	581
— 5000 — 7500 —	11 16 3	162	141
— 7500 — 10,000 —	15 15 0	94	81
— 10,000 — 20,000 —	31 10 0	78	82
— 20,000 — 30,000 —	47 5 0	26	24
— 30,000 — 40,000 —	63 0 0	5	6
Exceeding 40,000 —	78 15 0	22	22
Brewers of table beer only, not exceeding 20 barrels	0 10 6	73	126
Exceeding 20 and not exceeding 50 barrels	1 1 0	15	17
— 50 — 100 —	1 11 6	11	7
Exceeding 100 —	2 2 0	15	12
Retail brewers of strong beer	5 10 3	40	38
Total number of Licences		44,804	43,906

N. B.—The barrel contains 36 gallons, or 4 firkins of 9 gallons each, Imperial measure. It is enacted

(1 Will. 4. c. 51. § 7.), that, from the 10th of October, 1830, brewers are to pay their license duty according to the malt used by them in brewing, and that every brewer shall be deemed to have brewed *one* barrel of beer for every *two* bushels of malt used by such brewer.

Account of the Number of Brewers, Licensed Victuallers, Persons licensed for the Sale of Beer to be drunk on and off the Premises, &c., with the Quantities of Malt used by such Brewers, &c. in England, Scotland, and Ireland, during the Year 1842 (supplied by the Excise).

	Number of				Number who brew their own Beer.			Bushels of Malt consumed by each Class.			
	Brewers.	Victuallers.	Persons licensed to sell Beer.		Victuallers.	Persons licensed to sell Beer.		Brewers.	Victuallers.	Persons licensed to sell Beer.	
			To be drunk on the Premises.	Not to be drunk on the Premises.		To be drunk on the Premises.	Not to be drunk on the Premises.			To be drunk on the Premises.	Not to be drunk on the Premises.
England	2,251	57,591	31,821	4,477	26,599	12,948	1,246	16,180,142	7,629,153	2,671,282	388,169
Scotland	193	15,699	- -	- -	193	228	- -	760,128	85,598	- -	- -
Ireland	145	13,941	- -	- -	145	- -	- -	993,414	- -	- -	- -
United Kingdom	2,589	87,231	31,821	4,477	26,937	13,176	1,246	17,933,684	7,714,751	2,671,282	388,169

It is enacted (1 Will. 4. c. 51.) that every person who shall sell any beer or ale in less quantities than four and a half gallons, or two dozen reputed quart bottles, to be drunk elsewhere than on the premises where sold, shall be deemed a dealer in beer.

7. *Progressive Consumption of Ale and Beer.* — Malt liquor early became to the labouring classes of England what the inferior sorts of wine are to the people of France, at once a necessary of life and a luxury, the taste for it was universally diffused. There are, however, no means by which an estimate can be formed of the quantity actually consumed previously to the reign of Charles II. But duties, amounting to *2s. 6d.* a barrel on strong, and to *6d.* a barrel on small ale or beer, were imposed, for the first time, in 1660. These duties being farmed until 1684, the amount of the revenue only is known; and as there are no means of ascertaining the proportion which the strong bore to the small beer, the quantities that paid duty cannot be specified. But, since the collection of the duty was entrusted to officers employed by government, accurate accounts have been kept of the quantities of each sort of beer on which duty was paid, as well as of the rate of duty and its amount. Now, it appears, that, at an average of the ten years from 1684 to 1693 inclusive, the amount of ale annually charged with duty was as follows: —

Strong ale - - 4,567,293 barrels.
Small do. - - 2,376,278 do.

Soon after the Revolution several temporary duties were imposed on ale and beer; but in 1694 they were consolidated, the established duties being then fixed at *4s. 9d.* a barrel on the strong, and at *1s. 3d.* on the small beer, instead of *2s. 6d.* and *6d.*, which had been the rates previously to 1690. This increase of duty had an immediate effect on the consumption, the quantity brewed during the ten years from 1694 to 1703 being as follows: —

Strong ale - - 3,371,604 barrels.
Small do. - - 2,180,764 do.

The whole of this decrease must not, however, be ascribed to the increase of the beer duties only, the duties on malt and hops having been, at the same time, considerably increased, operated partly, no doubt, to produce the effect.

During the five years ending with 1750 the ale brewed amounted, at an average, to 3,803,580 barrels of strong, and 2,162,540 barrels of small. — (*Hamilton's Principles of Taxation*, p. 255.)

The ale brewed in private families for their own use has always been exempted from any duty; and it may, perhaps, be supposed that the falling off in the consumption, as evinced by the statements now given, was apparent only, and that the decline in the public brewery would be balanced by a proportional extension of the private brewery. But, though there can be no doubt that the quantity of beer brewed in private families was increased in consequence of the peculiar taxes laid on the beer brewed for sale, it is abundantly certain that it was not increased in any thing like the ratio in which the other was diminished. This is established beyond all dispute, by the fact of the consumption of malt having continued *very nearly stationary*, notwithstanding the vast increase of population and wealth, from the beginning of the last century down to 1750, and, indeed, to 1830. — (See MALT.) Had the fact as to malt been different, or had the demand for it increased proportionally to the increase of population, it would have shown that the effect of the malt and beer duties had not been to lessen the consumption of beer, but merely to cause it to be brewed in private houses instead of public breweries; but the long continued stationary demand for malt completely negatives this supposition, and shows that the falling off in the beer manufactured by the public brewers had not been made up by any equivalent increase in the supply manufactured at home.

It appears from the following tables, that the quantity of strong beer manufactured by the public brewers had increased about a third between 1787 and 1830; but the quantity of malt consumed in 1787 was quite as great as in 1828, a fact which shows conclusively, either that the *quality* of the beer brewed in the public breweries had been deteriorated since 1787, or that less, comparatively, was then brewed in private families, or, which is most probable, that both effects had been produced.

I. An Account of the Quantity of the different Sorts of Beer made in England and Wales, in each Year from 1787 to 1825, both inclusive, the Rate of Duty, and the total Produce of the Duties (English Ale Gallons).

Years ended 5th July.	Strong Beer. Barrels.	Strong Beer. Rate of Duty.	Table Beer. Barrels.	Table Beer. Rate of Duty.	Small Beer. Barrels.	Small Beer. Rate of Duty.	Total Amount of Duty.
1787	4,426,482	8*s.* 0*d.*	485,620	3*s.* 0*d.*	1,342,301	1*s.* 4*d.*	*L.*1,932,922 10*s.* 8*d.*
1788	4,301,895	—	524,176	—	1,334,947	—	1,889,580 17 4
1789	4,437,831	—	514,900	—	1,241,046	—	1,935,303 16 0
1790	4,595,950	—	546,260	—	1,282,157	—	1,977,796 2 8
1791	4,754,588	—	579,742	—	1,347,086	—	2,078,602 4 8
1792	5,082,293	—	625,260	—	1,401,870	—	2,220,164 4 0
1793	5,167,850	—	620,207	—	1,411,255	—	2,254,455 14 4
1794	5,011,320	—	586,554	—	1,446,939	—	2,188,973 14 0
1795	5,037,804	—	576,164	—	1,453,036	—	2,198,460 5 4
1796	5,501,453	—	565,630	—	1,479,130	—	2,385,234 7 4
1797	5,839,627	—	581,422	—	1,518,512	—	2,521,748 4 8
1798	5,781,467	—	622,064	—	1,547,570	—	2,510,267 14 8
1799	5,774,311	—	611,151	—	1,597,139	—	2,507,872 19 8
1800	4,824,306	—	571,995	—	1,360,502	—	2,106,671 15 8
1801	4,735,574	—	500,025	—	1,191,930	—	2,048,695 7 0
1802	5,345,884	9*s.* 5*d.*	592,022	—	976,787	—	2,321,198 0 4
1803	5,582,516	—	1,660,828	—		—	2,782,263 13 4
1804	5,265,623	10*s.* 0*d.*	1,779,570	—		—	2,810,768 10 0
1805	5,412,131	—	1,776,807	—		—	2,883,743 4 0
1806	5,143,502	—	1,771,754	—		—	2,858,926 8 0
1807	5,577,176	—	1,732,710	—		—	2,961,859 0 0
1808	5,571,360	—	1,719,213	—		—	2,956,704 6 0
1809	5,515,111	—	1,682,899	—		—	2,924,845 8 0
1810	5,553,319	—	1,635,588	—		—	3,040,218 6 0
1811	5,902,903	—	1,619,564	—		—	3,116,407 18 0
1812	5,860,869	—	1,593,395	—		—	3,099,774 4 0
1813	6,382,916	—	1,455,759	—		—	3,837,018 18 0
1814	5,624,0[illegible]	—	1,434,729	—		—	2,955,280 8 0
1815	6,150,5[illegible]	—	1,518,302	—		—	3,227,102 4 0
1816	5,982,379	—	1,614,867	—		—	3,142,676 4 0
1817	5,238,148	—	1,453,960	—		—	2,763,420 0 0
1818	5,361,009	—	1,434,642	—		—	2,825,468 14 0
1819	5,629,230	—	1,460,244	—		—	2,960,614 8 0
1820	5,266,701	—	1,444,990	—		—	2,792,779 10 0
1821	5,575,850	—	1,439,970	—		—	2,951,912 0 0
1822	5,712,937	—	1,492,281	—		—	3,005,696 12 0
1823	6,177,[illegible]71	—	1,419,589	—		—	3,230,594 8 0
1824	6,188,271	—	1,101,021	—		—	3,234,237 12 0
					Intermediate Beer.		
1825	6,500,664	—	1,485,750	—	9,559	—	3,401,296 15 0

II. An Account of the Quantity of all the different Sorts of Beer, stated in Barrels, made in each Year, from 5th of January 1825 to 5th of January 1830, the Rates of Duty per Barrel in each Year, and Total Amount thereof in each Year in England and Scotland.—(*Parl. Paper*, No. 190. Sess. 1830.)

Years ended 5th January	ENGLAND. Number of Barrels, Imperial Measure.* Strong.	Rate per Barrel.	Table.	Rate per Barrel.	Intermediate.	Rate per Barrel.	Total Amount of Duty.
		s. *d.*		*s.* *d.*		*s.* *d.*	*L.* *s.* *d.*
1826	7,008,143	9 10	1,606,899	1 11½	6,160	4 11	3,492,779 10 4
1827	4,177,225	9 0	1,040,726	1 9½	7,707	—	3,265,141 14 6
	2,512,767	9 10	502,927	1 11½			
1828	3,805,226	9 0	989,827	1 9½	17,158	—	3,128,017 9 0
	2,500,013	9 10	512,481	1 11½			
1829	3,911,519	9 0	977,962	1 9½	62,617	—	3,217,812 2 11
	2,617,691	9 10	552,457	1 11½			
1830	3,569,364	9 0	879,879	1 9½	55,498	—	2,917,828 8 4
	2,379,930	9 10	500,590	1 11½			
	SCOTLAND.						
		s. *d.*		*s.* *d.*		*s.* *d.*	*L.* *s.* *d.*
1826	153,903	9 10	264,035	1 11½	- -	—	91,751 2 2
1827	116,594	9 0	219,724	1 9½	- -	—	79,931 1 7
	5,545	9 10	51,613	1 11½			
1828	102,769	9 0	187,873	1 9½	- -	—	72,855 4 4
	9,250	9 10	53,420	1 11½			
1829	101,475	9 0	178,550	1 9½	- -	—	76,885 9 11
	17,248	9 10	68,913	1 11½			
1830	94,387	9 0	161,488	1 9½	- -	—	71,733 17 5
	16,566	9 10	67,896	1 11½			

N. B.—The duty on beer being repealed in 1830, there are no later accounts of the quantity brewed.

The stationary consumption of malt and beer during the greater part of last century is, most probably, in great part ascribable to the introduction and rapid diffusion of a taste for tea and coffee, and to the consequent change that was effected in the mode of living of the middle and upper classes. No doubt, however, the oppressive duties with which malt and beer were loaded in the latter part of last century and down to 1830 narrowed their consumption in an extraordinary degree. After various previous additions the duty on malt was raised in 1804 to 4*s.* 5½*d.* per bushel, or 35*s.* 10*d.* a quarter, the beer duties being then also raised to 10*s.* per barrel (old measure); and as a quarter of malt produced about three or three and a half barrels of beer, it follows that the duty on malt used in breweries really amounted at that period to from 65*s.* 10*d.* to 70*s.* 10*d.* a quarter, making the duty on strong beer, exclusive of that on hops, about 20*s.* a barrel. The duty on malt continued at this exorbitant rate till 1816; and to show its influence it is only necessary to state that during the 12 years ending with 1816 the consumption of malt amounted to no more than 23,197,754 bushels a year, being, notwithstanding the vast increase of wealth and population in the interval, less than it had been a century previously, the consumption having amounted to 24,191,304

* The ale gallon contains 282 cubic inches, and the Imperial gallon 277½; the latter being 1·60th part less than the former.

bushels a year during the 12 years ending with 1720!—(See art. MALT.) The duties had, in fact, been completely overdone; and besides hindering the consumption of malt and malt liquors, they had the mischievous effect of vitiating the public taste and stimulating the consumption of ardent spirits, especially of those made from raw grain. In 1816, however, the duty on malt was reduced to *2s. 5d.* a bushel, and since 1823 it has amounted to *2s. 7d.* a bushel, or *20s. 8d.* a quarter; and the beer duty having been abolished in 1830, this has been the only duty with which malt liquor has since been affected. And though we are unable, from the want of subsequent returns, to state how much the consumption of beer has increased since 1830, the increase in the consumption of malt shows that it must be very considerable. We subjoin

An Account of the Quantities of Malt brewed by the Twelve principal London Porter and Ale Brewers, during the 5 Years ending with October 1842 (from Slater's Brewers' Malt List).

	1838.	1839.	1840.	1841.	1842.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
Barclay & Co. - - - -	107,455	112,476	115,561	106,345	114,090
Hanbury & Co. - - - -	90,140	91,069	98,210	88,132	92,469
Whitbread & Co. - - - -	45,460	51,979	53,692	51,457	52,098
*Reid & Co. - - - -	44,928	44,010	48,130	47,980	50,140
*Meux & Co. - - - -	35,065	38,165	40,787	39,797	40,340
Combe & Co. - - - -	43,444	40,712	38,368	36,460	46,484
Calvert & Co. - - - -	31,529	31,028	30,872	30,615	30,660
Hoare & Co - - - -	31,978	31,098	30,810	29,450	29,607
Elliot & Co. - - - -	22,000	22,990	25,255	25,379	27,090
Charrington & Co. - - - -	20,290	18,688	18,328	17,840	20,423
Taylor & Co. - - - -	27,320	25,955	27,300	21,424	19,530
Courage & Co. - - - -	10,723	10,456	11,532	12,328	13,016

* Those marked thus * brew porter only.

The duties on beer were even more indefensible from the mode in which they were charged than from their amount. They affected only that description of beer which was *brewed for sale;* and as all the higher classes brewed their own beer, the duty fell only on the lower and middle ranks of the community, and particularly the former. It is singular that a tax so grossly unequal and oppressive should have been so long submitted to.

But besides the obstacles to the consumption of beer arising from the oppressive duties with which it was burdened, the system formerly in force for granting licences for its sale opposed obstacles that were hardly less formidable. Previously to 1830 no one could open a house for the sale of beer without first obtaining a licence renewable annually from the magistrates; and as these functionaries were accustomed only to grant licences to the occupiers of *particular houses*, the brewers naturally endeavoured, in order to ensure the sale of their beer, either to buy up those houses or to lend money upon them: and in many extensive districts a few large capitalists succeeded in engrosssing most of the public houses, so that even the appearance of competition was destroyed, and a ready market and good prices secured for the very worst beer. We, therefore, look upon the abolition of the beer duties, and the granting of leave to all persons to retail beer on their taking out proper licences, as highly advantageous measures. The conditions under which such licenses are taken out, and the sale of beer conducted, are fixed by the acts 1 Will. 4. c. 64. and the 4 & 5 Will. 4. c. 85. Under the former the commissioners of excise, or other persons duly authorised, were bound to grant licences, costing *2l. 2s.* a year, to all persons not excepted in the act, empowering them to sell ale, beer, porter, cider, &c. to be drunk *indifferently either on or off the premises.* But in consequence of the complaints (whether well or ill founded it is now needless to inquire) of the increase and bad character of beer shops the act 4 & 5 Will. 4. c. 85. makes the obtaining of a licence to retail beer to be drunk on the premises contingent on the applicant being able to produce a certificate of good character, subscribed by certain persons rated at a certain amount to the poor; it also raised the cost of such licence to *3l. 3s.*, and reduced the cost of a licence to sell beer not to be drunk on the premises to *1l. 1s.* We subjoin an abstract of the acts—

Persons applying for a Licence to sell Beer to be drunk on the Premises, to deposit a Certificate of good Character, &c. — Every person applying for a licence to sell beer or cider by retail, to be drunk in the house or on the premises, shall annually produce to and deposit with the commissioners of excise, collector, or other person authorised to grant such licence within the parish or place in which the person applying intends to sell beer or cider by retail, a certificate signed by 6 persons residing in and being and describing themselves to be inhabitants of such parish, place, &c., and respectively rated therein to the poor at not less than *6l.*, or occupying a house therein rated to the poor at not less than *4l.*, none of whom shall be maltsters, common brewers, or persons licensed to sell spirituous liquors or beer or cider by retail, nor owners or proprietors of any houses licensed to sell liquors, beer, or cider by retail, stating that the person applying for the licence is of good character; and at the foot of such certificate one of the overseers of the parish, township, or place shall certify (if the fact be so) that such 6 persons are inhabitants respectively rated as aforesaid; and such certificate shall respectively be in the form of the schedule annexed to this act: provided always, that in any parish, township, or district maintaining its own poor, in which there are not 10 inhabitants rated to their relief to the amount of *6l.* each, or not occupying houses respectively rated to the poor at *6l.* each (not being maltsters, common brewers, or persons licensed to sell spirituous liquors or beer or cider by retail), the certificate of the majority of the inhabitants of such parish, township, or district maintaining its own poor, as are rated to the amount of *6l.* each, shall be deemed to be a sufficient certificate for the purposes of this act.—4 & 5 Will. 4. § 2.

Penalty on Overseers.—Any overseer who shall, without due cause, refuse to certify that the persons who have signed the certificate are respectively rated to the poor's rate as aforesaid, to forfeit not more than *5l.* — § 3.

Beer drunk in Sheds.— Any persons licensed under the act 1 Will. 4. c. 64., to sell beer, cider, &c. not to be consumed on the premises, who shall employ, permit, or suffer any person or persons to take or carry any beer, &c. from his house or premises, to be drunk or consumed for his benefit or profit, in any other house, tent, shed, &c. belonging to, or hired, used, or occupied by such licensed person, such beer, &c. shall be held to have been consumed on the premises, and the person selling the same shall be subject to the like forfeitures and penalties as if it had been actually drunk or consumed in a house or upon premises licensed only for the sale thereof. — § 4.

Billetting.— Provisions for billetting soldiers under mutiny acts to extend only to those licensed to sell beer or cider to be drunk in the house or on the premises, and not to extend to those licensed to sell beer not to be consumed on the premises. — § 5.

Justices to regulate the Opening and Closing of Houses.— Justices in petty sessions are authorised to fix the hours at which houses and premises licensed to sell beer under this act shall be opened and closed; but any person thinking himself aggrieved by any such order may appeal at any time, within 4 months from its date, to the justices in quarter sessions, on giving the jus-

tices making the order 14 days' notice of his intention; and the decision of the justices in quarter sessions shall be final: provided, however, that the hour to be fixed for opening any house shall not in any case be earlier than 5 o'clock in the morning, nor for closing the same later than 11 o'clock at night, or before 1 o'clock in the afternoon on Sunday, Good Friday, Christmas Day, or any day appointed for a public fast or thanksgiving; and the hours so fixed by the justices, with reference to the districts within their jurisdictions, shall be taken to be the hours to be observed and complied with under this act as fully as if the same had been specially appointed by it. — § 6.

Constables, &c. to visit licensed Houses. — All constables and officers of police are authorised to enter into all houses licensed to sell beer or spirituous liquors to be consumed upon the premises whenever they shall think proper; and if any person licensed as aforesaid, or any servant or person in his employ or by his direction, shall refuse to admit such constables, &c. into such house or premises, the person having the licence shall for the first offence forfeit and pay any sum not exceeding 5*l.*, together with the costs of conviction, to be recovered within 20 days before 1 or more justices; and it shall be lawful for any 2 or more justices, upon any person being convicted of such offence for the second time, to adjudge (if they think fit) that such offender be disqualified from selling beer, ale, porter, cider, or perry, by retail, for 2 years after such conviction, or for such shorter space as they may think proper. — § 7.

Penalty for making or using false Certificates. — Persons certifying any matter having reference to this act as true, who know the same to be false, or using any certificate, knowing the same to be forged, shall, on conviction of such offence before 2 or more justices, forfeit and pay the sum of 20*l.*; and every licence granted to any person making use of any certificate to obtain the same, such person knowing such certificate to be forged, or the matters certified therein to be false, shall be void to all intents and purposes; and any person using such certificate shall be disqualified for ever from obtaining a licence to sell beer or cider by retail. — § 8.

No Licence to be granted without a Certificate. — No licence for the sale of beer or cider by retail to be consumed or drunk in the house or on the premises shall be granted, except upon the certificate hereby required: provided, that in all extra-parochial places the certificate required by this act may be signed and given by inhabitants rated to the poor at 6*l.* in any adjoining parish or parishes. — § 9.

Retailers to produce their Licences on Requisition of 2 Magistrates. — In case any complaint be laid before 2 justices against any licensed person for an offence against the tenor of his licence, or against this act or the act 1 Will. 4. c. 64., the said justices may require such person to produce his licence before them for their examination; and if he wilfully neglect or refuse so to do, he shall forfeit for such offence any sum, not exceeding 5*l.*, the said justices shall think proper; and such person may be convicted, proceeded against, and dealt with for such offence in the same manner, *mutatis mutandis*, as is directed by the act 1 Will. 4. c. 64. with regard to persons guilty of a first offence against said act; and the penalty imposed for such offence is to be applied in the manner that a penalty for a first offence against said act is directed to be applied. — § 10.

Continuance of Powers, &c. The powers, provisions, and penalties of 1 Will. 4. c. 64. to apply to persons licensed under this act, and to their sureties, &c. — § 11.

Duties on Beer Licences. — There shall be paid upon the licences hereby authorised to be granted the duties following; viz.

For and upon every licence to be taken out by any person for the sale of beer by retail, not to be drunk or consumed in or upon the house or premises where sold, the annual sum of 1*l.* 1*s.*	For and upon every licence to be taken out by any person for the sale of beer by retail, to be drunk or consumed in or upon the house or premises where sold, the annual sum of 3*l.* 3*s.* — § 13.

The duties to be under the management of commissioners of excise, and to be recovered and accounted for under the provisions of the act 1 Will. 4. c. 64. — § 14.

Not to affect Duty on Licences to retail Cider and Perry. — Nothing in this act shall affect the amount of duty payable under the 1 Will. 4. c. 64. on licences to retail cider and perry; but every such licence shall specify whether it be granted for the sale of cider and perry by retail not to be drunk in the house or premises where sold, or for the retail of the same to be drunk in the house or premises where sold. — § 15.

Licences under this Act not to authorise Persons to sell Wine. — No licence granted under the act 1 Will. 4. c. 64. and this act shall authorise any person to take out or hold any licence for the sale of wine, spirits, or sweets or made wines, or mead or metheglin; and if any person licensed under the act 1 Will. 4. c. 64. and this act shall permit or suffer any wine, spirits, &c. to be brought into his house or premises to be drunk or consumed there, or shall suffer them to be drunk or consumed in his house or premises, he shall over and above any excise penalties to which he may be subject, forfeit 20*l.* — § 16.

Penalty on unlicensed Persons. — Such persons selling beer and cider by retail to be drunk off the premises, 10*l.*; to be drunk on the premises, 20*l.* — § 17.

Board over the Door. — Every person licensed to sell beer, cider, or perry, by retail, under the authority of the act 1 Will. 4. c. 64. and this act, shall, on the board required by the former act to be placed over his door, paint and keep thereon, after the words "licensed to sell beer or cider by retail," the additional words, "not to be drunk on the premises," or "to be drunk on the premises," as the case may be, on pain of forfeiting the penalty imposed by such act for not having such board over the door — § 18.

What is retailing of Beer, &c. — Every sale of beer, or of cider or perry, in any less quantity than 4½ gallons, shall be deemed and taken to be a sale by retail. — § 19.

Penalties for selling Spirits or Wine without a Licence. — Persons licensed to sell beer or cider under the act 1 Will. 4. c. 64. and this act, who sell spirits or wine, sweets, &c. without being licensed, are liable to the penalties imposed by the laws of excise for selling spirits or wine, sweets, &c. without licence. — § 20.

Certificate not to be required for Houses in certain Situations, if Population exceed 5,000. — The before-mentioned certificate shall not be required as to any house situated within the cities of London and Westminster, or within any parish or place within the bills of mortality, nor within any city or town corporate, nor within the distance of 1 mile from the place used at the last election as the place of election or polling place of any town returning a member to parliament, provided that the population, determined according to the last parliamentary census taken in such city, town, &c. shall exceed 5,000; provided, that no licence for the sale of beer, ale, porter, cider, or perry by retail on the premises in the cities of London and Westminster, or in any parish within the bills of mortality, or in any such city or town corporate, or town returning a member to parliament as before mentioned, shall be granted after the 5th day of April, 1836, unless the house or premises specified as those in which beer or cider is intended to be sold shall be of the value of 10*l.* per annum. — § 21.

Form of Certificate referred to in § 2.

We, the undersigned, being inhabitants of the parish [*or* township, *as the case may be*] of and respectively rated to the poor at not less than 6*l.* per annum, and none of us being maltsters, common brewers, or persons licensed to sell spirituous liquors, or being licensed to sell beer or cider by retail, do hereby certify, That *A. B.*, dwelling in street, [*here specify the street, lane, &c.*] in the said parish [*or* township, &c.] is a person of good character.

[*Here insert the day of signing the certificate.*]

(Signed) *E. F.*, *G. H.*, *I. K.*, *L. M.*, *N. O.*, *P. Q.* [*Here state the residence of each of the persons signing.*]

I do hereby certify, That all the above-mentioned persons whose names are subscribed to this certificate are inhabitants of the parish [*or* township, &c.] of rated to 6*l.* to the relief of the poor of the said parish.

C. D.
[Overseer of the parish *or* township, &c.]
Date

In addition to the above the following clauses of the act 1 Will. 4. c. 64. are still in force: —

Persons trading in partnership, and in one house, shall not be obliged to take out more than one licence in any one year, provided also, that no one licence shall authorise any person to sell beer, in any other than the house mentioned in such licence. — § 10.

In cases of riot or expected riot or tumult, every person licensed under this act, and keeping any house situate within their jurisdictions, shall close his house at any time which the justice or justices shall direct; and every such person who shall keep open his house at or after any hour at which such justices shall have so ordered or directed such house to be closed, shall be deemed to have not maintained good order and rule therein, and to be guilty of an offence against the tenor of his licence. — § 11.

Every person licensed to sell beer by retail, shall sell (except in quantities less than a half pint) by the gallon, quart, pint, or half pint measure, sized according to the standard; and in default thereof, he shall for every such offence forfeit the illegal measure, and pay not exceeding 40*s.*, together with the costs of the conviction, to be recovered within thirty days next after that on which such offence was committed, before two justices; such penalty to be over and above all penalties to which the offender may be liable under any other act. — § 12.

Every seller of beer by retail, having a licence under this act, who shall permit any person to be guilty of drunkenness, or disorderly conduct, in the house mentioned in such licence, shall forfeit the sums following: for the first offence, not less than 40*s.* nor more than 5*l.*, as the justices, before whom such retailer shall be convicted, shall adjudge; and for the second offence, any sum not less than 5*l.* nor more than 10*l.*; and for the third offence, any sum not less than 20*l.* nor more than 50*l.*; and it shall be lawful for the justices, before whom any such conviction for such third offence shall take place, to adjudge, if they shall think fit, that such offender shall be disqualified from selling beer by retail for the space of two years next ensuing such conviction, and also that no beer shall be sold by retail, by any person in the house mentioned in the licence of such offender; and if any person so licensed shall, knowingly, sell any beer, ale, or porter, made otherwise than from malt and hops, or shall mix, or cause to be mixed, any drugs or other pernicious ingredient, with any beer sold in his house, or shall fraudulently dilute, or

in any way adulterate, any such beer, such offender shall for the first offence forfeit not less than 10*l.* nor more than 20*l.*, and for the second such offence such offender shall be adjudged to be disqualified from selling beer, ale, or porter, by retail, for the term of two years, or to forfeit not less than 20*l.* nor more than 50*l.*, and shall be subject to a like penalty at every house where he shall commit such offence; and if any person shall during any term in which it shall not be lawful for beer to be sold by retail on the premises of any offender, sell any beer by retail on such premises, knowing that it was not lawful to be sold, such offender shall forfeit not less than 10*l.* nor more than 20*l.*; every person suffering the conditions of the licence to be infringed to be deemed guilty of disorderly conduct. — § 13.

Retailers' houses not to be open before four in the morning, nor after ten in the evening: nor between the hours of ten in the forenoon and one in the afternoon, nor at any time between the hours of three and five in the afternoon, on any Sunday, Good Friday, Christmas-day, or any day appointed for a public fast or thanksgiving: and any person offending herein shall forfeit 40*s.* for every offence; every separate sale to be deemed a separate offence. — § 14.

All penalties under this act, except for selling beer by any person not duly licensed, shall be recovered, upon the information of any person before two justices in petty sessions; and every such penalty shall be prosecuted for within three calendar months next after the offence; and every person licensed under this act, who shall be convicted before two justices, shall, unless proof be adduced to the satisfaction of such justices, that such person had been theretofore convicted before two justices, within the space of twelve calendar months next preceding, be adjudged by such justices to be guilty of a first offence against this act, and to forfeit and pay any penalty by this act imposed for such offence, or if no specific penalty be imposed, then any sum not exceeding 5*l.*, together with the costs of the conviction; and if proof be adduced to the satisfaction of such justices that such person had been previously convicted, within the space of twelve calendar months next preceding, of one such offence only, such person to be adjudged guilty of a second offence against this act, and to forfeit and pay any penalty by this act imposed for such offence, or if no specific penalty be so imposed, then any sum not exceeding 10*l.*, together with the costs of conviction; and if proof shall be adduced that such person had been previously convicted within the space of eighteen calendar months next preceding, of two such separate offences, and if proof be adduced that such person, so charged, is guilty of the offence charged against him, such person shall be adjudged to be guilty of a third offence against this act, and to forfeit and pay any penalty imposed by this act, in respect of such offence, or if no such specific penalty shall be imposed, then to forfeit and pay the sum of 50*l.*, together with the costs of conviction. — § 15.

The party, convicted of any such third offence, may appeal to the general sessions, or quarter sessions then next ensuing, unless held within twelve days after conviction, and in that case, to the then next subsequent sessions; and, in such case, the party convicted shall enter into a recognizance, with two sureties, personally to appear at the said general or quarter sessions, to abide the judgment of the court; and to pay such costs as shall be by the court awarded; or, in failure of the party convicted entering into such recognizance, such conviction shall remain good and valid; and the said justices who shall take such recognizance, are also required to bind the person who shall make such charges to appear at such general or quarter sessions, then and there to give evidence against the person charged, and, in like manner, to bind any other person who shall have any knowledge of such offence; and it shall be lawful for the said general or quarter sessions to adjudge such person to be guilty of such third offence against this act, and such adjudication shall be final; and it shall be lawful for such general or quarter sessions to punish such offender by fine, not exceeding 100*l.*, together with the costs of such appeal, or to adjudge the licence to be forfeited, or that no beer be sold by retail in the house for the term of two years, and if such licence shall be adjudged to be forfeited, it shall thenceforth be void; and whenever, in such case, the licence of such offender shall be adjudged to be void, such offender shall be deemed incapable of selling beer, ale, or porter, by retail, in any house kept by him, for the space of two years, to be computed from the time of such adjudication; and any licence granted to such person during such term shall be void. — § 16.

In default of payment of penalties, proceedings may be had against the sureties. — § 19.

Any person summoned as a witness, who shall neglect or refuse to appear, and not make such reasonable excuse for such neglect, &c. as shall be admitted by such justices of sessions, or who, appearing, shall refuse to be examined, shall, on conviction, forfeit not exceeding 10*l.* — § 20.

Offenders refusing or neglecting, within seven days after conviction, to pay the penalty imposed, and any costs assessed, such justices may issue their warrant, to levy the amount by distress and sale, together with the costs of distress and sale; and in every such case, such offenders, if in custody, shall be forthwith discharged; but if the goods and chattels are not sufficient, such justices may commit the offender to the common gaol or house of correction for not exceeding one calendar month, if the penalty shall not be above 5*l.*; for not exceeding three calendar months, if the penalty shall be above 5*l.* and not more than 10*l.*; and for not exceeding six calendar months, if the penalty shall be above 10*l.*; provided, that whenever such offender shall pay to the gaoler or keeper, or to whomsoever such justices shall have appointed, the penalty and costs, together with all the costs of apprehension and conveyance to gaol, at any time previous to the expiration of the time for which such offender shall have been committed, such offender shall be forthwith discharged. — § 21.

No conviction under this act, nor any adjudication made upon appeal therefrom, shall be quashed for want of form, nor removed by *certiorari*. — § 27.

Every action against any justice, constable, or other person, for any thing done in execution of his duty under this act, to be commenced within three calendar months, and not afterwards; and if any person be sued, he may plead the general issue, and give the special matter in evidence. — § 28.

This act not to affect the two universities, nor the vintners' company in London; nor to prohibit the sale of beer at fairs, as heretofore.

11. *Scotch Ale and Beer Duties.* — The duties on ale and beer in Scotland have been for a lengthened period the same as in England.

At the union in 1707, the English duties on ale and beer were introduced into Scotland. But, besides strong and small beer, the Scotch had an intermediate species, which they called *two-penny*, and which was their favourite beverage. The duty on this description of beer was fixed, at the union, at 2*s.* 1½*d.* a barrel. For *thirty* years after its imposition, the quantity of two-penny that paid duty was always above 400,000, and sometimes exceeded 500,000 barrels a year. But in 1760 the duty on two-penny was increased to 3*s.* 4½*d.* and the consumption immediately fell off to between 100,000 and 200,000 barrels! The quantity that paid duty in 1800 amounted to 149,803 barrels. The manufacture of this species of beer ceased entirely in 1802.

No account has been kept of the quantity of beer brewed in Ireland since 1809, when it amounted to 960,300 barrels. — (*Morewood on Intoxicating Liquors*, p. 353.) Perhaps it may now amount to from 1,000,000 to 1,200,000 barrels.

An Account of the Number of Barrels of Beer exported from the United Kingdom to Foreign Countries in 1841 and 1842; specifying the Countries to which they were principally sent. — (*Parl. Papers*, No. 175. Sess. 1843.)

	To the West Indies.	To Australia.	To the East Indies.	To all other countries.	Total.
In 1841 -	34,252	43,932	54,376	34,415	166,975
In 1842 -	35,711	22,985	51,150	33,692	143,538

12. *Regulations as to the Exportation of Beer.* — Ale or beer exported to foreign parts as merchandise is allowed a drawback of 5*s.* the barrel of 36 gallons, Imp. meas. But before any debenture for the above drawback shall be paid, the exporter or his principal clerk or manager shall make oath thereon, before the proper officer of excise, that such ale or beer was put on board the exporting ship as merchandise to be sent beyond seas, and no part thereof for the ship's use; and that, according to the best of his knowledge and belief, the same has been brewed wholly from malt which has been charged with and paid the duty of 2*s.* 7*d.* a bushel, and shall also specify in such oath the time when and the place where; and the brewer, being an entered and licensed brewer for sale, by whom such beer or ale was brewed, and that the quantity of malt used in brewing was not less than two bushels (Imp. meas.) for every 36 gallons of such beer or ale. Persons making false statements forfeit the sum of 200*l.* and the debenture is void. — (1 *Will.* 4. cap. 51. § 11.)

ALEXANDRIA, so called from its illustrious founder, Alexander the Great, the principal seaport of Egypt, on the coast of the Mediterranean, about 14 miles W. S. W. of the Canopic mouth of the Nile; the Pharos being in lat. 31° 12′ 35″ N., long. 29° 53′ 33″ E. The situation of this famous city was most admirably chosen. Until the discovery of the route to India by the Cape of Good Hope, Egypt formed the centre of the commerce between the eastern and western worlds; and Alexandria was placed in the

most favourable position in Egypt for an emporium, being the only port on its northern coast, where there is, at once, deep water, and security for shipping throughout the year. The ports of Rosetta and Damietta, the former on the west, and the latter on the eastern arm of the Nile, are both difficult of entrance, each having a bar, upon which there is always a dangerous surf. Ships bound for Alexandria avoid this serious inconvenience; and by means of an artificial navigation, stretching from the city to the western branch of the Nile, it has almost the same facilities for internal navigation that are enjoyed by the cities referred to.

It may be proper, however, to mention that this artificial communication with the Nile has not always been open. It existed in antiquity, but fell into decay during the barbarism of more modern times. After being shut up for some centuries, it has been re-opened by Mehemet Ali, who dug the Mahmoudie canal from Alexandria to Atfeh on the Nile, about 27 miles above Rosetta. This important work is 44 miles in length, 90 feet in breadth, and from 15 to 18 feet deep. It was opened in 1819; but owing partly to the nature of the ground, partly to some defects in its construction, and partly to the mud deposited by the water of the Nile, it is difficult to keep in repair; and can only be navigated by boats that draw little water, and are not suitable for the navigation of the Nile. But, with all its defects, the construction of this canal has been of the greatest advantage, not to Alexandria only, but to Egypt and even Europe.

Ports, &c. — The ancient city was situated a little more inland than the modern one, opposite to the small island of Pharos, on which was erected the lighthouse, so celebrated in antiquity. — (*Cæsar de Bello Civili*, lib. iii. cap. 112.) This island was, partly by artificial means, and partly by natural causes, gradually joined to the land by a mound, and on this the new town is principally built. The isthmus and island have now the form of a T, its head being N. E. and S. W. A square castle, or tower, built on a small islet or rock, at the extremity of a mole projecting from the north-east angle of the city, is still called the Pharos, and a light is regularly exhibited upon it. On each side of the city there is a port. That on the western, or African side, called the Old Port, the *Eunostos* of the ancients, is by far the largest and best. It stretches from the town westwards to Marabout, about six miles, and is about a mile and a half wide. It is bounded on the north, partly by the western tongue or angle of the island on which the city is partially built, and partly by rocks and sand banks. It has three entrances. The first, or that nearest the city, having 17 feet water, is about two miles S. W. from the large building, situated a little to the westward of the town, called the palace; but it is too narrow and difficult to be attempted by any one not thoroughly acquainted with the port. The *eastern* side of the second or middle entrance is marked by buoys which lie about two miles and three quarters S. W. from the palace; it is about a quarter of a mile wide, and has, where shallowest, 27 feet water. The third or western entrance has its *western* boundary within about three eighths of a mile from the east end of Marabout island; it is about half a mile wide, and has from 25 to 27 feet water in its shallowest places. This last is the best entrance. Ships, when in, may anchor close to the town in from 22 to 40 feet water, and there is good anchorage in deep water all along the shore. Foreigners were formerly excluded from this port; but this prohibition no longer exists.

The New or Asiatic harbour is on the eastern side of the town. A rock called the Diamond lies a little to the east of the Pharos tower; and ships entering the port ought to have this rock about a cable's length on the right. If they get much further to the left, they will come in contact with a shoal which stretches westward from the Pharillon, or little tower, on the east side of the port. The water immediately within the port S. W. from the Pharos is from 30 to 40 feet deep; but the space for anchorage is very limited, and is exposed to the northerly gales; and the ground being foul and rocky, hempen cables are very apt to chafe, and several accidents have happened in consequence to ships unprovided with iron cables. Ordinary tides rise 2 feet; but during the overflow of the Nile the rise is 4 feet. Variation 13° west. — (See *Plan of Alexandria*, by Lieut. Falbe.)

Ancient and Modern City. — Under the Ptolemies and Romans, Alexandria was the first commercial city in the world. It suffered greatly by its reduction by the Saracens in 640; but it continued to be a place of considerable commercial importance till the despotism of the Mamelukes and Turks, and the discovery of the route to India by the Cape of Good Hope, completed its ruin. Under the Ptolemies, the population is believed to have amounted to about 300,000, and the city was adorned by a vast number of magnificent structures. At present the population varies with the seasons of the year, but, when greatest, it is not supposed to exceed 45,000; and may vary between this amount and 30,000. The appearance of the modern town is most unpromising. "It may be justly said, that in the new city of Alexandria we find a poor orphan, whose sole inheritance has been the venerable name of its father. The vast extent of the ancient city is contracted in the new, to a little neck of land, between the two ports. The most superb temples are changed into plain mosques; the most magnificent palaces into houses of a bad structure; the royal seat is become a prison for slaves; an opulent and numerous people has given way to a small number of foreign traders, and to a multitude of wretches, that are the servants of those on whom they depend: a place formerly so famous for the extent of its commerce, is no longer any thing more than a mere place of embarking; in fine, it is not a phœnix that revives from its own ashes, it is, at most, a reptile, sprung from the dirt, the dust, and corruption with which the Alcoran has infected the whole country." — (*Norden's Travels*, Eng. trans. 8vo ed. p. 37.) But this striking description, though accurate at the time when it was written (1737), conveys too unfavourable an idea of the present state of Alexandria. The vigorous government of Mehemet Ali, by introducing comparative security and good order into Egypt, has latterly revived the commerce of Alexandria, which has again become a place of much importance in the trading world; and many new warehouses and other buildings have been constructed.

Trade of Alexandria. — The imports principally consist of cotton stuffs, timber, woollen and silk stuffs, iron and hardware, including copper and tin plates, jewellery, machinery, ammunition, paper and stationery, cutlery, &c. &c. The exports consist principally of raw cotton, rice, wheat and barley, beans, linseed, senna, and other drugs and gums brought from the interior; indigo opium, ostrich feathers, dates, soda, linen cloth, coffee from Arabia, &c. The exports of wheat, barley, and pulse have declined in consequence of the superior encouragement given to the growth of cotton; the culture of flax has also declined: formerly from 50,000 to 60,000 quarters of linseed have been exported from Alexandria in a single season, but the exports are now much less. Sugar has been long cultivated in Egypt; but not to any great extent, though the soil and climate of Upper Egypt are said to be especially favourable to its growth. Indigo and madder are among the articles of culture introduced by the Pacha.

Cotton has been grown in Egypt from a very remote period; previously, however, to the ascendancy of Mehemet Ali it was but little cultivated, and that little was of an inferior quality, short stapled, and

closely resembling "Surats," under which name the small quantities exported from the country were usually sold. But, in 1820, a Frenchman of the name of Jumel accidentally observed a very valuable variety of long-stapled cotton, raised from seeds brought from Dongola and Sennar, growing in the garden of Mahè Bey at Cairo. Jumel having represented its superiority to the Pacha, its cultivation was undertaken on a large scale on account of the latter; and has succeeded so well, that Mahè or Makko cotton has been for a lengthened period by far the principal article of export from Egypt. At a later period seeds of the Sea-Island cotton were introduced; and for a while it also answered remarkably well; its produce, which in Egypt was called Sennar, and in England "Egyptian Sea-Island," ranking next in the estimation of the manufacturers to genuine "sea-Island." Unfortunately, however, this variety was found to degenerate, and its culture, which was never very extensive, as well as that of the old short-stapled variety, has, we believe, been wholly abandoned. — We subjoin

An Account of the Exports of Cotton from Egypt from 1831 to 1840, both inclusive.

Destination.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
Trieste	47,783	44,778	43,051	16,223	32,362	49,958	56,169	55,281	9,289	17,405
Marseilles	36,408	26,171	36,777	14,846	33,812	44,119	35,965	29,392	12,680	15,768
England	36,074	30,089	2,569	2,028	31,709	17,864	42,495	24,279	15,274	28,981
Leghorn and Genoa	2,152	665	608		424	1,373	1,385	1,249	3,460	1,286
Sundry Ports	4,607	2,250	727		195	757	680		6,408	2,902
Total	127,024	113,953	83,712	33,097	98,502	114,051	136,694	110,201	47,111	66,342

N. B. — The gross weight of a bale of Egyptian cotton at Alexandria averages 230 rottoli or 228 07 lbs.; and allowing 12 rottoli as tare for sacking and cordage, the nett weight of the bale will be about 219 lbs. The cantar of cotton was fixed in 1836 at 100 rottoli. Exclusive of the cotton shipped from Egypt, about 30,000 cantars a year are supposed to have been annually wrought up in the Pacha's cotton factories at an average of the 10 years ending with 1838; but, owing to the failure of most of these establishments, the quantity is now much less. — (See the valuable Tract of George R. Gliddon Esq., on the Cotton of Egypt.)

We doubt, however, whether the encouragement given to the culture of cotton has not been really injurious to Egypt. At all events, we apprehend that the cotton of that country will have great difficulty in finding a profitable vent in the European markets in competition with American cotton, considering the extreme low price at which the latter can be sold. We have alluded to the degeneracy of the Sea-Island cotton in Egypt, and it is alleged that the Mahè is also degenerating. We need not, therefore, be surprised should it be found necessary to abandon the culture of cotton in Egypt. But in the culture of wheat, beans, barley, and rice, Egypt has nothing to fear from any rivalry. In this department of industry she is, if not superior to every other country, inferior to none.

We subjoin some accounts illustrative of the trade and navigation of Alexandria in 1841 and 1842.

Account of the Quantities and Values of the different Articles exported from Alexandria in 1842.

Denominations.		Quantity.	Value.	Denominations.		Quantity.	Value.
Horns of Buffalo	Pieces	146	245,000	Barley	Ardebs	78,660	3,128,000
Cotton wool (Macko)	Cantars	211,030	39,088,200	Bones of Animals	Cantars	9,280	278,400
Chick Pease	Ardebs	13,870	787,200	Pepper	—	2,210	353,600
Carnaccio	Cantars	250	25,000	Salted Hides	Hides	97,140	4,370,300
Cocculus Indicus	—	470	73,000	Ostrich Feathers	Rotoli	9,750	2,885,000
Bees' wax	Okes	33,370	658,400	Bottargo	Okes	17,000	253,800
Coffee	Cantars	6,420	1,926,000	Rice	Ardebs	60,210	15,853,400
Pot ashes	—	26,050	2,197,000	Rum, Egyptian	Okes	50,900	305,000
Dates	—	108,890	6,758,000	Senna	Cantars	4,275	1,325,800
Drugs of different descriptions	—	12,045	3,635,500	Sal ammoniac	—	740	740,000
Elephants' Teeth, or Ivory	—	810	810,000	Seeds of different descriptions	Ardebs	3,140	1,441,000
Beans	Ardebs	387,520	13,569,900	Cotton seed	—	28,050	629,300
Iron assorted	Cantars	14,410	570,500	Sesame do.	—	47,430	6,118,900
Gums of different descriptions	—	37,960	9,776,300	Linseed	—	83,850	8,385,000
Wheat	Ardebs	336,250	15,750,200	Mats	Packages	-	1,266,000
Indian Corn	—	9,610	384,400	Salt	Ardebs	24,000	167,000
Henna	Cantars	22,190	3,689,000	Saltpetre	Cantars	19,750	2,365,150
Incense	—	16,150	2,561,100	Silk manufactured	Packages	-	294,600
Flax	—	37,290	4,467,100	Tamarinds	Cantars	2,150	430,000
Lentils	Ardebs	40,080	1,229,400	Linen Cloth	Pieces	240,800	4,510,500
Lupines	—	19,580	587,400	Tortoise Shells	Rotoli	1,810	882,300
Mother-of Pearl	Cantars	17,490	2,320,400	Turnbacks	Okes	101,200	901,700
Sundries	Packages	-	6,154,800	Safflower	Cantars	2 500	500,000
Manufactures (Cotton Goods)	—	-	2,275,000	Sugar, Muscovado	—	3,820	414,000
Musk and Otto of Roses	Ounces	9,270	484,200	Baskets, empty	Packages	-	369,000
Natron, refined	Cantars	25,485	3,048,200				
Do., raw	—	6,520	419,100				
				Total	Pias.		181,411,950

Shipping. — The Arrivals of Vessels of all Nations in this Port during 1842 were, —

Flags.	Laden.	In Ballast	Total.	Flags.	Laden.	In Ballast.	Total.
British	150	40	190	Forward	734	160	894
Austrian	96	36	132	Egyptian	136		136
Russian	12	6	18	Turkish	155	3	158
French	21	13	34	Neapolitan		1	1
Sardinian	13	8	21	Jerusalem (with Greek crews)	138		138
Tuscan	23	5	28	Moldavian	3		3
Samos	16		16	Prussian	1		1
Greek	212	47	259	Dutch	2		2
Rayas or Christian Ottoman	186	5	191	Barbary	19		19
Belgian	5		5				
Forward	734	160	894	Total	1,188	164	1,352

In the above, Vessels of War and Packets are included.

The Arrivals of British merchant shipping in the 13 years ending with 1842 have been, exclusive of Packets, —

In 1830	89	In 1835	102	In 1840 (from 1st Jan. to 23d Sept.)	71
1831	118	1836	96	1841	255
1832	120	1837	84	1842	164
1833	112	1838	85		
1834	58	1839	102		

Account of Wheat, Beans, &c. exported from Alexandria in 1841.

Destination.	Wheat.	Beans.	Barley.	Lentils.	Indian Corn.	Chick Peas.	Lupins.	Total.
Great Britain	23,286	149,030	-	6,495	-	1,253		
Archipelago and Ionian Islands	47,889	9,415	12,023	2,330	5,207	582		
Constantinople	76,598	200	22,810	1,809	600			
Leghorn	69,062	103,872	3,347	19,410	-	1,700	16,553	
Marseilles	18,645	31,199	2,800	4,112				
Malta	205,082	169,823	180,523	38,874	5,487	16,005		
Sundry Places	48,555	4,511	37,436	2,040	6,839	316		
Trieste	9,680	38,851	8,552	2,820				
Ardebs	498,797	506,901	267,485	77,890	16,133	19,806	16,553	1,403,565

Constantinople and the islands of the Archipelago are the great markets for the wheat and other grain exported from Egypt. The supplies are, however, extremely uncertain. Every thing in Egypt depends on the Nile; and when it does not rise to the usual height, the crops are very much below an average. Beans are extensively cultivated, and have sometimes been brought to England, but rarely, if ever, with advantage to the importers. They are inferior to English beans, and are peculiarly subject to the worm. No oats are raised in Egypt, the horses being entirely fed upon barley. Silk is grown to some extent. The date-palm thrives in every part of Egypt, and the fruit is largely exported. It is singular, that notwithstanding the luxuriance of many of its vegetable productions, Egypt should be entirely destitute of timber.

Money. — Accounts are kept at Alexandria, as at Cairo, in *current piastres*, each piastre being equal to 40 paras, or medini, and each medino to 30 aspers. The medino is also divided into 8 borbi, or 6 forli. A purse contains 25,000 medini. At the close of 1842 the exchange with England was 93·08 current piastres per *l.*; but in general calculations 100 piastres are supposed to equal *l.* Payments, in transactions of any importance, are generally made in Spanish dollars.

Weights and Measures. — The yard, or *pik*, = 26·8 English inches; hence 100 piks = 74·438 English yards. The measures for corn are the *rhebebe*, and the *quilot* or *kistoz*; the former = 4·364 English bushels, the latter = 4·729 ditto. The *cantaro* or *quintal* = 100 *rottoli*, but the rottolo has different names and weights: 1 *rottolo forforo* = ·9347 lb. avoirdupois; 1 *rottolo zaidino* = 1·335 lb. ditto; 1 *rottolo zauro* or *zaro* = 2·07 lbs. ditto; 1 *rottolo mina* = 1·67 lb. ditto. — (*Manuel Universel de Nelkenbrecker.*)

Duties. — With the exception of the arbitrary principles on which the Pacha fixes the prices of commodities, there is nothing objectionable in his policy as to commerce. The duties on imports are only 3 per cent. We believe, however, that a small increase of the customs duty would compensate the Pacha for the abolition of other oppressive charges, and there can be little doubt that his subjects would be materially benefited by the change.

Policy of the Pacha. — It is much to be regretted that Mehemet Ali, who is in many respects one of the most extraordinary men of his age, should have had no just conception of the principles by the adoption of which his plans of improvement might have been perpetuated, and industry established on a solid foundation. He interferes with everything, and leaves as little as possible to the discretion and enterprise of individuals. He may, indeed, be said to be the sole proprietor, manufacturer, farmer-general, and wholesale merchant in his dominions. It was, no doubt, stipulated in the treaty concluded between this country and the Turkish government in 1838, the provisions of which extend to Egypt, that the monopolies which previously existed in the different parts of the Turkish empire should all be abolished, and that, in future, all parties should be at liberty to buy and sell all descriptions of produce at such prices and in such a way as they thought fit. This stipulation has, however, been of little consequence in Egypt; for, as the largest and best portion of the land has become the property of the Pacha or his dependents, and the taxes are mostly all paid in produce, the government continues, in effect, in possession of its old monopoly of the produce of the country, and has power to determine the price at which it shall be sold. A system of this sort is injurious alike to the interests of the producers and merchants; inasmuch as they are both liable to have their plans and speculations deranged by the caprices and regulations of those in authority. It is difficult, however, to suggest any means by which this inconvenience might be avoided; and it is much to be regretted that, when the European powers dictated the terms on which the Pacha and his family should hold the country, they did not make some stipulations in favour of the rights of the population; which, had they been properly devised, would have been as much for the advantage of the Pacha as of his subjects.

Ancient Trade of Alexandria. — As already remarked, Alexandria was, for a long series of years, — first under the Greek successors of Alexander, and subsequently under the Romans, — the principal *entrepôt* of the ancient world. Most part of the traffic between Asia and Europe that had at a more early period centered at Tyre, was gradually diverted to this new emporium. An intercourse between the ports on the eastern coast of Egypt, and those on the opposite coast of Arabia, had subsisted from a very early period. That between Egypt and India was more recent. It was at first carried on by ships, which having sailed down the Red Sea from Myos Hormos and Berenice, coasted along the Arabian shores till they reached Cape Rasselgate, whence a short course brought them to India near the mouth of the river Indus. This was the course followed during the dynasty of the Ptolemies: but about 80 years after Egypt had been annexed to the Roman empire, Hippalus, the commander of an Egyptian ship trading to India, having observed the regular shifting of the trade winds, ventured to sail with the western monsoon from the Straits of Babelmandeb right across the Arabian Ocean; and was fortunate enough, after a prosperous voyage, to arrive at Musiris, in that part of India now known by the name of the Malabar coast. Having taken on board a cargo of Indian produce, Hippalus returned in safety with the eastern monsoon to Egypt. This discovery was deemed of so much importance, that the name of the discoverer was given to the wind which had carried him across the ocean to India: and

how trifling soever this voyage may now appear, those who consider that Hippalus had no compass by which to direct his course, and that owing to this circumstance, and the otherwise imperfect state of the art of navigation, the ancients seldom ventured out of sight of land, even in seas with which they were well acquainted, will be forward to admit that his enterprise and daring were nowise inferior to his success; and that he was well entitled to the gratitude of his contemporaries, and the respect of posterity.

From the epoch of this discovery, fleets traded periodically from Egypt to Musiris, conveying the products of Europe to India, and conversely. The Indian goods having been landed at Myos Hormos and Berenice were thence conveyed by caravans to Coptos (the modern Kenné), on the Nile, where they were put on board lighters and sent to Alexandria, whence they were distributed all over the western world. The goods sent to India were conveyed to Myos Hormos and Berenice by the same route. Myos Hormos was situated on the shore of the Arabian gulf, about a degree to the north of the modern port of Cosseir. The distance from it to Coptos, in a straight line, is about 70 English miles. Berenice was situated a good way further south, being nearly under the tropic. It was built by Ptolemy Philadelphus. Its distance from Coptos is stated by Pliny at 258 Roman miles; the different resting places on the road were determined by the wells, and the journey occupied about 12 days. Ptolemy seems to have preferred this station to Myos Hormos, though the land carriage to Coptos was so much further, from its greater proximity to the Straits of Babelmandeb, and its lessening the voyage up the Red sea.

Pliny says that the cost of the Indian commodities brought to Rome through Alexandria was increased a hundred fold (*centuplicato veneant*) by the expense of carriage, &c. We suspect, however, that this is a rhetorical exaggeration, meaning merely that their price was very materially enhanced. If the increase was any thing like that mentioned, it must have been owing to the imposition of oppressive tolls and duties, for it could not possibly have been occasioned by the mere expenses of conveyance.* — (*Plin. Hist. Nat.* lib. vi. cap. 23.; *Ameilhon, Commerce des Egyptiens*, pp. 161—176, &c.; *Robertson's Ancient India*, note 20. &c.)

Besides this important traffic, which supplied Rome and the western world with the silks, spices, precious stones, and other products of Arabia and India, a great trade in corn was carried on from Alexandria to Rome. Egypt, for a lengthened period, constituted the granary from which Rome, and afterwards Constantinople, drew the principal part of their supplies; and its possession was, on that account, reckoned of the utmost consequence. Augustus employed merchantmen of a larger size than any that had previously traded in the Mediterranean, to convey the corn of Egypt to Ostia. They were escorted by ships of war. The fleet received the names of *sacra* and *felix embole*; and enjoyed several peculiar privileges. The ships belonging to it were the only ones authorised to hoist the small sail called *supparum*, when they drew near the coasts of Italy. Some of the fast-sailing vessels attached to the fleet were sent on before, to give notice of its approach; and a deputation of senators went down to Ostia to receive the ships, which anchored amid the acclamations of an immense number of spectators. The captains were obliged to make oath that the corn on board their ships was that which had been delivered to them in Egypt, and that the cargoes were entire as shipped. — (*Huet, Commerce et Navigation des Anciens*, cap. xlviii.; *Senecæ Epist.* cap. lxxvii. &c.)

Intercourse with India through Alexandria. — These few details will, perhaps, serve to give a faint idea of the importance of Alexandria in the commerce of antiquity. It is impossible, indeed, for any one to glance at a map of the world, or of the ancient hemisphere, and not to perceive that Egypt is the natural *entrepôt* of the commerce between Europe, and all the vast countries stretching east from Arabia to China. The discovery of the route to India by the Cape of Good Hope, in 1498, must, no doubt, have, under any circumstances, diverted a considerable portion of the trade with the western states of Europe, and in the heavier and bulkier class of articles, into a new channel. It is, however, abundantly certain, that had the same facilities for conducting the trade with the East existed in Egypt in the sixteenth and seventeenth centuries that existed in it in antiquity, she would have continued to be the centre of the trade for all the lighter and more valuable products, and the route of the greater number of the individuals passing between Europe and Asia. But the lawless and arbitrary dominion of the Mamelukes, who loaded all individuals passing through the country with oppressive exactions, at the same time that they treated all foreigners, and espe-

* In the 16th century, the cost of Indian commodities brought to Western Europe by way of Alexandria and Aleppo was about *three* times the cost of those brought by the Cape of Good Hope. — (See *post*, EAST INDIA COMPANY, *History of.*) But Egypt was then occupied by the Mamelukes and Turks, who threw every sort of obstacle in the way of commerce, and loaded it with the most oppressive exactions.

cially Christians, with insolence and contempt, put an entire stop to the intercourse so long carried on by this shortest, most direct, and most convenient route. Happily, however, a new æra has begun, and Egypt has once more become the grand thoroughfare of the eastern and western worlds. After good order and a regular government had been introduced into Egypt by Mehemet Ali, it was seen that it might be again made the channel of communication with India; and the importance of facilitating the intercourse with that continent forcibly attracted the attention of the British government and the East India Company. We believe, however, that the public are principally indebted to the exertions of a private individual, Mr. Waghorn, for the early and successful opening of what has been called the "over-land route" to India. At all events the establishment of a steam communication between Europe and southern Asia, by way of Alexandria and Suez, is one of the most striking and important events in recent times. It has shortened the journey to India from England more than a half, and rendered it comparatively safe and expeditious. Steamers ascend the Nile as far as Cairo; and the passengers and mails are thence conveyed across the desert to Suez, and conversely, by horses and carriages, no fewer than 7 inns or khans being established along this road, which is travelled with comfort and expedition!

These results are most satisfactory; and there is every probability that the facilities for travelling to and from the East by this route will be materially improved in time to come. It should be mentioned, to the honour of the Egyptians and the Pacha, that no instance has occurred of a single package or even a letter being lost in its transit through Egypt since the opening of the route; and that when we were waging (for what good reason has yet to be learned) hostilities with the Pacha, he never interrupted the communication with India through his dominions, or subjected English passengers to any inconvenience! We subjoin the following particulars with respect to this route.

Overland Mails — Outward.

Despatched from London.		Arrive at Alexandria.	Leave Suez.	Arrive in Bombay.
Via Falmouth.*	Via Marseilles.			
Last day of each month by contract steamer.	4th every month.	17th every month.	22nd.	About 8th of every month.

The steamers that take the Falmouth mail call at Gibraltar, and arrive at Malta about the 11th of every month. The mails from Marseilles leave that port by one of her Majesty's steamers about the 9th of each month, and arrive at Malta the 12th, when both mails are taken to Alexandria by the steamers that leave England.

Overland Mails — Homeward.

Despatched from Bombay.	Arrive at Suez.	Leave Alexandria.	Arrive in London.	
			Via Marseilles.	Via Falmouth.
1st of every month.	18th.	22nd.	6th.	13th.

The contract steamer with the outward mail waits at Alexandria for the homeward mail, and arrives at Malta about the 26th of every month, where the Marseilles portion is transferred to one of her Majesty's steamers, which carries it to Marseilles, whence it is sent by land to Paris and via Dover to London; the remaining portion is landed at Falmouth, and thence sent by coach to London. Average time to or from Bombay via Marseilles 35 days, and via Falmouth 40 days. By ship round the Cape 4 months. The newspaper proprietors run expresses from Marseilles on the arrival of each mail, and are thus enabled to publish the news some 2 days before the letters arrive in London.

Routes for Passengers — 1st, via *Southampton*.

Steamers employed.	Time of starting.	Fare to Alexandria.	Alexandria to Suez.	Suez to Bombay.	From Suez to Ceylon, Madras, or Calcutta.
		1st Cabin. *L.* *s.* *d.*	1st Cabin. *L.* *s.* *d.*	1st Cabin.	1st Cabin.
"Great Liverpool," "Oriental."	Leave alternately from Southampton 1st every month, and call at Falmouth, Gibraltar, and Malta, arriving at Alexandria about the 17th of every month.	40 10 0	15 0 0	30*l.*, 55*l.*, or 60*l.*	80*l.* to 160*l.*

2nd Route, via Marseilles.—By steamer to Boulogne; diligence to Paris and Châlons sur Saone; steamers to Lyons and Avignon; and diligence to Marseilles. Time occupied 9 days; but this will be materially shortened by the opening of the railways now in progress between Paris and the English Channel, and Paris and Lyons. French government steamers leave Marseilles the 1st, the 11th, and the 21st of every month, calling at the following places, opposite which are the rates of passage.

Stations.		Postage of a single letter weighing ½ oz.	Distance in miles.	Fares of Passengers in the Packets: for								
Point of Departure.	Places of Destination.			Places of the 1st Class.			Places of the 2nd Class.			Places of the 3rd Class.		
		d.		*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Marseilles.	Alexandria	10	1913	19	4	0	11	10	5	7	13	8
	Civita Vecchia	5	380	5	4	10	3	7	3	2	1	8
	Constantinople	9	1921	18	12	0	11	3	3	7	8	10
	Dardanelles	9	1771	16	16	0	10	1	8	6	14	6
	Leghorn	5	257	4	0	0	2	11	5	1	12	0
	Malta	7	894	11	0	0	7	0	10	4	8	0
	Naples	6	537	7	10	5	4	16	0	3	0	0
	Athens	8	1531	14	0	0	8	8	0	5	12	0
	Smyrna	9	1618	16	0	0	9	12	0	6	8	0
	Syra	9	1456	14	0	0	8	8	0	5	12	0

* It is in contemplation to embark the mails at Southampton instead of Falmouth.

Time to Alexandria 14 days. Expenses by this route at least 10*l.* less than by the steamer from Southampton, and decidedly more agreeable in the summer season. A new line of steamers is nearly ready to go direct from Toulon to Alexandria.

Route through Egypt, &c. — By iron track boat, drawn by iron screw propeller boats on the Mahmoudie Canal, 44 miles, to Atfeh in 7 hours, where passengers are transferred to iron steamers on the Nile to Cairo: distance accomplished in from 16 to 20 hours. From Cairo to Suez, 84 miles, 20 hours, in carriages drawn by horses. On the desert there are 7 station houses. Refreshments provided at 3, the others being merely for changing horses. Arrived at Suez, the Bombay passengers are taken on by one of the Honourable East India Company's steamers, which is always in waiting for the mails. To Ceylon, Madras, and Calcutta, there are steamers monthly from Suez, and passengers embark by whichever may be in waiting. Both steamers call at Aden for coals.

Canal between the Nile and the Red Sea. — We are assured, that were it not for the hostilities in which the Pacha has been almost always engaged, he would have attempted to reopen the famous canal that formerly connected the Red Sea and the Nile. According to Herodotus, this canal was commenced by Nechos, king of Egypt, and finished by Darius (lib. ii. §. 158. iv. 39.). Under the Ptolemies, by whom, according to some authorities, it was completed, this canal became an important channel of communication. It joined the E., or Pelusiac branch of the Nile at Bubastis the ruins of which still remain; it thence proceeded E. to the bitter or natron lakes of Temrah and Cheik-Aneded, whence it followed a nearly S. direction to its junction with the Red Sea at Arsinoe, either at or near where Suez now stands. It is said by Strabo (lib. xvii. p. 805.) to have been 1000 stadia (122 m.) in length; but if we measure it on the best modern maps, it could hardly have exceeded from 85 to 95 miles. Herodotus says that it was wide enough to admit two triremes sailing abreast. This great work having fallen into decay after the downfal of the Ptolemaic dynasty, was renovated either by Trajan or Adrian; and it was finally renewed by Amrou, the general of the caliph Omar, the conqueror of Egypt, anno 639 (Herodote, par Larcher, iii. 450.). The French engineers traced the remains of this great work for a considerable distance, and it would be of singular advantage to Egypt and the commerce of the world were it reopened.

Marshal Marmont states that the ground has been carefully examined by M. Lepère, an able engineer, and that it presents no sort of difficulty that may not easily be overcome. This, indeed, might have been inferred from the fact of its former construction; for the ancients being unacquainted with the use of locks had to encounter difficulties in the construction and working of canals which are now obviated with the utmost facility. According to M. Lepère, the cost of constructing a navigable canal from the Nile to the Red Sea would not exceed 17,000,000 francs, or less than 700,000*l.* (Marmont, iv. 161.) The completion of this work need not, therefore, be despaired of. The opening of the Mahmoudieh canal from Alexandria to Atfeh shows what the present government is able to achieve; and an enterprise like that now under consideration, though more difficult, would be of still greater importance to Egypt as well as to Europe and Asia. Marshal Marmont appears to think that the ground between Suez and Cairo is quite unsuitable for a railway, to which project the Pacha is, however, understood to be most favourable. In fact, a portion of the iron rails for this undertaking have been ordered from England, and are now in Egypt; but the attention of the Pacha having been diverted to other matters, the project has been, for the present, abandoned.

ALICANT, a sea-port town of Spain, in Valencia, lat. 38° 20′ 41″ N., long. 0° 30′ W. Population about 14,000, and declining. The port is an open and spacious bay, between Cape de la Huerta on the north-east and Isla Plana on the south, distant from each other S. W. and N. E. about 10 miles. Ships may enter on any course between these points, steering direct for the castle, which stands on an eminence about 400 feet high. Those of considerable burden moor N. and S., distant from ¼ to 1 mile from shore, in from 4 to 8 fathoms water; they are exposed to all winds from E. N. E. to S. by W.; but the holding ground is good, and there is no instance during the last twenty years of a ship having been driven from her moorings. Small craft lie alongside the mole, which is already 320 yards in length, and is continuing to be projected still further into the sea. There are no pilots. The trade of Alicant, though still considerable, has declined much within the last few years; a consequence partly of the emancipation of America from the Spanish yoke, but more of the oppressive duties laid on the importation of most articles of foreign produce into Spain (see CADIZ), and the extensive smuggling carried on from Gibraltar, Algiers, &c.

Raisins form the principal article of export; and their produce, which amounts to nearly 200,000 cwt., has increased rapidly of late years. They are principally taken off by England, the shipments thither, in 1842, having been 146,496 cwt. But with this single exception all the other articles of export have declined. The principal are silk, wool, barilla, almonds, wine, salt, oil, lead, mats, saffron, brandy, anise, saffron, &c. The exportation of barilla, which formerly amounted to from 50,000 to 100,000 cwt., has declined, partly from its having been largely adulterated, but principally from its being to a great extent superseded by *soude factice* (artificial soda), to little more than 20,000 cwt. The imports consist principally of sugar, coffee, cocoa, and other colonial products; cotton, and linen stuffs, and other manufactured goods, from England and France; salted fish, tobacco, iron and hardware, deals and tar, &c.; but it is impossible to form any estimate of the imports from official or other returns, as by far the largest portion are supplied clandestinely. Indeed, the whole population of this part of Spain are clothed in prohibited articles, which are sold as openly in the towns as if they were of Spanish manufacture! (Consul's Report for 1841.) An *Associacion Britanica* has recently been formed in this port for smelting and refining the rich argentiferous lead ores of Almagrera and other parts of the province of Murcia.

Last year (1842) the produce amounted to 400,000 oz. pure silver and 400 tons lead. The manufacture of woollens is carried on pretty extensively at Alcoy, 23 miles N. from Alicant; but they are coarse and of inferior quality.

Port Charges on Shipping entering and clearing out.

N. B.—A vessel of 300 tons pays the maximum rate. One of less burthen pays proportionally less.

Spanish Vessels of 300 Tons.	Rs. Vn.	Mar.
Anchorage	75	
Health visit and pratique	15	2
Captain of Port	8	
Bill of Health	14	
Tonnage Duty (300 Tons), if loaded outwards	300	
If cleared in Ballast		
Mole and Light Duty	24	
Tarifa Light in and out 24 Maravedis per Ton (300 Tons)	211	26
Equal to 6*l.* 10*s.* sterling.	647	28

Foreign Vessels of 300 Tons.	Rs. Vn.	Mar.
Anchorage	75	
Health Visit, &c.	98	
Captain of Port	8	
Bill of Health	25	
Tonnage Duty, if loaded outwards	300	
If cleared in Ballast		
Mole and Light Duty	120	
Tarifa Light in and out 48 Maravedis per Ton (300 Tons)	423	18
Equal to 10*l.* 10*s.* sterling.	1049	18

Account of Vessels entering Inwards at Alicant in 1842; specifying the Countries to which they belonged their Tonnage, Crews, and the Invoice Value of their Cargoes.

Flags.	Ships.	Tons.	Men.	Invoice Value of Cargoes.
				L.
British	181	9,949	1,327	66,692
Spanish	116	15,578	1,698	272,480
French	32	3,958	386	5,600
Sardinian	12	536	115	
Swedish	63	27,844	874	9,350
Total	404	57,865	4,400	354,122

Flags.	Ships.	Tons.	Men.	Invoice Value of Cargoes.
				L.
Carried forward	404	57,865	4,400	354,122
American	4	1,580	58	36,300
Hamburgh	1	135	9	
Hanoverian	1	234	10	
Dutch	6	716	53	680
Total	416	60,560	4,550	391,102

Principal Articles imported into and exported from Alicant in 1842.

Principal Imports.	Invoice Value.	Whereof from England.	Whereof from France.
	cwt. *L.*	*L.*	*L.*
Newfoundland Fish	103,999 62,355	62,355	
Sugar from West Indies	85,760		
Cocoa	27,320		
Manufactured Goods	158,160	33,700	71,960
Tobacco from America	36,300		
Deals and Tar (from Sweden)	9,350		

Principal Exports.	Invoice Value.	Whereof to England.	Whereof to France.
	cwt. *L.*	*L.*	*L.*
Barilla	19,580 12,480	12,480	
Raisins	146,496 116,397	116,397	
Silk	46,740		46,700
Wool	41,430	to	41,450
Oil (to France and West Indies)	17,600		
Almonds	9,275	3,810	
Salt (to Sweden)	14,180		

Custom-house Regulations.—A manifest of the cargo, the ship's tonnage, and number of crew, must be presented within 24 hours after pratique being given, when two officers are put on board to prevent smuggling. The consignees then make entry of the articles consigned to them, and obtain an order to discharge from the collector, or custom-house authorities, a *certificate of origin* from the Spanish consul at the port of lading being no longer requisite. To load the whole or part of an outward cargo, the master reports his intention to the collector, who gives his order permitting goods to be shipped, and the shippers make their specific entries. When the vessel is loaded, the waiting officers make their return to the collector; who, on being presented with the receipts of the captain of the port and of the Pratique office for their respective charges, grants his clearance, upon which a bill of health is obtained, and the vessel is clear for sea.

Warehousing System.—Goods legally imported may be deposited in bonded warehouses for twelve months, paying, in lieu of all charges, 2 per cent. *ad valorem*, but at the end of the year they must be either taken for home consumption or re-shipped. The 2 per cent. is charged, whether the goods lie for a day or the whole year. In charging duties, no allowance is made for waste or damage in the warehouses.

Rates of Commission are usually 2½ per cent. on sales and purchases; ½ per cent. is commonly charged on the negotiation of bills. Goods are commonly sold at 3 months' credit. Ordinary discount at the rate of 6 per cent. per annum.

Alicant is not a favourable place for repairing ships, and provisions of all sorts are scarce and dear.

Vessels with foul bills of health, or coming from an infected or suspected place, though with clean bills, are usually ordered to Port Mahon to perform quarantine. But vessels coming with clean bills obtain, under ordinary circumstances, immediate pratique.

Money.—Accounts are kept in libras of 20 sueldos; each sueldo containing 12 dineros; the libra, also called the peso, = 10 reals; and a real of Alicant = 27·2 maravedis of plate, or 51·2 maravedis vellon. The libra may be valued at 3*s.* 6*d.* sterling, and the real at 4½*d.* ditto.

Weights and Measures.—The carga = 2½ quintals = 10 arrobas. The arroba consists either of 24 large pounds, or of 36 small ditto; the latter having 12 Castilian ounces to the pound, the former 18. The arroba = 27 lbs. 6 oz. avoirdupois; but at the Custom-house the arroba = 25 lbs. of 16 oz. each.

The principal corn measure is the cahiz or caffise, containing 12 barchiilas, 96 medios, or 192 quartillos. The cahiz = 7 Winch. bushels nearly.

The principal liquid measure is the cantaro of 8 medios, or 16 quartillos. The cantaro = 3·05 English wine gallons. The tonnelada or ton contains 2 pipes, 80 arrobas, or 100 cantaros.

The yard or vara, divided into 4 palmos, is = 29·96, or very nearly 30 English inches.—(*Consul's Reports to Foreign Office for* 1841 *and* 1842; *Inglis's Spain in* 1830, ii. 304, &c.; *Kelly's Cambist, &c.*)

ALIENS. According to the strict sense of the term, and the interpretation of the common law, all individuals born out of the dominions of the crown of England (*alibi natus*) are aliens or foreigners.

It is obvious, however, that this strict interpretation could not be maintained without very great inconvenience; and the necessity of making exceptions in favour of the children born of native parents resident in foreign countries was early recognised. The 25 Edw. 3. stat. 2. enacts, that all children born abroad, provided *both* the parents were at the time of their birth in allegiance to the king, and the mother had passed the seas by her husband's consent, might inherit as if born in England. And this relaxation has been carried still further by several modern statutes: so that all children born out of the king's ligeance, whose fathers, or grandfathers by the father's side, were natural born subjects, are now deemed to be themselves natural born subjects; unless their ancestors were outlawed, or banished beyond sea for high treason, or were, at the birth of such children, in the service of a prince at enmity with Great Britain.

Naturalisation of Aliens.—Aliens may be naturalised by act of parliament, which puts them in exactly the same condition as natural-born subjects, except that they are incapable of being members of the privy council, of being elected to serve in parliament, or of holding any office of trust under the crown.

A *denizen* is an alien born, who has obtained letters patent, *ex donatione regis*, to make him an English subject. He occupies a kind of middle station between a natural-born subject and an alien. He may acquire lands by purchase or devise, but not by inheritance; and may transmit such lands to his children born after his denization, but not to those born before. — (*Blackstone's Com.* book 1. cap. 10.)

An alien may also be naturalised by serving on board any of his Majesty's ships of war, in time of war, for three years, or, if a proclamation has been issued to that effect, for two years. — (6 *Geo.* 4. cap. 109. §§ 16, 17.)

Influence of the Residence of Aliens. — There can be no doubt that, generally speaking, the resort of foreigners to a country, and their residence in it, are highly conducive to its interests. Those who emigrate in order to practise their calling in an old settled country are pretty uniformly distinguished for activity, enterprise, and good conduct. The native inhabitants have so many advantages on their side, that it would be absurd to suppose that foreigners should ever come into any thing like successful competition with them, unless they were acquainted with some branch of trade or manufacture of which the others were ignorant, or possessed superior skill, industry, or economy. But whether aliens practise new arts, or introduce more perfect processes into the old, or display superior economy, &c., their influx cannot fail to be of the greatest advantage. They practically instruct those among whom they reside in what it most concerns them to know, that is, in those departments of art and science in which they are inferior to others; and enable them to avail themselves of whatever foreign sagacity, skill, or practice has produced that is most perfect. It is not easy, indeed, to overrate the benefits conferred on most countries by the resort of aliens. Previously to the invention of printing, there was hardly any other way of becoming acquainted with foreign inventions and discoveries; and even now it is far easier to learn any new art, method, or process, from the example and instruction of those familiar with its details, than from the best possible descriptions. The experience, indeed, of every age and country shows that the progress of nations in the career of arts and civilisation depends more on the freedom of commerce, and on the liberality with which they have treated foreigners, than on almost any thing else.

English Legislation as to Aliens. — But, notwithstanding what has been stated above, an antipathy to resident foreigners seems to be indigenous to all rude and uncivilised nations. Whatever is done by them appears to be so much taken from the employment, and, consequently, from the subsistence of the citizens; while the advantages resulting from the new arts or improved practices they introduce, for the most part manifest themselves only by slow degrees, and rarely make any impression on the multitude. Hence the jealousy and aversion with which foreigners are uniformly regarded in all countries not far advanced in civilisation. The early Greeks and Romans looked upon strangers as a species of enemies, with whom, though not actually at war, they maintained no sort of friendly intercourse. "*Hostis*," says Cicero, "*apud majores nostros is dicebatur, quem nunc peregrinum dicimus.*" — (*De Off.* lib. 1. cap. 12.) It may, therefore, be considered as a striking proof of the good sense and liberality of those by whom it was framed, that a clause is inserted in Magna Charta which has the encouragement of commerce for its object; being to the effect, that "all merchants (if not openly prohibited before) shall have safe and sure conduct to depart out of and to come into England, to reside in and go through England, as well by land as by water; to buy and sell without any manner of evil tolls, by the old and rightful customs, except in time of war; and if they be of a land making war against us, and such be found in our nation at the beginning of the war, they shall be attached without harm of body or goods, until it be known unto us, or our chief justice, how our merchants be entreated in the land making war against us; and if our merchants be well entreated there, shall be so likewise here."

But until the æra of Edward I. the stipulation in the Great Charter as to foreign merchants seems to have been little attended to. It is doubtful whether, previously to his reign, they could either hire houses of their own, or deal except through the medium of some Englishman. But this intelligent prince saw the advantage that would result to the trade and industry of his subjects from the residence and intercourse of Germans, Flemings, Italians, and other foreigners, who, at that time, were very superior to the English in most branches of manufactures and commerce. He, therefore, exerted himself to procure a repeal of some of the more oppressive restrictions on aliens, and gave them a charter which conveyed considerable privileges.* Down, however, to the reign of Edward III., it continued to be customary to arrest one stranger for the debt, and even to punish him for the crimes and misdemeanors of others! It may appear extraordinary that the gross injustice of this barbarous regulation ever permitted it to be adopted; and yet it was probably, at one period, the common law of most European states. As soon, however, as the foundations of good order and civilisation began to

* This charter was confirmed by Edward III. in 1328. Among other clauses, it has the following; viz. 1st, That on any trial between foreigners and Englishmen the jury shall be half foreigners; 2d, That a proper person shall be appointed in London to be justiciary for foreign merchants; and, 3d, That there shall be but one weight and measure throughout the kingdom. — (*Anderson*, anno 1302.)

be laid, its operation was seen to be most pernicious. In 1325, Edward II. entered into a convention with the Venetians, in which it was expressly stipulated that they should have full liberty to come to England to buy and sell commodities, without being liable for the debts or crimes of others. Conventions to the same effect were entered into with other foreigners. At length, in 1353, this disgraceful practice was put an end to by 27 Edward 3. stat. 2. cap. 17.; it being provided in this statute, not only that no stranger shall be impeached for the trespass or debt of another, but that, in the event of a war breaking out with any foreign power, its subjects, residing amongst us, shall be warned thereof by proclamation, and be allowed forty days to arrange their affairs, and to depart out of the kingdom; and that, under special circumstances, this term may be extended. There are few acts in the statute-book that reflect more credit on their proposers, or that have been more advantageous than this.

In consequence of the encouragement given by Edward III. to such of the woollen manufacturers of Flanders as chose to immigrate to England, a good many came over; and it is from their immigration that we may date the improvement and importance of the woollen manufacture in this country. — (See Woollen Manufacture.) But this policy, however wise and judicious, was exceedingly unpopular. The foreigners were openly insulted, and their lives endangered, in London and other large towns; and a few of them in consequence returned to Flanders. Edward, however, was not to be driven from his purpose by an unfounded clamour of this sort. A proclamation was issued, in which every person accused of disturbing or attacking the foreign weavers was ordered to be committed to Newgate, and threatened with the utmost severity of punishment. In a parliament held at York, in 1335, an act was passed for the better protection and security of foreign merchants and others, by which penalties were inflicted on all who gave them any disturbance. This seems to have had the effect, for a while at least, of preventing any outrages.

The corporations of London, Bristol, and other great towns, have been at all times the principal enemies to the immigration of foreigners. Perhaps, indeed, they were not more hostile to them than to such of their own countrymen, belonging to another part of the kingdom, as should have attempted to settle amongst them without being free of their corporation. But in denouncing foreigners they had the national prejudice on their side; and their attempts to confirm and extend their monopolies by their exclusion were regarded as the noblest efforts of patriotism! Edward III. was fully aware of the real motives by which they were actuated, and steadily resisted their pretensions. But in the reigns of his successors they succeeded better: some of these were feeble and unfortunate, whilst others enjoyed the crown only by a disputed title, and in defiance of powerful competitors. The support of the great towns was of the utmost consequence to such princes, who, whatever might be their own opinion as to its policy, could hardly venture to resist the solicitations of such powerful bodies to exclude strangers, and to impose restrictions on commerce. From the death of Edward III. to the reign of Elizabeth, the progress made by the country was not inconsiderable, but it was little promoted by legislative enactments. Throughout the whole of this period, the influence of corporations seems to have predominated in all matters relating to trade and the treatment of foreigners; and our legislation partook of the selfish, monopolising character of the source whence it was principally derived. Were the acts and proceedings as to aliens the only memorials of our policy from 1377 to 1560, we should certainly seem to have retrograded materially during the interval. Some of these acts were passed with so little consideration, and were so very absurd, that they had to be immediately repealed. Of this sort was the statute of the 8 Henry 6. cap. 24., to the effect "that no Englishman shall within this realm sell, or cause to be sold, hereafter, to any merchant alien, any manner of merchandises, but only for ready payment in hand, or else in merchandises for merchandises, to be paid and contented in hand, upon pain of forfeiture of the same." But as an enactment of this sort was very speedily found to be more injurious to ourselves than to the foreigner, it was repealed in the following session.

The more tyrannical their conduct in other respects, the more were our princes disposed to humour the national prejudice against foreigners. If not a cheap, it was, at least, an easy method of acquiring popularity. In the very first parliament after the accession of Richard III., a statute was passed full of the most ridiculous, contradictory, and unfounded allegations as to the injury sustained by the influx of foreigners, and laying them under the most oppressive restraints. Considering, indeed, the sort of treatment to which aliens were then exposed, it may excite surprise that they should ever have thought of visiting the country; and, in point of fact, it appears that the resort of foreign merchants to our ports was materially impaired by the statutes referred to, and others of the same description. This is evident from the act 19 Henry 7. cap. 6., where it is stated that "woollen cloth is not sold or uttered as it hath been in divers parts," and that "foreign commodities and merchandises are at so dear and exceeding

high price that the buyer cannot live thereon." But in despite of this authoritative exposition of the mischiefs arising from the restraints on aliens, and on trade, they were both increased in the reign of Henry VIII. And it was not till the reign of Elizabeth that the pretensions of the corporations seem to have been disregarded, and an attempt made to act, not by starts, but consistently, on the policy of Edward III.

The influx of foreigners during the reign of Elizabeth was occasioned chiefly by the persecutions of the Duke of Alva and the Spaniards in the Low Countries. The friends of the reformed religion, which, at the time, was far from being firmly established, and the government, were glad to receive such an accession of strength; and from the superiority of the Flemings in commerce and manufactures, the immigrants contributed materially to the improvement of the arts in England. It would seem, however, that the ministers of Elizabeth contented themselves, perhaps that they might not excite the public prejudice, with declining to enforce the laws against aliens, without taking any very active steps in their favour.

In the reign of James I. the corporation of London renewed with increased earnestness their complaints of aliens. In 1622, a proclamation was issued, evidently written by James himself, in which, under pretence of keeping "a due temperament" between the interests of the complainants and those of the foreigners, he subjects the latter to fresh disabilities.

Since the revolution, more enlarged and liberal views as to the conduct to be followed with respect to aliens have continued to gain ground: several of the restraining statutes have fallen into disuse, while others have been so much modified by the interference of the courts, which have generally been inclined to soften their severity, that their more offensive provisions are become inoperative. In 1708, an act was passed, notwithstanding the strenuous opposition of the corporations, for the general naturalisation of all foreign protestants; but the prejudice against them was still so powerful that it was repealed within about three years. Some unsuccessful attempts have since been made to carry a similar measure. One of these, about the middle of last century, occasioned the publication by Dr. Tucker of two excellent pamphlets, in which the policy of the naturalisation act is most ably vindicated, and the arguments against it successfully exposed.* But no such statute has hitherto been passed, and aliens still continue subject to various disabilities.

Disabilities of Aliens. — The principal of these regards the possession of fixed property. It is ruled that lands purchased by an alien for his own use may be seized by the king. "If," says Blackstone, "he could acquire a permanent property in lands, he must owe an allegiance, equally permanent with that property, to the king of England, which would probably be inconsistent with that which he owes to his own natural liege lord; besides that, thereby the nation might in him be subject to foreign influence, and feel many other inconveniences. Wherefore by the civil law such contracts were made void, but the prince had no such advantage of forfeiture thereby as with us in England." — (*Commentaries*, book i. cap. 10.)

An alien cannot take a benefice without the king's consent, nor can he enjoy a place of trust, or take a grant of lands from the crown. Aliens may, however, acquire property in money, goods, or other personal estate, and may have houses for the purpose of their habitation, and for carrying on their business. They may bring actions as to their personal effects, and may dispose of them by will. The *droit d'aubaine* (*jus albinatus*, i. e. *alibi natus*), or the right of the crown to succeed to the effects of an alien at his death, so long the custom in France, never obtained in England. If an alien abroad die intestate, his whole property here is distributed according to the law of the country where he resided; but such residence must have been stationary, and not occasional, otherwise the foreign municipal regulations will not apply to the property.

Aliens may trade as freely as natives; and for these many years past the duties of *package* and *scarage* in the port of London, repealed in 1833, were the only peculiar duties with which they were burdened. The statutes of Henry VIII. restraining alien artificers from working for themselves are understood to have been repealed by the stat. 5 Eliz. c. 7., and they are quite at liberty to employ themselves as they please.

Aliens indicted for felony or misdemeanor are tried by a jury of which half are foreigners, a privilege they have enjoyed, as already seen, with some partial interruptions, from the reign of Edward I.

Conditions of Residence. — During the late war aliens were placed under the surveillance of the police; they were obliged to send frequent reports of their residence, and of the mode in which they were employed, and were liable to be sent out of the kingdom at any moment by an order from the secretary of state. The conditions under which they now reside amongst us are embodied in the 6 Will. 4. c. 11.

Every master of a ship arriving from foreign ports shall, to the best of his knowledge and belief, immediately declare, in writing, to the chief officer of customs, the name or names, rank, occupation, &c. of any alien or aliens on board his ship, or who may have landed therefrom at any place within the realm, under a penalty of 20*l.* for omission or false declaration, and of 10*l.* for every alien omitted in the declaration. This regulation does not, however, extend to foreign mariners navigating the vessel. — § 2.

On arrival in this country the alien is to declare his name, description, &c., and to produce his passport; which declaration is to be registered by the officer of customs, who is to deliver a certificate to the alien. A copy of this declaration is to be transmitted, within two days, to the secretary of state, or (if the alien land in Ireland) to the chief secretary of the lord lieutenant. The original certificate given to the alien is to be transmitted to the secretary of state on his leaving the country. New certificates to be granted in lieu of such as may be lost, without fee, under a penalty of 20*l.* Forging certificates, or falsely personating aliens, punishable by imprisonment, not exceeding three months, or by fine, not exceeding 100*l.* — §§ 3, 4, 5, &c.

Policy of the Laws as to Aliens. — The reasons assigned by Mr. Justice Blackstone and others for preventing aliens from acquiring fixed property seem to be very unsatis-

* Historical Remarks on the late Naturalisation Bill, 1751; Queries occasioned by the late Naturalisation Bill, 1752.

factory. In small states there might be grounds, perhaps, for fearing lest the easy admission of aliens to the rights of citizenship should give them an improper bias; but in a country like England, such apprehensions would be quite futile. In this respect the example of Holland seems quite decisive. Notwithstanding the comparatively limited population of that country, it was "the constant policy of the republic to make Holland a perpetual, safe, and secure asylum for all persecuted and oppressed strangers; no alliance, no treaty, no regard for, no solicitation of any potentate whatever, has at any time been able to weaken or destroy, or make the state recede from protecting, those who have fled to it for their own security and self-preservation."—(*Proposals for amending the Trade of Holland*, printed by authority. Lond. 1751.)

A short residence in the country, and a small payment to the state, was all that was required in Holland to entitle a foreigner to every privilege enjoyed by a native. And it is of importance to remark, that it has not been so much as insinuated that this liberal conduct was in any instance productive of a mischievous result. On the contrary, all the highest authorities consider it as one of the main causes of the extraordinary progress made by the republic in wealth and commerce. It is said in the official paper just quoted, that "Throughout the whole course of all the persecutions and oppressions that have occurred in other countries, the steady adherence of the republic to this fundamental law has been the cause that many people have not only fled hither for refuge, with their whole stock in ready cash, and their most valuable effects, but have also settled and established many trades, fabrics, manufactures, arts, and sciences, in this country; notwithstanding the first materials for the said fabrics and manufactures were almost wholly wanting in it, and not to be procured but at a great expense from foreign parts."—(*Ibid.*)

With such an example to appeal to, we are warranted in affirming that nothing can be more idle than to suppose that any number of foreigners which it is at all likely should ever come to England under the most liberal system, could occasion any political inconvenience; and in all other respects their immigration would be advantageous. A general naturalisation act would, therefore, as it appears to us, be a wise and politic measure. It might be enacted, that those only who had resided three or four years in the country, and given proofs of their peaceable conduct, should be entitled to participate in its advantages.

(Some parts of this article have been borrowed from the *Treatise on Commerce*, written for the Society for the Diffusion of Useful Knowledge by the author of this Work.)

ALKALIES. The distinguishing characters of these bodies are, a strong acrid and powerfully caustic taste; a corrosive action upon all animal matter, destroying its texture with considerable rapidity; exposed to the atmosphere, when in their caustic state, they absorb carbonic acid with great rapidity, and become carbonated (or mild). Their action upon vegetable colours also affords us means by which the presence of an uncombined or carbonated alkali may be detected; the yellow colour of turmeric is changed to a red brown tint when immersed into solutions containing them; the blue colour of the litmus, after being reddened by an acid, is again restored; the infusions of the red cabbage, the violet, and many other purple vegetable colours, are converted to green. Litmus paper reddened by carbonic acid is, however, the most delicate test of the presence of an alkali. With the various acids they also combine, forming the very important and extensive class of compounds generally called salts; a salt being any compound formed by the union of an acid with an alkali or a metallic oxide.

Alkalimetry.—The method by which the value of the alkalies, or carbonated alkalies, is determined, being of considerable importance in a commercial point of view, we shall here treat it somewhat in detail. It is an established fact, that 49 parts by weight of oil of vitriol of the specific gravity of 1·8485 are exactly equivalent to the neutralisation of 70 parts by weight of pure carbonate of potash, or 48 of pure potass, or 54 of carbonate of soda, or 32 of soda, and that 70 parts of oil of vitriol will therefore be necessary to neutralise 100 parts of carbonate of potass. Hence, by employing a glass tube of about two ounces' capacity, and accurately divided into 100 equal parts, taking 70 grains of oil of vitriol, and diluting it with water, to make the 100 measures complete, every measure of this dilute acid must be equal to a grain of pure carbonate of potass. The percentage of real carbonate of potass existing in any sample of pearlash may be at once ascertained by taking 100 grains of the sample, dissolving it in hot water, straining, and adding by degrees 100 measures of the test acid above mentioned; the point of neutralisation (when it ceases to affect litmus paper or reddened litmus) being accurately ascertained, the residual acid will give the percentage of impurities; for instance, say that 75 measures of the dilute acid have been employed to render 100 grains of a sample of pearlash perfectly neutral, then we have ascertained that it contains 25 per cent. impurities. The same process of course must be followed in examining samples of barilla or kelp, except that the alkali contained in them, being carbonate of soda, 90·75 of oil of vitriol must be employed instead of 70. The process recommended by Mr. Faraday, and in which he uses only one test acid, is as follows:—Into a tube about three quarters of an inch in diameter, and nine and a half long, and as cylindrical as possible throughout its whole length, 1,000 grains of water are to be weighed, and the space occupied marked on the tube by a fine file; this space is then divided from above downwards into 100 equal parts. At 23·44, or 76·56 parts from the bottom an extra line should be made, and soda marked opposite to it; at 48·96 potass should be marked in the same way; at 54·63 carbonate of soda; and at 65 carbonate of potass. A diluted acid is now to be prepared, which shall have a specific gravity 1·127, and this is made by mixing intimately together 19 parts by weight of oil of vitriol and 81 of water. The method to be followed in the employment of this acid is as follows:—The dilute acid is to be measured in the tube up to the line opposite to which the alkali sought for is marked; if barilla, which contains carbonate of soda, 54·63

measures are to be taken. The 100 measures are then made up by the addition of water, and is then ready for use, following the method before stated.

The alkalies are four in number, namely, ammonia (or volatile alkali), potass (or vegetable alkali), soda (or mineral alkali), and lithia; which last is of so little importance that we shall not treat of it here.

The combinations of these alkalies with the various acids, whenever they form compounds of any importance, will be noticed.

Ammonia, or Spirits of Hartshorn, or Volatile Alkali, in its uncombined form, is an elastic gaseous body, having a very pungent and suffocating odour, destroys animal life, converts the yellow of turmeric paper to a brown, which, from the volatility of the alkali, is again restored by a gentle heat to its original colour. This gas is rapidly absorbed by water, which takes into solution about 780 times its volume, forming the liquid ammonia, or what is commonly called hartshorn. Ammonia is liberated whenever any of the compounds of this alkali are acted upon by potass, soda, lime, and many other alkaline earths. Lime, from its being the most economical, is generally employed; the best proportion for its preparations are equal weights of sal ammoniac (muriate of ammonia), and fresh slaked lime. When these are introduced into a retort, and heat applied, ammonia is liberated in the gaseous form, and is conducted by a Wetter's safety tube into a vessel of water, by which the gas is instantly absorbed. Muriate of lime remains in the retort; sometimes water is added to the mixture, and then distilled. As thus obtained, it has a specific gravity of ·930 or ·940, water being equal to 1·000. The most concentrated solution of ammonia has the specific gravity ·875.

Carbonate of Ammonia, or Volatile Salt, or Subcarbonate of Ammonia. — This salt, which is very much employed in various processes of the arts, was formerly obtained by the action of chalk (carbonate of lime) upon muriate of ammonia; a double decomposition takes place. Carbonic acid and ammonia are sublimed in vapour, and muriate of lime remains in the vessel. A much less expensive process is, however, now followed, namely, from the waste gas liquors obtained in the purification of coal gas; these are evaporated, and the black impure sulphuric acid added. By this means a sulphate of ammonia is formed, and the carbonate procured from it by the action of powdered chalk, as in the former process.

Its uses are principally in forming other compounds of ammonia, as smelling salts; and it is likewise employed rather extensively by pastry-cooks for making light pastry, which is caused by the volatile carbonate of ammonia escaping and raising up the pastry by the heat of the oven. It is entirely dissipated during the baking, so that no ill effect can arise from its use.

Both this compound and the preceding act as violent stimulants on the animal system.

Muriate of Ammonia, or Sal Ammoniac, was formerly brought to this country from Egypt, where it was procured by submitting the soot of camels' dung (they employed for fuel) to sublimation in closed vessels; it is, however, at present manufactured in very large quantities in this country in a variety of ways. The most economical processes are either submitting sulphate of ammonia mixed intimately with muriate of soda (sea salt) to sublimation, or by substituting the bittern of sea water, which consists chiefly of muriate of magnesia, for the sea salt. In the first process a sulphate of soda is formed, and the muriate of ammonia, which, being volatile, rises in the vaporous form, and is condensed in the cool parts of the apparatus; in the latter process a sulphate of magnesia (Epsom salts) results. It is generally from this salt (muriate of ammonia) that the liquid ammonia is manufactured; it is also employed in tinning and soldering, to preserve the metals from oxidation. It is a semi-transparent, tough salt, having an acrid and cool taste, and is usually met with in the form of hemispherical masses. Sal ammoniac is made at Calcutta, and is thence exported to Great Britain, the United States, and the Arabian and Persian gulfs. In 1824-25 the exports amounted to 114 tons.

Sulphate of Ammonia. — The preparation of the sulphate has been already given under the head of ammonia; it is employed in the manufacture both of the carbonate and muriate.

Acetate of Ammonia. — The spirit of Mindererus is obtained by acting upon the carbonate of ammonia by acetic acic; the carbonic acid escapes with effervescence, and an acetate of ammonia is formed; it is employed in medicine as a febrifuge.

All these salts of ammonia have the following properties; — they are volatile at a low red heat; the fixed alkalies decompose them, combining with their acid, and the ammonia is liberated.

When combined with a fixed acid, such as the boracic or phosphoric, they are decomposed, the ammonia alone being volatilised, and the acid remaining pure. *This process was described for obtaining pure phosphoric acid.*

Potass, or Vegetable Alkali. — The original source of this alkali is in the vegetable kingdom, whence is derived its name of vegetable alkali. When wood is burnt, and the ashes lixiviated with water, boiled, strained, and evaporated to dryness, an intensely alkaline mass is obtained, which is known by the name of potash, from this process being conducted in iron pots. It is then removed to a reverberatory furnace, and submitted to heat, and a current of air. This burns out extractive matter and other impurities, and the salt assumes a pearly white colour, and is hence called pearlashes. Care should be taken, during this process, that the potashes do not enter into fusion, as this would destroy the full effect of the operation.

Pearlashes. — Pearlashes generally contain about from 60 to 83 or 84 per cent. of pure carbonate of potass. Its uses in manufactures are numerous and important. It is employed in making flint-glass, of which it constitutes about one sixth of the materials employed; in soap-making, especially for the softer kinds of soap; for this purpose, however, it is first rendered caustic by means of lime. In the rectification of spirits large quantities are employed to combine with the water previously in union with the spirit.

Subcarbonate of Potass, or Salt of Tartar, is used in preparing the subcarbonate of potass of the Pharmacopœia (carbonate of potass of the chemical nomenclature), and likewise in rendering hard spring waters soft, and in cleansing substances from grease: it is sometimes called salt of wormwood. When made by the deflagration of two parts of tartar of argol and one of nitre, it is called black flux, and is used extensively in metallurgic operations.

From the subcarbonate of potash the pure and uncombined potass is obtained, by adding an equal weight of fresh burnt lime, previously slaked, and boiling them with half their weight of water. By this process the lime combines with the carbonic acid, and the potass remains in solution in its caustic state; by boiling the clear solution rapidly in iron vessels, and submitting it to fusion, we obtain the fused potass.

If it be required perfectly pure for chemical purposes, it is necessary to evaporate in silver vessels, and dissolve in strong alcohol. This takes up the pure potass, and leaves any portion of the subcarbonate that may not have been acted upon by the lime; then the alcohol is to be distilled off, and the potass fused at a red heat, and poured out in its liquid state on a cold slab. As thus procured, it is a white, brittle mass, highly deliquescent, absorbing moisture and carbonic acid rapidly from the atmosphere. When evaporated in iron vessels it has a dirty colour, and lets fall a quantity of oxide of iron, when dissolved in water from its having acted upon the iron boilers.

Potass acts with great rapidity upon animal substances, destroying their texture, and is on this account employed as a caustic, and was formerly called *lapis infernalis*.

Carbonate (or, in the chemical nomenclature, *Bicarbonate*) *of Potass*, is prepared by passing carbonic acid gas through a solution of the subcarbonate: and evaporating at a temperature below 212°, and crystallising. It is used in making effervescing draughts. It loses one proportion of its carbonic acid when heated, and is converted into the subcarbonate.

Sulphate of Potass, or Sal Polychrest, or Vitriolated Tartar, is obtained by submitting the salt, which remains after the manufacture of nitric acid from nitre and sulphuric acid, to a red heat, or by neutralising the excess of acid contained in that salt by subcarbonate of potass.

Bisulphate of Potass, or Sal Enixum. — This is the salt mentioned above, as the residue from the process for obtaining nitric acid. It is employed, in very large quantities, in the manufacture of alum; also in tinning iron, for pickling, as it is termed; it is sometimes also used as a flux.

Nitrate of Potash, Nitre, or Saltpetre. — This salt, which is of so much importance in every branch of the arts, is found native in many parts of the world, especially in the East Indies. It is obtained from soils composed of decomposing granite, the felspar of which gives rise, as is supposed, to the potass. The nitric acid is not so easily accounted for, except it is by a union of the nitrogen and oxygen gases in the atmosphere taking place in those hot climates; for, from authenticated accounts, no decaying animal or vegetable matter exists in the nitre districts of India. By lixiviation with water the nitre is dissolved from the soil, which is again thrown out into the air, to be washed the following year; so that it is formed continually. These lixiviations are then evaporated; and when of a certain strength, a quantity of common salt separates, which is removed as it falls; and the nitre is then crystallised and imported to this country, always containing a certain quantity of impurities, which are deducted in the purchase of large quantities of the article, being termed its refraction. It is generally used for the manufacture of gunpowder and pure nitric acid, refined or re-crystallised.

Nitre may be also made artificially, in beds of decaying vegetable or animal substances, mixed with old mortar, or other refuse calcareous earth; these are watered occasionally, too much moisture being hurtful; after a certain period, depending on the rapidity with which the process has gone on, the whole is submitted to lixiviation together with wood-ashes, which contain subcarbonate of potass, and which decomposes any nitrate of lime formed, of which there is generally a considerable quantity. After the lixiviation is complete, which takes some time, the solution is separated and boiled down; the salt separates as in the other process, and the nitre is then crystallised. It was from this source that the whole of the nitre, nearly, employed by the French during the long protracted war with the continental powers was obtained.

Nitre has a cold, penetrating, and nauseous taste; enters into igneous fusion at a gentle heat, and is then moulded into round cakes called sal prunella. It is employed in the manufacture of nitric acid; of gunpowder, which is composed of 75 parts by weight of nitre, 16 of charcoal, and 9 of sulphur (the nitre for this purpose should be of great purity); and in the manufacture of oil of vitriol: as a flux it is one of the most powerful we possess; it is also used for the preservation of animal food, and in making frigorific mixtures: 1 oz. of nitre dissolved in 5 oz. of water lowers its temperature 15 degrees of Fahrenheit's thermometer. — (See SALTPETRE.)

Oxalate and Binoxalate of Potass. — The binoxalate of potass, or salt of lemon, or sorrel, by both which last names it is very commonly known, is procured from the juice of the common sorrel (Rumex Acetosa), or the wood sorrel (Oxalis Acetosella), by crystallisation, after the feculent matter has been separated by standing a few days. Its chief uses are, in removing ink spots or iron moulds; and also as a refreshing beverage when mixed with sugar and water.

The neutral oxalate is obtained from this salt by combining the excess of acid which it contains with a solution of subcarbonate of potass. Is very much used in chemistry, as the best test of the presence of lime.

Tartrate and Bitartrate of Potass. — Bitartrate of potass, or cream of tartar, is, when in its crude and impure state, called argol, and is deposited in the interior of wine casks during fermentation, and from this source the whole of the cream of tartar is obtained. It is generally of a very dark brown colour, but may be purified and rendered perfectly white by solution and crystallisation. It is employed very extensively in dyeing, hat-making, and in the preparation of tartaric acid, and many of the compounds of tartaric acid, as tartar emetic, soluble tartar (tartrate of potass): when heated to redness it is converted into carbonate of potass and charcoal; mixed with half its weight of nitre and thrown into a red hot crucible it forms the black flux, and with its own weight of nitre the white flux, both of which are very much employed in metallurgic operations. The tartrate is made by the addition of subcarbonate of potass to a solution of the bitartrate until perfectly neutral: it is used in medicine as a mild purgative.

Ferrocyanate or Prussiate of Potass. — This salt is obtained by the action of subcarbonate of potass, at a low red heat, upon refuse animal matter, such as hoofs, horns, skin, &c., in the proportion of two of subcarbonate to four or five of the animal matter. But the process recommended by M. Gautier is preferable; he finds, that when animal matter is heated with nitre, it yields a much larger quantity of the ferroprussiate than when either potass or subcarbonate of potass are employed; the proportions he finds most economical are, 1 part by weight of nitre, 3 parts of dry blood, and iron scales or filings equal to a fiftieth of the blood employed.

The coagulum of blood is mixed intimately with the nitre and iron filings, and dried by exposure to the air; they are then submitted to a very low red heat, in deep iron cylinders, as long as vapours continue to be liberated; when cold, the contents are dissolved in 12 or 15 times their weight and strained. On evaporation till of the specific gravity 1·284, and allowing it to cool, a large quantity of bicarbonate of potass crystallises, and by further evaporation till of the specific gravity 1·306, the ferroprussiate of potass crystallises on cooling. This is to be recrystallised. It is a beautiful yellow salt, very tough, having a tenacity similar to spermaceti, and is decomposed at a red heat. It is employed very extensively in dyeing blues, and in calico printing; also in the manufacture of Prussian blue, which is a compound of the ferroprussic acid and oxide of iron, prepared by adding 1 part of the ferroprussiate of potass dissolved in water, to 1 part of copperas, and 4 parts of alum in solution.

Chromate of Potass. — This salt is obtained from the native chromate of iron by the action of nitre at a full red heat in equal proportions. By solution, filtration, and evaporation, a beautiful lemon-yellow coloured salt results. It is very much employed in dyeing, calico printing, and calico making, from its producing bright yellow precipitates with solutions of lead.

Bichromate of Potass — is prepared from the above-mentioned salt, by the addition of nitric acid to the yellow solution obtained from the heated mass by the action of water; on evaporating this, a dark red coloured salt crystallises, which is the bichromate. This is also very largely employed by the calico printers, and when mixed in solution with nitric acid, possesses the property of destroying vegetable colours; on this account it is of great importance, as it at the same time removes a vegetable colour, and forms a base for a yellow dye.

Chlorate or Hyperoxymuriate of Potass. — The preparation of this salt is attended with some little difficulty, and requires a great deal of nicety. It is obtained by passing a current of chlorine gas through a solution of caustic potass; then boiling and evaporating; the first salt that separates is the chlorate of potass; and by further evaporation, muriate of potass is obtained. It is used in making matches for instantaneous light boxes, which are prepared by first dipping the wood in melted sulphur, and then into a thin paste, formed of 3 parts chlorate of potass, 2 parts starch, and a little vermilion; with sulphur it forms a very explosive compound, generally employed for filling the percussion caps of fowling-pieces.

Soda, or Mineral Alkali. — The sources of this alkali in nature are various. It is obtained in combination with carbonic acid, when plants which grow by the sea-side are burnt. The ashes thus obtained are called barilla and kelp; and also in some countries it is found as an efflorescence upon the surface of the earth, and is called nitrum or natron; this occurs particularly in Egypt and South America. Trona is also another native carbonate of soda, and is exported from Tripoli. In combination with muriatic acid it is also found in immense abundance, forming the rock salt, and sea salt or muriate of soda. It is obtained from the carbonate exactly in the same way as potass is obtained from its carbonate, namely, by boiling it with fresh burnt lime previously slaked, decanting the clear solution, and evaporating and fusing. It is a white brittle substance, and by exposure to the air becomes converted into a dry carbonate. Its uses in the arts and manufactures are of considerable importance. In soap-making it is

employed in very large quantities, and for this purpose is generally procured from barilla or kelp, by mixing them with lime, and by the infusion of water procuring a caustic soda ley; this is mixed with oil and fatty matters in various proportions, and boiled; the saponification of the fatty matter takes place, and the soap formed rises to the surface; the ley is then drawn from beneath, and fresh leys added, until the soap is completely free from oil; it is then allowed to dry. Soda is also employed in the manufacture of plate, crown, and bottle glass, though for this purpose it is generally in the form of carbonate or sulphate.

Subcarbonate of Soda. (In the chemical nomenclature it is called *carbonate.*) — This is generally prepared from barilla, which contains about from 16 to 24 per cent. Barilla is procured by incinerating the *salsola soda*, and other sea-side plants; it is made in large quantities on the coast of Spain. Kelp is another impure carbonate of soda, but does not contain more than 4 or 5 per cent.; it is the ashes obtained from sea weeds by incineration, and is made on the northern shores of Scotland. From these, the crystallised carbonate (or subcarbonate, as it is more frequently called) is made by the addition of a small quantity of water, boiling, straining, evaporating, and skimming off the common salt as it forms on the surface; on cooling, the subcarbonate of soda crystallises. Another method is by heating the sulphate of soda with carbonate of lime and charcoal, and then dissolving out the soluble carbonate; also, by the action of carbonate of potass (pearlash) upon solutions of sea salt. — (See BARILLA and KELP.)

Bicarbonate of Soda — is procured by driving a current of carbonic acid gas through solutions of the carbonate, and then evaporating at a temperature below 212° Fahrenheit; it is chiefly employed in making soda water powders. This is the carbonate of soda of the Pharmacopœia. By the application of a red heat it loses carbonic acid, and is converted into the subcarbonate.

Sulphate of Soda, or Glauber Salts. — This salt, which has received the name of Glauber, from its discoverer, is the residue of a great many chemical processes; for instance, when muriate of soda is acted upon by oil of vitriol, muriatic acid and sulphate of soda result; in making chlorine gas for the manufacture of the chloride of lime, or bleaching powder, sulphate of soda and sulphate of manganese result; the materials employed being sea salt, sulphuric acid (oil of vitriol), and black oxide of manganese: also, in the preparation of acetic acid from the acetate of soda, and in the preparation of muriate of ammonia from sea salt and sulphate of ammonia. Sulphate of soda is a colourless, transparent salt, effloresces readily when exposed to the air, and becomes converted into a dry powder; it has a cold, bitter taste. It is used for the preparation of carbonate of soda, and as a medicine. It is found native in some countries, particularly in Persia and South America — frequently as an efflorescence upon new walls.

Nitrate of Soda. — This salt is found native in some parts of the East Indies, and is called, from its square form, cubic nitre; it is, however, very little used.

Muriate of Soda, or Sea Salt. — This compound is found in immense quantities in the earth, and is called from this circumstance rock salt, or sal gem. The mines of Cheshire and Droitwich, in this country, and those in Poland, Hungary, and Spain, and many others, afford immense quantities of this compound. It is also obtained by the evaporation of sea water, both spontaneously in pits formed for the purpose, and in large iron boilers; the uncrystallisable fluid is called the bittern; basket salt is made by placing the salt after evaporation in conical baskets, and passing through it a saturated solution of salt, which dissolves and carries off the muriate of magnesia or lime. Pure salt should not become moist by exposure to the air; it decrepitates when heated; it is employed for the preparation of muriatic acid, carbonate of soda, muriate of ammonia, and many other operations; also in glazing stone-ware, pottery, &c.; and from its great antiseptic properties, is used largely for the preservation of animal food; as a flux also in metallurgy.

Borate of Soda, or Borax. — This salt is found in Thibet and Persia, deposited from saline lakes; it is called tincal, and is imported into this country, where it is purified by solution; the fatty matter with which the tincal is always coated being removed, and the solution evaporated and crystallised: its principal uses are as a flux, from its acting very powerfully upon earthy substances.

ALKANET, or ANCHUSA (Ger. *Orkanet;* Du. *Ossetong;* Fr. *Orcanette;* It. *Ancusa;* Sp. *Arcaneta*), a species of bugloss (*Anchusa tinctoria* Lin). It has been cultivated in England; but is found of the finest quality in Siberia, Spain, and more particularly in the South of France, in the vicinity of Montpelier. The roots of the plant are the only parts that are made use of. When in perfection, they are about the thickness of the finger, having a thick bark of a deep purplish red colour. This, when separated from the whitish woody pith, imparts a fine deep red to alcohol, oils, wax, and all unctuous substances. To water it gives only a dull brownish hue. It is principally employed to tint wax, pomatum, and unguents, oils employed in the dressing of mahogany, rose-wood, &c. The alkanet brought from Constantinople yields a more beautiful but less permanent dye than that of France. — (*Lewis's Mat. Med.; Magniem, Dictionnaire des Productions.*)

The duty, which was previously very oppressive, was reduced in 1832 to 2*s.* a cwt.; and by the tariff of last year (1842) to 1*s.* a cwt. The imports are inconsiderable. The price varies from 27*s.* to 32*s.* a cwt.

ALLOWANCES, TARES, &c. In selling goods, or in paying duties upon them, certain deductions are made from their weights, depending on the nature of the packages in which they are inclosed, and which are regulated in most instances by the custom of merchants, and the rules laid down by public offices. These allowances, as they are termed, are distinguished by the epithets *Draft, Tare, Tret,* and *Cloff.*

Draft is a deduction from the original or gross weight of goods, and is subtracted before the tare is taken off.

Tare is an allowance for the weight of the bag, box, cask, or other package, in which goods are weighed.

Real or *open tare* is the actual weight of the package.

Customary tare is, as its name implies, an established allowance for the weight of the package.

Computed tare is an estimated allowance agreed upon at the time.

Average tare is when a few packages only among several are weighed, their mean or average taken, and the rest tared accordingly.

Super-tare is an additional allowance, or tare, where the commodity or package exceeds a certain weight.

When tare is allowed, the remainder is called the nett weight; but if trett be allowed, it is called the *suttle weight.*

Trett is a deduction of 4 lbs. from every 104 lbs. of suttle weight.

This allowance, which is said to be for dust or sand, or for the waste or wear of the commodity, was formerly made on most foreign articles sold by the pound avoirdupois; but it is now nearly discontinued by merchants, or else allowed in the price. It is wholly abolished at the East India warehouses in London; and neither trett nor draft is allowed at the Custom-house.

Claff, or *Clough,* is another allowance that is nearly obsolete. It is stated in arithmetical books to be a deduction of 2 lbs. from every 3 cwt. of the *second suttle;* that is, the remainder after trett is subtracted;

but merchants, at present, know cloff only as a small deduction, like draft, from the original weight, and this only from two or three articles.—(See *Kelly's Cambist*, art. "London.")

For an account of the tares and allowances at London, see TARE; for the tares and allowances at the great foreign trading towns, see their names.

ALMONDS (Ger. *Mandeln*; Du. *Amandelen*; Fr. *Amandes*; It. *Mandorli*; Sp. *Almendra*; Port. *Amendo*; Rus. *Mindal*; Lat. *Amygdalæ amaræ, dulces*), a kind of medicinal fruit, contained in a hard shell, that is enclosed in a tough sort of cotton skin. The tree (*Amygdalus communis*) which produces this fruit nearly resembles the peach both in leaves and blossoms; it grows spontaneously only in warm countries, as Spain, and particularly Barbary. It flowers early in the Spring, and produces fruit in August. Almonds are of two sorts, sweet and bitter. They are not distinguishable from each other but by the taste of the kernel or fruit. "The Valentia almond is sweet, large, and flat-pointed at one extremity, and compressed in the middle. The Italian almonds are not so sweet, smaller, and less depressed in the middle. The Jordan almonds come from Malaga, and are the best sweet almonds brought to England. They are longer, flatter, less pointed at one end and less round at the other, and have a paler cuticle than those we have described. The sweet almonds are imported in mats, casks, and boxes; the bitter, which come chiefly from Mogadore, arrive in boxes."—(*Thomson's Dispensatory.*)

Previously to 1832, almonds were grossly overtaxed; but the duties were then considerably reduced, and they were also still farther reduced in 1842. At an average of the years 1840 and 1841, the entries for home consumption amounted to 8,019 cwt. They are mostly imported from Spain and Northern Africa. The (1843) duties are, almonds, not Jordan or bitter, 10*s.* a cwt.; Jordan, 25*s.* per ditto; bitter, 2*s.* per ditto. Almonds were quoted in bond in London, in January 1843, Jordan (new), 155*s.* a cwt.; Valencia (sweet, shipped from Alicant,) 78*s.* per ditto; African bitter, 65*s.* per ditto; African sweet, 46*s.* to 47*s.* per ditto.

ALOES (Du. *Aloe*; Fr. *Aloés*; Ger. and Lat. *Aloe*; Rus. *Sabir*; Sp. *Aloè*; Arab. *Mucibar*), a bitter, gummy, resinous, inspissated juice, obtained from the leaves of the plant of the same name. There are four sorts of aloes met with in commerce; viz. *Socotrine, Hepatic, Caballine*, and *Cape*.

1. *Socotrine*—so called from the island of Socotra, in the Indian Ocean, not very distant from Cape Guardafui, where the plant (*Aloe spicata*), of which this species is the produce, grows abundantly. It is in pieces of a reddish brown colour, glossy as if varnished, and in some degree pellucid. When reduced to powder, it is of a bright golden colour. Its taste is extremely bitter; and it has a peculiar aromatic odour, not unlike that of the russet apple decaying. It softens in the hand, and is adhesive; yet is sufficiently pulverulent. It is imported by way of Smyrna and Alexandria, in chests and casks, but is very scarce in England.

2. *Hepatic.*—The real hepatic aloes, so called from its liver colour, is believed to be the produce of the *Aloe perfoliata*, which grows in Yemen in Arabia, from which it is exported to Bombay, whence it finds its way to Europe. It is duller in the colour, bitterer, and has a less pleasant aroma than the Socotrine aloes, for which, however, it is sometimes substituted. Barbadoes aloes, which is often passed off for the hepatic, is the produce of the *Aloe vulgaris*. It is brought home in calabashes, or large gourd shells, containing from 60 to 70 lbs. It is duskier in its hue than the Bombay, or real hepatic aloes, and the taste is more nauseous, and intensely bitter. The colour of the powder is a dull olive yellow.

3. *Caballine* or *Horse Aloes* seems to be merely the coarsest species or refuse of the Barbadoes aloes. It is used only in veterinary medicine; and is easily distinguished by its rank fœtid smell.

4. *Cape Aloes* is the produce of the *Aloe spicata*, which is found in great abundance in the interior of the Cape colony, and in Melinda. The latter furnishes the greater part of the extract sold in Europe under the name of Socotrine aloes. The odour of the Cape aloes is stronger and more disagreeable than that of the Socotrine; they have, also, a yellower hue on the outside; are less glossy, softer, and more pliable; the colour of the powder is more like that of gamboge than that of the true Socotrine aloes.—(*Ainslie's Mat. Indica*; *Thomson's Dispensatory* and *Mat. Medica.*)

The entries of aloes for home consumption amounted, at an average of the years 1841 and 1842, to 170,780 lbs. a year. Previously to 1842 the duties were 2*d.* per lb. on those from a British possession, and 8*d.* on those from a foreign country; but they were then reduced to 1*d.* and 2*d.* per lb.

ALOES-WOOD (Ger. *Aloeholz*; Du. *Aloëhout, Paradyshout*; Fr. *Bois d'Aloés*; It. *Legno di Aloe*; Sp. *Aloè chino*; Lat. *Lignum Aloes*; Sans. *Aguru*; Malay, *Agila*; Siam. *Kisna*), the produce of a large forest tree, to be found in most of the countries between China and India, from the 24th degree of north latitude to the equator.

It seems to be the result of a diseased action confined to a small part of a few trees, of which the rest of the wood is wholly valueless. It appears to be more or less frequent according to soil and climate, and from the same causes to differ materially in quality. It is produced both in the greatest quantity and perfection in the countries and islands on the east coast of the Gulf of Siam. This article is, in high repute for fumigations, and as incense, in all Hindu, Mohammedan, and Catholic countries. It formerly brought a very high price, being at one time reckoned nearly as valuable as gold. It is now comparatively cheap, though the finest specimens are still very dear. The accounts of this article in most books, even of good authority, are singularly contradictory and inaccurate. This is more surprising, as La Loubère has distinctly stated, that it consisted only of "*certains endroits corrumpus dans des arbres d'une certaine espèce. Toute arbre de cette espèce n'en a pas; et ceux qui en ont, ne les ont pas tous en même endroit.*"—(Royaume de Siam, t. i. p. 45. 12mo. ed.) The difficulty of finding the trees which happen to be diseased, and of getting at the diseased portion, has given rise to the fables that have been current as to its origin. The late Dr. Roxburgh introduced the tree which yields this production into the Botanical Garden at Calcutta, from the hills to the eastward of Sylhet, and described it under the name of *Aquillaria agalocha*.

ALUM (Ger. *Alaun*; Du. *Aluin*; Fr. *Alun*; It. *Allume*; Sp. *Allumbre*; Rus. *Kwasszë*; Lat. *Alumen*; Arab. *Sheb*), a salt of great importance in the arts, consisting of a ternary compound of *aluminum*, or pure argillaceous earth, potass, and sulphuric acid. Alum is sometimes found native; but by far the greater part of that which is met with in commerce is artificially prepared. The best alum is the Roman, or that which is manufactured near Civita Vecchia, in the Papal territory. It is in irregular,

octahedral, crystalline masses, about the size of a walnut, and is opaque, being covered on the surface with a farinaceous efflorescence. The Levant, or Roch alum, is in fragments, about the size of the former, but in which the chrystalline form is more obscure; it is externally of a dirty rose-colour, and internally exhibits the same tinge, but clearer. It is usually shipped for Europe from Smyrna; but it was anciently made at Roccha, or Edessa, in Syria; and hence its name Roch alum. English alum is in large, irregular, semi-transparent, colourless masses, having a glassy fracture; not efflorescent, and considerably harder than the others. It is very inferior to either the Roman or Roch alum. The principal use of alum is in the art of dyeing, as a mordant for fixing and giving permanency to colours which otherwise would not adhere at all, or but for a very short time; but it is also used for a great variety of other purposes.

Beckmann has shown (*History of Inventions*, vol. i. art. "Alum") that the ancients were unacquainted with alum, and that the substance which they designated as such was merely vitriolic earth. It was first discovered by the Orientals, who established alum works in Syria in the thirteenth or fourteenth century. The oldest alum works in Europe were erected about the middle of the fifteenth century. Towards the conclusion of the reign of Queen Elizabeth, Sir Thomas Chaloner established the first alum work in England, in the vicinity of Whitby, in Yorkshire, where the principal works of the sort in this country are still carried on; the shipments of alum from Whitby in 1841 amounted to 3,237 tons. There is, also, a large alum work at Hurlett, near Paisley, the produce of which may be estimated at about 1,200 tons a year. Alum is largely manufactured in China, and is thence exported to all the western Asiatic countries. In 1837, 35,642 piculs (2,120 tons) were exported from Canton.

AMBER (Ger. *Bernstein*; Du. *Barnsteen*; Da. *Bernsteen, Rav.*; Fr. *Ambre jaune*; It. *Ambra gialla*, Sp. *Ambar*; Rus. *Jantar*; Pol. *Bursztyn*; Lat. *Succinum, Electrum*), a brittle, light, hard substance, usually nearly transparent, sometimes nearly colourless, but commonly yellow, or even deep brown. It has considerable lustre. Specific gravity 1·065. It is found in nodules or rounded masses, varying from the size of coarse sand to that of a man's hand. It is tasteless, without smell, except when pounded or heated, when it emits a fragrant odour. It is highly electric. Most authors assert that amber is bituminous; but Dr. Thomson states, that "it is undoubtedly of a vegetable origin; and though it differs from resins in some of its properties, yet it agrees with them in so many others, that it may without impropriety be referred to them."—(*Chemistry*, vol. iv. p. 147. 5th ed.)

Pieces of amber occasionally enclose parts of toads and insects in their substance, which are beautifully preserved. It is principally found on the shores of Pomerania and Polish Prussia; but it is sometimes dug out of the earth in Ducal Prussia. It is also met with on the banks of the river Glaretta, in Sicily. Sometimes it is found on the east coast of Britain, and in gravel pits round London. The largest mass of amber ever found was got near the surface of the ground in Lithuania. It weighs 18 lbs., and is preserved in the royal cabinet at Berlin. Most of the amber imported into this country comes from the Baltic, but a small quantity comes from Sicily. Amber was in very high estimation among the ancients, but is now comparatively neglected.

AMBER-GRIS, OR AMBER-GREASE (Ger. *Amber*; Du. *Amber*; Fr. *Ambergris*; It. *Ambra-grigia*; Sp. *Ambar-gris*; Lat. *Ambra, Ambra grisea*,) a solid, opaque, generally ash-coloured, fatty, inflammable substance, variegated like marble, remarkably light, rugged and uneven in its surface, and has a fragrant odour when heated; it does not effervesce with acids, melts freely over the fire into a kind of yellow resin, and is hardly soluble in spirit of wine. It is found on the sea-coast, or floating on the sea, near the coasts of India, Africa, and Brazil, usually in small pieces, but sometimes in masses of 50 or 100lbs. weight. "Various opinions have been entertained respecting its origin. Some affirmed that it was the concrete juice of a tree, others thought it a bitumen; but it is now considered as pretty well established that it is a concretion formed in the stomach or intestines of the *Physeter macrocephalus*, or spermaceti whale."—(*Thomson's Chemistry.*) Ambergris ought to be chosen in large pieces, of an agreeable odour, entirely grey on the outside, and grey with little black spots within. The purchaser should be very cautious, as this article is easily counterfeited with gums and other drugs.

AMETHYST (Ger. *Amethyst*; Fr. *Amethyste*; It. *Amatista*; Sp. *Ametisto*; Lat. *Amethystus*), a precious stone, of which there are two species differing widely in quality and value.

The *Oriental amethyst* is a gem of the most perfect violet colour, and of extraordinary brilliancy and beauty. It is said to be as hard as the sapphire or ruby, with which it also corresponds in its form and specific gravity—(see SAPPHIRE), differing in colour merely. It has been met with in India, Persia, Siam, and other countries; but it is exceedingly scarce. That found in India is said by Pliny to be the best. (*Principatum amethysti Indicæ tenent.*—Nat. Hist. lib. xxxvii. cap. 9.) Mr. Mawe says he had rarely seen an oriental amethyst offered for sale, unless small and inferior in colour. Mr. Hope, the author of Anastasius, had in his cabinet the finest gem of this sort in Europe. This exquisite specimen exceeds an inch in its greatest diameter; in daylight it exhibits the most beautiful violet colour, while by candlelight it is a decided blue.

The *Occidental amethyst* is merely coloured crystal or quartz.—"When perfect, its colour resembles that of the violet, or purple grape; but it not unfrequently happens that the tinge is confined to one part of the stone only, while the other is left almost colourless. When it possesses a richness, clearness, and uniformity of hue, it is considered a gem of exquisite beauty; and as it occurs of considerable size, it is suited to all ornamental purposes. In specific gravity and hardness it bears no comparison with the oriental amethyst; it is also inferior in beauty and lustre; though I have often seen the common amethyst offered for sale as oriental. Brazil, Siberia, and Ceylon produce very fine amethysts: they are found in rolled pieces in the alluvial soil, and finely crystallised in fissures of rock. From the first of these localities, they have lately been imported in such quantities as considerably to diminish their

"value: but as they are the only coloured stones, except garnets, that are worn with mourning, they still retain, when perfect, a distinguished rank among the precious gems. The present price of inferior light-coloured stones, in the rough state, is about 20*s.* per pound, whilst those of good quality sell at 10*s.* or 12*s.* per ounce. Amethysts calculated for brooches or seals may be purchased at from 15*s.* to two or three guineas each, for which, ten years ago, treble that sum would have been given."—(*Mawe on Diamonds*, 2d ed. pp. 115—117.)

AMIANTHUS, ASBESTOS, OR MOUNTAIN FLAX, a mineral of which there are several varieties, all more or less fibrous, flexile, and elastic. It is inconsumable by a high degree of heat; and in antiquity the art was discovered of drawing the fibres into threads, and then weaving them into cloth. Pliny says that he had seen napkins made of this substance, which, when soiled, were thrown into the fire, and that they were better cleaned by this means than they could have been by washing! Hence it obtained from the Greeks the name of Αμιαντος (undefiled). Its principal use, as stated by Pliny, was to wrap the bodies of the dead previously to their being exposed on the funeral pile, that the ashes of the corpse might not be mixed with those of the wood. And in corroboration of this statement we may mention, that in 1702, a skull, some calcined bones, and a quantity of ashes, were found at Rome, in a cloth of amianthus nine Roman palms in length by seven in width. Its employment in this way was, however, confined to a few of the very richest families, incombustible cloth being very scarce, and bringing an enormously high price. *Rarum inventu, difficile textu propter brevitatem. Cùm inventum est, æquat pretia excellentium margaritarum.*—(Plin. Hist. Nat. lib. xix. cap. 1.) The disuse of the practice of cremation, or of burning the dead, caused the manufacture of amianthine cloth to be neglected. Several moderns have, however, succeeded in making it; but, if it be not lost, the art is now rarely practised.—(For further particulars, see *Rees's Cyclopædia.*)

AMMONIACUM (Fr. *Gomme Ammoniaque;* It. *Gomma Ammoniaco;* Sp. *Goma Ammoniaco;* Lat. *Ammoniacum;* Arab. *Feshook*), a concrete resinous juice obtained from a plant resembling fennel, found in the north of Africa, Arabia, Persia, the East Indies, &c. Pliny says that it derived its name from its being produced in the vicinity of the temple of Jupiter Ammon in Africa.—(*Hist. Nat.* lib. xii. cap. 23.) It has a faint but not ungrateful smell; and a bitter, nauseous, sweet taste. The fragments are yellow on the outside and white within, brittle, and break with a vitreous fracture; their specific gravity is 1·207. The best ammoniacum is brought from Persia by Bombay and Calcutta, packed in cases and chests. It is in large masses, composed of small round fragments or tears; or in separate dry tears, which is generally considered a sign of its goodness. The tears should be white internally and externally, and free from seeds or other foreign substances. Reject that which is soft, dark-coloured, and foul. It is used principally in the materia medica, and the quantity imported is but small.—(*Rees's Cyclopædia; Thomson's Dispensatory; Milburn's Orient. Com. &c.*)

AMMONIAC (SAL). See ALKALIES (*Muriate of Ammonia*).

AMMUNITION, a term expressive of the various implements used in war.

No ammunition can be imported into the United Kingdom by way of merchandise, except by licence from his Majesty, for furnishing his Majesty's stores only, under penalty of forfeiture.—(3 & 4 *Will.* 4. cap. 52. § 58.) His Majesty may forbid, by order in council, the exportation of any saltpetre, gunpowder, or any sort of ammunition. Any master of a vessel exporting ammunition when so forbidden, shall for every such offence forfeit 100*l.*—(29 *Geo.* 2. c. 16.)

AMSTERDAM, the principal city of Holland, situated on the Y, an arm of the Zuyder Zee, in lat. 52° 22′ 17″ N., long. 4° 53′ 15″ E. From 1580 to 1750, Amsterdam was, perhaps, the first commercial city of Europe; and though her trade has experienced a great falling off since the last-mentioned epoch, it is still very considerable. In 1785, the population is said to have amounted to 235,000; in 1815 it had declined to 180,179; but its increase in the interval has been such, that it amounted in 1840 to 210,077. The harbour is spacious and the water deep; and it has recently been much improved by the construction of docks, two of which are already completed, and a third in a very advanced state. Owing, however, to a bank (the Pampus) where the Y joins the Zuyder Zee, large vessels going or coming by that sea are obliged to load and unload a part of their cargoes in the roads. The navigation of the Zuyder Zee is also, by reason of its numerous shallows, very intricate and difficult; and as there were no hopes of remedying this defect, it became necessary to resort to other means for improving the access to the port. Of the various plans suggested for this purpose, the preference was given to the scheme for cutting a canal capable of admitting the largest class of merchantmen, from the north side of the port of Amsterdam to Newdiep, opposite to the Texel, and a little to the east of the Helder. This canal has fully answered the views of the projectors, and has proved of signal service to Amsterdam, by enabling large ships to avoid the Pampus, as well as the difficult navigation of the Zuyder Zee, where they were frequently detained for three weeks, and to get to and from Newdiep without any sort of risk in less than 24 hours. The canal was begun

in 1819, and completed in 1825. It has 5 sluices large enough to admit ships of the line; the dues and charges on account of towing, &c. being at the same time very moderate. At Newdiep the water is deeper than in any other port on the coast of Holland, and ships are there in the most favourable position for getting expeditiously to sea.—(See CANALS.) The imports principally consist of sugar, coffee, spices, tobacco, cotton, tea, indigo, cochineal, wine and brandy, wool, grain of all sorts, timber, pitch and tar, hemp and flax, iron, hides, linen, cotton and woollen stuffs, hardware, rock salt, tin plates, coal, dried fish, &c. The exports consist partly of the produce of Holland, partly and principally of the produce of her possessions in the East and West Indies, and other tropical countries, and partly of commodities brought to Amsterdam, as to a convenient *entrepôt* from different parts of Europe. Of the first class are cheese and butter (very important articles), madder, clover, rape, hemp, and linseeds, rape and linseed oils, Dutch linen, &c. Geneva is principally exported from Schiedam and Rotterdam; oak bark principally from the latter. Of the second class are spices, coffee, and sugar, principally from Java, but partly also from Surinam, Brazil, and Cuba; indigo, cochineal, cotton, tea, tobacco, and all sorts of eastern and colonial products. And of the third class, all kinds of grain, linens from Germany, timber and all sorts of Baltic produce; Spanish, German, and English wools; French, Rhenish, and Hungarian wines, brandy, &c. The trade of Amsterdam may, indeed, be said to comprise every article that enters into the commerce of Europe. Her merchants were formerly the most extensive dealers in bills of exchange; and though London be now, in this respect, far superior to Amsterdam, the latter still enjoys a respectable share of this business.

The Bank of the Netherlands was established at Amsterdam in 1814. It is not, like the old Bank of Amsterdam, which ceased in 1796, merely a bank of deposit, but a bank of deposit and circulation formed on the model of the Bank of England. Its capital, which originally amounted to 5,000,000 fl., was doubled in 1819. It has the exclusive privilege of issuing notes. Its original charter, which was limited to 25 years, was prolonged in 1838 for 25 years more.

For an account of the Dutch fisheries, see the articles HERRING FISHERY and WHALE FISHERY.

About 250 or 260 large ships belong to Amsterdam; they are employed in the East and West India trades, and in trading to the Baltic, the Mediterranean, &c. There is comparatively little coasting trade at Amsterdam, the communication with most other ports in the vicinity being principally kept up by canals, and that with Friesland by regular packets.

The following account (No. II.) of the value of the trade of Amsterdam in 1840 (given in Macgregor's Tariff for Holland) was derived from returns transmitted by the French consul at Amsterdam to his government. We do not know the precise degree of credit to which it may be entitled, though we are inclined to think that it is not far from accurate. This, however, is certainly not the case with the account taken by Mr. Macgregor from the same source of the navigation of Amsterdam in 1840. It states, for example, that 4,177 ships, of which 1,062 were English, entered the port in the course of that year; whereas in point of fact only 2,198 ships entered the port, and of these (though we have no exact return), the English were considerably under 300.—(*Private communications from Holland.*) It is really, however, not a little difficult to get any authentic information as to the present state of Dutch commerce. Government rarely publishes any statements having reference to it; and those of private parties are not always to be depended on.

I. Account of the Value of the Principal Articles imported into and exported from Amsterdam, in 1840.

Imports.	Fl.	L.	Exports.	Fl.	L.
Sugar	24,170,200	2,014,183	Sugar — Refined	23,820,000	1,985,000
Coffee	20,200,200	1,683,350	Sugar — Raw	1,684,000	140,333
Thread and Twist of — Cotton	854,800	71,233	Coffee	9,462,250	788,521
Thread and Twist of — Wool	738,500	61,542	Thread and Twist of — Cotton	6,438,000	536,500
Thread and Twist of — Hemp and Linen	193,050	16,088	Thread and Twist of — Wool	907,300	75,608
Thread and Twist of — Silk	13,000	1,083	Thread and Twist of — Hemp and Linen	821,000	68,417
Thread and Twist of — Other Articles	8,712,750	726,063	Thread and Twist of — Silk	147,500	12,292
Tobacco	4,837,900	404,825	Thread and Twist of — Other Articles	196,200	16,350
Dyes and Colours	4,631,600	385,967	Cheese and Butter	7,271,500	605,958
Metals, raw and manufactured — Nails, Iron Wire, and Irommongery	825,600	68,800	Metals, raw and manufactured — Nails, Iron Wire, and Irommongery	837,200	69,767
Metals, raw and manufactured — Other Metals	3,153,900	262,825	Metals, raw and manufactured — Other Metals	2,706,600	225,550
Grain — Wheat, Rye, and Meal	3,767,300	313,942	Oils	3,141,500	261,792
Grain — Barley, Oats, &c.	135,900	11,317	Dyes and Colours	3,011,000	250,917
Seed, oleaginous	2,952,150	246,013	Tobacco — In Leaves (exotic)	702,800	58,567
Woods, manufactured	2,798,200	233,183	Tobacco — In Rolls (indigenous)	799,700	66,058
Wine		159,987	Tobacco — Manufactured	4,0,000	35,833
Spirits — Brandy and Alcohol	1,919,850		Spices and Provisions	1,345,000	112,083
Spirits — Rum, &c.	317,150	26,429			
Spices and Provisions	1,921,650	160,137			
Oils	1,725,800	143,817			
Leather and Hides	1,725,500	143,792			
Cotton and Wool	1,380,150	115,013			
Tea	1,155,200	96,267			
Hemp and Linen	1,025,000	85,417			

II. An Account of the Value of Imports into and Exports from Amsterdam, in 1840; distinguishing those from and to each Country.

Countries.	Imports, in Florins and Sterling.		Exports, in Florins and Sterling.	
	Fl.	*L.*	*Fl.*	*L.*
Germany and the Rhine	8,671,200	722,600	24,156,500	2,013,042
England	5,141,600	428,467	8,822,750	735,229
Hanse Towns	9,371,500	780,958	6,617,650	551,471
United States	522,400	43,533	1,115,500	92,958
Italy: Tuscany	174,350	14,529	8,313,000	692,750
Italy: Sardinian States	146,000	12,167		
Italy: Austria	29,150	2,429		
Italy: Two Sicilies	—	—		
Italy: Roman States	—	—		
West Indies: Cuba and Porto Rico	8,017,750	668,146	488,400	40,700
West Indies: Hayti	123,850	10,321		
West Indies: Other Places	—	—		
Prussia	4,387,350	365,613	4,241,800	353,483
France	2,607,600	217,300	4,795,100	399,592
Russia	2,515,500	212,125	1,743,500	145,292
South America: Brazil	3,141,850	261,821	61,700	5,142
South America: Rio de la Plata	1,052,150	87,679		
South America: Other Places	—	—		
Norway	3,118,500	259,875	407,400	33,950
Sweden	406,150	33,846	315,700	26,308
Hanover	1,332,600	111,050	776,700	64,725
Denmark	688,200	57,350	985,300	82,108
Portugal	995,500	82,958	372,000	31,000
Spain and Canary Isles	539,500	44,958	441,000	36,750
China	565,500	47,125		
Belgium	424,350	35,363		
Turkey	235,500	19,625		
Other Countries (Foreign)	189,950	16,579		
Dutch India: Eastern	35,276,000	2,939,667	9,139,500	761,625
Dutch India: Western	5,626,900	468,875	1,907,500	158,958
Total	95,339,500	7,944,958	74,701,000	6,225,083

How deficient soever, the previous statements show that Amsterdam still continues to preserve no inconsiderable portion of her former importance as a commercial city. The extent of her transit trade cannot fail to attract the reader's attention; the more especially as Rotterdam, from her situation on the Meuse, and her greater facilities of communication with the interior, has very superior advantages for the prosecution of this department of commercial industry. Subjoined is

An Account of the Quantities of the principal Articles of Foreign and Colonial Produce (exclusive of Manufactured Goods) imported into Amsterdam, in 1842.

Ashes	7,569	barls.	Spirits, Spirit 3-6ths	573	casks.	
Barley	2,699	lasts.	Brandy	294	casks.	
Buckwheat	648	lasts.	Arrack	689	casks.	
Cinnamon	211	bxs.	Rum	823	puncb.	
Cloves	3,286	bags.	Sugar, E. I.	14,028 mts.	1,021 bx.	103,692 bks.
Cochineal	211	chests.	Surinam	21,014	hhds.	
Cocoa	2,948	bags.	Havanna	42,963	boxes.	
Cod Oil	12,725	barls.	Brazil	570 bags.	7,403 barls.	4,827 cases.
Coffee, E. I.	315 barls.	458,532 bags.	Tallow	2,333	casks.	
W. I. & Braz.	310 barls.	39,529 bags.	Tar	21,600	barls.	
Surinam	498 barls.	8,455 bags.	Tea	15,602	pkgs.	
Copper	30,742	bales.	Tin	49,180	slabs.	
Cotton	20,903	bales.	Tobacco, American	17,432	hhds.	
Cow-hair	1,979	bales.	W. I.	6,155	bales.	
Hides	116,812	pces.	Java — bxes.	5,349	bales.	
Indigo	18 sur.	4,781 chests.	Turmeric	300	bags.	
Iron, Swed. & Russian	12,834	bars.	Turpentine	1,094	barls.	
English	150,204	bars.	Whale Oil	54,000	hect.	
Lead	15,799	slabs.	Wheat	9,596	lasts.	
Mace	310	casks.	Wine, Bordeaux	3,996	hhds.	
Nutmegs	721	casks.	Languedoc	1,948	casks.	
Olive Oil	671	casks.	Oporto	61	casks.	
Paddy	39,000	bush.	Spanish	542 barls.	1,002	pps.
Palm Oil	976	casks.	Teneriffe	599	pps.	
Pepper	5,026	bags.	Woods, Log	1,918	tons.	
Pitch	1,200	barls.	Fustic	606	tons.	
Pimento	803	bags.	Sapan	250	tons.	
Quercitron Bark	251	bags.	Rio de la Hache	200	tons.	
Raisins 6,420 drms.	15,914 bxes.	11,536 barls.	Lima Nicaragua	95	tons.	
Rice, Java	40,229	bags.	Red Saunders	216	tons.	
American	3,355	casks.	Brazil	10	tons.	
Rosin	10,434	barls.	Wool	2,748	bales	
Rye	8,472	lasts.				

These imports were effected by 2,156 vessels; viz., 2 from China and Manilla; 96 from Java, &c.; 74 from Surinam, &c.; 20 from South America; 32 from Cuba, &c.; 73 from the United States; 51 from the Levant, Italy, Spain, and Portugal; 65 from France; 66 from Liverpool and London, &c. — (From the Brokers' Returns.)

Expenses of Ships in Amsterdam. — The expenses of a ship of 300 English tons, or 158 Dutch lasts, with a mixed cargo on board, inwards and outwards, coming and departing by the canal, were, in 1842, nearly as follows: —

	Arriving from Great Britain.			Arriving from the Mediterranean.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*
Lock dues in the canal, and charges — inwards	4	10	0	8	10	0
Ditto — outwards	2	10	0	5	10	0
Measuring the ship	1	10	0	1	10	0
Tonnage dues, inwards and outwards	25	12	0	25	12	0
A charge called port money	1	12	0	2	0	0
Haven money	0	13	6	0	13	6
Quay or key money	1	2	0	1	2	0
Permit to consume provisions free of excise dues	0	8	0	0	8	0
Clearance	0	5	0	0	12	6
Expenses of clearing, fees, &c.	2	18	0	2	18	0
Total	*L.*41	0	6	*L.*48	16	6

There is besides, the merchants' and brokers' commission on recovering and procuring freights, generally settled by agreement.

The tonnage duty is 45 cents (9*d.*) the Netherlands ton (nearly equal to the British) inwards, and the same outwards, with the addition of the Syndicate tax of 15 per cent. It is payable only *once a year* by native ships, and by ships belonging to countries which have reciprocity treaties with Holland. Others pays 57½ cents (11½*d.*) per ton inwards, and the same outwards, every voyage.

The charge called port money is payable half on entry, and half on departure; and that called haven money the same. The hire of a horse for towing along the whole line of the canal amounts to 1¼ flor. 40 cents, or about 1*l.* 1*s.*

Quarantine. — The quarantine station is at the island of Wierengen, near the Helder.

Commission. — The usual rate of the commission or factorage on the purchase or sale of goods is 2 per cent., and on bill transactions ½ and ¾ per cent. according to their nature.

Provisions of all sorts are abundant at Amsterdam, and reasonably cheap. The wages of ships' carpenters vary from 1 flor. 20 cents to 1 flor. 80 cents; that is, from about 2*s.* to 3*s.* a day.

For an account of the corn trade of Amsterdam, see CORN TRADE AND CORN LAWS.

Custom-House Regulations. — Captains of ships are bound to make, within 24 hours of their arrival at Amsterdam, or any Dutch port, a declaration in writing of the goods of which their cargo consists. If the captains be not acquainted with the goods of which the cargo consists, they must make their declaration under the general term of *merchandize*, and exhibit the bills of lading along with the declaration. The Custom-house officers are instructed to inform the captains of all formalities required by law.

The ships entering Amsterdam during each of the 6 years ending with 1842 have been, —

Years.	Ships.	Years.	Ships.	Years.	Ships.
1837	1,933	1839	2,335	1841	2,036
1838	2,074	1840	2,198	1842	2,156

Of these ships by far the largest number come from ports on the Baltic and the North Sea. The numbers entering in 1842 from the more distant countries are specified above.

The warehousing system has been long established in Amsterdam; and all goods, whether for home consumption or transit, may be deposited in bonded warehouses. It is, however, desirable to observe that merchandise re-exported by sea or by the Rhine has no transit duty to pay; whereas a small transit duty is payable on all merchandise re-exported by roads, canals, or otherwise than by the Rhine, for the interior; but the impression is that this duty will at no distant period be repealed. Speaking generally, goods can only be kept in bonded warehouses for two years; but grain of all kinds may be kept for an unlimited period. The warehouse rent chargeable per month on a quarter of wheat is, on an upper loft, 1*d.* and 2-5ths; on an under loft 1½*d.* On a ton (Eng.) of sugar in casks the charge is 8*d.*; in bags 6*d.*

The dock and its adjacent warehouses, belonging to the *Entrepot General*, or establishment for warehousing goods imported by sea or intended to be re-exported by sea or by the Rhine, are large and commodious. The dock has water to float the largest ships, and the dues and other charges are exceedingly moderate. Merchants may employ their own men or those of the dock in loading and unloading; and may either place their property in separate vaults or floors of which they keep the key, or entrust it to the care of the dock officers.

Dutch Trading Company. — A large proportion of the foreign trade of Holland has been for a considerable period engrossed by the large trading company called the *Nederlandsche Handelmaatschappy*, created in 1824. Its capital, which consisted originally of 37 millions flor., was reduced in 1824 to 24 millions do.; but as the company borrowed 10 millions flor. in 1835, and 13 millions more in 1837, its capital consists at present of 47 millions fl. At first it extended its operations to America and the West Indies, as well as to the East Indies. But it has latterly very much contracted the scale of its operations; and having lent 40 millions of its capital to government, it is now merely the agent employed by the latter to bring home and sell that part of the produce of Java which, under the new colonial system, belongs to the state, and to carry on the trade with Japan, which, however, is of little or no value. The company has no ships of its own, but charters those of private individuals. Its charges on importation are limited to certain fixed rates.

This company is believed to be principally indebted for its existence to the late king, who held a tenth part of the shares, and who, to encourage the undertaking, guaranteed the shareholders a dividend of 4½ per cent. There can, however, be little doubt that it were better had it never existed. Government might have directly chartered the ships of private parties to bring home the produce of Java, on any conditions it might have chosen to specify, under a system of open competition, which would have been ten times more advantageous to itself and to the public. It has no doubt been said, that owing to the demand of the company the trade and shipping of Holland have increased so much, that while Holland and Belgium had together in 1820 only 1,176 vessels (exclusive of fishing boats) of the burden of 148,000 tons, Holland alone had on the 1st of January, 1840, no fewer than 1,528 vessels of the burden of 270,678 tons. But this is altogether illusory; the company has, in fact, had nothing to do with this increase, which, as every body knows, has been wholly a consequence of the astonishing increase of produce in Java, and of the plan pursued of bringing it home to Holland for sale. The privileges conferred upon or usurped by the company are so many encroachments on the rights of individuals, and obstruct that private enterprise and free competition that are the soul of trade. It seems, indeed, to be the general opinion of all the most intelligent persons in Holland unconnected with the company, that the sooner it is dissolved the better; and now that it has lost its most powerful protector, this event is probably not very distant.

The business of insurance is extensively practised at Amsterdam; the premiums are moderate, and the security unexceptionable. The high duty imposed in this country on policies of insurance has contributed to the increase of this business in Holland.

Credit, Discount, &c. — Holland is, and has always been, a country of short credit. A discount is usually given for prompt payment, at the rate of 1 per cent. for six weeks, and of 2 per cent. for two months; but the terms of credit on most articles, and the discount allowed for ready money, have been fixed by usage, and are regarded as essential conditions in every bargain. Some of the more important of these terms and discounts are specified in the following table. In consequence of the preference given in Holland to ready money transactions, it is not a country in which adventurers without capital have much chance of speedily making a fortune. "Rien, en effet, de plus facile que de s'établir à Amsterdam; mais *rien de plus difficile que de s'y soutenir sans des grandes ressources*. Dans cette ville, où l'argent abonde, où on le prête contre des sûretés à si bon marché, *il est pourtant impossible de s'en procurer à crédit*; et sans argent il n'y a plus de possibilité d'y travailler, que de trouver quelqu'un qui veuille de se charger d'un papier nouveau qui *ne seroit pas* appuyé d'un crédit que l'opinion, la protection, ou des effets réels feroient valoir à la bourse. Les Hollandois suivent là-dessus des maximes très austères, même à l'égard des maisons d'une certaine considération." — (*Encyclopédie Méthodique, Commerce*, t. ii. p. 650.) But this *austerity* is not a disadvantage, but the reverse. It prevents commerce from degenerating, as it has too often done in other places, into gambling adventures, and places it on a comparatively solid foundation. And it should be mentioned to the honour of the Dutch, and as a proof of the excellence of this system, that notwithstanding the distress and loss of trade occasioned by the invasion and occupation of their country by the French, the bankruptcies in 1795 and subsequent years were not, comparatively, so numerous as in England in ordinary seasons! The regulations in the Code Napoléon as to bankruptcy are enforced in Holland.

It has long been the practice in Holland to make, on selling articles, considerable deductions from their weight, particularly from those of large bulk, as compared with their value. These tares and drafts, as they are termed, are now fixed by ancient usage: and the most important amongst them are here specified.

Tares and Allowances on the principal Articles sold at Amsterdam.

	Tares.	Allowances. (Draft and Discount.)
Ashes	42 lbs per cask	18 months' discount, and 1 per cent.
Barilla	per cent.	2 per cent. and 2 per cent.
Cocoa, Caracas	42 lbs.	1 per cent.
Maranham	ditto	2 per cent. and 2 per cent.
Cayenne	ditto	
Martinique	ditto	
Surinam	6 per cent.	
Coffee, East and West India in general	bags 3 per cent., casks real tare	2 per cent. and 2 per cent.
Bourbon	10 lbs. per original mat	
Java	14 lbs. per gunny	
Mocha	24 lbs. per bale	
Cotton, Surat and Bengal	8 per cent.	2 per cent. and 1 per cent.
all other kinds	6 per cent.	
Cotton yarn twist	—	1 per cent.
Indigo, Bengal	real tare	1 per cent. 2 per cent. and 1 per cent.

Cochineal	3 à 4 lbs.	1 per cent. augment. 1 per cent. deduct.
Galls	6 lbs. or 20 lbs.	2 per cent. and 2 per cent.
Gums, Senegal	6 lbs. 14 lbs. or 21 lbs.	2 per cent. and 2 per cent.
Barbary		
Arabic	14 lbs. or 30 lbs.	
Logwood	2 and 3 per cent.	2 per cent.
Fustic	2 per cent.	
Hides, Buenos Ayres, &c.	2 lbs. per hide	2 per cent. and 1 per cent.
Linens, Flemish	—	2 per cent. and 1 per cent.
all other kinds	—	1 per cent.
Oils	—	1 per cent.
Rice, Carolina	real tare	2 per cent. and 2 per cent.
East India	6 lbs.	
Saltpetre	8 à 14 lbs.	1 per cent. and 1½ per cent.
Liquorice	real tare and 4 lbs.	2 per cent. and 1 per cent.
Spices, pepper	25 lbs. or 13 lbs.	
cinnamon		
cloves and mace	—	1 per cent.
pimento	42 lbs. and above 100 lbs.	1 per cent.
nutmegs	12 per cent.	
ginger	8 lbs. à 16 lbs.	2 per cent.
Sugars, Martinique	18 per cent.	2 per cent. and 2 per cent.
St. Domingo		
St. Croix		
Surinam		
English Colonies	20 per cent.	
Demerara	18 per cent.	
Berbice		
Essequibo		
Brazil, white		
Ditto, Muscovado	—	18 months' discount, 2 per cent. and 2 per cent.
Havannah	80 lbs.	2 per cent. and 2 per cent.
Java	48 lbs.	
Salt	—	1 per cent.
Tea, bohea	21 lbs. à 24 lbs.	1 per cent.
congo		
souchong		
campoi		
hyson	18 lbs.	
pekoe	18 lbs. à 42 lbs.	
tonquin		
Tobacco, Maryland	casks tared	2 per cent. and 1 per cent. damaged, and 1 per cent.
Virginia	2 and 8 per cent.	
Tin plates	2 per cent.	1 per cent.
Wool, Spanish	bags tared, and 21 lbs. per 175 lbs.	21 months' discount, and 1 per cent.
Wines	—	½ per cent.
Madder	casks tared	10 lbs. per cask, and 2 per cent.
Herrings	3 or 5 per cent.	1 per cent. 2 per cent. and 2 per cent.
Smaltz	36 lbs.	2 per cent.
Flax, hams, seeds, geneva, grain	—	1 per cent.
Butter	—	none.
Hides	—	2 and 1 per cent.
Cheese, Edam	—	2 per cent.
Gouda	—	1 per cent.

The above are the customary tares and other allowance made by the merchants in their transactions with each other. But in paying the import duties at the Custom-house, the tare upon goods paying duty by weight is, with the exceptions undermentioned, fixed at 15 per cent. for such as are in casks or barrels, and at 8 per cent. for such as are in packages, canisters, mats, baskets, &c. Merchants dissatisfied with these allowances may pay the duty according to the *real* weight, ascertained by the customs officers at their expense.

Exceptions.—The tare upon grain imported in sacks is fixed at 2 per cent.

Porcelain, 15 per cent.

Indigo { in chests, 25 per cent. / in serons, 15 per cent.

Sugar { chests from Havannah 18 per cent., other places 20 per cent. / canisters, 10 per cent. / casks and packages, 15 and 8 per cent. The tare upon sugar refined in the interior and exported, is 12 per cent. per barrel, 8 per cent. per package.

Allowances for leakage are made upon all liquids, including treacle and honey, as follows, viz.:

Coming from England, the northern ports of Europe, and France, by inland navigation, 6 per cent.

From France by sea, and from other countries by the rivers Rhine and Waal, 12 per cent.

From any other port or place, 14 per cent.

Finally, from whatever place the same may come, upon train oil, 12 *per cent.*; blubber, 6 *per cent.*

In case liquids shall have experienced, upon the voyage, such leakage as shall cause the importer to be dissatisfied with the allowance before specified, he is permitted to pay the duty upon the actual quantity, to be ascertained by the officers at the importer's expense.

Money.—Accounts used to be kept at Amsterdam by the pound Flemish = 6 florins = 20 schillings = 120 stivers = 240 groats = 1,920 penings. But in 1820 the decimal system was introduced. In order, however, to cause as little inconvenience as possible, the florin = 1*s.* 8*d.* sterling, was made the unit of the new system. The florin is supposed to be divided into 100 equal parts or cents; and the other silver coins are equal multiples or sub-multiples of it. The new gold coin is called the florin-piece, and is worth 16*s.* 6*d.* very nearly. But accounts are still sometimes kept in the old way, or by the pound Flemish. Par of exchange between Amsterdam and London is 11 flor. 58 cents per pound sterling.

Weights and Measures.—In 1820, the French system of weights and measures was introduced into the Netherlands, the names only being changed.

The *pond* is the unit of weight, and answers to the French *kilogramme*. Its divisions are the ons, lood, wigtje, and korrel.

The *elle*, which is the unit or element of long measure, equals the French *mètre*. Its decimal divisions are the palm, duim, and streep; and its decimal multiples, the roede and mijle.

The *vierkante elle*, or square ell, is the unit of superficial measure; and answers to the *centiare* or *mètre carré* of France. Its divisions are the vierkante palm, vierkante duim, and the vierkante streep; and its multiples, the vierkante roede and vierkante bunder.

The *kubicke elle* is the unit of measures or capacity; and equals the French *stère*. Its divisions are the kubicke palm, kubicke duim, and kubicke streep.

The term *wisse* is given to a kubicke elle of fire-wood.

The *kop* is the unit of measures for dry wares, and is the cube of the palm; answering to the French *litre*. Its division is the maatje, and its multiples the scheyel and muddé: the latter is also called the *zak*, and equals the French hectolitre. 30 mudden make 1 last.

The *kan* is the unit for liquid measure, and is the cube of the palm; it corresponds to the French *litre*. Its divisions are the maatje and vingerhoed, and 100 kans make a vat or cask, which equals the French hectolitre.

The apothecary's new pound is 12 ounces, 96 drachms, 288 scruples, or 5,760 grains; and answers to 375 grammes, or 5,787 English grains.

By the old method of calculating, which is not yet entirely superseded, the pound of Amsterdam was = to 1·09 lb. avoirdupois, or 100 lbs. Amsterdam = 108·925 lbs. Avoirdupois.

The *last* or measure for corn = 27 mudden = 10 quars. 5½ bushels Winchester measure. The *aam* liquid measure = 4 ankers = 8 steckans = 21 viertels = 64 stoops or stoppen = 281 mingles = 256 pints = 41 English wine gallons.

The stoop contains 5 1-8th pints English measure.

100 mingles are equal to 32 English wine gallons, or 26 1-5th English beer gallons, or 26 2-5d Imperial gallons.

French wine is sold per hogshead of.....180 mingles.
Spanish and Portuguese wine, per pipe of.....349 ditto.
French brandy, per hogshead of.....30 viertels.
Beer, per barrel (equal to the aam) of.....128 mingles.
Vegetable oils, per aam, of.....120 ditto.
Whale oil, per ditto.....16 ditto.

Rum is sold per *anker* of 2 steckan = 10½ English wine gallons.

The foot of Amsterdam = 11 1-7th English inches.
The Rhineland foot.... = 12 ditto.
The ell, cloth measure = 27 1-12th ditto.

Rock salt is sold per hondert of 404 maaten, making 20 tons, or 4,000 lbs. Dutch.

Pit coal is sold per hoed of 38 maaten; nine hoeds are five chaldrons of Newcastle, or six hoeds are five chaldrons of London.

Butter is sold per barrel; the barrel of Leyden is 320 lbs. nett—that of Friesland 28 lbs. nett—and the common Dutch barrel 336 lbs. gross.

A *last of herrings* is reckoned at 12, 13, or 14 barrels.
A *last of pitch* is 12 barrels.
A *last of tar*, 13 barrels.
A bag of seed = 2½ Winchester quarters.

A last for freight is reckoned 4,000 lbs., equal to two English tons.

The following are reckoned as one last in settling the freight of ships:
Eight hogsheads (or oxhofts) of wine
Twelve barrels of pitch
Thirteen barrels of tar
Twenty chests of lemons, &c.
4,000 lbs. of iron, copper, and colonial produce
4,000 lbs. of almonds
2,000 lbs. of wool or feathers

A last of wheat is considered 10 per cent. higher than one of rye, and the latter 20½ per cent. higher than oats, and 12 per cent. higher than seed. A last of ballast is only 2,000 lbs.

—These details have been derived from the answers by the British consul to the circular queries; the *Dictionnaire du Commerce* (*Ency. Method.*), tom. ii. pp. 554–650.; *Kelly's Cambist*, *private information*, &c.

We subjoin an account illustrative of the amount of the trade of the United Kingdom with Holland. The greater part of this trade is, however, carried on with Rotterdam, which is more favourably situated for the intercourse with this country than Amsterdam. (See Table next page.)

Magnitude of the Commerce of Holland in the Seventeenth Century—Causes of its Prosperity and Decline.—We believe we need make no apology for embracing this opportunity to lay before our readers the following details with respect to the commerce and commercial policy of Holland. It forms one of the most instructive topics of investigation; and it is to be regretted that so little attention should have been paid to it in this country.

Account of the Quantities of the Principal Articles imported into the United Kingdom from Holland in 1839, 1840, and 1841; and of the Quantities and Declared Value of the Principal Articles of British Produce and Manufacture exported from the United Kingdom to Holland in 1839, 1840, and 1841.

IMPORTS FROM HOLLAND.

Articles.	1839. Quantities.	1840. Quantities.	1841. Quantities.	Articles.	1839. Quantities.	1840. Quantities.	1841. Quantities.
Bark for Tanning or Dyeing cwts.	194,153	171,735	138,229	Madder - - - cwts.	55,869	47,575	35,334
Butter - - - —	139,239	157,802	164,652	Nutmegs - - - lbs.	121,146	25,146	46,909
Cheese - - - —	209,547	224,957	253,540	Clover Seed - - - cwts.	18,088	21,196	6,275
Corn, Wheat - - qrs.	116,480	50,612	101,983	Flaxseed and Linseed - bush.	55,126	66,727	42,544
Barley - - —	13,057	5,584	3,358	Silk, Raw and Waste - lbs.	81,112	201,060	166,977
Oats - - —	101,336	50,215	21,850	Geneva Spirits - - pr. gall.	575,554	676,404	464,537
Peas and Beans - —	19,109	12,684	11,075	Rhenish Wine - - -	79,869	72,842	73,146
Flax and Tow, or Codilla of Hemp and Flax - cwts.	160,48	113,108	120,085				

EXPORTS TO HOLLAND.

Articles.	1839. Quantities.	1839. Declared Value.	1840. Quantities.	1840. Declared Value.	1841. Quantities.	1841. Declared Value.
		£.		£.		£.
Brass and Copper Manufactures - - cwt.	25,555	114,473	25,849	114,161	39,401	172,175
Coals, Culm, and Cinders - - tons	180,318	64,133	205,757	62,737	173,578	58,433
Cotton Manufactures, entered by the yard - yds	27,515,446	605,613	25,535,489	540,746	28,217,924	585,574
Cotton Hosiery, Lace, and Small Wares - —		70,283	-	61,476	-	79,498
Cotton Twist and Yarn - - - lbs.	21,193,315	1,729,690	21,774,633	1,612,151	22,179,383	1,684,738
Earthenware of all Sorts - - - pieces	2,239,039	25,230	2,501,353	28,905	2,101,141	24,610
Hardware and Cutlery - - - cwts.	7,563	38,686	7,258	38,916	6,947	38,352
Iron and Steel, Wrought and Unwrought - tons	23,858	229,408	30,014	231,769	36,246	220,821
Lead and Shot - - - - —	343	6,869	2,154	37,533	1,719	31,854
Linen Yarn - - - - lbs.	2,183,577	69,302	2,598,998	66,134	2,521,671	66,369
Machinery and Mill Work - - - —	-	48,278	-	49,293	-	51,326
Salt - - - - - bush.	799,166	11,535	1,102,940	14,823	1,111,094	12,237
Woollen and Worsted Yarn - - lbs.	723,166	81,428	919,513	95,435	1,264,090	127,602
— Manufactures entered by the Piece - pieces	145,496	287,623	135,197	228,995	175,887	275,718
— — by the Yard - - yds.	230,575	19,188	351,506	25,703	436,892	30,879
All other Articles - - - - —	-	162,133	-	174,110	-	169,658
Total Declared Value		3,563,792		3,416,190		3,610,877

Previously to the commencement of the long-continued and glorious struggle made by the Dutch to emancipate themselves from the blind and brutal despotism of Old Spain, they had a considerable marine, and had attained to distinction by their fisheries and commerce; and the war, instead of being injurious to the trade of the republic, contributed powerfully to its extension. After the capture of Antwerp by the Spaniards, in 1585, the extensive commerce of which it had been the centre was removed to the ports of Holland, and principally to Amsterdam, which then attained to the distinction she long enjoyed, of the first commercial city of Europe.

In 1602, the Dutch East India Company was formed; and notwithstanding the pernicious influence of that association, the Indian trade increased rapidly in magnitude and importance. Ships fitted either for commercial or warlike purposes, and having a considerable number of soldiers on board, were sent out within a few years of the establishment of the company. Amboyna and the Moluccas were first wrested from the Portuguese, and with them the Dutch obtained the monopoly of the spice trade. Factories and fortifications were in no long time established, from Bussorah, near the mouth of the Tigris, in the Persian Gulph, along the coasts and islands of India as far as Japan. Alliances were formed with several of the Indian princes; and in many parts, particularly on the coasts of Ceylon, and in various districts of Malabar and Coromandel, they were themselves the sovereigns. Batavia, in the large and fertile island of Java, the greater part of which had been conquered by the Dutch, formed the centre of their Indian commerce; and though unhealthy, its port was excellent, and it was admirably situated for commanding the trade of the Eastern Archipelago. In 1651, they planted a colony at the Cape of Good Hope, which had been strangely neglected by the Portuguese.

Every branch of commerce was vigorously prosecuted by the Dutch. Their trade with the Baltic was, however, by far the most extensive and lucrative of which they were in possession. Guicciardini mentions that the trade with Poland, Denmark, Prussia, &c., even before their revolt, was so very great, that fleets of 300 ships arrived twice a year at Amsterdam from Dantzic and Livonia only; but it increased prodigiously during the latter part of the sixteenth and the beginning of the seventeenth centuries. The great population of Holland, and the limited extent and unfruitful nature of the soil, render the inhabitants dependent on foreigners for the greater part of their supplies of corn. The countries round the Baltic have always furnished them with the principal part of those supplies; and it is from them that they have been in the habit of bringing timber, iron, hemp and flax, pitch and tar, tallow, ashes, and other bulky articles required in the building of their houses and ships, and in various ma-

nufactures. Nothing, however, redounds so much to the credit of the Dutch, as the policy they have invariably followed with respect to the trade in corn. They have, at all times, had a large capital embarked in this business. The variations which are perpetually occurring in the harvests, early led them to engage very extensively in a sort of speculative corn trade. When the crops happened to be unusually productive, and prices low, they bought and stored up large quantities of grain, in the expectation of profiting by the advance that was sure to take place on the occurrence of an unfavourable year. Repeated efforts were made, in periods when prices were rising, to prevail on the government to prohibit exportation; but they steadily refused to interfere. In consequence of this enlightened policy, Holland has long been the most important European *entrepôt* for corn; and her markets have on all occasions been furnished with the most abundant supplies. Those scarcities which are so very disastrous in countries without commerce, or where the trade in corn is subjected to fetters and restraints, have not only been totally unknown in Holland, but became a copious source of wealth to her merchants, who then obtained a ready and advantageous vent for the supplies accumulated in their warehouses. "Amsterdam," says Sir Walter Raleigh, "is never without 700,000 quarters of corn, none of it of the growth of Holland; and a dearth of only one year in any other part of Europe enriches Holland for seven years. In the course of a year and a half, during a scarcity in England, there were carried away from the ports of Southampton, Bristol, and Exeter alone, nearly 200,000*l.*; and if London and the rest of England be included, there must have been 2,000,000*l.* more." — (*Observations touching Trade and Commerce with the Hollander*, Miscel. Works, vol. ii.)

The very well informed author of the *Richesse de la Hollande*, published in 1778, observes, in allusion to these circumstances, "Que la disette de grains regne dans les quatre parties du monde; vous trouverez du froment, du seigle, et d'autres grains à Amsterdam; *ils n'y manquent jamais.*"—(Tome i. p. 376.)

The Bank of Amsterdam was founded in 1609. The principal object of this establishment was to obviate the inconvenience and uncertainty arising from the circulation of the coins imported into Amsterdam from all parts of the world. The merchants who carried coin or bullion to the Bank obtained credit for an equal value in its books: this was called bank-money; and all considerable payments were effected by writing it off from the account of one individual to that of another. This establishment continued to flourish till the invasion of the French in 1795.

Between the years 1651 and 1672, when the territories of the republic were invaded by the French, the commerce of Holland seems to have reached its greatest height. De Witt estimates its increase from the treaty with Spain, concluded at Munster in 1648, to 1669, at fully a half. He adds, that during the war with Holland, Spain lost the greater part of her naval power; that since the peace, the Dutch had obtained most of the trade to that country, which had been previously carried on by the Hanseatic merchants and the English; that almost all the coasting trade of Spain was carried on by Dutch shipping; that Spain had even been forced to hire Dutch ships to sail to her American possessions; and that so great was the exportation of goods from Holland to Spain, that all the merchandise brought from the Spanish West Indies was not sufficient to make returns for them.

At this period, indeed, the Dutch engrossed, not by means of any artificial monopoly, but by the greater number of their ships, and their superior skill and economy in all that regarded navigation, almost the whole carrying trade of Europe. The value of the goods exported from France in Dutch bottoms, towards the middle of the fourteenth century, exceeded 40,000,000 livres; and the commerce of England with the Low Countries was, for a very long period, almost entirely carried on in them.

The business of marine insurance was largely and successfully prosecuted at Amsterdam; and the ordinances published in 1551, 1563, and 1570, contain the most judicious regulations for the settlement of such disputes as might arise in conducting this difficult but highly useful business. It is singular, however, notwithstanding the sagacity of the Dutch, and their desire to strengthen industrious habits, that they should have prohibited insurance upon lives. It was reserved for England to show the advantages that might be derived from this beautiful application of the science of probabilities.

In 1690, Sir William Petty estimated the shipping of Europe at about 2,000,000 tons, which he supposed to be distributed as follows:—viz. England, 500,000; France, 100,000; Hamburgh, Denmark, Sweden, and Dantzic, 250,000; Spain, Portugal, and Italy, 250,000; that of the Seven United Provinces amounting, according to him, to 900,000 tons, or to nearly one half of the whole tonnage of Europe! No great dependence can, of course, be placed upon these estimates; but the probability is, that, had they been more accurate, the preponderance in favour of Holland would have been greater than it appears to be; for the official returns to the circulars addressed in 1701 by the commissioners of customs to the officers at the different ports, show that

the whole mercantile navy of England amounted at that period to only 261,222 tons, carrying 27,196 men. — (*Macpherson's Annals of Commerce, anno* 1701.)

It may, therefore, be fairly concluded that during the seventeenth century the foreign commerce and navigation of Holland was greater than that of all Europe besides; and yet the country which was the seat of this vast commerce had no native produce to export, nor even a piece of timber fit for ship-building. All had been the fruit of industry, economy, and a fortunate combination of circumstances.

Holland owed this vast commerce to a variety of causes: partly to her peculiar situation, the industry and economy of her inhabitants, the comparatively liberal and enlightened system of civil as well as of commercial policy adopted by the republic; and partly also to the wars and disturbances that prevailed in most European countries in the sixteenth and seventeenth centuries, and prevented them from emulating the successful career of the Dutch.

The ascendency of Holland as a commercial state began to decline from about the commencement of last century. After the war terminated by the treaty of Aix-la-Chapelle, the attention of the government of Holland was forcibly attracted to the state of the shipping and foreign commerce of the republic. The discovery of means by which their decline might be arrested, and the trade of the republic, if possible, restored to its ancient flourishing condition, became a prominent object in the speculations of every one who felt interested in the public welfare. In order to procure the most correct information on the subject, the Stadtholder, William IV., addressed the following queries to all the most extensive and intelligent merchants, desiring them to favour him with their answers: —

"1. What is the actual state of trade? And if the same should be found to be diminished and fallen to decay, then, 2. To inquire by what methods the same may be supported and advanced, or, if possible, restored to its former lustre, repute, and dignity?"

In discussing these questions, the merchants were obliged to enter into an examination, as well of the causes which had raised the commerce of Holland to the high pitch of prosperity to which it had once attained, as of those which had occasioned its subsequent decline. It is stated that, though not of the same opinion upon all points, they, speaking generally, concurred as to those that were most important. When their answers had been obtained, and compared with each other, the Stadtholder had a dissertation prepared from them, and other authentic sources, on the commerce of the republic, to which proposals were subjoined for its amendment. Some of the principles advanced in this dissertation apply to the case of Holland only; but most of them are of universal application, and are not more comprehensive than sound. We doubt, indeed, whether the benefits resulting from religious toleration, political liberty, the security of property, and the freedom of industry, have ever been more clearly set forth than in this dissertation. It begins by an enumeration of the causes which contributed to advance the commerce of the republic to its former unexampled prosperity: these the authors divide into three classes, embracing under the first those that were natural and physical; under the second, those they denominated moral; and under the third, those which they considered adventitious and external; remarking on them in succession as follows: —

"I. The natural and physical causes are the advantages of the situation of the country, on the sea, and at the mouth of considerable rivers; its situation between the northern and southern parts, which, by being in a manner the centre of all Europe, made the republic become the general market, where the merchants on both sides used to bring their superfluous commodities, in order to barter and exchange the same for other goods they wanted.

"Nor have the barrenness of the country, and the necessities of the natives arising from that cause, less contributed to set them upon exerting all their application, industry, and utmost stretch of genius, to fetch from foreign countries what they stand in need of in their own, and to support themselves by trade.

"The abundance of fish in the neighbouring seas put them in a condition not only to supply their own occasions, but with the overplus to carry on a trade with foreigners, and out of the produce of the fishery to find an equivalent for what they wanted, through the sterility and narrow boundaries and extent of their own country.

"II. Among the moral and political causes are to be placed, The unalterable maxim and fundamental law relating to the free exercise of different religions, and always to consider this toleration and connivance as the most effectual means to draw foreigners from adjacent countries to settle and reside here, and so become instrumental to the peopling of these provinces.

"The constant policy of the republic to make this country a perpetual, safe, and secure asylum for any persecuted and oppressed strangers. No alliance, no treaty, no regard for or solicitation of any potentate whatever, has at any time been able to weaken or destroy this law, or make the state recede from protecting those who have fled to it for their own security and self-preservation.

"Throughout the whole course of all the persecutions and oppressions that have occurred in other countries, the steady adherence of the republic to this fundamental law has been the cause that many people have not only fled hither for refuge, with their whole stock in ready cash, and their most valuable effects, but have also settled, and established many trades, fabrics, manufactories, arts, and sciences in this country, notwithstanding the first materials for the said fabrics and manufactories were almost wholly wanting in it, and not to be procured but at a great expense from foreign parts.

"The constitution of our form of government, and the liberty thus accruing to the citizen, are further reasons to which the growth of trade, and its establishment in the republic, may fairly be ascribed; and all her policy and laws are put upon such an equitable footing, that neither life, estates, nor dignities, depend on the caprice or arbitrary power of any single individual; nor is there any room for any person,

who, by care, frugality, and diligence, has once acquired an affluent fortune or estate, to fear a deprivation of them by any act of violence, oppression, or injustice.

"The administration of justice in the country has, in like manner, always been clear and impartial, and without distinction of superior or inferior rank, whether the parties have been rich or poor, or were this a foreigner and that a native; and it were greatly to be wished we could at this day boast of such impartial quickness and despatch in all our legal processes, considering how great an influence it has on trade.

"To sum up all, amongst the moral and political causes of the former flourishing state of trade may be likewise placed the wisdom and prudence of the administration, the intrepid firmness of the councils, the faithfulness with which treaties and engagements were wont to be fulfilled and ratified, and particularly the care and caution practised to preserve tranquillity and peace, and to decline instead of entering on a scene of war, merely to gratify the ambitious views of gaining fruitless or imaginary conquests.

"By these moral and political maxims were the glory and reputation of the republic so far spread, and foreigners animated to place so great a confidence in the steady determinations of a state so wisely and prudently conducted, that a concourse of them stocked this country with an augmentation of inhabitants and useful hands, whereby its trade and opulence were from time to time increased.

"III. Amongst the adventitious and external causes of the rise and flourishing state of our trade may be reckoned —

"That at the time when the best and wisest maxims were adopted in the republic as the means of making trade flourish, they were neglected in almost all other countries; and any one reading the history of those times may easily discover that the persecutions on account of religion, throughout Spain, Brabant, Flanders, and many other states and kingdoms, have powerfully promoted the establishment of commerce in the republic.

"To this happy result, and the settling of manufacturers in our country, the long continuance of the civil wars in France, which were afterwards carried on in Germany, England, and divers other parts, have also very much contributed.

"It must be added, in the last place, that during our most burthensome and heavy wars with Spain and Portugal (however ruinous that period was for commerce otherwise), these powers had both neglected their navy; whilst the navy of the republic, by a conduct directly the reverse, was at the same time formidable, and in a capacity not only to protect the trade of its own subjects, but to annoy and crush that of their enemies in all quarters." *

We believe our readers will agree with us in thinking that these statements reflect the greatest credit on the merchants and government of Holland. Nothing, as it appears to us, could be conceived more judicious than the account they give of the causes which principally contributed to render Holland a great commercial commonwealth. The central situation of the country, its command of some of the principal inlets to the Continent, and the necessity under which the inhabitants have been placed, in consequence of the barrenness of the soil and its liability to be overflowed, to exert all their industry and enterprise, are circumstances that seem to be in a great degree peculiar in Holland. But though there can be no doubt that their influence has been very considerable, no one will pretend to say that it is to be compared for a moment with the influence of those free institutions, which, fortunately, are not the exclusive attributes of any particular country, but have flourished in Phœnicia, Greece, England, and America, as well as in Holland.

Many dissertations have been written to account for the decline of the commerce of Holland. But, if we mistake not, its leading causes may be classed under two prominent heads: viz. first, the natural growth of commerce and navigation in other countries; and, second, the weight of taxation at home. During the period when the republic rose to great eminence as a commercial state, England, France, and Spain, distracted by civil and religious dissensions, or engrossed wholly by schemes of foreign conquest, were unable to apply their energies to the cultivation of commerce, or to withstand the competition of so industrious a people as the Dutch. They, therefore, were under the necessity of allowing the greater part of their foreign, and even of their coasting trade, to be carried on in Dutch bottoms, and under the superintendence of Dutch factors. But after the accession of Louis XIV. and the ascendency of Cromwell had put an end to internal commotions in France and England, the energies of these two great nations began to be directed to pursuits of which the Dutch had hitherto enjoyed almost a monopoly. It was not to be supposed that when tranquillity and a regular system of government had been established in France and England, their active and enterprising inhabitants would submit to see one of their most valuable branches of industry in the hands of the foreigners. The Dutch ceased to be the carriers of Europe, without any fault of their own. Their performance of that function necessarily terminated as soon as other nations became possessed of a mercantile marine, and were able to do for themselves what had previously been done for them by their neighbours.

Whatever, therefore, might have been the condition of Holland in other respects, the natural advance of rival nations must inevitably have stripped her of a large portion of the commerce she once possessed. But the progress of decline seems to have been considerably accelerated, or rather, perhaps, the efforts to arrest it were rendered ineffectual, by the extremely heavy taxation to which she was subjected, occasioned by the unavoidable expenses incurred in the revolutionary struggle with Spain, and the subsequent wars with France and England. The necessities of the state led to the imposition of taxes on corn, on flour when it was ground at the mill, and on bread when it came from the oven; on butter, and fish, and fruit; on income and legacies; the sale of

* The Dissertation was translated into English, and published at London in 1751. We have quoted from the translation.

houses; and, in short, almost every article of either necessity or convenience. Sir William Temple mentions that in his time—and taxes were greatly increased afterwards—one fish sauce was in common use, which directly paid no fewer than *thirty* different duties of excise; and it was a common saying at Amsterdam, that every dish of fish brought to table was paid for *once* to the fishermen, and *six* times to the state.

The pernicious influence of this heavy taxation has been ably set forth by the author of the *Richesse de la Hollande*, and other well-informed writers; and it has also been very forcibly pointed out in the Dissertation already referred to, drawn up from the communications of the Dutch merchants. "Oppressive taxes," it is there stated, "must be placed at the head of all the causes that have co-operated to the prejudice and discouragement of trade; and it may be justly said, that it can only be attributed to them that the trade of this country has been diverted out of its channel, and transferred to our neighbours, and must daily be still more and more alienated and shut out from us, unless the progress thereof be stopped by some quick and effectual remedy: nor is it difficult to see, from these contemplations on the state of our trade, that the same will be effected by no other means than a *diminution of all duties.*

"In former times this was reckoned the only trading state in Europe; and foreigners were content to pay the taxes, as well on the goods they brought hither, as on those they came here to buy; without examining whether they could evade or save them, by fetching the goods from the places where they were produced, and carrying others to the places where they were consumed: in short, they paid us our taxes with pleasure, without any farther inquiry.

"But, since the last century, the system of trade is altered all over Europe: foreign nations, seeing the wonderful effect of our trade, and to what an eminence we had risen only by means thereof, they did likewise apply themselves to it; and, to save our duties, sent their superfluous products beside our country, to the places where they are most consumed; and in return for the same, furnished themselves from the first hands with what they wanted."

But, notwithstanding this authoritative exposition of the pernicious effects resulting from the excess of taxation, the necessary expenses of the state were so great as to render it impossible to make any sufficient reductions. And, with the exception of the transit trade carried on through the Rhine and the Meuse, which is in a great measure independent of foreign competition, and the American trade, most of the other branches of the foreign trade of Holland, though still very considerable, continue in a comparatively depressed state.

In consequence principally of the oppressiveness of taxation, but partly, too, of the excessive accumulation of capital that had taken place while the Dutch engrossed the carrying trade of Europe, profits in Holland were reduced towards the middle of the seventeenth century, and have ever since continued extremely low. This circumstance would of itself have sapped the foundations of her commercial greatness. Her capitalists, who could hardly expect to clear more than two or three per cent. of nett profit by any sort of undertaking carried on at home, were tempted to vest their capital in other countries, and to speculate in loans to foreign governments. There are the best reasons for thinking that the Dutch were, until very lately, the largest creditors of any nation in Europe. It is impossible, indeed, to form any accurate estimate of what the sums owing them by foreigners previously to the late French war, or at present, may amount to; but there can be no doubt that at the former period the amount was immense, and that it is still very considerable. M. Demeunier (*Dictionnaire de l'Economie Politique*, tom. iii. p. 720.) states the amount of capital lent by the Dutch to foreign governments, exclusive of the large sums lent to France during the American war, at *seventy-three* millions sterling. According to the author of the *Richesse de la Hollande* (ii. p. 292.), the sums lent to France and England only, previously to 1778, amounted to 1,500,000 livres tournois, or sixty millions sterling. And besides these, vast sums were lent to private individuals in foreign countries, both regularly as loans at interest, and in the shape of goods advanced at long credits. So great was the difficulty of finding an advantageous investment for money in Holland, that Sir William Temple mentions, that the payment of any part of the national debt was looked upon by the creditors as an evil of the first magnitude. "They receive it," says he, "with tears, not knowing how to dispose of it to interest with such safety and ease."

Among the subordinate causes which contributed to the decline of Dutch commerce, or which have, at all events, prevented its growth, we may reckon the circumstance of the commerce with India having been subjected to the trammels of monopoly. De Witt expresses his firm conviction, that the abolition of the East India Company would have added very greatly to the trade with the East; and no doubt can now remain in the mind of any one, that such would have been the case.* The interference of the

* For proofs of this, see the article on the Commerce of Holland in the Edinburgh Review, No. 102., from which most part of these statements have been taken.

administration in regulating the mode in which some of the most important branches of industry should be carried on, seems also to have been exceedingly injurious. Every proceeding with respect to the herring fishery, for example, was regulated by the orders of government, carried into effect under the inspection of officers appointed for that purpose. Some of these regulations were exceedingly vexatious. The period when the fishery might begin was fixed at five minutes past twelve o'clock of the night of the 24th of June! and the master and pilot of every vessel leaving Holland for the fishery were obliged to make oath that they would respect the regulation. The species of salt to be made use of in curing different sorts of herrings was also fixed by law; and there were endless regulations with respect to the size of the barrels, the number and thickness of the staves of which they were to be made; the gutting and packing of the herrings; the branding of the barrels, &c. &c.—(*Histoire des Pêches, &c. dans les Mers du Nord*, tom. i. chap. 24.) These regulations were intended to secure to the Hollanders that superiority which they had early attained in the fishery, and to prevent the reputation of their herrings from being injured by the bad faith of individuals. But their real effect was precisely the reverse of this. By tying up the fishers to a system of routine, they prevented them from making any improvements; while the facility of counterfeiting the public marks opened a much wider door to fraud, than would have been opened had government wisely declined interfering in the matter.

In despite, however, of the East India monopoly, and the regulations now described, the commercial policy of Holland has been more liberal than that of any other nation. And in consequence, a country not more extensive than Wales, and naturally not more fertile, conquered, indeed, in a great measure from the sea, has accumulated a population of upwards of two millions; has maintained wars of unexampled duration with the most powerful monarchies; and, besides laying out immense sums in works of utility and ornament at home, has been enabled to lend hundreds of millions to foreigners.

During the occupation of Holland by the French, first as a dependent state, and subsequently as an integral part of the French empire, her foreign trade was almost entirely destroyed. Her colonies were successively conquered by England; and, in addition to the loss of her trade, she was burdened with fresh taxes. But such was the vast accumulated wealth of the Dutch, their prudence, and energy, that the influence of these adverse circumstances was far less injurious than could have been imagined; and, notwithstanding all the losses she had sustained, and the long interruption of her commercial pursuits, Holland continued, at her emancipation from the yoke of the French in 1814, to be the richest country in Europe! Java, the Moluccas, and most of her other colonies were then restored, and she is now in the enjoyment of a large foreign trade. Her connection with Belgium was an unfortunate one for both countries. The union was not agreeable to either party, and was injurious to Holland. Belgium was an agricultural and manufacturing country; and was inclined, in imitation of the French, to lay restrictions on the importation of most sorts of raw and manufactured produce. A policy of this sort was directly opposed to the interests and the ancient practice of the Dutch. But though their deputies prevented the restrictive system from being carried to the extent proposed by the Belgians, they were unable to prevent it from being carried to an extent that materially affected the trade of Holland. Whatever, therefore, may be the consequences as to Belgium, there can be little doubt that the separation of the two divisions of the kingdom of the Netherlands will redound to the advantage of Holland. It must ever be for the interest of England, America, and all trading nations, to maintain the independence of a state by whose means their productions find a ready access to the great continental markets. It is to be hoped that the Dutch, profiting by past experience, will adopt such a liberal and conciliatory system towards the natives of Java, as may enable them to avail themselves to the full of the various resources of that noble island. And if they do this, and freely open their ports, with as few restrictions as possible, to the ships and commodities of all countries, Holland may still be the centre of a very extensive commerce, and may continue to preserve a respectable place among mercantile nations. Even at this moment, after all the vicissitudes they have undergone, the Dutch are, beyond all question, the most opulent and industrious of European nations. And their present, no less than their former state, shows that a free system of government, security, and the absence of restrictions on industry, can overcome almost every obstacle; "can convert the standing pool and lake into fat meadows, cover the barren rock with verdure, and make the desert smile with flowers."

ANCHOR (Fr. *Ancre*; Lat. *Anchora*; Gr. Αγκυρα), a well-known maritime instrument used in the mooring or fastening of ships. It consists of a shank having two hooked arms at one end, and at the other end a bar, or stock, at right angles to the arms, with a ring to which the cable is fastened. The arms, shank, and ring should be made of the very best and toughest iron; the stock is for the most part of oak, but it

is frequently also, especially in the smaller anchors, made of iron. On being let go, or cast into the water, the anchor sinks rapidly to the bottom, and is thrown by the stock into such a position that the *fluke*, or point of one of the arms, is sure to strike the ground perpendicularly, and being kept in that direction, unless the bottom be particularly hard or rocky, sinks into it, and cannot be dislodged, where the ground is not soft or oozy, without a violent effort. When the anchor is dislodged, it is said, by the sailors, to *come home*.

Seeing that the safety and preservation of ships and crews are very frequently dependent on their anchors and cables, it is needless to say that it is of the utmost importance that these should be of the most approved quality and construction.

Every ship has, or ought to have, three principal anchors; viz. 1st, the *sheet anchor*, the largest of all, and only let down in cases of danger, or when the vessel is riding in a gale of wind; 2d, the *best bower* anchor; and, 3d, the *small bower* anchor. There are, besides, smaller anchors for mooring in rivers, ports, &c. The largest class of men-of-war have six or seven anchors. The weight of an anchor is determined principally by the tonnage; it being usual to allow, for every 20 tons of a ship's burden, 1 cwt. for the weight of her best bower anchor; so that this anchor in a ship of 400 tons should weigh about 20 cwt., or a ton.

To cast, or let go, the anchor, is to let the anchor fall from the ship's bows into the water, so that it may take hold of the ground.

To drag the anchor, is to make it come home; that is, to dislodge it from its bed, and to drag it over or through the ground. This may be occasioned by the anchor being too light, by the violent straining of the cable in a storm or a current, by the too great hardness or softness of the ground, &c.

To weigh the anchor, is to dislodge it from its hold, and heave it up by means of the capstan, &c.

Law as to Anchors left, parted from, &c. — By the 1 & 2 Geo. 4. c. 75. pilots and other persons taking possession of anchors, cables, and other ship materials parted with, cut from, or left by any vessel, whether in distress or otherwise, shall give notice of the same to a deputy vice-admiral, or his agent, within forty-eight hours, on pain of being considered as receivers of stolen goods; and if any person shall knowingly and wilfully purchase any such anchor, &c. that shall have been so obtained, without its being so reported, he shall be held to be a receiver of stolen goods, and suffer the like punishment as for a misdemeanour at common law, or be liable to be transported for seven years, at the discretion of the court. Any master of a ship or vessel outward-bound finding or taking on board any anchor, &c. shall make a true entry of the circumstance in the log-book of such ship or vessel, reporting the same by the first possible opportunity to the Trinity House, and on his return shall deliver the article to the deputy vice-admiral, or his agent, nearest to the port where he shall arrive, under a penalty of not more than 100*l.* nor less than 30*l.*, on conviction before a magistrate on the oath of one witness, one half to go to the informer, the other half to the Merchant Seamen's Society, established by 20 Geo. 3. c. 38.; he shall also forfeit double the value of the article to the owner. And every pilot, hoveller, boatman, &c. who shall convey any anchor, &c. to any foreign harbour, port, creek, or bay, and sell and dispose of the same, shall be guilty of felony, and be transported for any term not exceeding seven years. — (See SALVAGE.)

Invention of the Anchor. — This instrument, admirable alike for its simplicity and effect, is of very considerable antiquity. It was not, however, known in the earliest ages. The President de Goguet has shown that it was not used by the Greeks till after the Trojan war; and that they were then accustomed to moor their ships by means of large stones cast into the sea, a practice which still subsists in some rude nations. — (*Origin of Laws*, vol. ii. p. 330. Eng. trans.) Pliny ascribes the invention of the anchor to the Tyrrhenians. — (*Hist. Nat.* lib. vii. cap. 56.) At first it had only one arm, the other being added at a subsequent period; some authors say, by Anacharsis the Scythian. — (*Origin of Laws*, vol. i. p. 293.) Since this remote epoch, the form and construction of the instrument seem to have undergone very little change.

ANCHORAGE, OR ANCHORING GROUND. Good anchoring ground should neither be too hard nor too soft; for, in the first case the anchor is apt not to take a sufficient hold, and in the other to drag. The best bottom is a stiff clay, and next to it a firm sand. In a rocky bottom the flukes of the anchor are sometimes torn away, and hempen cables are liable to chafe and be cut through. It is also essential to a good anchorage that the water be neither too deep nor too shallow. When too deep, the pull of the cable, being nearly perpendicular, is apt to jerk the anchor out of the ground; and when too shallow, the ship is exposed to the danger, when riding in a storm, of striking the bottom. Where a ship is in water that is land-locked, and out of the tide, the nature of the ground is of comparatively little importance.

The anchorage of ships, especially ships of war, being a subject of great importance to the naval and commercial interests of the kingdom, several statutes have been enacted with respect to it. The first which it is necessary to notice here is 19 Geo. 2. c. 22. It prohibits masters of ships from casting out ballast, or rubbish of any kind, into any harbour or channel, except on the land where the tide never comes, on pain of forfeiting not more than 5*l.* nor less than 50*s.* on conviction before a justice on view, or on the oath of one witness, or of being committed to prison for two months; which penalty is increased to 10*l.*, over and above the expense of removing the same, by 54 Geo. 3. c. 159. In pursuance of the same object, 54 Geo. 3. c. 159. enables the Lords of the Admiralty to establish regulations for the preservation of the king's moorings or anchorage, as well as for those of merchant ships, in all the ports, harbours, channels, &c. &c. of the United Kingdom, as far as the tide flows, where or near to which his Majesty has, or may hereafter have, any docks, dock-yards, arsenals, wharfs, or moorings. It prohibits all descriptions of private ships from being moored or anchored, or placed in any of his Majesty's moorings, &c. without special licence obtained from the Admiralty, or other persons appointed to grant such licences, on pain of forfeiting not exceeding 10*l.*, one moiety to his Majesty, the other to the informer, on conviction before any justice of the peace or commissioner of the navy.

It further prohibits the breaming of private vessels in such places otherwise than appointed by the said authority of the Admiralty; and the receiving or having gunpowder, beyond a certain limited quantity,

under a penalty of 5*l.* for every five pounds' weight of such powder beyond the quantity allowed. It prohibits likewise all such private vessels in any such places having any guns on board shotted or loaded with ball, as well as firing and discharging any such before sun-rising and after sun-setting, under a penalty of 5*l.* for every gun so shotted, and 10*l.* for every gun so fired. It further gives to every officer of vessels of war, to harbour-masters, and others in their aid, a right of search in all private vessels so moored in such places, and inflicts a penalty of 10*l.* on resistance.

ANCHORAGE also means a duty laid on ships for the use of the port or harbour.

ANCHOVY (Fr. *Anchois*; It. *Acciughe*; Lat. *Encrasicolus*), a small fish (*Clupea encrasicolus* Lin.), common in the Mediterranean, resembling the sprat. Those brought from Gorgona in the Tuscan Sea are esteemed the best. They should be chosen small, fresh pickled, white outside and red within. Their backs should be round. The sardine, a fish which is flatter and larger than the anchovy, is frequently substituted for it. About 120,000 lbs. are annually entered for home consumption.

ANGELICA, a large umbelliferous plant, with hollow jointed stalks, of which there are several varieties. It grows wild, and is cultivated in moist places near London, and in most European countries from Lapland to Spain. Its roots are thick, fleshy, and resinous; have a fragrant agreeable smell, and a bitterish pungent taste, mixed with a pleasant sweetness glowing on the lips and palate for a long time after they have been chewed. To preserve them, they must be thoroughly dried, and kept in a well-aired place. The other parts of the plant have the same taste and flavour as the roots, but in an inferior degree. The leaves and seeds do not retain their virtues when kept. The London confectioners make a sweetmeat of the tender stems. The faculty used to direct that none but the roots of Spanish angelica should be kept by the druggists. In Norway the roots are sometimes used as bread, and in Iceland the stalks are eaten with butter. Here the plant is used only in confectionary and the materia medica.—(*Lewis's Mat. Med.*; *Rees's Cyclopædia*, &c.)

The duty of 4*s.* per cwt. on Angelica produced, in 1840, 88*l.* 4*s.* 6*d.*, showing that 441 cwt. had been entered for home consumption.

ANISEED (Fr. *Anis*; It. *Anise*; Lat. *Anisum*), a small seed of an oblong shape. It is cultivated in Germany, but the best comes from Alicant in Spain. It is also a product of China, whence it is exported. It should be chosen fresh, large, plump, newly dried, of a good smell, and a sweetish aromatic taste.

The duty of 5*s.* a cwt. on aniseed produced, in 1840, 78*l.* 5*s.* 10*d.*, showing that 315 cwt. had been entered for consumption.

ANKER, a liquid measure at Amsterdam. It contains about 10¼ gallons English wine measure.

ANNOTTO, or ARNOTTO (Fr. *Rocou*; Ger. *Orlean*; It. *Oriana*), a species of red dye formed of the pulp enveloping the seeds of the *Bixa Orellana*, a plant common in South America, and the East and West Indies; but dye is made, at least to any extent, only in the first. It is prepared by macerating the pods in boiling water, extracting the seeds, and leaving the pulp to subside; the fluid being subsequently drawn off, the residuum, with which oil is sometimes mixed up, is placed in shallow vessels and gradually dried in the shade. It is of two sorts, viz. *flag* or *cake*, and *roll* annotto. The first, which is by far the most important article in a commercial point of view, is furnished almost wholly by Cayenne. It is imported in square cakes, weighing 2 or 3 lbs. each, wrapped in banana leaves. When well made, it should be of a bright yellow colour, soft to the touch, and of a good consistence. It imparts a deep but not durable orange colour to silk and cotton, and is used for that purpose by the dyers. Roll annotto is principally brought from Brazil. The rolls are small, not exceeding 2 or 3 oz. in weight; it is hard, dry, and compact, brownish on the outside, and of a beautiful red colour within. The latter is the best of all ingredients for the colouring of cheese and butter; and is now exclusively used for that purpose in all the British and in some of the continental dairies. In Gloucestershire it is the practice to allow an ounce of annotto to a cwt. of cheese; in Cheshire, 8 dwts. are reckoned sufficient for a cheese of 60 lbs. When genuine, it neither affects the taste nor the smell of cheese or butter. The Spanish Americans mix annotto with their chocolate, to which it gives a beautiful tint. (*Gray's Supplement to the Pharmacopœias*; *Loudon's Encyc. of Agriculture*, and *private information.*)

At an average of the years 1840 and 1841, 296,821 lbs. annotto were entered for home consumption. Previously to 1832 the duty on flag annotto was 18*s.* 8*d.* a cwt., and on other sorts 5*l.* 12*s.*; but the duty was then reduced to 1*s.* a cwt. on the former, and to 4*s.* on the latter, and is now 1*s.* a cwt. on both sorts. The price of flag annotto varies in the market from 5*d.* to 7*d.* per lb., and of roll from 1*s.* to 1*s.* 6*d.*

ANNUITIES. See INTEREST AND ANNUITIES.

ANTIMONY (Ger. and Du. *Spiesglas*; Fr. *Antimoine*; It. *Antimonio*; Rus. *Antimonia*; Lat. *Antimonium*), a metal which, when pure, is of a greyish white colour, and has a good deal of brilliancy, showing a radiated fracture when broken; it is converted by exposure to heat and air into a white oxide, which sublimes in vapours. It is found in Saxony and the Hartz, also in Cornwall, Spain, France, Mexico, Siberia, the Eastern

Islands, and Martaban in Pegu. We are at present wholly supplied with this metal from Singapore, which receives it from Borneo; it is imported in the shape of ore, and commonly as ballast. It is about as hard as gold; its specific gravity is about 6·7; it is easily reduced to a very fine powder; its tenacity is such that a rod of $\frac{1}{10}$th of an inch diameter is capable of supporting 10 lbs. weight. Antimony is used in medicine, and in the composition of metal types for printing. The ores of antimony are soft, and vary in colour from light lead to dark lead grey; their specific gravity varies from 4·4 to 6·8; they possess a metallic lustre, are brittle, and occur in the crystallised massive forms. (*Thomson's Chemistry*, and *private information.*)

ANTWERP, the principal sea-port of Belgium, lat. 51° 13′ 16″ N., long. 4° 24′ 10″ E. A large, well-built, and strongly fortified city, on the Scheldt. Pop. in 1836, 75,363. Previously to its capture by the Spaniards, under Farnese, in 1585, Antwerp was one of the greatest commercial cities of Europe; but it suffered much by that event. In 1648, at the treaty of Westphalia, it was stipulated by Spain and Holland, that the navigation of the Scheldt should be shut up; a stipulation which was observed till the occupation of Belgium by the French, when it was abolished. In 1803, the improvement of the harbour was begun, and extensive new docks and warehouses have since been constructed. Ships of the largest burden come up to the town, and goods destined for the interior are forwarded with the greatest facility by means of canals and railways. Almost all the foreign trade of Belgium is at present centred in Antwerp, which has again become a place of much commercial importance.

Goods may be warehoused in Antwerp *en entrepôt*, at the rates of charge specified in a fixed tariff. The exports chiefly consist of flax, cotton and linen manufactured goods, refined sugar, glass, zinc, oak-bark, grain and seeds, lace, &c. The imports consist principally of coffee, sugar, and other colonial products, cotton stuffs, and other manufactured goods, corn, raw cotton, leather, timber, tobacco, wool, rice, dye-stuffs, salt, wines, fruits, &c. A large proportion of the imports not being intended for home consumption, but for transit to other countries, their amount is always much greater than the amount of the exports. Of the total value of the articles imported into Antwerp in 1839, amounting to 97,960,200 fr. (3,918,408*l.* sterling), those supplied by England were worth very near 30,000,000 fr.; ditto by Russia, 14,363,900 fr.; ditto by the United States, 8,217,800 fr.; ditto by France, 7,630,200 fr., &c. The principal articles were coffee, worth 14,715,500 fr.; grain and seeds, 13,936,800 fr.; sugar, 11,430,800 fr.; woven fabrics, 11,339,100 fr.; raw cotton, 5,225,200 fr.; metals, 4,872,300 fr., &c. The total value of the articles exported during the same year was 35,630,000 fr. (1,425,140*l.*), whereof those sent to England were worth 14,349,100 fr.; ditto to Holland, 5,777,500 fr.; the Hanse Towns, 4,320,200 fr.

Money, Weights, and Measures. — The French system of monies, weights, and measures has been adopted in Belgium. Formerly accounts were kept in florins worth 1*s.* $9\frac{3}{4}$*d.* sterling. The quintal formerly in use, and still sometimes referred to, = 103$\frac{1}{2}$ lbs. avoirdupois. In 1837 the Commercial Bank, a joint-stock association, was founded in Antwerp. It has a capital of 25,000,000 fr. (1,000,000*l.* sterling), divided into 25,000 shares of 1,000 fr. each, and transacts all sorts of banking business. Here also are two considerable insurance companies. The railway from Antwerp to Brussels, 28$\frac{1}{2}$ miles in length, has been signally successful, and has been of great advantage to both cities, but especially to Antwerp.

Custom-house Regulations. — Captains of ships arriving at Antwerp, or any of the Belgian ports, must make, within 24 hours, a declaration in writing of the goods of which their cargo consists, specifying the marks and numbers of the bales, parcels, &c., their value, according to the current price at the time when the declaration is made, the name of the ship or vessel, as well as that of the captain, and of the country to which she belongs, &c.

Port Charges. — These, as will be seen from the subjoined statement, are rather heavy.

Account of Port Charges at Antwerp on a national Ship, or on a foreign privileged Ship of 250 Tons, arriving with a Cargo, discharging the same, and clearing out in Ballast.

	fr.	cnts.		fr.	cnts.
1. Custom-house officers from Flushing, about	24	0	11. For the cooking-houses in the dock, four weeks	16	0
2. Pilotage from sea to Flushing, 15 Dutch feet	136	0	12. Ballast, 100 lasts, at 2 fr. per last	200	0
Ditto from Flushing to Antwerp, 15 ditto	160	0	13. Surveyor's visit of the vessel outwards in ballast	13	50
3. Pilot, for moving the vessel into the dock	2	0	14. To pilot, for moving the vessel into the river	2	0
4. Charges for clearing in at Flushing	36	0	15. Water-bailiff's certificate, in and out	25	50
5. Leads put to the hatches by the Custom-house, and sealing the ship's provisions, about	12	0	16. Charterparty and stamps (if required)	8	0
6. Harbour dues and quay money	6	0	17. Brokerage on 250 tons, at 25 cent. per ton	187	50
7. Tonnage duty on 250 tons, at 1 fr. 80 centimes per ton, and additional duty 13 centimes, and stamps 72 frs.	521	0	18. To the excise, for town dues on ship's provisions, clearance in and out	16	0
8. Clearance, passport of the tonnage duty, measuring, and stamps	21	70	19. Pilotage to Flushing on 12 feet	112	0
9. Custom-house clearance, certificate outwards	20	50	20. Ditto from Flushing to sea, and clearing charges there	110	0
10. Dock duty on 250 tons, at 5$\frac{1}{2}$ centimes for three months	150	0	21. Cancelling custom-house bonds, postages, and small expenses	10	0
			22. Pilotage office for hooking the vessel	2	0

N. B. All vessels leaving Antwerp must be provided with a surveyor's certificate that they are seaworthy. When in ballast, this certificate costs from 6 fr. to 13 fr. 50 cent.; when loaded, from 10 fr. to 30 fr., according to the burden of the vessel, besides 11 fr. 40 cent. for certificate of tribunal. The cooking-house duties depend on the size of the vessel, and must be paid whether the house be used or not.

Shipping. — In 1839 there entered the port of Antwerp 1182 ships of the burden of 202,038 tons, whereof 337 ships were from England, 231 from Russia, 109 from France, 44 from the United States, &c. In 1838 there belonged to Antwerp 61 vessels (of which 2 were steamers) of the burden of 9,557 tons. From 4,000 to 5,000 passengers arrive annually at the city by the steam-packets from England. We subjoin a Statement of the Imports, &c. (See Table, next page.)

Conditions under which Goods are sold. — On goods generally 2 per cent. is allowed for payment in 20 days, and 1$\frac{1}{2}$ per cent. on credit of 6 weeks or 2 months. On cottons, at 20 days' credit, 3 per cent. are allowed, and 1$\frac{1}{2}$ per cent. on a credit of 2 or 3 months. On ashes, hides, and sugar, 3 per cent. for 20 days, and 1$\frac{1}{2}$ per cent. for three months' credit.

For further information as to the trade, &c. of Antwerp, see Heuschling, *Statistique Générale de la Belgique*; Macgregor's Commercial Tariffs, art. BELGIUM; the *Revûe Commerciale et Maritime d'Anvers*, &c.

Statement of the Imports and Sales of some of the principal Articles imported into Antwerp in 1840, 1841, and 1842, with the Stocks on hand on the 31st of December each Year.

		Imports in			Sales in			Stocks on 31st Dec.		
		1840.	1841.	1842.	1840.	1841.	1842.	1840.	1841.	1842.
Ashes { United States	barls.	11,021	10,026	13,887	13,221	9,826	11,587	1,000	1,200	3,500
Ashes { Russian	casks	1,036	1,900	947	1,636	1,750	1,097	100	250	100
Coffee	tons	18,000	13,800	21,700	18,500	14,100	18,400	3,000	2,700	6,000
Cotton	bales	53,227	40,367	35,478	42,827	32,442	36,405	17,000	24,925	22,000
Hides, South American	no.	288,810	684,699	421,021	276,340	557,059	502,881	15,000	142,660	60,800
Indigo, from Holland	chests	467	644	359	485	609	508	192	227	78
— —	serrons	113	232	315	108	143	336	80	45	24
Pimento	bags	1,414	975	440	1,714	1,075	540	600	500	400
Pepper	—	6,478	7,187	19,826	8,778	5,987	11,726	1,200	2,400	10,500
Rice	tierces	9,136	6,270	8,222	9,336	6,720	7,572	800	350	1,000
—	bags	30,031	31,389	22,625	37,531	25,889	26,125	6,000	11,500	8,000
Sugar	tons	17,000	13,500	13,300	16,500	11,900	16,900	4,000	5,600	2,000
Tea	packgs.	758	*1,500	2,560	2,056	1,250	2,510	300	550	600
Tobacco	hhds.	7,401	9,228	12,868	8,126	7,571	12,560	75	1,792	2,100
Campeachy Logwood	tons.	2,430	3,900	2,310	1,880	3,260	3,140	750	1,450	650
Fustic	—	175	820	780	295	650	550	140	450	660
South-Sea Oil	hect.	27,540	19,000	19,000	17,340	28,000	18,500	11,000	2,000	2,500
	Including tuns	7,000	5,500	5,700 received from Holland by the Interior.						

APPLES, the fruit of the *Pyrus Malus*, or apple tree. It is very extensively cultivated in most temperate climates. An immense variety and quantity of excellent apples are raised in England, partly for the table, and partly for manufacturing into cider. Those employed for the latter purpose are comparatively harsh and austere. The principal cider counties are Hereford, Monmouth, Gloucester, Worcester, Somerset, and Devon. Mr. Marshall estimated the produce of the first four at 30,000 hhds. a year, of which Worcester is supposed to supply 10,000; but it is now probably much greater. Half a hogshead of cider may be expected, in ordinarily favourable seasons, from each tree in an orchard in full bearing. The number of trees on an acre varies from 10 to 40, so that the quantity of cider must vary in the same proportion, that is, from 5 to 20 hhds. The produce is, however, very fluctuating; and a good crop seldom occurs above once in three years. — (*Loudon's Encyc. of Agriculture, &c.*)

Besides the immense consumption of native apples, we import, for the table, considerable supplies of French and American apples, especially the former. Owing, however, to the duty previously to 1842 having been an *ad valorem* one of 5 per cent., we are unable to specify the quantities imported. They must, however, have been very considerable, as their declared value amounted, in 1841, to 41,197*l.* 4*s.* 10*d.* In 1842, the duty was fixed at 6*d.* per bushel on raw, and 2*s.* per do. on dried apples. The apples produced in the vicinity of New York are universally admitted to be the finest of any; but unless selected and packed with care, they are very apt to spoil before reaching England. The exports of apples from the United States, during the year ended the 30th of September, 1841, amounted to 25,216 barrels, valued at 48,396 dollars. Of these, 5,059 barrels were shipped for the United Kingdom. — (*Papers laid before Congress*, 21st of July, 1842.)

APPRENTICE, a person of either sex, bound by indenture to serve some particular individual, or company of individuals, for a specified time, in order to be instructed in some art, science, or trade.

According to the common law of England, every one has a right to employ himself at pleasure in every lawful trade. But this sound principle was almost entirely subverted by a statute passed in the fifth year of the reign of Queen Elizabeth, commonly called the Statute of Apprenticeship. It enacted that no person should, for the future, exercise any trade, craft, or mystery, at that time exercised in England and Wales, unless he had previously served to it an apprenticeship of *seven* years at least; so that what had before been a bye-law of a few corporations, became the general and statute law of the kingdom. Luckily, however, the courts of law were always singularly disinclined to give effect to the provisions of this statute; and the rules which they established for its interpretation served materially to mitigate its injurious operation. But though its impolicy had been long apparent, it was continued till 1814, when it was repealed by the 54 Geo. 3. c. 96. This act did not interfere with any of the existing rights, privileges, or bye-laws of the different corporations; but wherever these do not interpose, the formation of apprenticeships, and their duration, is left to be adjusted by the parties themselves.

The regulations with respect to the taking of apprentices on board ship, the only part of this subject that properly comes within the scope of this work, are embodied in the 5 and 6 Will. 4. c. 19. They are as follow: —

The master of every ship belonging to any subject of the United Kingdom of the burden of 80 tons and upwards, shall have on board thereof, on clearing from any port of the United Kingdom, one apprentice or more, in the following proportion to the number of tons of her admeasurement, according to the certificate of registry viz. —

For every vessel of 80 tons and under	200	tons,	1	apprentice at least,	
200	400	—	2		
400	500	—	3		
500	700	—	4		
700 and upwards	- - -		5		

all of whom, at the period of being bound, shall be under the age of 17 years, and shall be duly indented for at least four years; and all masters neglecting to have on board such number of apprentices shall forfeit 10*l.* for every apprentice that may be deficient. — § 31.

Indentures and assignments thereof are to be registered in books kept for that purpose by the registrar in London, and by the collector and comptroller at any other port; and masters neglecting to register indentures, or suffering apprentices to quit their service, except in case of sickness, death, desertion, or other unavoidable cause, certified in the ship's log-book, shall for every such offence forfeit 10*l*. No apprentice can enter the king's service, except with consent of his master, during his apprenticeship. Indentures are exempted from stamp duty.—§§ 33—39. Sections 26—30. regulate the manner in which parish boys are to be apprenticed for the sea service.

AQUA FORTIS. See Acid (*Nitric*).

AQUAMARINE. See Beryl.

AQUA VITÆ (Ger. *Aquavit*; Fr. *Eau de vie*; It. *Acqua vite*; Sp. *Agua de vida*; Rus. *Wodka*; Lat. *Aqua vitæ*), a name familiarly applied to all native distilled spirits; equivalent to the *eau de vie*, or brandy, of the French, the *whisky* of the Scotch and Irish, the *geneva* of the Dutch, &c. In this way it is used in the excise laws relating to the distilleries.

ARANGOES, a species of beads made of rough carnelian. They are of various forms, as barrel, bell, round, &c., and all drilled. The barrel-shaped kind, cut from the best stones, are from two to three inches long, and should be chosen as clear as possible, whether red or white, having a good polish, and free from flaws. The bell-shaped are from one to two inches long, being in all respects inferior. Considerable quantities were formerly imported from Bombay, for re-exportation to Africa; but since the abolition of the slave trade, the imports and exports of Arangoes are comparatively trifling.—(*Milburn's Orient. Com.*)

ARCHANGEL, the principal commercial city of the north of Russia, in lat. 64° 32′ 8″ N., long. 40° 33′ E., on the right bank of the Dwina, about 35 English miles above where it falls into the White Sea. Pop. 24,500. The harbour is at the island of Sollenbole, about a mile from the town. The bar at the mouth of the Dwina has from 13 to 14½ feet water; so that ships drawing more than this depth must be partially loaded outside the bar from lighters. The Dwina being a navigable river, traversing a great extent of country, and connected by canals with the Wolga on the one hand, and the Neva on the other, Archangel is a considerable *entrepôt*. It was discovered in 1554, by the famous Richard Chancellor, the companion of Sir Hugh Willoughby in his voyage of discovery; and from that period, down to the foundation of Petersburg, was the only port in the Russian empire accessible to foreigners. Though it has lost its ancient importance, it still enjoys a pretty extensive commerce. The principal articles of export are grain, tallow, flax, hemp, timber, linseed, iron, potash, mats, tar, &c. Deals from Archangel, and Onega in the vicinity of Archangel, are considered superior to those from the Baltic. Hemp not so good as at Riga, but proportionally cheaper. Tallow is also inferior. Iron same as at Petersburg, sometimes cheaper and sometimes dearer. The quality of the wheat exported from Archangel is about equal to that from Petersburg. The imports, which are not very extensive, consist principally of sugar, coffee, spices, salt, woollens, hardware, &c.

Account of the Quantities of the different Articles exported from Archangel during each of the six Years ending with 1842.

Description of Goods.		1837.	1838.	1839.	1840.	1841.	1842.	Totals.
Linseed	in chetverts	66,016	106,529	86,122	78,113	109,605	102,909	549,294
Oats	—	58,178	11,866	163,377	134,451	32,453	73,123	476,448
Wheat	—	-	1,978	25,644	16,292	9,402	29,817	83,133
Rye	—	4,088	31,060	106,504	4,594	4,514	11,578	165,138
Tallow	in poods	30,098	53,500	35,181	23,541	21,808	26,010	190,241
Hemp	—	16,568	8,781	43,134	15,096	12,533	483	96,895
Hemp Codilla	—	-	-	5,266	2,269	-	-	7,535
Flax	—	179,967	218,086	301,688	218,214	255,165	130,165	1,333,285
Flax Codilla and Tow	—	42,747	130,116	119,524	158,800	172,478	99,349	722,985
Iron	—	84,854	22,064	3,465	11,574	15,943	-	134,900
Potashes	—	7,975	2,311	3,085	2,985	-	-	16,356
Bristles	—	266	614	90	232	-	-	1,202
Butter	—	21,059	5,472	2,047	1,128	1,478	158	34,322
Tallow Candles	—	1,382	1,335	438	1,250	-	-	4,405
Train Oil	—	34,099	25,957	29,065	40,956	36,821	42,916	209,724
Cordage	—	3,127	2,699	-	4,056	5,782	2,982	18,646
Rye Flour	—	182,840	300,351	273,706	180,854	156,350	-	1,093,701
Tar	in barrels	96,487	101,478	76,682	118,470	86,265	49,853	529,215
Pitch	—	11,540	18,568	10,286	20,498	13,947	10,216	85,085
Mats	in pieces	875,258	1,098,702	1,061,915	1,103,291	669,577	633,571	5,445,314
Deals	in dozens	88,933	80,304	43,947	15,760	13,149	16,001	258,994
Ends	—	5,572	5,690	3,195	1,308	947	969	17,681
Battens	—	12,783	14,763	10,329	6,516	3,648	2,391	50,230
Cow Hair	in poods	-	-	-	2,275	-	-	2,275
Beef and Pork	—	-	-	-	15,440	17,239	6,660	39,339
Junk	—	-	-	-	-	3,812	4,379	8,191
Hides	in pieces	-	-	-	-	9,210	9,517	18,727

Account of Ships and Coasters cleared out from Archangel during the same Period.

	1837.	1838.	1839.	1840.	1841.	1842.	Totals.
Ships	290	332	363	245	245	212	1687
Coasters	83	91	94	72	81	84	505

The total value of the exports from Archangel, in 1841, was 2,873,733 silver rubles, and that of the imports, in the same year, only 258,589 do. The value of the flax exported, in 1841, was estimated at 851,863 silver rubles, and that of the linseed at 758,163 do. (Russian *Official Returns*.)

The trade of Archangel has latterly been declining. It is much influenced by the demand from the more southerly parts of Europe, and especially from England, for corn. When a brisk demand is anticipated, oats are brought in large quantities from the interior, sometimes even from a distance of 1,500 miles, in covered barks capable of holding several hundred quarters. But as there are few extensive mercantile establishments here, the supplies are scanty, except when a large demand is expected for some time previously to the season for bringing them down. — (*Oddy's European Commerce*, and *private information.*)

Monies, *Weights*, and *Measures*, same as at Petersburg; which see.

ARGOL, ARGAL, OR TARTAR (Ger. *Weinstein;* Du. *Wynsteen;* Fr. *Tartre;* It. Sp. and Port. *Tartaro;* Rus. *Winnui kamen;* Lat. *Tartarus*), a hard crust formed on the sides of the vessels in which wine has been kept; it is red or white according to the colour of the wine, and is otherwise impure. On being purified, it is termed *cream* or *crystals of tartar.* It consists principally of bitartrate of potash. White argol is preferable to red, as containing less drossy or earthy matter. The marks of good argol of either kind are, its being thick, brittle, hard, brilliant, and little earthy. That brought from Bologna is reckoned the best, and fetches the highest price. Argol is of considerable use among dyers, as serving to dispose the stuffs to take their colours the better. Pure argol, or cream of tartar, is extensively used in medicine. It has an acid and rather unpleasant taste. It is very brittle, and easily reduced to powder: specific gravity 1·95.

The duty on argol, which is 6*d.* per cwt., produced, in 1840, 551*l.*, showing that 22,040 cwt. had been entered for consumption. The price of argol in the London market, in January, 1843, varied, Bologna, from 50*s.* to 52*s.* per cwt., Leghorn, 46*s.* to 48*s.* per ditto, Oporto, 28*s.* to 38*s.*, Rhenish, 38*s.* to 40*s.*

ARISTOLOCHIA (Fr. *Serpentaire;* Ger. *Schlangenwurzel;* It. *Serpentaria;* Lat. *Aristolochia serpentaria*), the dried root of Virginia snake-root, or birthwort: it is small, light, and bushy, consisting of a number of fibres matted together, sprung from one common head, of a brownish colour on the outside, and pale or yellow within. It has an aromatic smell something like that of valerian, but more agreeable; and a warm, bitterish, pungent taste, very much resembling camphor. — (*Ency. Metrop.*)

ARMS. See FIRE-ARMS.

ARRACK, OR RACK (Fr. *Arac;* Ger. *Arrack, Rack;* Du. *Arak, Rak;* It. *Araco;* Sp. *Arak;* Port. *Araca;* Rus. *Arak*), a spirituous liquor manufactured at different places in the East.

Arrack is a term applied in most parts of India, and the Indian islands, to designate every sort of spirituous liquor; a circumstance which accounts for the discrepancy in the statements as to the materials used in making it, and the mode of its manufacture. The arrack of Goa and Batavia is in high estimation; that of Columbo or Ceylon has been said to be inferior to the former; but this is doubtful. Goa and Columbo arrack is invariably made from the vegetable juice, *toddy*, which flows by incision from the cocoa-nut tree (*Kocos nucifera*). After the juice is fermented, it is distilled and rectified. It usually yields about an *eighth* part of pure spirit. Batavia or Java arrack is obtained by distillation from molasses and rice, with only a small admixture of toddy. When well prepared, arrack is clear and transparent; generally, however, it is slightly straw-coloured. Its flavour is peculiar; but it differs considerably, no doubt in consequence of the various articles of which it is prepared, and the unequal care taken in its manufacture. In England, arrack is seldom used except to give flavour to punch; formerly the imports were quite inconsiderable; but they have recently been a good deal greater, though, as they are mixed up in the official returns with rum from India, it is impossible to state their exact amount. The duty on rack from a British possession is 9*s.* 4*d.* a gallon, and on that from a foreign country 25*s.* 10*d.* per gallon. In the East its consumption is immense. It is issued to the soldiers in India as part of the established rations; and it is supplied, instead of rum, to the seamen of the royal navy employed in the Indian seas. It is one of the principal products of Ceylon. Its prime cost in that island varies from 8*d.* to 10*d.* a gallon; and large quantities are exported to India and elsewhere. It is sold in Ceylon by the legger of 150, and in Java by the legger of 160 gallons. In 1841 the exports from the latter amounted to 4,672 leggers, or 747,520 gallons, valued at 286,313 florins. Batavia arrack sold in bond in London in January, 1843, at from 1*s.* 6*d.* to 2*s.* per gallon.

Pariah-arrack is a phrase used to designate a spirit distilled in the peninsula of India, which is said to be often rendered unwholesome by an admixture of *ganga* (*Cannabis sativa*), and a species of *Datura*, in the view of increasing its intoxicating power. But it is not clear whether the term pariah-arrack be meant to imply that it is an inferior spirit, or an adulterated compound. This liquor is sometimes distilled from cocoa-nut toddy, and sometimes from a mixture of jaggery, water, and the barks of various trees. — (See *Milburn's Orient. Com.;* and *Mr. Marshall's* valuable *Essay on the Cocoa Nut Tree*, p. 18.)

ARROW-ROOT, the pith or starch of the root *Maranta arundinacea.* It has received its common name from its being supposed to be an antidote to the poisoned arrows of the Indians. The powder is prepared from roots of a year old. It is reckoned a very wholesome nutritious food: it is often adulterated, when in the shops, with the starch or flour of potatoes. It is a native of South America; but has been long intro-

dicted into the West Indies, where it forms a pretty important article of cultivation. An excellent kind of arrow-root, if it may be so called, is now prepared in India from the root of the *Curcuma angustifolia*. The plant is abundant on the Malabar coast, where the powder is made in such quantities as to be a considerable object of trade. Some of it has been brought to England. The *Maranta arundinacea* has been carried from the West Indies to Ceylon, where it thrives extremely well, and where arrow-root of the finest quality has been manufactured from it.—(*Ainslie's Mat. Indica.*)

At an average of the years 1840 and 1841, the entries of arrow-root for home consumption amounted to 454,893 lbs. a year. The duty on arrow-root from a British possession is 1*s*., and from a foreign country, 5*s*. a cwt. It was quoted in the London market, in Jan. 1843, at from 8*d*. to 1*s*. 6*d*. per. lb.

ARSENIC (Ger. *Arsenik*; Fr. *Arsenic*; It. and Sp. *Arsenico*; Rus. *Müschjah*; Lat. *Arsenicum*). This metal has a bluish white colour not unlike that of steel, and a good deal of brilliancy. It has no sensible smell while cold, but when heated it emits a strong odour of garlic, which is very characteristic. It is the softest of all the metallic bodies, and so brittle that it may easily be reduced to a very fine powder by trituration in a mortar. Its specific gravity is 5·76.—(*Thomson's Chemistry.*)

Metallic arsenic is not used in the arts, and is not, therefore, extracted from the ore, except for the purposes of experiment or curiosity. The arsenic of commerce is the white oxide, or *arsenious acid* of chemists. It is a white, brittle, compact substance, of a glassy appearance; is inodorous; has an acrid taste, leaving on the tongue a sweetish impression; and is highly corrosive. In its metallic state arsenic exerts no action on the animal system; but when oxidised, it is a most virulent poison. The arsenic of the shops is sometimes adulterated with white sand, chalk, or gypsum: the fraud may be detected by heating a small portion of the suspected powder; when the arsenic is dissipated, leaving the impurities, if there be any, behind. Though the most violent of all the mineral poisons, the white oxide of arsenic, or the arsenic of the shops, is yet, when judiciously administered, a medicine of great efficacy. It is also used for various purposes in the arts. It is principally imported from Saxony and Bohemia.—(*Thomson's Chemistry*; *A. T. Thomson's Dispensatory.*)

ASAFŒTIDA (Ger. *Teufelsdreck*; Du. *Duivelsdreck*; Fr. *Assa-fetida*; Sp. *Asa-fetida*; Lat. *asa-fœtida*; Per. *Ungoozeh*), a gum resin, consisting of the inspissated juice of a large umbelliferous plant, the *Ferula asafœtida*. It is produced in the southern provinces of Persia, and in the territory of Sinde, or country lying at the mouth of the Indus.

It is exported from the Persian gulf to Bombay and Calcutta, whence it is sent to Europe. It has a nauseous, somewhat bitter, biting taste, and an excessively strong, fœtid, alliaceous smell: the newer it is, it possesses its smell and other peculiar properties in the greater perfection. It is imported, packed in irregular masses, in mats, casks, and cases; the last being, in general, the best. It should be chosen clean, fresh, strong-scented, of a pale reddish colour, variegated with a number of fine, white tears: when broken, it should somewhat resemble marble in appearance; and, after being exposed to the air, should turn of a violet red colour. That which is soft, black, and foul, should be rejected. The packages should be carefully examined, and ought to be tight, to prevent the smell from injuring any other article. Neither the imports nor the quantities cleared for consumption are considerable, though the latter are probably greater than might have been expected, amounting to about 9,000 lbs. a year. The duty is 1*s*. a cwt. In this country, it is used only in the materia medica. In France, it is used both in that way, and, to some extent, also as a condiment. It is worth, in bond, in the London market, from 25*s*. to 5*l*. per cwt.—(*Milburn's Orient. Com.*; *Parl. Papers*; and *private information.*)

ASH (COMMON), the *Fraxinus excelsior* of botanists, a forest tree of which there are many varieties. It is abundant in England, and is of the greatest utility.

The ash is of very rapid growth; and, unlike most other trees, its value is rather increased than diminished by this circumstance. Like the chestnut, the wood of young trees is most esteemed. It grows on a great variety of soils, but is best where the growth has been most vigorous. It is inferior to the oak in stiffness, and is more easily split; but in toughness and elasticity it is far superior to the oak, or to any other species of timber. Hence its universal employment in all those parts of machinery which have to sustain sudden shocks, such as the circumference, teeth, and spokes of wheels, ship-blocks, &c., and in the manufacture of agricultural implements; in the latter, indeed, it is almost exclusively made use of. The want of prolonged durability is its greatest defect; and it is too flexible to be employed in building. The wood of old trees is of a dark brown colour, sometimes beautifully figured; the wood of young trees is brownish white, with a shade of green. The texture is alternately compact and porous: where the growth has been vigorous, the compact part of the several layers bears a greater proportion to the spongy, and the timber is comparatively tough, elastic, and durable. It has neither taste nor smell; and, when young, is difficult to work. The mountain ash (*Pyrus aucuparia*) is quite a different tree from the common ash, and its timber is far less valuable.—(*Tredgold's Principles of Carpentry*; *Timber Trees and Fruits*, in *Lib. of Entertaining Knowledge, &c.*)

ASHES (Fr. *Vedasse*; Ger. *Waidasche*; Du. *Weedas*; Da. *Veedaske*; It. *Feccia bruciata*; Sp. *Alumbre de hez*; Rus. *Weidasch*; Lat. *Cineres infectorii*), the residuum, or earthy part, of any substance after it has been burnt. In commerce, the term is applied to the ashes of vegetable substances; from which are extracted the alkaline salts called potash, pearlash, barilla, kelp, &c.; which see.

ASPHALTUM. See BITUMEN.

ASSETS, in commerce, a term used to designate the stock in trade, and the entire property of all sorts, belonging to a merchant or to a trading association. It is also applied to goods or property placed, for the discharge of some particular trust or obligation, in the hands of executors, assignees, &c.

ASSIENTO, a Spanish word signifying a contract. In commercial history, it means the contract or agreement by which the Spanish government ceded first to a company of French, and afterwards (by the treaty of Utrecht) to a company of English merchants, the right to import, under certain conditions, a specified number of slaves into the

Spanish colonies. (For full particulars with respect to this contract see Mr. Bandinel's valuable work on the Slave Trade.)

ASSIGNEE, a person appointed by competent authority to do, act, or transact some business, or exercise some particular privilege or power, for or on account of some specified individual or individuals.

Assignees may be created by deed, or by law: by deed, where the lessee of a farm assigns the same to another; by law, where the law makes an assignee, without any appointment of the person entitled, as an executor is assignee in law to the testator, and an administrator to an intestate. The term is most commonly applied to the official assignees appointed to manage bankrupt estates. —(See BANKRUPT.)

ASSIZE. See BREAD.

ASSURANCE. See INSURANCE.

AUCTION, a public sale of goods to the highest bidder. Auctions are generally notified by advertisement, and are held in some open place. The biddings may be made either by parties present, or by the auctioneer under authority given to him; the sale is usually terminated by the fall of a hammer.

AUCTIONEER, a person who conducts sales by auction. It is his duty to state the conditions of sale, to declare the respective biddings, and to terminate the sale by *knocking down* the thing sold to the highest bidder. An auctioneer is held to be lawfully authorised by the purchaser to sign a contract for him, whether it be for lands or goods. And his writing down the name of the highest bidder in his book is sufficient to bind any other person for whom the highest bidder purchased, even though such person be present, provided he do not object *before entry*.

Every auctioneer must take out a licence, renewable annually on the 5th of July, for which he is charged 5*l*.; and if he sell goods for the sale of which an excise licence is specially required, he must also take out such licence, unless the goods be the property of a licensed person, and sold for his behalf and on his *entered* premises, in which case such additional licence is not required. —(6 *Geo.* 4. c. 81.)

Auctioneers within the limits of the chief excise office in London are bound, when they receive their licence, to give security to the excise by bond, themselves in 1000*l.* and two sureties in 200*l.* each, to deliver in within twenty-eight days of any sale a true and particular account of such sale, and to pay the duties on the same. Auctioneers refusing or delaying to pay the duties within the specified time, forfeit their bond and the bonds of their sureties, and double the amount of the duties. —(19 *Geo.* 3. c. 56.)

Auctioneers carrying on their trade without the limits of the head office give bond, themselves in 500*l.* and two sureties in 50*l.* each, to render an account of the duties accruing on sales, and to pay them within six weeks, under the penalties already mentioned. —(19 *Geo.* 3. c. 56., and 38 *Geo.* 3. c 54.)

A licensed auctioneer going from town to town by a public stage coach, and sending goods by a public conveyance, and selling them on commission by retail or auction, is a *trading person* within the 30 Geo. 3. c. 41. § 6., and must take out a hawker's and pedlar's licence.

The following duties are payable on goods sold by auction: —

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction for the benefit of the growers or first purchasers respectively of any sheep's wool, the growth or produce of any part of the United Kingdom, 2*d.*

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction of any interest in possession or reversion in any freehold, customary copyhold, or leasehold lands, tenements, houses, or hereditaments, and any share or shares in the capital or joint stock of any corporation or chartered company, and of any annuities or sums of money charged thereon, and of any ships and vessels, and of any reversionary interest in the public funds, and of any plate or jewels, and so in proportion for any greater or less sum, 7*d.*

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction of furniture, fixtures, pictures, books, horses, and carriages, and all other goods and chattels whatsoever, and so in proportion for any greater or less sum, 1*s.*

The duties to be paid by the auctioneer, agent, factor, or seller by commission.

By stat. 29 Geo. 3. c. 63. §§ 1, 2., no duty shall be paid for piece goods sold by auction, wove or fabricated in this kingdom, which shall be sold entire in the piece or quantity as taken from the loom, and in lots of the price of 20*l.* or upwards, and so as the same be sold in no other than entered places, and openly shown and exposed at such sale.

And the auctioneer shall, besides the bond given on receiving his licence, give a further bond in 5,000*l.* with two sureties, that he will, within fourteen days after every such sale, deliver an account thereof at the next excise office, and will not sell by auction any goods woven out of this kingdom, or woven in this kingdom, which shall not be sold in the entire piece, without payment of the proper duty. —§ 6.

By stat. 41 Geo. 3. c. 91. § 8., all corn and grain of every sort, flour, and meal, and all beef, pork, hams, bacon, cheese, and butter, imported into Great Britain, shall be free of the duty on the first sale thereof by auction on account of the importer, so as the same be entered at some custom-house at the port of importation, and the sale thereof be within twelve months and by a licensed auctioneer.

By stat. 30 Geo. 3. c. 26., all goods imported by way of merchandise from *Yucatan*, and by 32 Geo. 3. c. 41., all whale-oil, (and by 41 Geo. 3. c. 42., all elephant-oil, produced from sea-cows or sea-elephants, and commonly called "elephant's oil,") whalebone, ambergris, and head-matter, and all skins of seals and other animals living in the sea, and also elephants' teeth, palm oil, dyeing-wood, drugs, and other articles for dyers' use, and all mahogany and other manufactured wood for the use of cabinet-makers and other manufacturers, imported in *British* ships from *Africa* and (by 42 Geo. 3. c. 93. § 3.) *America*, or any *British* settlement abroad, shall be free of the excise duty on the first sale thereof at auction by or for the account of the original importer to whom the same were consigned, and by whom they were entered at the Custom-house, so as such sale be made within twelve months after such goods are imported, and the same be sold by a licensed auctioneer.

By stat. 19 Geo. 3. c. 56. § 13., no duties shall be laid (1.) on any sale by auction of estates or chattels made by order of the Court of Chancery or Exchequer, or courts of great sessions in Wales: (2.) on any sale made by the *East India* or *Hudson's Bay* companies: (3.) by order of the commissioners of customs or excise: (4.) by order of the Board of ordnance: (5.) by order of the commissioners of the navy or victualling offices: (6.) on any such sales made by the sheriff, for the benefit of creditors, in execution of judgment: (7.) on sales of goods distrained for rent: (8.) on sales for non-payment of tithes: (9.) on sales of effects of bankrupts sold by assignees: (10.) on goods imported by way of merchandise from any *British* colony in *America*, the same being of the growth, produce, or manufacture of such colony, on the first sale thereof on account of the original importer to whom they were consigned, and by whom they were entered at the Custom-house, so as such sale be made within twelve months after importation (see

59 Geo. 3. c. 54. § 3.): (11.) on any ships or their cargoes condemned as prize, and sold for the benefit of the captor: (12.) on any ships or goods wrecked or stranded, sold for the benefit of the insurers or proprietors: (13.) on the sale of any goods damaged by fire, and sold for the benefit of the insurers: (14.) on any auction to be held on the account of the lord or lady of the manor for granting any copyhold or customary messuages, lands, or tenements for the term of a life or lives, or any number of years: (15.) on any auction to be held for the letting or demising any messuages, lands, or tenements for the term of a life or lives, or any number of years, to be created by the person on whose account such auction shall be held: (16.) on the sale of any wood, coppice, produce of mines or quarries, or materials for working the same; or on the sale of any cattle, and live or dead stock, or unmanufactured produce of land, so as such sale of woods, coppices, produce of mines or quarries, cattle, corn, stock or produce of land, may be made whilst they continue on the lands producing the same, and by the owner of such lands, or proprietor of or adventurer in such mines or quarries, or by their steward or agent.

By stat. 52 Geo. 3. c. 53. § 1., all coffee imported in any *British* ship from any *British* colony in *America* may be sold by auction, free of the auction duty, whilst the same shall remain in warehouses under the act 43 Geo. 3. c. 132. or any other act.

Certain articles from the United States, as regulated by the act 59 Geo. 3. c. 54. § 3., and goods from Portugal imported under stat. 51 Geo. 3. c. 47., may also be sold by auction free of duty, if on account of the original importer, and within twelve months of their importation.

By stat. 19 Geo. 3. c. 56. § 9., the auctioneer, if the sale be within the limits of the chief office of excise in *London*, shall give two days' notice at the said office, elsewhere three days' notice to the collector or at the next excise office, in writing, signed by him, specifying the particular day when such sale shall begin; and shall at the same time, or within twenty-four hours after, deliver a written or printed catalogue, attested and signed by such auctioneer or his known clerk, in which catalogue shall be particularly enumerated every article, lot, parcel, and thing intended to be sold at such auction. And if he shall presume to make such sale without delivering such notice and catalogue, or sell any estate or goods not enumerated therein, he shall forfeit 20*l*.

By stat. 32 Geo. 3. c. 11., every auctioneer who shall have delivered such notice or catalogue shall, within 28 days (if within the limits of the chief office of excise, elsewhere within six weeks) after the day specified in such notice for such sale, deliver at such chief office, or to the collector of excise in whose collection such sale has been or was intended to be, a declaration in writing, setting forth whether or not any such sale had been or was opened or begun under such notice, or any article, lot, parcel, or thing contained in such catalogue was bid for or sold at such auction; and such auctioneer, or person acting as his clerk as aforesaid, shall make oath to the truth of such declaration before the said commissioners or collector, on pain of forfeiting 50*l*. for every neglect or refusal of delivering such declaration, verified as aforesaid.

The real owner of any estate, goods, or effects put up to sale by way of auction, and bought in either by himself or by his steward or known agent employed in the management of the sale, or by any other person appointed *in writing* by the owner to bid for him, shall be allowed the duties, provided notice in writing be given to the auctioneer before such bidding, both by the owner and person intended to be the bidder, of such person being appointed by the owner; and provided such notice be verified by the oath of the auctioneer, as also the fairness of the transaction to the best of his knowledge and belief. — (19 *Geo.* 3. c. 56., 28 *Geo.* 3. c. 37.) An auctioneer employed in a case of this sort, and neglecting to take the proper steps to prevent the duties from attaching, may be obliged to pay them himself. — (19 *Geo.* 3. c. 56.)

If the sale of an estate be void through defect of title, the commissioners of excise or justices of the peace in the county, may, on oath being made, grant relief for the duties paid. Claim must be made within twelve months after the sale, if rendered void within that time; or if not rendered void within that time, within three months after the discovery.

The auctioneer is by law liable to pay the auction duties, but he may recover the same from the vendor. The conditions of sale usually oblige the buyer to pay the whole, or a part of the duties; and upon his refusing or neglecting to pay them, the bidding is void.

An auctioneer who declines to disclose the name of his principal at the time of sale, makes himself responsible. But if he disclose the name of his principal, he ceases to be responsible, either for the soundness of or title to the thing sold, unless he have expressly warranted it on his *own* responsibility.

If an auctioneer pay over the produce of a sale to his employer, after receiving notice that the goods were not the property of such employer, the real owner of the goods may recover the amount from the auctioneer.

It has long been a common practice at certain auctions (called for that reason *mock* auctions) to employ *puffers*, or mock bidders, to raise the value of the articles sold by their apparent competition, and many questions have grown out of it. It was long ago decided, that if the owner of an *estate* put up to sale by auction employ puffers to bid for him, it is a fraud on the real bidder, and the highest bidder cannot be compelled to complete his contract. — (*6 T. Rep.* p. 642.) But it would seem as if the mere employment of puffers under any circumstances were now held to be illegal. "The inclination of the courts at the present time is, that a sale by auction should be conducted in the most open and public manner possible; that there should be no reserve on the part of the seller, and no collusion on the part of the buyers. Puffing is illegal, according to a late case, even though there be only one puffer; and it was then decided that the recognised practice at auctions, of employing such persons to bid upon the sale of horses, could not be sustained." — (*Woolrych on Commercial Law*, p. 262.)

A party bidding at an auction may retract his offer at any time before the hammer is down. Another clearly established principle is, that verbal declarations by an auctioneer are not to be suffered to control the printed conditions of sale; and these, when pasted up under the box of the auctioneer, are held to be sufficiently notified to purchasers.

Auctioneers, like all other agents, should carefully observe their instructions. Should

those who employ them sustain any damage through their carelessness or inattention, they will be responsible. They must also answer for the consequences, if they sell the property intrusted to their care for less than the price set upon it by the owners, or in a way contrary to order.

An auctioneer who has duly paid the licence duty is not liable, in the city of London, to the penalties for acting as a *broker* without being admitted agreeably to the 6 Anne, c. 16.

The establishment of mock auctions is said to be a common practice among swindlers in London. Persons are frequently placed at the doors of such auctions, denominated *barkers*, to invite strangers to come in; and puffers are in wait to bid up the article much beyond its value. A stranger making an offer at such an auction is almost sure to have the article knocked down to him. Plated goods are often disposed of at these auctions; but it is almost needless to add, that they are of very inferior quality. Attempts have sometimes been made to suppress mock auctions, but hitherto without much success.

Account of the Produce of the Auction Duties in each of the three Years ending the 5th of January 1843, distinguishing the Amount paid under separate Heads.

	Amount of Auction Duties on the Sale of									Total Produce.		
	Estates, Houses, Annuities, Ships, Plate, Jewels, &c.			Household Furniture, Horses, Carriages, and all other Goods and Chattels.			Sheep's Wool.			Foreign Produce (First Sale thereof.)					
	L.	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
England	127,443	12	10	156,189	13	0½	21	8	6¾	2,985	14	9½	286,639	9	2½
Scotland	5,850	4	2	14,024	3	1½	2	4	7½	201	4	9½	20,060	16	7½
Ireland	2,585	4	10	10,791	14	6½	0	6	5½	-	-		13,377	5	8½
Year ended 5th of January, 1841	135,859	1	10	181,005	10	8½	23	19	5½	3,169	19	6½	320,058	11	6½
England	121,080	8	4	155,956	1	7½	19	13	3	2,792	11	6	279,848	14	8½
Scotland	5,837	12	1½	14,904	19	7½	3	2	1½	137	10	6½	20,883	4	5½
Ireland	3,016	18	5½	10,318	8	0½	-	-	-	-	-		13,335	6	5½
Year ended 5th of January, 1842	129,934	18	11	181,179	9	3½	22	15	4½	2,930	2	0½	314,067	5	7½
England	101,536	13	9	155,839	16	6	17	10	6	2,865	16	2½	260,259	16	11½
Scotland	5,067	5	10	14,697	2	6½	1	19	7½	74	12	3½	19,841	0	3½
Ireland	6,727	10	1½	10,124	9	5	0	5	5	11	1	3	16,863	6	2½
Year ended 5th of January, 1843	113,331	9	8½	180,661	8	5½	19	15	6½	2,951	9	9	296,964	3	5½

Excise Office, London, 10th April, 1843.

AVERAGE, a term used in commerce and navigation to signify a contribution made by the individuals, when they happen to be more than one, to whom a ship, or the goods on board it, belong, or by whom it or they are insured; in order that no particular individual or individuals amongst them, who may have been forced to make a sacrifice for the preservation of the ship or cargo, or both, should lose more than others. "Thus," says Mr. Serjeant Marshall, "where the goods of a particular merchant are thrown overboard in a storm to save the ship from sinking; or where the masts, cables, anchors, or other furniture of the ship, are cut away or destroyed for the preservation of the whole; or money or goods are given as a composition to pirates to save the rest; or an expense is incurred in reclaiming the ship, or defending a suit in a foreign court of admiralty, and obtaining her discharge from an unjust capture or detention; in these and the like cases, where any sacrifice is deliberately and voluntarily made, or any expense fairly and *bonâ fide* incurred, to prevent a total loss, such sacrifice or expense is the proper subject of a general contribution, and ought to be rateably borne by the owners of the ship, freight, and cargo, so that the loss may fall equally on all, according to the equitable maxim of the civil law — no one ought to be enriched by another's loss: *Nemo debet locupletari aliena jactura.*"

Upon this fair principle is founded the doctrine of average contributions; regulations with respect to which having been embodied in the Rhodian law, were thence adopted into the Roman law; and form a prominent part of all modern systems of maritime jurisprudence. The rule of the Rhodian law is, that "if, for the sake of lightening a ship in danger at sea, goods be thrown overboard, the loss incurred for the sake of all, shall be made good by a general contribution." — (*Dig.* lib. 14. tit. 2. § 1.; *Schomberg on the Maritime Laws of Rhodes*, p. 60.)

Formerly it was a common practice to ransom British ships when captured by an enemy, the ransom being made good by a general average. But this practice having been deemed disadvantageous, it was abolished by statute 22 Geo. 3. c. 25., which declares, "That all contracts and agreements which shall be entered into, and all bills, notes, and other securities, which shall be given by any person or persons, for ransom of any ship or vessel, merchandise, or goods, captured by the subjects of any state at war with his Majesty, or by any person committing hostilities against his Majesty's subjects, shall be absolutely void in law, and of no effect whatever;" and a penalty of 500*l.* is given to the informer, for every offence against this act.

Average is either *general* or *particular;* that is, it either affects all who have any interest in the ship and cargo, or only some of them. The contributions levied in the cases mentioned above, come under the first class. But when losses occur from ordinary wear and tear, or from the perils naturally incident to a voyage, without being *voluntarily* encountered, such as the accidental springing of masts, the loss of anchors, &c., or when any peculiar sacrifice is made for the sake of the *ship only*, or of the *cargo only*, these losses, or this sacrifice, must be borne by the parties not immediately interested, and are consequently defrayed by a *particular* average.

There are also some small charges called *petty* or *accustomed* averages; it is usual to charge one third of them to the ship and two thirds to the cargo.

No general average ever takes place, except it can be shown that the danger was imminent, and that the sacrifice made *was indispensable, or supposed to be indispensable, by the captain and officers, for the safety of the ship and cargo.* The captain, on coming on shore, should immediately make his protests; and he, with some of the crew, should make oath that the goods were thrown overboard, masts or anchors cut away, money paid, or other loss sustained, for the preservation of the ship and goods, and of the lives of those on board, and for no other purpose. The average, if not settled before, should then be adjusted, and it should be paid before the cargo is landed; for the owners of the ship have a *lien* on the goods on board, not only for the freight, but also *to answer all averages and contributions that may be due.* But though the captain should neglect his duty in this respect, the sufferer would not be without a remedy, but might bring an action either against him or the owners.

The laws of different states, and the opinions of the ablest jurists, vary as to whether the loss incurred in defending a ship against an enemy or pirate, and in the treatment of the wounded officers and men, should be made good by general or particular average. The Ordinance of the Hanse Towns (art. 35.), the Ordinance of 1681 (liv. iii. tit. 7. § 6.), and the *Code de Commerce* (art. 400. § 6.), explicitly declare that the charges on account of medicine, and for attendance upon the officers and seamen wounded in defending the ship, shall be general average. A regulation of this sort seems to be founded on reason. But other codes are silent on the subject; and though the contrary opinion had been advanced by Mr. Serjeant Marshall, and by Mr. Justice Park in the earlier editions of his work, the Court of Common Pleas has unanimously decided that in England neither the damage done to a ship, nor the ammunition expended, nor the expense of healing sailors wounded in an action with an enemy or pirate, is a subject of general average. —(*Abbott on the Law of Shipping*, part iii. cap. 8.)

Much doubt has been entertained, whether expenses incurred by a ship in an intermediate port in which she has taken refuge, should be general average, or fall only on the ship. But on principle, at least, it is clear, that if the retreat of the ship to port be made in order to obviate the danger of foundering, or some other great and imminent calamity, the expenses incurred in entering it, and during the time she is forced by stress of weather, or adverse winds, to continue in it, ought to belong to general average. But if the retreat of the ship to port be made in order to repair an injury occasioned by the unskilfulness of the master, or in consequence of any defect in her outfit, such, for example, as deficiencies of water, provisions, sails, &c., with which she ought to have been sufficiently supplied before setting out, the expenses should fall wholly on the owners.

When a ship (supposed to be *seaworthy*) is forced to take refuge in an intermediate port, because of a loss occasioned by a peril of the sea, as the springing of a mast, &c., then, as the accident is not ascribable to any fault of the master or owners, and the retreat to port is indispensable for the safety of the ship and cargo, it would seem that any *extraordinary expense* incurred in entering it should be made good by general average.

Supposing, however, that it could be shown, that the ship was not, at her outset, seaworthy, or in a condition to withstand the perils of the sea; that the mast, for example, which has sprung, had been previously damaged; or supposing that the mischief had been occasioned by the incapacity of the master; the whole blame would, in such a case, be ascribable to the owners, who, besides defraying every expense, should be liable in damages to the freighters for the delay that would necessarily take place in completing the voyage, and for whatever damage might be done to the cargo.

These, however, are merely the conclusions to which, as it appears to us, those must come who look only to principles. The law with respect to the points referred to differs in different countries, and has differed in this country at different periods. "A doubt," says Lord Tenterden, "was formerly entertained as to the expenses of a ship in a port in which she had taken refuge, to repair the damage occasioned by a tempest; but this has been removed by late decisions. And it has been held, that the wages and provisions of the crew during such a period must fall upon the ship alone. But if a ship should necessarily go into an intermediate port for the purpose only of repairing

such a damage as is in itself a proper object of general contribution, possibly the wages, &c. during the period of such detention, may also be held to be general average, on the ground that the accessory should follow the nature of its principal."—(*Law of Shipping*, part iii. cap. 8.)

Perhaps the reader who reflects on the vagueness of this passage will be disposed to concur with Lord Tenterden's remark in another part of the same chapter, "That the determinations of the English courts of justice furnish less of authority on this subject (average) than on any other branch of maritime law."

The question, whether the *repairs* which a ship undergoes that is forced to put into an intermediate port ought to be general or particular average, has occasioned a great diversity of opinion; but the principles that ought to regulate our decision with respect to it seem pretty obvious. Injuries voluntarily done to the ship, as cutting away masts, yards, &c. to avert some impending danger, are universally admitted to be general average. It seems, however, hardly less clear, and is, indeed, expressly laid down by all the great authorities, that injuries done to the ship by the violence of the winds or the waves should be particular average, or should fall wholly on the owners. The ship, to use the admirable illustration of this principle given in the civil law, is like the tool or instrument of a workman in his trade. If in doing his work he break his hammer, his anvil, or any other instrument, he can claim no satisfaction for this from his employer. —(*Dig.* lib. xiv. tit. 2. § 2.) The owners are bound, both by the usual conditions in all charterparties, and at common law, to carry the cargo to its destination; and they must consequently be bound, in the event of the ship sustaining any accidental or natural damage during the voyage, either to repair that damage at their own expense, or to provide another vessel to forward the goods. In point of fact, too, such subsidiary ships have often been provided; but it has never been pretended that their hire was a subject of general average, though it is plain it has quite as good a right to be so considered as the cost of repairing the damage done to the ship by a peril of the sea. Hence, when a ship puts into an intermediate port for the common safety, the charges incurred in entering the port, and *down to the earliest time that the wind and weather become favourable for leaving it*, ought to be general average; but the repair of any damage she may have sustained by wear and tear, or by the mere violence of the storm, or an accidental peril, and the wages of the crew, and other expenses incurred after the weather has moderated, should fall wholly on the owners.

It has been, however, within these few years, decided, in the case of a British ship that had been obliged to put into port in consequence of an injury resulting from her accidentally coming into collision with another, that so much of the repair she then underwent as was *absolutely necessary to enable her to perform her voyage* should be general average. The Judges, however, spoke rather doubtfully on the subject; and it is exceedingly difficult to discover any good grounds for the judgment. —(Plummer and Another *v.* Wildman, 3 *M. & S.* 482.)—It seems directly opposed to all principle, as well as to the authority of the laws of Rhodes (*Dig.* 14. tit. 2.), of Oleron (art. 9.), of Wisby (art. 12.), and to the common law with respect to freight. Lord Tenterden has expressed himself as if he were hostile to the judgment. It is, indeed, at variance with all the doctrines he lays down; and the terms in which he alludes to it, "*yet in one case*," appear to hold it forth as an exception (which it certainly is) to the course of decisions on the subject.

It is now usual in this country, when a vessel puts into port on account of a damage belonging to particular average, which requires to be repaired before she can safely proceed on her voyage, to allow in general average the expense of entering the port and unloading, to charge the owners of the goods or their underwriters with the warehouse rent and expenses attending the cargo, and to throw the expense of reloading and departure on the freight.

According to the law of England, when a ship is injured by coming into collision with or *running foul* of another, if the misfortune has been accidental, and no blame can be ascribed to either party, the owners of the damaged ship have to bear the loss; but where blame can be fairly imputed to one of the parties, it, of course, falls upon him to make good the damage done to the other. The regulations in the *Code de Commerce* (art. 407.) harmonise, in this respect, with our own. According, however, to the laws of Oleron and Wisby, and the famous French ordinance of 1681, the damage occasioned by an accidental collision is to be defrayed equally by both parties.

The ship and freight, and every thing on board, even jewels, plate, and money, except wearing apparel, contribute to general average. But the wages of seamen do not contribute; because, had they been laid under this obligation, they might have been tempted to oppose a sacrifice necessary for the general safety.

Different states have adopted different modes of valuing the articles which are to contribute to an average. In this respect the law of England has varied considerably at different periods. At present, however, the ship is valued at the price she is worth on

her arrival at the port of delivery. The value of the freight is held to be the clear sum which the ship has earned after seamen's wages, pilotage, and all such other charges as come under the name of petty averages, are deducted. It is now the settled practice to value the goods lost, as well as those saved, at the price they would have fetched in ready money, *at the port of delivery*, on the ship's arrival there, freight, duties, and other charges being deducted. Each person's share of the loss will bear the same proportion to the value of his property, that the whole loss bears to the aggregate value of the ship, freight, and cargo. The necessity of taking the goods lost into this account is obvious; for otherwise their owner would be the only person who would not be a loser.

When the loss of masts, cables, and other furniture of the ship, is compensated by general average, it is usual, as the new articles will, in all ordinary cases, be of greater value than those that have been lost, to deduct *one third* from the value of the former, leaving two thirds only to be contributed.

But the mode of adjusting an average will be better understood by the following example, extracted from Chief Justice Tenterden's valuable work on the *Law of Shipping*, part iii. cap. 8.

"The reader will suppose that it became necessary, in the Downs, to cut the cable of a ship destined for Hull; that the ship afterwards struck upon the Goodwin, which compelled the master to cut away his mast, and cast overboard part of the cargo, in which operation another part was injured; and that the ship, being cleared from the sands, was forced to take refuge in Ramsgate harbour, to avoid the further effects of the storm.

Amount of Losses.			Value of Articles to contribute.	
	L.			*L.*
Goods of A. cast overboard	500		Goods of A. cast overboard	500
Damage of the goods of B. by the jettison	200		Sound value of the goods of B., deducting freight and charges	1,000
Freight of the goods cast overboard	100		Goods of C.	500
Price of a new cable, anchor, and mast *L.*300			——— D.	2,000
Deduct one third 100	200		——— E.	5,000
Expense of bringing the ship off the sands	50		Value of the ship	2,000
Pilotage and port duties going into the harbour and out, and commission to the agent who made the disbursements	100		Clear freight, deducting wages, victuals, &c.	800
Expenses there	25			
Adjusting this average	4			
Postage	1			
Total of losses	1,180		Total of contributory values	11,800

Then, 11,800*l.* : 1,180*l.* :: 100*l.* : 10*l.*

That is, each person will lose 10 per cent. upon the value of his interest in the cargo, ship, or freight. Therefore, A. loses 50*l.*, B. 100*l.*, C. 50*l.*, D. 200*l.*, E. 500*l.*, the owners 280*l.*; in all, 1,180*l.* Upon this calculation, the owners are to lose 280*l.*; but they are to receive from the contribution 380*l.*, to make good their disbursements, and 100*l.* more for the freight of the goods thrown overboard; or 180*l.*, minus 280*l.*

They, therefore, are actually to receive	*L.*200
A. is to contribute 50*l.*, but has lost 500*l.*; therefore A. is to receive	450
B. is to contribute 100*l.*, but has lost 200*l.*; therefore B. is to receive	100
Total to be actually received	*L.*750
On the other hand, C., D., and E. have lost nothing, and are to pay as before; viz. C. *L.*50, D. 200, E. 500	
Total to be actually paid	*L.*500

which is exactly equal to the total to be actually received, and must be paid by and to each person in rateable proportion.

"In the above estimate of losses, I have included the freight of the goods thrown overboard, which appears to be proper, as the freight of the goods is to be paid, and their supposed value is taken clear of freight, as well as other charges. In this country, where the practice of insurance is very general, it is usual for the broker, who has procured the policy of insurance, to draw up an adjustment of the average, which is commonly paid in the first instance by the insurers without dispute. In case of dispute, the contribution may be recovered either *by a suit in equity*, or by an action at law, instituted by each individual entitled to receive, against each party that ought to pay, for the amount of his share. And in the case of a general ship, where there are many consignees, it is usual for the master, before he delivers the goods, to take a bond from the different merchants for payment of their portions of the average when the same shall be adjusted."

The subject of average does not necessarily make a part of the law of insurance; though as insurers, from the terms of most policies, are liable to indemnify the insured against those contributions which are properly denominated *general* average, its consideration very frequently occurs in questions as to partial losses. But in order to confine assurances to that which should be their only object, namely, an indemnity against real and important losses arising from a peril of the sea, as well as to obviate disputes respecting losses arising from the perishable quality of the goods insured, and all trivial subjects of difference and litigation, it seems to be the general law of all maritime states, and is expressly, indeed, provided by the famous Ordinance of 1681 (see liv. iii. tit. 6. § 47., and the elaborate commentary of M. Valin), that the insurer shall not be liable to any demand on account of average, unless it exceed *one* per cent. An

article (No. 408.) to the same effect is inserted in the *Code de Commerce*; and, by stipulation, this limitation is frequently extended in French policies to *three* or *four* per cent. A similar practice was adopted in this country in 1749. It is now constantly stipulated in all policies, that upon certain enumerated articles of a quality peculiarly perishable, the insurer shall not be liable for any partial loss whatever; that upon certain others liable to partial injuries, but less difficult to be preserved at sea, he shall only be liable for partial losses above *five* per cent.; and that as to all other goods, and also the ship and freight, he shall only be liable for partial losses above *three* per cent. This stipulation is made by a memorandum inserted at the bottom of all policies done at Lloyd's, of the following tenour:—"N. B. Corn, fish, salt, fruit, flour, and seeds are warranted free from average, unless general, or the ship be stranded; sugar, tobacco, hemp, flax, hides, and skins are warranted free from average under *5l.* per cent.; and all other goods free from average under *3l.* per cent., unless general, or the ship be stranded."

The form of this memorandum was universally used, as well by the Royal Exchange and London Assurance Companies as by private underwriters, till 1754, when it was decided that a ship having run aground, was a stranded ship within the meaning of the memorandum; and that although she got off again, the underwriters were liable to the average or partial loss upon damaged corn. This decision induced the two Companies to strike the words "*or the ship be stranded*" out of the memorandum; so that now they consider themselves liable to no losses which can happen to such commodities, except general averages and total losses. The old form is still retained by the private underwriters.—(See STRANDING.)

The reader is referred, for the further discussion of this important subject, to the article MARINE INSURANCE; and to *Mr. Stevens's Essay on Average; Abbott on the Law of Shipping*, part iii. cap. 8.; *Marshall on Insurance*, book i. cap. 12. s. 7.; *Park on Insurance*, cap. 7.; and *Mr. Benecke's* elaborate and able work on the *Principles of Indemnity in Marine Insurance*.

AVOIRDUPOIS, a weight used in determining the gravity of bulky commodities. See WEIGHTS AND MEASURES.

B.

BACON and HAMS. The former is made from the sides and belly of the pig, and the latter from its hind legs. The process of curing may be effected indifferently by the employment of salt or sugar, or both; but the first is by far the most commonly used: after being impregnated with salt or sugar, and allowed to remain a certain time in the solution, the bacon and hams are taken out, dried, and smoked. The counties of England most celebrated for bacon and hams are York, Hants, Berks, and Wilts. Ireland produces great quantities of both; but they are coarse, and not so well cured as the English, and much lower priced. Of the Scotch counties, Dumfries, Wigtown, and Kirkcudbright are celebrated for the excellence of their bacon and hams, of which they export large quantities, principally to the Liverpool and London markets.

The imports of bacon and hams from Ireland have increased rapidly of late years. The average quantity imported during the three years ending the 25th of March, 1800, only amounted to 41,948 cwt.; whereas during the three years ending with 1820, the average imports amounted to 204,380 cwt.; and during the three years ending with 1825, they had increased to 338,218 cwt. In 1825, the trade between Ireland and Great Britain was placed on the footing of a coasting trade; and bacon and hams are imported and exported without any specific entry at the Custom-house. We believe, however, that the imports of these articles into Great Britain from Ireland amount, at present, to little less than 600,000 cwt. a year. The quantity of bacon and hams exported from Ireland to foreign countries is inconsiderable.

Previously to 1842 the duty on bacon and hams being 28*s.* a cwt. was in effect prohibitory of the former, and little or none was imported. It was then, however, reduced to 14*s.* a cwt. (5 & 6 Vict. c. 47.), and there can be little doubt that this reduction will occasion a considerable increase of importation.

The exports of bacon and hams from the United States during the year ended the 30th September 1841 amounted to 2,794,517 lbs. (*Papers printed by order of Congress*, 21 July 1842, p. 210.); and it was stated during the discussions on the tariff in the House of Commons in 1842, that large quantities of American bacon and hams would, most probably, be imported into this country. It is doubtful, however, whether such will be the case. At present American bacon is very inferior, the exports going principally to Cuba and other West India islands, where it is mostly employed in feeding slaves; and unless it be very much improved, the presumption is that it will not be sent to our markets. It is highly probable, however, that America will henceforth supply us with considerable quantities of salted pork, the duty on which is now only 8*s.* a cwt.

The old duty on hams produced, in 1840, 2,389*l.*, showing that only 1,710 cwt. had been imported. But there can be no doubt that the imports will in future be largely increased. Westphalia hams being of a very superior quality, it is probable that they will be principally imported. Virginia hams are, also, of good quality.

BAGGAGE, in commercial navigation, the wearing apparel and other articles destined for the sole use or accommodation of the crews and passengers of ships. The following are the Custom-house regulations with respect to baggage: —

Baggage and apparel accompanied by the proprietor, worn and in use (not made up for the purpose of being introduced into this country), exempted from all duty on importation.

Articles in baggage subject to duty or prohibited may be left in custody of the officers of customs for a period of six months, to give the party an opportunity of paying the duty or taking them back. — (*Customs Order*, August 6. 1822.)

If unaccompanied by proprietor, proof must be made by the party that it is as aforesaid, and not imported as merchandise, otherwise it is subject to a duty of 20 per cent.

If not cleared at the expiration of six months from the date of landing, it is liable to be sold for duty and charges, the residue (if any) to be paid to the right owner on proof being adduced to the satisfaction of the honourable Board.

One fowling-piece and one pair of pistols accompanying the party, *bonâ fide* in use, free per Customs Order, July 5. 1825.

Spirits being the remains of passengers' stores may be admitted to entry. — (6 *Geo.* 4. c. 107. § 107.)

One pint of drinkable spirits of whatever strength, or half a pint of cordial or Cologne water, in baggage for private use — free. — (*Treasury Order*, October 20. 1820.)

Carriages of British manufacture, in use — free. — (*Treasury Order*, September 26. 1817.)

Glass, in dressing or medicine cases of British manufacture, free upon proof that no drawback has been received. — (*Treasury Order*, December 5. 1821.) — (*Nyren's Tables.*)

Passengers denying having Foreign Goods in their Possession. — The following clause in the act 3 & 4 Will. 4. c. 53. has reference to this subject: — "If any passenger or other person, on board any vessel or boat, shall, upon being questioned by any customs officer whether he or she has any foreign goods upon his or her person, or in his or her possession, deny the same, and any such goods shall, after such denial, be discovered upon his or her person, or in his or her possession, such goods shall be forfeited, and such person shall forfeit treble the value of such goods." — § 37.

BAHIA, OR ST. SALVADOR, a large city (formerly the capital) of Brazil, contiguous to Cape St. Antonio, which forms the right or eastern side of the entrance of the noble bay of Todos os Santos, or All-Saints. According to the observations of M. Roussin, the light-house on the Cape is in lat. 13° 0′ 30″ S., long. 38° 30′ W. The opposite side of the entrance to the bay is formed by the island of Taporica, distant from Cape St. Antonio about 2¼ leagues. But a bank along the shore of the island narrows the passage for large ships to about two thirds this distance. Another bank runs S. S. W. from Cape St. Antonio about 1½ league. Within, the bay expands into a capacious basin, having several islands and harbours, the depth of water varying from 8 and 10 to 40 fathoms, affording ample accommodation and secure anchorage for the largest fleets.

There is another entrance to the bay, partly exhibited in the annexed plan, on the west side of the island of Taporica; but it is narrow, intricate, and at its mouth has not more than 6 feet water. Several rivers have their embouchure in the bay, which generally occasions a current to set from the north end of the island by Cape St. Antonio; when the rivers are flooded, this current is sometimes very strong. The light-house at the extremity of the cape has no great elevation, and cannot be seen at a distance of more than 3 or 3½ leagues. The usual place of anchorage is abreast of the city, north and south of Fort do Mar.

The city is partly built on the beach, but principally on pretty high ground immediately contiguous. The public buildings, particularly the churches, are numerous, and some of them magnificent; but the streets are narrow, ill paved, and filthy. Population estimated at from 125,000 to 160,000. The city is defended by several forts, but none of them are of very great strength.

Account of the Quantities, Prices, &c. of the principal Articles exported from and imported into Bahia in 1841.

Principal Exports.	Quantities.	Average Price.	Principal Imports.	Average Price.	Value as per Customs Tariff.
		Reis.		Reis.	Reis.
Sugar	51,547 cases 658 boxes 2,243 barrels	White 1,900 p. arroba Brown 1,325 do.	Meats salted and preserved		547,759,132
Cotton	15,581 bales	5,874 —	Leather		120,888,267
Coffee	12,587 bags	2,890 —	Salt	410 p. alq.	213,511,497
	3,651 rolls	1,740 —	Flour		358,899,516
Tobacco	38,397 mangotes 1,646 bales	each 5,450 — 3,925 —	Iron, Wrought	Hoops 7,000 p. quint.	177,514,451
Rum	4,245 pipes	540 p. Canada	Glass and earthenware	Glass Bott. 500 p. doz. 485 p. lb.	100,84[illegible]31 149,61[illegible]00
Rose and other woods	6,638 logs	Rose 65,000 p. dozen	Butter		
Cigars	7,034 boxes	10,000 p. 1000	Manufactured goods		3,499,150,043
Cocoa Nuts (Coquilhos)	2,593,612	1,900 —	Salt fish		216,347,941
Horns	55,168	6,000 p. 100	Soap	Yellow 100 p. lb. Mediter. 160 —	142,175,530
			Wines		305,088,094
	Reis.	Duties.		Reis.	Duties.
Total value of exports in 1841	6,440,354,450	567,670,651	Total value of imports in 1841	7,236,840,332	1,486,237,669
Ditto 1840	5,982,000,000	524,000,000			
Increase in 1841	458,354,450	43,670,651	There being a decrease in the amount of imports as compared with 1839 of	2,000,000,000	
			Of the above imports Gt. Britain furnished	Reis. 3,888,[illegible]50,784	

The above table shows that the trade of Bahia is very considerable. The principal exports amount, at present (1842), to about 52,000 chests (13 cwt. each) of sugar;

16,000 bags (170 lbs. each) of cotton; 12,500 bags (160 lbs. each) of coffee, with hides, tobacco, rice, dye and fancy woods, bullion, &c. The imports consist principally of cottons and other manufactured goods, provisions, flour, salt, salt fish, soap, wines, &c.

The exports from Bahia have rather decreased of late years, in consequence, as is alleged, of the greater obstructions thrown in the way of importing slaves; and the greater scarcity and high price of labour.

No articles are prohibited to be imported, nor are there any privileges in favour of ships belonging to any country. The coasting trade is exclusively carried on by Brazilian vessels.

There is no difference made in the duty on goods, whether imported in native or foreign vessels.

All foreign goods imported, pay 15 per cent. on the valuations of the Custom-house tariff, with the exception of wines, spirituous liquors, gunpowder, and tea, which pay as follows:—

Wines and spirituous liquors (except produce of Great Britain, which pays only 15) - -	48½ per cent.
Gunpowder - - - - -	50
Tea - - - - - - -	30

An additional 5 per cent. is invariably charged under the plea of warehouse rent, &c.

Vessels putting into Bahia in distress pay no tonnage dues. Those which discharge or take in cargo, pay 30 reis per ton per day, Brazilian measurement; but should a vessel remain in port more than 50 days, this payment ceases to be enforced.

Port Dues on Vessels.

Brazilian hospital for each man specified in muster-roll - - - - - - -	640 reis
Bill of health - - - - - - -	3,200
English, Portuguese, and Brazilian vessels pay lighthouse, &c. - - - - -	6,720
Vessels of other nations - - ditto - -	10,240

Bahia is the only port of this province where goods may be warehoused on importation, and afterwards exported. A duty is charged thereon at the rate of 4 per cent. on tariff valuation.

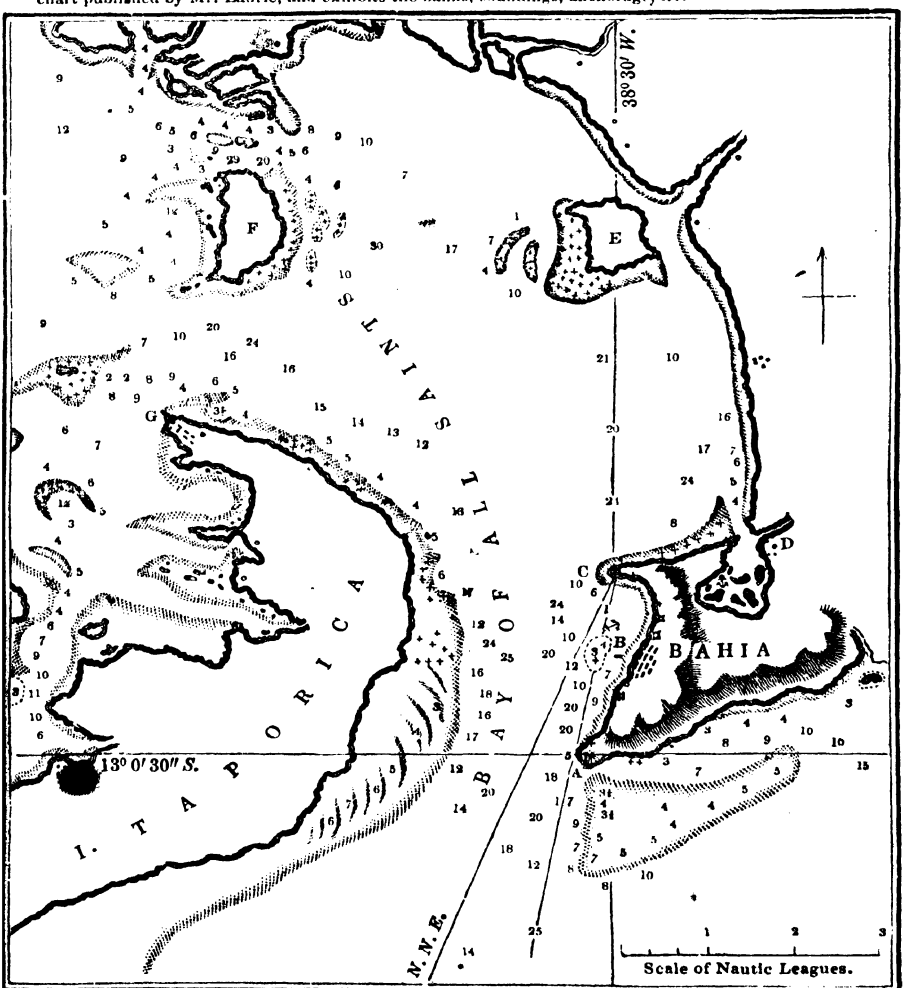
The duty of 15 per cent. formerly levied on chronometers and other nautical instruments, in use on board vessels has been recently abolished.

Average Exchange, 30d. per 1000 reis.

Weights and Measures.

1 quintal = 4 arrobas. 1 arroba = 32 lbs.
1 Canada = 2 imperial gallons. 1 alqueire = 7-8ths of a bushel.
(*Consular Returns*, and *private information*.)

Plan. — The subjoined wood-cut conveys a clearer and better idea of this celebrated bay than could be acquired from any description. It is copied, without any reduction, from a revised edition of a Portuguese chart published by Mr. Laurie, and exhibits the banks, soundings, anchorage, &c.



References to the Plan.—A, Cape, light-house, and fort of St. Antonio; B, Fort do Mar; C, Fort St. Philip; D, Tapagippe; E, Isla do Mar; F, Isla dos Frados; G, Fort Beaumont. The figures in the plan are the soundings in fathoms.

BALACHONG, an article consisting of pounded or bruised fish. It consists principally of small fish, with prawns and shrimps. Though fœtid and offensive to strangers, this substance, used as a condiment to rice, is largely consumed in all the countries to the east of Bengal, including the southern provinces of China, and the islands of the Eastern Archipelago. Its distribution gives rise to an extensive internal traffic.

BALANCE, in accounts, is the term used to express the difference between the debtor and creditor sides of an account.

BALANCE, in commerce, is the term commonly used to express the difference between the value of the exports from and imports into a country. The balance is said to be favourable when the value of the exports exceeds that of the imports, and unfavourable when the value of the imports exceeds that of the exports. According to the Custom-house returns, the official value of the exports from Great Britain, exclusive of foreign and commercial merchandise, during the year ending 5th of January, 1842, amounted to 102,180,517*l.* ; and the official value of the imports during the same year amounted 64,377,962*l.* ; leaving a favourable balance of 37,802,555*l.*

The attainment of a favourable balance was formerly regarded as an object of the greatest importance. The precious metals, in consequence of their being used as money, were long considered as the only real wealth that could be possessed either by individuals or nations. And as countries without mines could not obtain supplies of these metals except in exchange for exported products, it was concluded, that if the value of the commodities exported exceeded that of those imported, the balance would have to be paid by the importation of an equivalent amount of the precious metals ; and conversely. A very large proportion of the restraints imposed on the freedom of commerce, during the last two centuries, grew out of this notion. The importance of having a favourable balance being universally admitted, every effort was made to attain it ; and nothing seemed so effectual for this purpose as the devising of schemes to facilitate exportation, and to hinder the importation of almost all products, except gold and silver, that were not intended for future exportation. But the gradual though slow growth of sounder opinions with respect to the nature and functions of money, showed the futility of a system of policy having such objects in view. It is now conceded on all hands that gold and silver are nothing but commodities ; and that it is in no respect necessary to interfere either to encourage their importation, or to prevent their exportation. In Great Britain they may be freely exported and imported, whether in the shape of coin or bullion. — (See Coin.)

The truth is, however, that the theory of the balance of trade is not erroneous merely from the false notions which its advocates entertained with respect to money ; but proceeds on radically mistaken views as to the nature of commerce. The mode in which the balance is usually estimated is, indeed, completely fallacious. Supposing, however, that it could be correctly ascertained, it would be found, in opposition to the common opinion, that the imports into every commercial country generally exceed the exports ; and that when a balance is formed, it is only in certain cases, and those of rare occurrence, that it is cancelled by a bullion payment.

I. The proper business of the wholesale merchant consists in carrying the various products of the different countries of the world, from the places where their value is least to those where it is greatest ; or, which is the same thing, in distributing them according to the effective demand. It is clear, however, that there could be no motive to export any species of produce, unless that which it was intended to import in its stead were of greater value. When an English merchant commissions a quantity of Polish wheat, he calculates on its selling for so much more than its price in Poland, as will be sufficient to pay the expense of freight, insurance, &c., and to yield, besides, the common and ordinary rate of profit on the capital employed. If the wheat did not sell for this much, its importation would obviously be a loss to the importer. It is plain, then, that no merchant ever did or ever will export, but in the view of importing something more valuable in return. And so far from an excess of exports over imports being any criterion of an advantageous commerce, it is directly the reverse ; and the truth is, notwithstanding all that has been said and written to the contrary, that unless the value of the imports exceeded that of the exports, foreign trade could not be carried on. Were this not the case—that is, were the value of the exports always greater than the value of the imports—merchants would lose on every transaction with foreigners, and the trade with them would be speedily abandoned.

In England, the rates at which all articles of export and import are officially valued were fixed so far back as 1696. But the very great alteration that has since taken place, not only in the value of money, but also in the cost of most part of the commodities produced in this and other countries, has rendered this official valuation, though valuable as a means of determining their quantity, of no use whatever as a criterion of the true value of the exports and imports. In order to remedy this defect, an account of the *real*

or *declared* value of the exports is annually prepared, from the declarations of the merchants, and laid before parliament: there is, however, no such account of the imports; and, owing to the difficulties which high duties throw in the way, it is, perhaps, impossible to frame one with anything like accuracy. It has also been alleged, and apparently with some probability, that merchants have not unfrequently been in the habit of exaggerating the value of articles entitled to drawbacks on exportation; but the recent extension and improvement of the warehousing system, and the diminution of the number of drawbacks, must materially lessen whatever fraud or inaccuracy may have arisen from this source. Most articles were formerly charged with an *ad valorem* duty of 10*s.* per cent. on exportation, so that, if anything, their value was probably rather under than overrated; but now that this duty has been repealed (*5* and *6* Vict. cap. 47. § 40.), the presumption is that their declared value comes very near the truth; at least, sufficiently so for all practical purposes.

Now the declared value of the exports in 1841 was 51,634,623*l.*, being only about half their official value, and nearly 13,000,000*l.* under the official value of the imports. What the excess of the latter might be, had we the means of comparing their real value with that of the exports, it is impossible to say: but there can be no manner of doubt, that, generally speaking, it would be very considerable. The value of an exported commodity is estimated at the moment of its being sent abroad, and *before* it is increased by the expense incurred in transporting it to the place of its destination; whereas the value of the commodity imported in its stead is estimated *after* it has arrived at its destination, and, consequently, after it has been enhanced by the cost of freight, insurance, importer's profits, &c.

In the United States, the value of the imports, as ascertained by the Custom-house returns, always exceeds the value of the exports. And although our practical politicians have been in the habit of considering the excess of the former as a certain proof of a disadvantageous commerce, "it is nevertheless true," says Mr. Pitkin, "that the real gain of the United States has *been nearly in proportion as their imports have exceeded their exports.*" — (*Commerce of the United States*, 2d. ed. p. 280.) The great excess of American imports has in part been occasioned by the Americans generally exporting their own surplus produce, and, consequently, receiving from foreigners not only an equivalent for their exports, but also for the cost of conveying them to the foreign market. "In 1811," says the author just quoted, "flour sold in America for *nine dollars and a half* per barrel, and in Spain for *fifteen dollars*. The value of the cargo of a vessel carrying 5,000 barrels of flour would, therefore, be estimated at the period of its exportation at 47,500 dollars; but as this flour would sell, when carried to Spain, for 75,000 dollars, the American merchant would be entitled to draw on his agent in Spain for 27,500 dollars more than the flour cost in America; or than the sum for which he could have drawn, had the flour been exported in a vessel belonging to a Spanish merchant. But the transaction would not end here. The 75,000 dollars would be vested in some species of Spanish or other European goods fit for the American market; and the freight, insurance, &c., on account of the return cargo, would probably increase its value to 100,000 dollars, so that, in all, the American merchant might have imported goods worth 52,500 dollars more than the flour originally sent to Spain." It is as impossible to deny that such a transaction as this is advantageous, as it is to deny that its advantage consists entirely in the excess of the value of the goods imported over the value of those exported. And it is equally clear that America might have had the real balance of payments in her favour, though such transactions as the above had been multiplied to any conceivable extent.

II. In the second place, when a balance is due by one country to another, it is but seldom that it is paid by remitting bullion from the debtor to the creditor country. If the sum due by the British merchants to those of Holland be greater than the sum due by the latter to them, the balance of payments will be against Britain; but this balance will not, and indeed cannot, be discharged by an exportation of bullion, *unless bullion be, at the time, the cheapest exportable commodity*; or, which is the same thing, *unless it may be more advantageously exported than anything else.* To illustrate this principle, let us suppose that the balance of debt, or the excess of the value of the bills drawn by the merchants of Amsterdam on London over those drawn by the merchants of London on Amsterdam, amounts to 100,000*l.*: it is the business of the London merchants to find out the means of discharging this debt with the least expense; and it is plain, that if they find that any less sum, as 96,000*l.*, 97,000*l.*, or 99,900*l.*, will purchase and send to Holland as much cloth, cotton, hardware, colonial produce, or any other commodity, as will sell in Amsterdam for 100,000*l.*, no gold or silver will be exported. The laws which regulate the trade in bullion are not in any degree different from those which regulate the trade in other commodities. It is exported only when its exportation is advantageous, or when it is more valuable abroad than at home. It would, in fact, be quite as reasonable to expect that water should flow from a low to a high level, as it is

to expect that bullion should leave a country where its value is great to go to one where it is low! It is never sent abroad to destroy, but always to find, its level. The balance of payments might be ten or a hundred millions against a particular country, without causing the exportation of a single ounce of bullion. Common sense tells us that no merchant will remit 100*l.* worth of bullion to discharge a debt in a foreign country, if it be possible to invest any smaller sum in any species of merchandise which would sell abroad for 100*l.* exclusive of expenses. The merchant who deals in the precious metals is as much under the influence of *self-interest*, as he who deals in coffee or indigo: and what merchant would attempt to extinguish a debt, by exporting coffee which cost 100*l.*, if he could effect his object by sending abroad indigo which cost only 99*l.*?

The argument about the balance of payment is one of those that contradict and confute themselves. Had the apparent excess of exports over imports, as indicated by the British Custom-house books for the last hundred years, been always paid in bullion, as the supporters of the old theory contend is the case, there should at this moment be about 450,000,000 or 500,000,000 of bullion in the country, instead of 50,000,000 or 60,000,000, which it is supposed to amount to! Nor is this all. If the theory of the balance be good for anything—if it be not a mere idle delusion—it follows, as every country in the world, with the single exception of the United States, has its favourable balance, that they must be paid by an annual importation of bullion from the mines corresponding to their aggregate amount. But it is certain, that the entire produce of the mines, though it were increased in a *tenfold* proportion, would be insufficient for this purpose! This *reductio ad absurdum* is decisive of the degree of credit that should be attached to conclusions respecting the flourishing state of the commerce of any country drawn from the excess of the exports over the imports!

Not only, therefore, is the common theory with respect to the balance of trade erroneous, but the very reverse of that theory is true. In the *first* place, the value of the commodities imported by every country which carries on an advantageous commerce (and no other will be prosecuted for any considerable period), invariably exceeds the value of those which she exports. Unless such were the case, there would plainly be no fund whence the merchants and others engaged in foreign trade could derive either a profit on their capital, or a return for their outlay and trouble; and in the *second* place, whether the balance of debt be for or against a country, that balance will neither be paid nor received in bullion, unless it be at the time the commodity by the exportation or importation of which the account may be most profitably settled. Whatever the partisans of the doctrine as to the balance may say about money being a preferable product, or *marchandise par excellence*, it is certain it will never appear in the list of exports and imports, while there is any thing else with which to carry on trade, or cancel debts, that will yield a larger profit, or occasion a less expense to the debtors.

It is difficult to estimate the mischief which the absurd notions relative to the balance of trade have occasioned in almost every commercial country;—here they have been particularly injurious. It is principally to the prevalence of prejudices to which they have given rise, that the restrictions on the trade between this country and France are to be ascribed. The great, or rather the only, argument insisted upon by those who prevailed on the legislature, in the reign of William and Mary, to declare the trade with France a *nuisance*, was founded on the statement that the value of the imports from that kingdom considerably exceeded the value of the commodities we exported to it. The balance was regarded as a *tribute* paid by England to France; and it was sagaciously asked, what had we done, that we should be obliged to pay so much money to our natural enemy? It never occurred to those who so loudly abused the French trade, that no merchant would import any commodity from France, unless it brought a higher price in this country than the commodity exported to pay it; and that the profit of the merchant, or the national gain, would be in exact proportion to this excess of price. The very reason assigned by these persons for prohibiting the trade affords the best attainable proof of its having been a lucrative one; nor can there be any doubt that an unrestricted freedom of intercourse between the two countries would still be of the greatest service to both.

BALE, a pack, or certain quantity of goods or merchandise; as a *bale* of silk, cloth, &c.

Bales are always marked and numbered, that the merchants to whom they belong may know them, and the marks and numbers correspond to those in the bills of lading, &c. Selling under the *bale*, or under the *cords*, is a term used in France and other countries for selling goods wholesale, without sample or pattern, and unopened.

BALKS, large pieces of timber.

BALLAST (Du. *Ballast*; Fr. *Lest*; Ger. *Ballast*; It. *Savorra*; Sp. *Lastre*; Sw. *Ballast*), a quantity of iron, stones, sand, gravel, or any other heavy material laid in a ship's hold, in order to sink her deeper in the water, and to render her capable of carry-

ing sail without being overset. All ships clearing outwards, having no goods on board other than the personal baggage of the passengers, are said to be in ballast.

The quantity of ballast required to fit ships of equal burden for a voyage, is often materially different; the proportion being always less or more, according to the sharpness or flatness of the ship's bottom, called, by seamen, the *floor*.

The proper ballasting of a ship deserves peculiar attention, for, although it be known that ships in general will not carry sufficient sail, till they are laden so that the surface of the water nearly glances on the extreme breadth midships, more than this general knowledge is required. If the ship have a great weight of heavy ballast, as lead, iron, &c., in the bottom, the centre of gravity will be too low in the hold; this no doubt will enable her to carry a press of sail, but it will, at the same time, make her sail heavily, and roll so violently, as to run the risk of being dismasted.

The object in ballasting a ship is, therefore, so to dispose of the ballast or cargo, that she may be duly poised, and maintain a proper equilibrium on the water, so as neither to be too *stiff*, nor too *crank*, qualities equally pernicious. If too stiff, she may carry much sail, but her velocity will not be proportionally increased; whilst her masts are endangered by sudden jerks and excessive labouring. If too crank, she will be unfit to carry sail without the risk of oversetting.

Stiffness in ballasting is occasioned by disposing a too great quantity of heavy ballast, as lead, iron, &c., in the bottom, which throws the centre of gravity very near the keel; and this being the centre about which the vibrations are made, the lower it is placed, the more violent is the rolling.

Crankness, on the other hand, is occasioned by having too little ballast, or by disposing the ship's lading so as to raise the centre of gravity too high: this also endangers the masts when it blows hard; for when the masts cease to be perpendicular, they strain on the shrouds in the nature of a lever, which increases as the sine of their obliquity: and it is superfluous to add, that a ship that loses her masts is in great danger of being lost.

Hence the art of ballasting consists in placing the centre of gravity to correspond with the trim and shape of the vessel, so as to be neither too high nor too low; neither too far forward, nor too far aft; and to lade the ship so deep, that the surface of the water may nearly rise to the extreme breadth midships: she will then carry a good quantity of sail, incline but little, and ply well to windward. — (See *Falconer's Marine Dictionary.*)

The mischievous consequences of not attending to the circumstances now mentioned are often experienced by ships loading barilla, brimstone, and such heavy articles, on the coast of Sicily and Spain. The habit there is to cut large quantities of brushwood and faggots, and to spread them in the hold, to hinder the cargo from sinking the centre of gravity too low, and causing the ship to labour violently; but it very frequently happens that the pressure of the cargo on this sort of dunnage is so great as to squeeze it into a much smaller space than could at first have been supposed; so that ships after getting to sea are sometimes obliged to return to port, to unload a part of their cargo, to prevent their foundering. In such cases firm dunnage, such as oak staves, should, if possible, be always employed. — (See *Jackson's Commerce of Mediterranean*, p. 125—128.)

Ships that have cargoes of light goods on board require a quantity of ballast; increasing, of course, according to the greater lightness of the goods. The following table shows the average quantity of ballast allowed to ships of war: —

Ballast allowed to the following Ships.

Guns.	Tonnage.	Iron, Tons.	Shingles, Tons.	Guns.	Tonnage.	Iron, Tons.	Shingles, Tons.
110	2,290	180	370	36	870	65	160
100	2,090	180	370	32	700	65	140
98	2,110	160	350	28	600	60	100
90	1,870	160	350	24	500	50	80
80	1,620	140	300	22	450	50	70
74	1,700	80	270	20	400	50	60
64	1,370	70	260	Sloop - -	300	50	40
50	1,100	65	170	Brig - -	160	30	15
44	900	65	160	Cutter -	—	20	seldom any.
38	930	70	170	Sloop - -	—	15	seldom any.

The iron ballast is first stored fore and aft, from bulk-head to bulk-head; then the shingle ballast is spread and levelled over the iron.

The soil of the river Thames from London Bridge to the sea is vested in the Trinity House corporation, and a sum of 10*d.* is to be paid for every ton of ballast taken from the channel of the river without due authority from the said corporation. Ships may receive on board land ballast from the quarries, pits, &c. east of Woolwich, provided the quantity taken in a year do not exceed the number of tons notified to the Trinity corporation. Land ballast must be entered, and 1*d.* paid per ton on entering. No ballast is to be put on board before entry at the ballast office, under a penalty of 5*l.* a ton. The Trinity corporation is authorised by the 3 Geo. 4. c. 111. to charge the following rates for all ballast demanded and entered at the ballast office, viz.: —

For every ton (20 cwt.) of ballast, not being washed ballast, carried to any ship or vessel employed in the coal trade, the sum of 1*s.*

For every such ton carried to any other British ship or vessel, the sum of 1*s.* 3*d.*

For every such ton carried to any foreign ship or vessel, the sum of 1*s.* 7*d.*

For every ton of washed ballast carried to any ship or vessel employed in the coal trade, the sum of 2*s.*

For every ton of washed ditto carried to any other British ship or vessel, the sum of 2*s.* 6*d.*

For every ton of washed ditto carried to any foreign ship or vessel, the sum of 3*s.* 2*d.*

And for every ton of ballast delivered in or unladen from the Inward West India Dock, the further sum of 10*d.*; and for every ton of ballast delivered in or unladen from the Outward West India Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the London Docks, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Inward East India Dock, the further sum of 10*d.*; and for every ton of ballast delivered in or unladen from the Outward East India Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Commercial Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the East Country Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the City Canal, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Surrey Canal, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Regent's Canal, the further sum of 4*d.*

Which further rates or prices shall be payable and paid over and above the respective rates first mentioned.

The ballast of all ships or vessels coming into the Thames, is to be unladen into a lighter, at the charge of 6*d.* a ton. If any ballast be thrown or unladen from any ship or vessel into the Thames, the captain, master, &c. shall for every such offence forfeit 20*l.* No ballast is to be received on board otherwise than from a lighter. By the stat. 54 Geo. 3. c. 149. it is enacted, that no person shall, under a penalty of 10*l.* over and above all expenses, discharge any ballast, rubbish, &c. in any of the ports, harbours, roadsteads, navigable rivers, &c. of the United Kingdom; nor take ballast from any place prohibited by the Lords of the Admiralty.

The masters of all ships clearing out in ballast, are required to answer any questions that may be put to them by the collectors or comptrollers, touching the departure and destination of such ships. — (3 & 4 *Will.* 4. c. 52. § 80.)

If a *foreign* ship clear out in ballast, the master may take with him British manufactured goods of the value of 20*l.*, the mate of the value of 10*l.*, and 5*l.* worth for each the crew. — § 87.

BALSAM (Ger. *Balsam*; Du. *Balsem*; Fr. *Baume*; It. and Sp. *Balsamo*; Lat. *Balsamum*). Balsams are vegetable juices, either liquid, or which spontaneously become concrete, consisting of a substance of a resinous nature, combined with benzoic acid, or which are capable of affording benzoic acid by being heated alone, or with water. The liquid balsams are copaiva, opobalsam, balsam of Peru, storax, and Tolu; the concrete are benzoin, dragon's blood, and red or concrete storax. — (*Ure.*)

1. *Copaiva* (Fr. *Baume de Copahu*; Ger. *Kopaiva Balsam*; Sp. *Copayva*), obtained from a tree (*Copaifera*) growing in South America and the West India islands. The largest quantity is furnished by the province of Para in Brazil. It is imported in small casks, containing from 1 to 1½ cwt. Genuine good copaiva or copaiba balsam has a peculiar but agreeable odour, and a bitterish, hot, nauseous taste. It is clear and transparent; its consistence is that of oil; but when exposed to the action of the air it becomes solid, dry, and brittle, like resin. — (*Thomson's Dispensatory.*)

2. *Opobalsam* (Fr. *Balsamier de la Mecque*; It. *Opobalsamo*; Pat. *Balsamum verum album, Ægyptiacum*; Egypt. *Balessan*), the most precious of all the balsams, commonly called Balm of Gilead. It is the produce of a tree (*Amyris Gileadensis*), indigenous to Arabia and Abyssinia, and transplanted at an early period to Judea. It is obtained by cutting the bark with an axe at the time that the juice is in the strongest circulation. The true balsam is of a pale yellowish colour, clear and transparent, about the consistence of Venice turpentine, of a strong, penetrating, agreeable, aromatic smell, and a slightly bitterish pungent taste. By age it becomes yellower, browner, and thicker, losing by degrees, like volatile oils, some of its finer and more subtile parts. It is rarely if ever brought genuine into this country; dried Canada balsam being generally substituted for it. It was in high repute among the ancients; but it is now principally used as a cosmetic by the Turkish ladies. — (*Drs. Ure and Thomson.*)

The Canada balsam, now referred to, is merely *fine turpentine*. It is the produce of the *Pinus Balsamea*, and is imported in casks, each containing about 1 cwt. It has a strong, but not a disagreeable odour, and a bitterish taste; is transparent, whitish, and has the consistence of copaiva balsam. — (See TURPENTINE.)

"Szafra and Beder are the only places in the Hedjaz where the balsam of Mecha, or Balessan, can be procured in a pure state. The tree from which it is collected grows in the neighbouring mountains, but principally upon Djebel Sobh, and is called, by the Arabs, Beshem. I was informed that it is from 10 to 15 feet high, with a smooth trunk, and thin bark. In the middle of summer small incisions are made in the bark; and the juice, which immediately issues, is taken off with the thumb nail, and put into a vessel; the gum appears to be of two kinds, one of a white, and the other of a yellowish white colour; the first is the most esteemed. I saw here some of the latter sort in a small sheep-skin, which the Bedouins use in bringing it to market: it had a strong turpentine smell, and its taste was bitter. The people of Szafra usually adulterate it with sesamum oil and tar. When they try its purity, they dip their finger into it and then set it on fire; if it burn without hurting or leaving a mark on the finger, they judge it to be of good quality, but if it burn the finger as soon as it is set on fire, they consider it to be adulterated. I remember to have read, in Bruce's Travels, an account of the mode of trying it, by letting a drop fall into a cup filled with water; the good balsam falling coagulated to the bottom, and the bad dissolving and swimming on the surface. I tried this experiment, which was unknown to the people here, and found the drop swim upon the water; I tried also their test by fire upon the finger of a Bedouin, who had to regret his temerity; I therefore regarded the balsam sold here as adulterated; it was of less density than honey. I wished to purchase some; but neither my own baggage, nor any of the shops of Szafra could furnish any thing like a bottle to hold it; the whole skin was too dear. The Bedouins, who bring it here, usually demand two or three dollars per pound for it when quite pure; and the Szafra Arabs resell it to the hadjeys of the great caravan at between 8 and 12 dollars per pound in an adulterated state. It is bought up principally by Persians." — (*Burckhardt's Travels in Arabia*, vol. ii. p. 123.)

3. *Balsam of Peru* (Fr. *Baume de Peru*; Ger. *Peruvianischer Balsam*; Sp. *Balsamo de Quinquina*; Lat. *Balsamum Peruvianum*), the produce of a tree (*Myroxylon Peruiferum*) growing in the warmest parts of South America. The balsam procured by incisions made in the tree is called *white liquid balsam*; that which is found in the shops is obtained by boiling the twigs in water; it is imported in jars, each containing from 20 to 40 lbs. weight. It has a fragrant aromatic odour much resembling that of benzoin, with a warm bitterish taste. It is viscid, of a deep reddish brown colour, and of the consistence of honey. — (*Thomson's Dispensatory.*)

4. *Storax* (Fr. *Storax*; Ger. *Styraxbroom*; It. *Storace*; Sp. *Azumbar*; Lat. *Styrax*; Arab. *Usteruk*), the produce of a tree (*Styrax officinale*) growing in the south of Europe and the Levant. Only two kinds are found in the shops: storax in tears, which is pure, and storax in the lump, or red storax, which is mixed with sawdust and other impurities. Both kinds are brought from the Levant in chests and boxes. Storax has a fragrant odour, and a pleasant, sub-acidulous, slightly pungent, and aromatic taste: it is of a reddish brown colour, and brittle. — (*Thomson's Dispensatory.*)

5. *Tolu, Balsam of* (Fr. *Baume de Tolu*; Ger. *Tolutanischer Balsam*; Sp. *Balsamo de Tolu*). The tree which yields this balsam is the same as that which yields the balsam of Peru, it being merely the white balsam of Peru hardened by exposure to the air.

6. *Benzoin*, or *Benjamin* (Fr. *Benzoin*; Ger. *Benzoe*; Sp. *Bengui*; It. *Belzuino*; Lat. *Benzoinum*; Arab. *Liban*; Hind. *Luban*; Jav. *Menian*; Malay, *Caminyan*), is an article of much greater commercial importance than any of those balsams previously mentioned. It is obtained from a tree (*Styrax Benzoin*) cultivated in Sumatra and Borneo, but particularly the former. The plants produce in the seventh year. The balsam is obtained by making incisions in the bark, when it exudes, and is scraped off. During the first three years the balsam is of a clear white colour, after which it becomes brown. Having borne 10 or 12 years, the tree is cut down, a very inferior article being obtained by scraping the wood. The balsams procured in these different stages are distinguished in commerce, and differ widely in value. Benzoin has a very agreeable, fragrant odour, but hardly any taste. It is imported in large masses, packed in chests and casks. It should be chosen full of clear, light-coloured, and white spots, having the appearance of white marble when broken: it is rarely, however, to be met with in so pure a state, but the nearer the approach to it the better. The worst *sort* is blackish, and full of impurities. — (*Milburn's Orient. Com.*, and *private information.*) The price of Benjamin in bond varied in the London market in February, 1843, from 3*l.* to no less than 46*l.* per cwt.!

Mr. Crawfurd has given the following interesting and authentic details with respect to this article: — "Benzoin, or frankincense, called in commercial language Benjamin, is a more general article of commerce than camphor, though its production be confined to the same islands. Benzoin is divided in commerce, like camphor, into three *sorts* (head, belly, foot), according to quality, the comparative value of which may be expressed by the figures 105, 45, 18. Benzoin is valued in proportion to its whiteness, semi-transparency, and freedom from adventitious matters. According to its purity, the first sort may be bought at the *emporia* to which it is brought, at from 50 to 100 dollars per picul (133⅓ lbs.), the second

from 25 to 45 dollars, and the worst from 8 to 20 dollars. According to Linschoten, benzoin in his time cost, in the market of Sunda Calapa or Jacatra, from $19\frac{5}{100}$ to $25\frac{40}{100}$ Spanish dollars the picul. By Niebuhr's account, the worst benzoin of the Indian islands is more esteemed by the Arabs than their own best *olibanum*, or frankincense. In the London market, the best benzoin is fourteen times more valuable than *olibanum*, and even the worst $2\frac{1}{2}$ times more valuable. Benzoin usually sells in England at 10*s.* per pound. The quantity generally imported into England in the time of the monopoly was 312 cwt. The principal use of this commodity is as incense, and it is equally in request in the religious ceremonies of Catholics, Mohammedans, Hindus, and Chinese. It is also used as a luxury by the great in fumigations in their houses, and the Japanese chiefs are fond of smoking it with tobacco. Its general use among nations in such various states of civilisation, and the steady demand for it in all ages, declare that it is one of those commodities the taste for which is inherent in our nature, and not the result of a particular caprice with any individual people, as in the case of Malay camphor with the Chinese."—(*Indian Archipelago*, vol. iii. p. 418.) The imports of benzoin, which are not specified in the Customs' returns, amount to about 40,000 lbs. a year.

An inferior description of benzoin, the produce of a different tree from the *Styrax benzoin*, is produced in Siam. It is comparatively cheap and abundant.

7. *Dragon's blood* (Fr. *Sang-Dragon*; Lat. *Sanguis Draconis*; Arab. *Damulākhwain*; Hind. *Heraduky*), the produce of a large species of rattan (*Calamus Draco*) growing on the north and north-east coast of Sumatra, and in some parts of Borneo. It is largely exported to China, and also to India and Europe. It is either in oval drops, wrapped up in flag-leaves, or in large and generally more impure masses composed of smaller tears. It is externally and internally of a deep dusky red colour, and when powdered it should become of a bright crimson: if it be black, it is worth little. When broken and held up against a strong light, it is somewhat transparent: it has little or no smell or taste; what it has of the latter is resinous and astringent. Dragon's blood in drops is much preferable to that in cakes, the latter being more friable, and less compact, resinous, and pure than the former. Being a very costly article, it is very apt to be adulterated. Most of its alloys dissolve like gums in water, or crackle in the fire without proving inflammable, whereas the genuine dragon's blood readily melts and catches flame, and is scarcely acted on by watery liquors. It sells in the market of Singapore at from 15 to 35 dollars per picul, according to quality; but the Chinese have the art of purifying and refining it, when it sells at from 80 to 100 dollars per picul.—(*Milburn's Orient. Com.*; *Crawfurd's East. Archip.*; and *private information.*) The price of dragon's blood in bond in the London market varied, in February, 1843, from 3*l.* to 7*l.* per cwt.

BALTIMORE, a large and opulent city of the United States, in Maryland, on the north side of the Patapsco river, about 14 miles above its entrance into Chesapeake bay, lat. 39° 17′* N., long. 76° 36′ W. Population in 1840, 102,313. The harbour is spacious, convenient, and the water deep. The exports principally consist of wheat-flour and wheat, tobacco, hemp and flax, flax-seed, Indian corn, and other agricultural products, timber, iron, &c. The imports principally consist of cottons and woollens, sugar, coffee, tea, wine, brandy, silk goods, spices, rum, &c. The registered, enrolled, and licensed tonnage belonging to Baltimore, in September, 1841, amounted to 83,638 tons, of which 45,083 tons were employed in the coasting trade. The total value of the articles imported into Maryland, in the year ending the 30th of September, 1841, almost the whole of which were through Baltimore, was 6,101,313 dollars; the total value of the exports during the same year being 4,947,166 ditto. (*Papers laid before Congress*, 21st of July, 1842.) In Maryland the dollar is worth 7*s.* 6*d.* currency, 1*l.* sterling being = 1*l.* 13*s.* 4*d.* currency. For an account of the currency of the different states of the Union, with a table of the value of the dollar in each, see NEW YORK; and to it also the reader is referred for an account of the foreign trade of the United States. Weights and measures same as those of England.

INSPECTIONS AT BALTIMORE.

Inspections of Fish in 1838.

	Barls.	Half Barls.		Barls.	Half Barls.		Barls.	Half Barls.
Herrings,	35,175	320	Shad,	2,673	115	Mackerel,	7,112	274

Inspections of Wheat Flour in 1840 *and* 10 *preceding Years.*

	Brls.	Half brls.	Total in brls.		Brls.	Half brls.	Total in brls.
1840	766,931	31,968	782,915	1834	481,733	17,264	489,565
1839	550,992	19,777	560,880	1833	524,020	18,072	533,656
1838	420,634	19,222	430,245	1832	518,674	17,544	527,446
1837	591,676	14,779	399,064	1831	541,373	21,537	555,141
1836	393,924	13,593	400,720	1830	587,875	19,859	597,804
1835	516,000	21,533	527,266				

Inspections of Beef and Pork in 1838.

	Barls.	Half Barls.		Barls.	Half Barls.
Beef, Baltimore, packed	4042	353	Pork, Baltimore, packed	813	47
Foreign, packed	416		Foreign, packed	5288	103
	4458	353		6101	150

Inspections of Butter and Lard in 1838.

Butter	11,812 kegs.	Lard	23,822 kegs.

Inspections of Tobacco in 1840 *and* 5 *preceding Years.*

Years.	Maryland.	Ohio.	Years.	Maryland.	Ohio.
	hhds.	hhds.		hhds.	hhds.
1840	39,661	8,436	1837	30,245	4,380
1839	22,582	4,096	1836	30,509	6,400
1838	23,205	5,539	1835	34,117	9,000

Shipping, 1838-39.—Entered from foreign ports, 309 American, burthen 53,097 tons; ditto ditto, 101 Foreign, — 23,903. Cleared for foreign ports, 352 American, — 67,798; ditto ditto, 109 Foreign, — 25,556.

* By a typographical error the latitude of Baltimore was set down in our last edition at 30° 17′; and this flagrant blunder was, of course, copied in the American reprint (the most worthless of all the reprints) of this work.

Entered at the Custom House, from ports within the United States, 826 vessels. These are exclusive of coasters, which are not obliged by law to enter.

The number of arrivals from sea, which is of course exclusive of bay and river craft and vessels through canals, were, ships 70, barques 60, brigs 375, schooners 875, and sloops 11. Total, 1391 vessels.

Of the foregoing there were —

American ships from foreign ports	40	Foreign brigs from foreign ports	56
ditto coastwise	9	ditto coastwise	1
Foreign ships from foreign ports	90	American schooners from foreign ports	118
ditto coastwise	1	ditto coastwise	744
American barques from foreign ports	19	Foreign schooners from foreign ports	13
ditto coastwise	29	American sloops coastwise	10
Foreign barques from foreign ports	12	Foreign sloops from foreign ports	1
American brigs ditto	137		1391
ditto coastwise	181		

There were built within the above period 3 ships, 1 barque, 11 brigs, 43 schooners, 1 sloop, and 1 steamboat. Total 69 vessels — the aggregate burthen of which is 8558 tons. — (Statements derived from *private information*, and from *Hazard's Commercial and Statistical Register.*)

BAMBOO (Fr. *Bambou, Bambouchés*; Ger. *Indianischer Rohr*; It. *Bambu*; Hind. *Rans*; Malay, *Bulih*; Jav. *Preng*), a species of cane, the *Bambos arundinacea* of botanists. It grows every where within the tropics, and is of the greatest utility: strictly speaking, it is a gigantic grass with a ligneous stem. It often rises to the height of 40 or 50 feet, and sometimes to even double those heights. Like most plants long and extensively cultivated, it diverges into many varieties. Some of these are dwarfish, while others, instead of being hollow canes, are solid. The bamboo is of rapid growth, and in four or five years is fit for many uses, but does not bear fruit or grain till it be 25 years old, after which it perishes. The grain makes tolerable bread. The young, but gigantic shoots, as they spring from the earth, make a tender and good esculent vegetable. The mature bamboo is employed in an immense variety of ways, in the construction of houses, bridges, boats, agricultural implements, &c. Some varieties grow to such a size as to be, in the largest part, near two feet in circumference, and single knees of these are used as pails or buckets. The Chinese are believed to fabricate their cheap and useful paper of macerated bamboo. The canes used in Europe as walking sticks are not bamboos, but rattans — a totally distinct class of plants. Bamboos are never used for that purpose. — (*Private information.*)

BANDANAS, silk handkerchiefs, generally red spotted with white. They were formerly manufactured only in the East Indies; but they are now manufactured of a very good quality at Glasgow and other places.

BANK. — BANKING. Banks are establishments intended to serve for the safe custody and issue of money; for facilitating its payment by one individual to another; and, sometimes, for the accommodation of the public with loans.

I. Banking (General Principles of).
II. Bank of England (Account of).
III. Banks (English Private and Provincial).
IV. Banks (Scotch).
V. Banks (Irish).
VI. Banks (Foreign).
VII. Banks (Savings).

I. Banking (General Principles of).

Banks are commonly divided into the two great classes of *banks of deposit* and *banks of issue*. This, however, appears at first sight to be rather an imperfect classification, inasmuch as almost all banks of deposit are at the same time banks of issue, and almost all banks of issue also banks of deposit. But there is in reality no ambiguity; for, by banks of deposit are meant banks for the custody and employment of the money deposited with them or intrusted to their care by their customers, or by the public; while by banks of issue are meant banks which, besides employing or issuing the money intrusted to them by others, issue money of their own, or notes payable on demand. The Bank of England is our principal bank of issue; but it, as well as the other banks in the different parts of the empire that issue notes, is also a great bank of deposit. The private banking companies of London, and the various provincial banks that do not issue notes of their own, are strictly banks of deposit. Banking business may be conducted indifferently by individuals, by private companies, or by joint stock companies or associations.

(1.) *Utility and Functions of Banks of Deposit.* — Banks of this class execute all that is properly understood by banking business; and their establishment has contributed in no ordinary degree to give security and facility to commercial transactions. They afford, when properly conducted, safe and convenient places of deposit for the money that would otherwise have to be kept, at a considerable risk, in private houses. They also prevent, in a great measure, the necessity of carrying money from place to place to make payments, and enable them to be made in the most convenient and least expensive manner. A merchant or tradesman in London for example, who employs a banker, keeps but very little money in his own hands, making all his considerable payments by drafts or checks on his banker; and he also sends the various

checks, bills, or drafts payable to himself in London, to his bankers before they become due. By this means he saves the trouble and inconvenience of counting sums of money, and avoids the losses he would otherwise be liable to, and would no doubt occasionally incur, from receiving coins or notes not genuine. Perhaps, however, the great advantage derived by the merchant or tradesman from the employment of a banker, consists in its relieving him from all trouble with respect to the presentation for payment of due bills and drafts. The moment these are transferred to the banker, they are at his risk. And if he either neglect to present them when due, or to have them properly noted in the event of their not being paid, he has to answer for the consequences.

"This circumstance alone must cause an immense saving of expense to a mercantile house in the course of a year. Let us suppose that a merchant has only two bills due each day. These bills may be payable in distant parts of the town, so that it may take a clerk half a day to present them; and in large mercantile establishments it would take up the whole time of one or two clerks to present the due bills and the drafts. The salary of these clerks is, therefore, saved by keeping an account at a banker's: besides the saving of expense, it is also reasonable to suppose that losses upon bills would sometimes occur from mistakes, or oversights — from miscalculation as to the time the bill would become due — from errors in marking it up — from forgetfulness to present it — or from presenting it at the wrong place. In these cases the indorsers and drawees are exonerated; and if the acceptor do not pay the bill, the amount is lost. In a banking house such mistakes occur sometimes, though more rarely; but when they do occur, the loss falls upon the banker, and not upon his customer." — (*Gilbart's Practical Observations on Banking.*)

It is on other grounds particularly desirable for a merchant or tradesman to have an account with a banking house. He can refer to his bankers as vouchers for his respectability; and in the event of his wishing to acquire any information with respect to the circumstances, or credit, of any one with whom he is not acquainted, his bankers render him all the assistance in their power. In this respect they have great facilities, it being the common practice amongst bankers in London, and most other trading towns, to communicate information to each other as to the credit and solvency of their customers.

To provide for the public security, the statute 7 & 8 Geo. 4. c. 29. § 49. "for the punishment of embezzlement committed by agents intrusted with property," enacts, "That if any money, or security for the payment of money, shall be intrusted to any banker, merchant, broker, attorney, or other agent, with any direction *in writing* to apply such money, or any part thereof, or the proceeds, or any part of the proceeds of such security, for any purpose specified in such direction, and he shall, in violation of good faith, and contrary to the purpose so specified, in any wise convert to his own use or benefit such money, security, or proceeds, or any part thereof respectively, every such offender shall be guilty of a misdemeanor, and being convicted thereof shall be liable, at the discretion of the court, to be transported beyond seas, for any term not exceeding fourteen years, nor less than seven years, or to suffer such punishment by fine or imprisonment, or by both, as the court shall award; and if any chattel or valuable security, or any power of attorney for the sale or transfer of any share or interest in any public stock or fund, whether of this kingdom, or of Great Britain, or of Ireland, or of any foreign state, or in any fund of any body corporate, company or society, shall be intrusted to any banker, merchant, broker, attorney, or other agent, for safe custody, or for any special purpose, *without any authority* to sell, negotiate, transfer, or pledge, and he shall, in violation of good faith, and contrary to the object or purpose which such chattel or security, or power of attorney, shall have been intrusted to him, sell, negotiate, transfer, pledge, or in any manner convert to his own use or benefit such chattel or security, or the proceeds of the same, or any part thereof, or the share or interest in stock or fund to which such power of attorney shall relate, or any part thereof, every such offender shall be guilty of a misdemeanor, and being convicted thereof shall be liable, at the discretion of the court, to any of the punishments which the court may award, as hereinbefore last mentioned."

This act is not to affect trustees and mortgagees, nor bankers receiving money due upon securities, nor securities upon which they have a lien, claim, or demand, entitling them by law to sell, transfer, or otherwise dispose of them, unless such sale, transfer, or other disposal shall extend to a greater number or part of such securities or effects than shall be requisite for satisfying such lien, claim, &c. — § 50.

Nothing in this act is to prevent, impeach, or lessen any remedy at law or in equity, which any party aggrieved by any such offence might or would have had, had it not been passed. No banker, merchant, &c. shall be convicted as an offender against this act, in respect of any act done by him, if he shall at any time previously to his being indicted for such offence have disclosed such act on oath, in consequence of any compulsory process of any court of law or equity, in any action *bonâ fide* instituted by any party aggrieved, or if he shall have disclosed the same in any examination or deposition before any commissioner of bankrupt. — § 52.

The Bank of England, and the private banking companies of London, as well as some of the English provincial banks, charge no commission on the payments made and received on account of those who deal with them. And until the recent introduction of joint-stock banks, none of the London bankers, except in peculiar cases, allowed interest on deposits; nor is it yet allowed by the great majority of the metropolitan private bankers. It is also either stipulated or distinctly understood that a person employing a banker should, besides furnishing him with sufficient funds to pay his drafts, keep an average *balance* in the banker's hands, varying, of course, according to the amount of business done on his account; that is, according to the number of his checks or drafts to be paid, and the number of drafts and bills to be received for him. The bankers then calculate, as well as they can, the probable amount of cash that it

will be necessary for them to keep in their coffers to meet the ordinary demands of their customers, and employ the balance in discounting mercantile bills, in the purchase of securities, or in some other sort of profitable adventure; so that their profits consist of the sum they realize from such part of the monies lodged in their hands as they can venture to employ in an advantageous way, after deducting the various expenses attendant on the management of their establishments. A bank of deposit would never be established if it had to depend on its own capital; it makes no profit, in its capacity of bank, till it begins to employ the capital of others.

The directors of the Bank of England do not allow any individual to overdraw his account. They answer drafts to the full extent of the funds deposited in their hands; but they will not pay a draft if it exceed their amount. Private bankers are not generally so scrupulous; most of them allow respectable individuals in whom they have confidence to overdraw their accounts, those who do so paying interest at the rate of 5 per cent. on whatever sums they overdraw. The possession of this power of overdrawing is often a great convenience to merchants, while it is rarely productive of loss to the banker. The money which is overdrawn is usually replaced within a short period; sometimes, indeed, in a day or two. The directors of the Bank of England decline granting this facility, from a disinclination on their part to come into competition in a matter of this sort with private bankers, who transact this kind of business better, probably, than it could be done by a great establishment like the Bank.

Banks afford great facilities to the public in the negotiation of bills of exchange, or in the making of payments at distant places. Many of the banking companies established in different districts have a direct intercourse with each other, and they have all correspondents in London. Hence an individual residing in any part of the country, who may wish to make a payment in any other part, however distant, may effect his object by applying to the bank nearest to him. Thus, suppose A. of Penzance has a payment to make to B. of Inverness: to transmit the money by letter would be hazardous; and if there were fractional parts of a pound in the sum, it would hardly be practicable: how then will A. manage? He will pay the sum to a banker in Penzance, and his debtor in Inverness will receive it from a banker there. The transaction is extremely simple: the Penzance banker orders his correspondent in London to pay to the correspondent of the Inverness banker the sum in question on account of B., and the Inverness banker, being advised in course of post of what has been done, pays B. A small commission charged by the Penzance banker, and the postages, constitute the whole expense. There is no risk whatever, and the whole affair is transacted in the most commodious and cheapest manner.

Recently, however, the facilities given to the transmission of money by means of post-office orders have materially interfered with this branch of banking business, especially in the transmission of small sums, and are a great convenience to the public. —(See POST OFFICE.)

By far the largest proportion both of the inland bills in circulation in the country, and also of the foreign bills drawn upon Great Britain, are made payable in London, the grand focus to which all the pecuniary transactions of the empire are ultimately brought to be adjusted. And in order still further to economise the use of money, the principal bankers of the metropolis are in the habit of sending a clerk each day to the *clearing house* in Lombard-street, who carries with him the various bills in the possession of his house that are drawn upon other bankers; and having exchanged them for the bills in the possession of those others that are drawn upon his constituents, the balance on the one side or the other is paid in cash or Bank of England notes. By this contrivance the bankers of London are able to settle transactions to the extent of several millions a day, by the employment of not more, at an average, than from 200,000*l.* to 300,000*l.* of cash or bank notes. —(See CLEARING HOUSE.)

In consequence of these and other facilities afforded by the intervention of bankers for the settlement of pecuniary transactions, the money required to conduct the business of an extensive country is reduced to a trifle only, compared with what it would otherwise be. It is not, indeed, possible to form any very accurate estimate of the total saving that is thus effected; but, supposing that 50 or 60 millions of gold and silver and bank notes are at present required, notwithstanding all the devices that have been resorted to for economising money, for the circulation of Great Britain, it may, one should think, be fairly concluded that 200 millions would, at the very least, be required to transact an equal extent of business but for those devices. If this statement be nearly accurate, and there are good grounds for thinking that it is rather under than over rated, it strikingly exhibits the vast importance of banking in a public point of view. By its means 50 or 60 millions are rendered capable of performing the same functions, and in an infinitely more commodious manner, that would otherwise have required four times that sum; and supposing that 20 or 30 millions are employed by the bankers as a capital in their establishments, no less than 120 or 130 millions will be

altogether disengaged, or cease to be employed as an instrument of circulation, and made available for employment in agriculture, manufactures, and commerce.

The security afforded by a bank of deposit is a matter as to which there must always be more or less of doubt. When, indeed, a banking company confines itself to its proper business, and does not embark in speculations of unusual hazard, or from which its funds cannot be easily withdrawn, in the event of any sudden run or demand, it can hardly ever fail of being in a situation to meet its engagements; whilst the large private fortunes that most commonly belong to the partners afford those who deal with it an additional guarantee. Much, however, depends on the character of the parties, and on a variety of circumstances with respect to which the public can never be correctly informed; so that though there can be no doubt that the security afforded by many private banks of deposit is of the most unexceptionable description, this may not be the case with others.

All joint-stock banks, or banks having more than six partners, whether for deposit and issue, or for deposit merely, are ordered, by the act 3 & 4 Will. 4. cap. 83., to send quarterly returns of the number and names of their partners to the stamp office. But this act does not apply to private banks, or banks not having more than six partners, though we see no good reason why similar returns should not, and several why they should, be required from them as well as from others. At present few have any certain knowledge of the partners in private banks. Individuals often appear in the names of firms who have been dead for many years; and it has not unfrequently been found in cases of bankruptcy that parties of large fortune, who were supposed to have belonged to the concern, had withdrawn long previously. All uncertainty and obscurity of this kind might, however, be easily put an end to by making periodical declarations of the names of the partners; and provided this were done, and the names made sufficiently public, we doubt whether any other step should be taken for interfering in any way with banks of deposit. There is in this respect a wide difference between them and banks of issue. It is the duty of the government to take care that the value of the currency shall be as invariable as possible; but it has never been pretended that it is any part whatever of its duty to inquire into the security given by the borrowers to the lenders of money, any more than into the security given by the borrowers to the lenders of any thing else. Government very properly obliges a goldsmith to have his goods stamped, this being a security to the public that they shall not be imposed on in buying articles of the quality of which they are generally ignorant; but it does not require that the persons to whom the goldsmith sells or lends his goods should give him a guarantee for their payment. This is a matter as to which individuals are fully competent to judge for themselves; and there neither is nor can be any reason why a lender or depositor of bullion or notes should be more protected than a lender or depositor of timber, coal, or sugar. Gold being the standard or measure of value, government is bound to take effectual precautions that the currency shall truly correspond in the whole and in all its parts with that standard, — that every pound note shall be worth a sovereign, and that the amount and value of the aggregate notes in circulation shall vary exactly as a gold currency would do were it substituted in their stead. But this is all that government is called upon to do. If A. trust a sum of money in the hands of B., it is their affair, and concerns no one else. Provided the money afloat correspond with the standard, it is of no importance, in a public point of view, into whose hands it may come. The bankruptcy of a deposit bank, like that of a private gentleman who has borrowed largely, may be productive of much loss or inconvenience to its creditors. But if the paper in circulation be equivalent to gold, such bankruptcies cannot affect either the quantity or value of money, and are therefore injurious only to the parties concerned.

(2.) *Substitution of Notes for Coins — Banks of Issue — Means by which the Value of Notes may be kept on a Level with the Value of the Precious Metals.* — Notwithstanding the precious metals are in many respects admirably fitted to serve as media of exchange (see art. Money), they have two very serious drawbacks — their cost, and the difficulty and expense of carrying them from place to place. If the currency of Great Britain consisted only of gold, it would amount to at least sixty millions of sovereigns; and the expense attending such a currency, allowing only ¼ per cent. for wear and tear and loss of coins, could not be reckoned at less than 3,250,000*l.* a year. The weight of 1000 sovereigns exceeds 21 lbs. troy; so that were there nothing but coins in circulation, the conveyance of large sums from place to place to discharge accounts would be a very laborious process, and even small sums could not be conveyed without considerable difficulty. Hence it is that most commercial and civilised nations have fabricated a portion of their money of less costly and heavy materials, and resorted to various devices for economising the use of coin. Of the substitutes for the latter hitherto suggested, paper is in all respects the most eligible. When governments are sufficiently powerful and intelligent to enforce the observance of contracts, individuals

possessed of written promises from others that they will pay certain sums at specified periods begin to assign them to those to whom they are indebted; and when those by whom such obligations are subscribed are persons of whose solvency no doubt can be entertained, they are readily accepted in payment of the debts due by one individual to another. But when the circulation of obligations or bills in this way has continued for a while, individuals begin to perceive that they may derive a profit by issuing them in such a form as to fit them for being readily used as a substitute for money in the ordinary transactions of life. Hence the origin of bank notes or paper money. An individual in whose wealth and discretion the public have confidence being applied to for a loan, say of 5,000*l.*, grants the applicant his bill or note payable on demand for that sum on his receiving adequate security for its repayment with interest. Now, as this note passes, in consequence of the confidence placed in the issuer, currently from hand to hand as cash, it is quite as useful to the borrower as if he had obtained an equivalent amount of gold; and supposing that the rate of interest is 4 per cent., it will yield, so long as it continues to circulate, a revenue of 200*l.* a year to the issuer. A sense of the advantages that might, in this way, be derived from the circulation of bills or notes led to the formation of banks for their regular issue. Those who issue such notes, coin as it were their credit. They derive the same revenue from the loan of their written promises to pay certain sums that they would derive from the loan of the sums themselves; and while they thus increase their own income, they at the same time contribute to increase the wealth of the society. Besides being incomparably cheaper, bank notes are also incomparably more commodious than a metallic currency. A bank note for 1,000*l.* or 100,000*l.* may be carried about with as much facility as a single sovereign. It is of importance, too, to observe, that its loss or destruction, whether by fire, shipwreck, or otherwise, would be of no greater importance, in a public point of view, than the loss or destruction of as much paper. No doubt it might be a serious calamity to the holder; but to whatever extent it injured him, it would proportionally benefit the issuer, whereas the loss of coin is an injury to the holder without being of service to any one else; it is, in fact, so much abstracted from the wealth of the community.

To obviate the endless inconveniences that would arise from the circulation of coins of every weight and degree of purity, were there no restrictions on their issue, all governments have forbidden the circulation of coins except they be of a certain specified or standard weight and fineness. And the recurrence of similar inconveniences from the issue of notes for varying sums, and payable under varying conditions, has led, in all countries in which paper money is made use of, to the enacting of regulations forbidding the issue of notes below a certain amount, and laying down rules for their payment. In England at this moment no note payable to bearer on demand can be issued for less than five pounds, and they must all be paid the moment they are presented. In Scotland and Ireland the minimum value of bank notes is fixed at one pound, the regulations as to payment being the same as in England. In order to preserve the monopoly of the London circulation to the Bank of England, no notes payable to bearer on demand are allowed to be issued by individuals or associations, other than the Bank of England, within sixty-five miles of St. Paul's. But beyond these limits every one who complies with the above regulations as to the minimum amount of notes, and who promises to pay them on demand, may, on paying the stamp-duty, and making returns of the issues to the stamp office, circulate any amount of notes he can succeed in getting the public to take off.

But though the condition that they shall be paid on demand, and the belief that this condition will be complied with, be necessary to sustain the value of notes issued by private parties or associations, it is not necessary to sustain the value of paper money, properly so called, or of notes which have been made *legal tender*. The only thing required to sustain the value of the latter description of currency is, that it should be issued in *limited quantities*. Every country has a certain number of exchanges to make; and whether these are effected by the employment of a given number of coins of a particular denomination, or by the employment of the same number of notes of the same denomination, is, in this respect, of no importance whatever. Notes which have been made legal tender, and are not payable on demand, do not circulate because of any confidence placed in the capacity of the issuers to retire them; neither do they circulate because they are of the same real value as the commodities for which they are exchanged; but they circulate because, having been selected to perform the functions of *money*, they are, as such, readily received by all individuals in payment of their debts. Notes of this description may be regarded as a sort of tickets or counters to be used in computing the value of property, and in transferring it from one individual to another. And as they are nowise affected by fluctuations of credit, their value, it is obvious, must depend entirely on the quantity of them in circulation as compared with the payments to be made through their instrumentality, or the business they have to perform. By reducing the supply of notes below the supply of coins that would circulate in their

place were they withdrawn, their value may be raised above the value of gold; while, by increasing them to a greater extent, it is proportionally lowered.

Hence, supposing it were possible to obtain any security other than immediate convertibility into the precious metals, that notes declared to be legal tender would not be issued in excess, but that their number afloat would be so adjusted as to preserve their value as compared with gold nearly uniform, the obligation to pay them on demand might be dispensed with. But it is needless to say that no such security can be obtained. Wherever the power to issue paper, not immediately convertible, has been conceded to any set of persons, it has been abused; or, which is the same thing, such paper has uniformly been over-issued, and its value depreciated from excess. And it is now admitted on all hands to be quite indispensable, for the prevention of injurious fluctuations in the value of money, that all notes be made payable, at the pleasure of the holder, in an unvarying quantity of gold or silver.

But though such be the law in this and most other countries, it is, we are sorry to say, operative only on the richest, most cautious, and respectable bankers; and is found to afford no real security against the roguery and misconduct of others. This security is, however, the more indispensable, seeing that the issue of notes, as now conducted, is, of all businesses, that which seems to hold out the greatest prospect of success to the schemes of those who attempt to get rich by preying on the public. The circumstances that excite the public confidence in the first instance, and that afterwards keep it up, are often of the most treacherous description. The cost of engraving and issuing notes is also but an inconsiderable item, compared with the sums for which they are issued; and provided they be got into anything like extensive circulation, they become at once considerably productive. They are seldom issued, except on the deposit of bills or other securities yielding a considerable rate of interest; so that if an individual, or set of individuals, with little or no capital, contrive by fair appearances, promises, and similar devices, to insinuate himself or themselves into the public confidence, and can maintain 20,000*l*., 50,000*l*., or 100,000*l*. in circulation, he or they secure a good income in the mean time; and when the bubble bursts, and the imposture is detected, they are no worse off than when they set up their bank. On the contrary, the presumption is that they are a great deal better off; and that they have taken care to provide, at the cost of the credulous and deceived public, a reserve stock for their future maintenance. Hence, seeing the facilities for committing fraud are so very great, the propriety, or rather necessity, of providing against them.

It must not be imagined that this is mere hypothetical reasoning. On the contrary, as every body knows, innumerable instances have occurred of the population of extensive districts having suffered severely from the insolvency of bankers in whom they placed the utmost confidence. In 1793, 1814-16, and 1825-26, a very large proportion of the provincial banks stopped payments, and produced by their fall an extent of bankruptcy and ruin that has seldom been equalled in any other country. But when such gigantic disasters have already happened, and were on the eve of again happening in 1837-38, it is surely the bounden duty of government to hinder, by every means in its power, their recurrence. It is no exaggeration to affirm, that we have sustained a thousand times more injury from the circulation of worthless paper, or paper issued by persons without the means of retiring it, than from the issue of spurious coin.

It has, no doubt, been sometimes contended, in vindication of our present system, that bank notes are essentially private paper; that the accepting of them in payment is optional; and that as they may be rejected by every one who either suspects or dislikes them, there is no room or ground for interfering with their issue! But every body knows that, whatever notes may be in law, they are, in most parts of the country, practically and in fact legal tender. The bulk of the people are totally without power to refuse them. The currency of many extensive districts consists in great part of country notes, and such small farmers or tradesmen as should decline taking them would be exposed to the greatest inconveniences. Every one makes use of, or is a dealer in, money. It is not employed by men of business only, but by persons living on fixed incomes, by women, labourers, minors; and in short by every class of individuals, very many of whom are necessarily, from their situation, quite unable to form any estimate of the solidity of the different banks whose paper is in circulation. Such parties are uniformly severe sufferers by the failure of banks. The paper that comes into their hands is a part of the currency or money of the country; and it is quite as much a part of the duty of government to take measures that this paper shall be truly and substantially what it professes to be, as that it should take measures to prevent the issue of spurious coins, or the use of false or deficient weights and measures.

Now it will be found, should the circulation of provincial notes be allowed to continue, that there is but one means of making sure of the solvency of the issuers, and of providing for their being paid when presented; and that is, by compelling all issuers

of such notes to give security for their payment. This, and this only, will hinder the circulation of spurious paper, and afford a sufficient guarantee that the notes which the public are obliged to take are really and in fact what they profess to be. The measure, too, is one that may be easily enforced. To carry it into effect, it is merely necessary to order that all individuals or companies shall, on applying for stamps, be obliged, previously to their obtaining them, to lodge in the hands of the commissioners an assignment of stock, mortgages, landed or other fixed property, equivalent to the amount of the stamps issued to them, to be held in security for their payment. Every one is aware that a security of this sort has been taken in the case of the Bank of England; and that the whole 11,048,000*l.* lent by her to government must be sacrificed before the holders of her notes can sustain any loss. Her stability has, therefore, been truly said by Adam Smith to be equal to that of the British government. Surely, however, if it have been found expedient to take securities from an establishment like the Bank of England, it must be the extreme of folly not to take them from private and joint stock banks.

It has been objected to this plan, that it would be injurious, by locking up a portion of the capital of the banks; but this is plainly an error. Its only effect in this respect would be to force such banks as issued notes to provide a supplemental capital, as a security over and above the capital required for conducting their business. But this supplemental capital would not be unproductive. If it consisted of lands, the owners would receive their rents; and if it consisted of government securities, they would receive the dividends or interest due upon them, precisely in the same way that they are received by other persons; while the fact being known that they possessed this supplemental capital, or that they had lodged security for the payment of their notes, would, by giving the public perfect confidence in their stability, enable them to conduct their business with a less supply of floating or immediately available capital than would otherwise be necessary.

It is absurd to object to this plan on the ground of its interfering with the private pursuits of individuals. It is the duty of government to interfere to regulate every business or pursuit that may otherwise become publicly injurious. On this principle it interferes to prevent the circulation of spurious coins, and of notes under a certain sum, and not payable on demand; and on the same principle it is called on to interfere to prevent the act ordering the payment of notes becoming again, as it has very frequently done already, a dead letter, by making sure that it shall be complied with. The interference that would take place under the proposed measure is not only highly expedient, but would be of the least vexatious kind imaginable. All that is required of the persons applying for stamps for notes is, that they should deposit in the hands of the commissioners a certain amount of exchequer bills, or other available securities, according to their demand for stamps. They are not asked to state how they mean to dispose of these stamps — to whom or in what way they are to be issued. They are merely required to give a pledge that they shall be paid, or that they shall not be employed, as so many others have been, to defraud the public. It is little else than an abuse of language to call this an interference with private affairs.

The taking of security in the way now suggested, from the issuers of notes, would effectually provide for their payment when presented. It would also elevate and improve the character of the banking business. Adventurers without capital, and sharpers anxious to get themselves indebted to the public, would find that banking was no longer a field on which they could advantageously enter. Notes would be made in fact, as well as in law, equivalent to the specie they profess to represent; and the paper currency would acquire a solidity of which it is at present nearly destitute.

The want of security arising from the circulation of worthless paper, or of paper issued by parties who may have neither the means nor the wish to pay it, is not, however, the only evil in the present state of the paper currency. Since provincial banks of issue became considerably multiplied, it has been subject to constant alternations of glut and deficiency, which are in the last degree injurious. A paper currency is not, in fact, in a sound or wholesome state, unless, 1st, means be taken to insure that each particular note or parcel of such currency be paid immediately on demand; and unless, 2d, *the whole currency vary in amount and value exactly as a metallic currency would do were the paper currency withdrawn and coins substituted in its stead.* This last condition is indispensable to the existence of a well-established currency; and it is one that cannot be realized otherwise than by confining the issue of paper to a single source.

It is supposed by many that there can be no greater fluctuations in a paper than in a metallic currency, provided the paper rest on an undoubted basis, and be regularly paid the moment it is presented. But this is an error. Wherever there are numerous issuers, there may be, and the chances are fifty to one there will be, perpetually recurring fluctuations in the amount and value of the currency. An over-issue of convertible paper is not, of course, indicated by any difference between the value of such paper

and gold at home; but it is indicated by a fall of the exchange, and by an efflux of bullion to other countries. If paper were only issued by the Bank of England, or some one source in London, and then only in exchange for bullion, the currency would be in its most perfect state, and would fluctuate exactly as it would do were it wholly metallic. But at present it is quite otherwise. The currency is supplied by hundreds of individuals and associations, all actuated by different and frequently conflicting views and interests. The issues of the Bank of England, though not always, are generally governed by the state of the exchange, or rather by the influx and efflux of bullion, increasing when it flows into, and decreasing when it flows out of, the country. But it is quite otherwise with the provincial bankers. Their issues are not regulated by any such standard, but by the state of credit and prices in the districts in which they happen to be situated. If their managers suppose that these are good or improving, they rarely hesitate about making additional issues. Hence, when the state of the exchange and the demand on the Bank of England for bullion show that the currency is redundant, and ought to be contracted, the efforts of the Bank to effect its diminution are often impeded, and met by a contrary action on the part of the country banks. This is not owing to the ignorance of the latter. Under the supposed circumstances, the country bankers see, speaking generally, that they ought also to contract; but being a very numerous body, comprising several hundred establishments scattered over all parts of the country, each is impressed with the well-founded conviction, that all that he could do in the way of contraction would be next to imperceptible; and no one ever thinks of attempting it, so long as he feels satisfied of the stability of those with whom he deals. On the contrary, every banker knows, were he to withdraw a portion of his notes, that some of his competitors would most likely embrace the opportunity of filling up the vacuum so created; and that consequently he should lose a portion of his business, without in any degree lessening the amount of paper afloat. Hence, in nineteen out of twenty instances, the country banks go on increasing their aggregate issues long after the exchange has been notoriously against the country, and the Bank of England has been striving to pull up.

The circumstances now stated were strikingly exemplified in the course of 1836 and the early part of 1837. The excessive multiplication of joint-stock banks in 1836, the great additions they made to the number of notes afloat, and the still greater additions they made to the number of bills, checks, and other substitutes for money, occasioned a redundancy of the currency, a fall of the exchange, and a drain upon the Bank of England for gold. But while the latter was narrowing her issues, by supplying the exporters of bullion with gold in exchange for notes, the country banks went on increasing their issues. What the former did by contracting on the one hand, the latter more than undid by letting out on the other. The vacuum created by the withdrawal of Bank of England paper was immediately filled up and made to overflow by the issue of a more than equal amount of provincial paper; so that had it not been for the rise in the rate of interest, and the other repressive measures adopted by the Bank, the probability is that she might have gone on paying away bullion for notes till she was drained of her last sixpence, without materially affecting the exchange. But this is not all. Not only do the country banks almost universally increase their issues when they ought to be diminished, but the moment they are compelled to set about their reduction they run headlong into the opposite extreme, and unreasonable suspicion takes the place of blind unthinking confidence. The cry of *sauve qui peut* then becomes all but universal. It is seldom that a recoil takes place without destroying more or fewer of the provincial banks; and provided the others succeed in securing themselves, little attention is usually paid to the interests of those they have taught to look to them for help, who are commonly destroyed by thousands.

It has been supposed that the objections to the issue of notes on our present system, because of the risk of non-payment, might be obviated were they issued only by associations or joint-stock companies. But it is not easy to see on what principle leave should be granted to fifty or sixty individuals to do that which is to be denied to five or six. And though this difficulty were got over, the measure would not have the effect supposed. A single individual may possess more wealth than a number of individuals associated together; and the chances are, that if he engage in banking, or any other business, it will be better managed than by a company. Under our present system, and in fact it is impossible to prevent it under any system, the partners in joint-stock banks, as in others, may be men of straw, or persons without property, and unable to fulfil their engagements. It is of the essence of a secure and well-established paper currency, that the notes of which it consists should be of the exact value of the gold or silver they profess to represent, and that, consequently, they should be paid the moment they are presented. But it is not enough to order that this condition shall be uniformly complied with. Such order is obeyed only by the opulent, prudent, and conscientious banker, and forms little or no check on the proceedings of those of a contrary

character. It is the latter class, however, that it is especially necessary to look after; and it is needless to say that any system that permits notes to be issued without let or hinderance by speculative, ignorant, or unprincipled adventurers, must be essentially vicious.

We have stated these principles so much at large, rather by way of illustrating the mischievous practical operation of our present pecuniary system, than because we have much expectation that the issue of notes by private parties or associations is at all likely to be suppressed. The practice has been too long acted upon, is participated in by too many and too powerful individuals, and is too closely connected with the habits, modes of business, and prejudices of the people, to allow us to believe that, how desirable soever, it is likely to be suppressed. No doubt, also, if that security which is in every point of view so indispensable were taken from the issuers of notes, the injurious fluctuations in the quantity and value of money to which we have alluded would be most materially diminished. Bankers would then, speaking generally, be of a higher and a wealthier class; and would therefore be less likely to engage in hazardous schemes, or to advance loans to parties in doubtful circumstances; and independently of this, the necessity of increasing their securities when they increased their issues would probably, in most cases, hinder the latter being done except when it was really required.

It is exceedingly difficult to prevent the issue of forged notes. Various schemes have been suggested for this purpose; and though it be hardly possible to suppose that an *inimitable* note will ever be produced, it is contended that by judiciously combining different sorts of engraving forgery may be rendered so difficult, as to be but rarely attempted. But however this may be, during the period from 1797 to 1819, when the Bank of England issued 1*l.* notes, their forgery was carried on to a great extent. And the desire to check this practice, and to lessen the frequency of capital punishments, appears to have been amongst the most prominent circumstances which led to the return to specie payments in 1821, and the suppression of 1*l.* notes.

(3.) *Bank of England Notes legal Tender.* — According to the law as it stood previously to 1834, all descriptions of notes were legally payable at the pleasure of the holder, in coin of the standard weight and purity. But the policy of such a regulation was very questionable; and we regard the enactment of the stat. 3 & 4 Will. 4, c. 98., which makes Bank of England notes legal tender, every where except at the Bank and its branches, for all sums above 5*l.*, as a great improvement. The unjust liabilities imposed upon the Bank of England by the old system, placed her in a situation of great difficulty and hazard. They obliged her to provide a supply of coin and bullion, not for her own exigencies only, but for those of *all* the country banks; and, what is harder still, they exposed her to be deeply injured by any misconduct on the part of the latter, as well as by the distress in which they might accidentally be involved. In consequence, her free action was at all times in some degree impeded; and her power to render assistance to the banking and mercantile interests in periods of discredit materially diminished. The country banks kept but a small supply of coin in their coffers. They were all, however, holders, to a greater or less extent, of government securities; and whenever any circumstance occurred to occasion a demand upon them for coin, they immediately sold or pledged the whole or a portion of their stock, carried the notes to the Bank to be exchanged, and then carried the specie to the country. Hence, when any suspicions were entertained of the credit of the country banks, or when a panic originated amongst the holders of their notes, as was the case in 1793 and 1825, the whole of them retreated upon the Bank of England, and 700 or 800 conduits were opened, to draw off the specie of that establishment, which was thus, it is evident, exposed to the risk of stoppage without having done any thing wrong. It was not the drain for gold from abroad, but the drain for gold from the country, that nearly exhausted the Bank's coffers in 1825, and forced her to issue about a million of 1*l.* and 2*l.* notes. The currency could not possibly be in a sound healthy state, while the Bank of England, and, through her, public credit, were placed in so perilous a situation. But the making of Bank of England notes legal tender at all places except the Bank, has tended materially to protect her from the injurious consequences of panics or runs among the holders of country bank paper; and while it does this, it has not, as it appears to us, anywise impaired the securities against over-issue or depreciation.

It has, no doubt, been contended that the measure now referred to might lead to the depreciation of provincial paper; inasmuch as the expense of sending notes from a distance to London, to be exchanged for gold, would prevent any one from demanding Bank of England notes from country banks in good credit, till the value of the notes issued by them was so much depreciated below the value of gold that the difference would more than pay the expense of sending them to London, and bringing gold back. There cannot, however, be the least difference, as respects value, in the pro-

vinces, between Bank of England paper, now that it is legal tender, and gold. London being the place where the exchanges are adjusted, the value of money in every part of the empire must depend on its value in it; and *this*, it is plain, is not in any degree affected by the measure under consideration. Formerly the provincial currency, gold as well as paper, might be, and indeed frequently was, depreciated. This was brought about either by an over-issue on the part of the country banks, generally in the first instance the effect, but always in the end the cause, of a rise of prices; or by the issues of the Bank of England being, in consequence of an adverse exchange, narrowed sooner or more rapidly than those of the country banks. In either case, the provincial currency being redundant as compared with that of the metropolis, there was a demand on its issuers for bills on London; but it is material to observe, that, unless their credit was suspected, there was not, in such cases, any demand upon them for gold. It is, indeed, obvious that a redundancy of the currency is a defect that cannot be obviated by getting gold from the country banks, unless (as hoarding is out of the question) it be intended to send it abroad; and that may always be done *better and cheaper* by getting from them Bank of England notes, or bills on London. A local redundancy of the currency may take place now as it has done formerly; and its occurrence cannot be prevented, even though paper were wholly banished from circulation, so long as the whole currency is not supplied from *one* source, and as London is the focus where the exchanges with foreign countries are adjusted. But the statements now made show that it is a radical mistake to suppose that it can take place more readily, or to a greater extent, under the present system than formerly. In this respect no change was made in 1834. But while our ancient security against over-issue was maintained unimpaired, the arrangements then made increased the stability of the Bank of England, and consequently improved our pecuniary system.

If any doubt could possibly remain as to the operation of this system, it would be removed by referring to Scotland. Gold has been practically banished from that country for a long series of years; and yet no one pretends to say that prices are higher in Scotland than in England, or that her currency is depreciated. The Scotch currency is kept at its proper level, not by the check of gold payments, but by the demand for bills on London; and it is as effectually limited in this way as it would be were the banks universally in the habit of exchanging notes for gold. On what grounds, then, is it to be apprehended that the obligation to give Bank of England notes or bills on London will be less effectual in restraining over-issue in Yorkshire or Durham than in Scotland?

A banker who issues notes must keep beside him such a stock of cash and bullion as may be sufficient to answer the demands of the public for their payment. If the value of the cash and bullion in his coffers were equal to the value of his notes in circulation, he would not, it is plain, make any profit; but if he be in good credit, a third, a fourth, or even a fifth part of this sum, will probably be sufficient; and his profit consists of the excess of the interest derived from his notes in circulation over the interest of the sum he is obliged to keep dormant in his strong box, and the expenses of managing his establishment. The Bank of England, as will be afterwards seen, keeps an average stock of coin and bullion equal to a third of her liabilities.

(4.) *Legal Description of Bank Notes.* — Bank notes are merely a species of promissory notes. They are subscribed either by the parties on whose account they are issued, or by some one in their employment, whose signature is binding upon them. A Bank of England note for 5*l.* is as follows: —

Bank of England.

I promise to pay Mr. Matt^w Marshall, or Bearer,

on Demand, the Sum of Five *Pounds.*

1843 *June* 9 *London* 9 *June* 1843.

For the Govr and Comp^y of the

£ Five BANK OF ENGLAND.

A. B.

No particular form of words is necessary in a bank note. The essential requisites are, that it should be for a definite sum (in England and Wales not less than 5*l.*, and in Scotland and Ireland not less than 1*l.*), that it should be payable to bearer on demand, and that it should be properly stamped. Promissory notes, though issued by bankers, if not payable to bearer on demand, do not come under the denomination of

bank notes: they are not, like the latter, taken as cash in all ordinary transactions; nor are they, like them, assignable by mere delivery.

The circulation of notes for less than *5l.* was restrained by law (stat. 15 Geo. 3. c. 51.) from 1766 to 1797. In 1808, it was enacted by stat. 48 Geo. 3. c. 88., that all bank notes, promissory notes, or other negotiable instruments for less than 20*s.*, should be absolutely void: a penalty of from 20*s.* to *5l.*, at the discretion of the justices, being imposed on their issuers. It was enacted by the 7 Geo. 4. c. 6., that the issue of all bank notes or promissory notes for less than *5l.* by the Bank of England, or by any licensed English bankers, and stamped on the 5th of February, 1826, or previously (after which period such notes were not stamped), should terminate on the 5th of April, 1829.

The stamp duties on bank notes or promissory notes payable on demand are, —

	£	s.	d.		£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
Not exceeding	1	1	0	- - -	-	-	-	0	0	5	Exceeding	10	0	0	and not exceeding	20	0	0	0	2	0
Exceeding	1	1	0	and not exceeding	2	2	0	0	0	10		—		20	0	0	—	30	0	0	0	3	0
	2	2	0		5	5	0	0	1	3		—		30	0	0	—	50	0	0	0	5	0
	5	5	0		10	0	0	0	1	9		—		50	0	0	—	100	0	0	0	8	6

Which notes may be reissued after payment, as often as shall be thought fit, provided they be issued by a banker or person who has taken out a licence, renewable annually, and costing 30*l.*, to issue notes payable to bearer on demand. Any banker or other person issuing such reissuable notes, without being duly licensed, shall forfeit 100*l.* for every offence. — (*55 Geo.* 3. c. 184. § 27.)

These conditions do not apply to the Bank of England, the stamp duties on the notes of that establishment being compounded for at the rate of 3,500*l.* per million of its notes in circulation.

Notes or bills *not* payable to bearer on demand are not reissuable, under a penalty of 50*l.* For the stamp duties affecting them, see EXCHANGE.

By the 9 Geo. 4. c. 23., English bankers not in the city of London, or within three miles thereof, are authorised to issue promissory notes, and to draw and issue bills of exchange, on unstamped paper, for any sum of *5l.* or upwards, expressed to be payable to the bearer on demand, or to order at any period not exceeding 7 days after sight (*bills* may also be drawn at any period not exceeding 21 days after date), upon obtaining licences, costing 30*l.*, to that effect; provided such bills of exchange be drawn upon bankers in London, Westminster, or Southwark; or provided such bills be drawn by any banker or bankers at the place where he or they shall be licensed to issue unstamped notes and bills, upon himself or themselves, or his or their copartner or copartners, payable at any other place where such banker or bankers shall be licensed to issue such notes and bills. Bankers having such licences are to give security, by bond, that they will keep a true account of all promissory notes and bills so issued, and account for the duties on them at the rate of 3*s.* 6*d.* for every 100*l.*, and also for the fractional parts of 100*l.* of the average value of such notes and bills in circulation. Persons post-dating unstamped notes or bills shall, for every such offence, forfeit 100*l.*

(*5.*) *Legal Effect of the Payment of Bank Notes.* — Notes of the Bank of England were not, previously to the act 3 & 4 Will. 4. c. 98., like bills of exchange, mere securities, or documents of debt, but were treated as money or cash in the ordinary course or transactions of business; the receipts given upon their payment being always given as for money. Now, however, they are legal tender, everywhere except at the Bank, for all sums above *5l.* All notes payable to bearer are assignable by delivery. The holder of a bank note is *primâ facie* entitled to its prompt payment, and cannot be affected by the previous fraud of any former holder in obtaining it, unless evidence be given to show that he was privy to such fraud. Such privity may, however, be inferred from the circumstances of the case. To use the words of Lord Tenterden, "If a person take a bill, note, or any other kind of security, under circumstances which *ought to excite suspicion* in the mind of any reasonable man acquainted with the ordinary affairs of life, and which ought to put him on his guard to make the necessary inquiries, and he do not, then he loses the right of maintaining possession of the instrument against the lawful owner." — (Guildhall, 25th October, 1826.)

Country-bank notes are usually received as cash. But though taken as such, if they be presented *in due time* and not paid, they do not amount to a payment, and the deliverer of the notes is still liable to the holder. It is not easy to determine what is a due or reasonable time, inasmuch as it must depend in a great measure on the circumstances of each particular case. On the whole, the safest rule seems to be to present all notes or drafts payable on demand, if received in the place where they are payable, on the day on which they are received, or as soon after as possible. When they have to be transmitted by post for payment, no unnecessary delay should be allowed to intervene. — (*Chitty's Commercial Law*, vol. iii. p. 590.; and the art. CHECK in this Dictionary.)

6. *Distinction between Bank Notes and Bills of Exchange.* — It is common with those

who object to any restrictions being laid on the issue of bank notes to represent them as substantially identical with ordinary bills of exchange, and to contend that if it would be imprudent or impracticable to interfere with the issue of the latter, the issue of the former should also be left to the discretion of the parties. The cases, however, are not parallel. It is true that bills of exchange perform in some respects the functions of money; and being transferred from one individual to another make payments much in the same way as if they were bank notes. But though there are, no doubt, certain points in which bills of exchange and bank notes closely resemble each other, there are others, and those too of the greatest importance, in which there is a distinct and material difference between them. Bank notes are issued only by parties licensed for the purpose, or by bankers; they are uniformly payable on demand, or when presented; they are not indorsed by the holder on his paying them away; the party receiving has no claim on the party from whom he received them in the event of the failure of the issuers *; and every one is thus encouraged, reckoning on the facility of passing them to others, to accept bank notes, "even though he should doubt the ultimate solvency of the issuers."—(*Thornton on Paper Credit*, p. 172.) Bills, on the contrary, may be drawn by all individuals; they are mostly all made payable at some distant period; and those into whose hands they come, if they be not in want of money, prefer retaining them in their possession, in order that they may get the interest accruing upon them. But the principal distinction between notes and bills is, that the latter are not assignable by mere delivery, but that every individual, in passing a bill to another, has to indorse it, and by doing so makes himself responsible for its payment. "A bill circulates," says Mr. Thornton, "in consequence chiefly of the confidence placed by each receiver of it in the last indorser, his own correspondent in trade; whereas the circulation of a bank note is owing rather to the circumstance of the name of the issuer being so well known as to give it an universal credit." (P. 40.) Nothing, then, can be more inaccurate than to represent bills and notes in the same point of view. If A. pay to B. 100*l.* in satisfaction of a debt, there is an end of the transaction; but if A. pay to B. a bill of exchange for 100*l.*, the transaction is not completed; and, in the event of the bill not being paid by the person on whom it is drawn, B. will have recourse upon A. for its value. It is clear, therefore, that a great deal more consideration is always required, and may be fairly presumed to be given, before any one accepts a bill of exchange in payment, than before he accepts a bank note. The note is payable on the instant, without deduction—the bill not until some future period; the note may be passed to another without incurring any risk or responsibility, whereas every fresh issuer of the bill makes himself responsible for its value. Notes form the currency of all classes, not only of those who are, but also of those who are not engaged in business, very many of whom are, as already seen, without the power to refuse them, and without the means of forming any correct conclusion as to the solvency of the issuers. Bills, on the other hand, pass only, with very few exceptions, among persons engaged in business, who, being fully aware of the risk they run in taking them, reject such as they apprehend might involve them in loss. There is plainly, therefore, a wide and obvious distinction between the two species of currency; and it would be ridiculous to argue that because government is bound to interfere to regulate the issue of the one, it should also regulate the issue of the other.

II. Bank of England (Account of).

(1.) *Historical Sketch of the Bank.* — This great establishment, which has long been the principal bank of deposit and circulation, not in this country only, but in Europe, was founded in 1694. Its principal projector was Mr. William Paterson, an enterprising and intelligent Scotch gentleman, who was afterwards engaged in the ill-fated colony at Darien. Government being at the time much distressed for want of money, partly from the defects and abuses in the system of taxation, and partly from the difficulty of borrowing, because of the supposed instability of the revolutionary establishment, the Bank grew out of a loan of 1,200,000*l.* for the public service. The subscribers, besides receiving *eight* per cent. on the sum advanced as interest, and 4,000*l.* a year as the expense of management, in all 100,000*l.* a year, were incorporated into a society denominated the *Governor and Company of the Bank of England.* The charter is dated the 27th of July, 1694. It declares, amongst other things, that they shall "be capable in law to purchase, enjoy, and retain to them and their successors, any manors, lands, rents, tenements, and possessions whatsoever; and to purchase and acquire all sorts of goods and chattels whatsoever, wherein they are not restrained by act of parliament; and also to grant, demise, and dispose of the same.

* Practically speaking, this is the fact; but, as seen above, a person paying away a country bank note is liable to be recalled upon for repayment, should the bank fail before it was in the power of the party to whom it was paid, using ordinary diligence, to present it. The responsibility seldom exceeds a couple of hours, and can hardly in any case exceed a couple of days. In practice it is never adverted to.

"That the management and government of the corporation be committed to the governor, deputy governor, and twenty-four directors, who shall be elected between the 25th day of March and 25th day of April, each year, from among the members of the Company duly qualified.

"That no dividend shall at any time be made by the said Governor and Company, save only out of the interest, profit, or produce arising by or out of the said capital stock or fund, or by such dealing as is allowed by act of parliament.

"They must be natural-born subjects of England, or naturalised subjects; they shall have in their own name and for their own use, severally, viz. — the governor at least 4,000*l.*, the deputy governor 3,000*l.*, and each director 2,000*l.* of the capital stock of the said corporation.

"That thirteen or more of the said governors and directors (of which the governor or deputy governor must be always one) shall constitute a court of directors, for the management of the affairs of the Company, and for the appointment of all agents and servants which may be necessary, paying them such salaries as they may consider reasonable.

"Every elector must have, in his own name and for his own use, 500*l.* or more capital stock, and can only give one vote. He must, if required by any member present, take the oath of stock; or the declaration of stock, in case he be one of the people called Quakers.

"Four general courts to be held in every year; in the months of September, December, April, and July. A general court may be summoned at any time, upon the requisition of nine proprietors, duly qualified as electors.

"The majority of electors in general courts have the power to make and constitute by-laws and ordinances for the government of the corporation, provided that such by-laws and ordinances be not repugnant to the laws of the kingdom, and be confirmed and approved, according to the statutes in such case made and provided."

The corporation is prohibited from engaging in any sort of commercial undertaking other than dealing in bills of exchange, and in gold and silver. It is authorised to advance money upon the security of goods or merchandise pledged to it; and to sell, by public auction, such goods as are not redeemed within a specified time.

It was also enacted, in the same year in which the Bank was established, by statute 6 William and Mary, c. 20., that the Bank "shall not deal in any goods, wares, or merchandise (except bullion), or purchase any lands or revenues belonging to the crown, or advance or lend to their Majesties, their heirs or successors, any sum or sums of money by way of loan or anticipation, or any part or parts, branch or branches, fund or funds of the revenue, now granted or belonging, or hereafter to be granted to their Majesties, their heirs and successors, other than such fund or funds, part or parts, branch or branches of the said revenue only, on which a credit of loan is or shall be granted by parliament." And in 1697 it was enacted, that the "common capital and principal stock, and also the real fund of the Governor and Company, or any profit or produce to be made thereof, or arising thereby, shall be exempted from any rates, taxes, assessments, or impositions whatsoever, during the continuance of the Bank; and that all the profit, benefit, and advantage, from time to time arising out of the management of the said corporation, shall be applied to the uses of all the members of the said corporation of the Governor and Company of the Bank of England, rateably and in proportion to each member's part, share, and interest in the common capital and principal stock of the said Governor and Company hereby established."

It was further enacted, in 1697, that the forgery of the Company's seal, or of any sealed bill or bank note, should be felony without benefit of clergy, and that the making of any alteration or erasure in any bill or note should also be felony.

In 1696, during the great recoinage, the Bank was involved in considerable difficulties, and was even compelled to suspend payment of her notes, which were at a heavy discount. Owing, however, to the judicious conduct of the directors, and the assistance of government, the Bank got over the crisis. But it was at the same time judged expedient, in order to place her in a situation the better to withstand any adverse circumstances that might afterwards occur, to increase her capital from 1,200,000*l.* to 2,201,171*l.* In 1708, the directors undertook to pay off and cancel one million and a half of Exchequer bills they had circulated two years before, at 4½ per cent., with the interest on them, amounting in all to 1,775,028*l.*; which increased the permanent debt due by the public to the Bank, including 400,000*l.* then advanced in consideration of the renewal of the charter, to 3,375,028*l.*, for which they were allowed 6 per cent. The Bank capital was then also doubled or increased to 4,402,343*l.* But the year 1708 is chiefly memorable, in the history of the Bank, for the act that was then passed, which declared, that during the continuance of the corporation of the Bank of England, "it should not be lawful for any body politic, erected or to be erected, other than the said Governor and Company of the Bank of England, or for any persons whatsoever, united

or to be united in covenants or partnership, exceeding the number of 6 persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes payable on demand, or in any less time than 6 months from the borrowing thereof."— This proviso, which has had so powerful an operation on banking in England, is said to have been elicited by the Mine-adventure Company having commenced banking business, and begun to issue notes.

It has been pretty generally imagined, from the private banking companies in the metropolis not issuing notes, that they were legally incapacitated from doing so. But the clause in the act of 1708, which has been the only restriction on the issue of notes, applied generally to all England, and had no peculiar reference to London. The fact that banks with 6 or fewer partners have not issued notes in the metropolis, as well as in the provinces, is, therefore, ascribable either to their being aware that their notes would obtain no considerable circulation concurrently with those of a great association like the Bank of England, or from their believing that their issue would not be profitable.

The charter of the Bank of England, when first granted, was to continue for eleven years certain, or till a year's notice after the 1st of August, 1705. The charter was further prolonged in 1697. In 1708, the Bank having advanced 400,000*l.* for the public service, without interest, the exclusive privileges of the corporation were prolonged till 1733. And in consequence of various advances made at different times, the exclusive privileges of the Bank have been continued by successive renewals, till a year's notice, after the 1st of August, 1855, under the proviso that they may be cancelled on a year's notice to that effect being given on the 1st of August, 1845.

We subjoin

An Account of the successive Renewals of the Charter, of the Conditions under which these Renewals were made, and of the Variations in the Amount and Interest of the Permanent Debt due by Government to the Bank, exclusive of the Dead Weight.

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
1694.	Charter granted under the act 5 & 6 Wil. 3. c. 20., redeemable upon the expiration of 12 months' notice after the 1st of August, 1705, upon payment by the public to the Bank of the demands therein specified.			
	Under this act the Bank advanced to the public 1,200,000*l.*, in consideration of their receiving an annuity of 100,000*l.* a year, viz. 8 per cent. interest, and 4,000*l.* for management - - - -	1,200,000	0	0
1697.	Charter continued by the 8 & 9 Wil. 3. c. 20. till 12 months' notice after 1st of August, 1710, on payment, &c.			
	Under this act the Bank took up and added to their stock 1,001,171*l.* Exchequer bills and tallies.			
1708.	Charter continued by 7 Anne, c. 7. till 12 months' notice after 1st of August, 1732, on payment, &c.			
	Under this act the Bank advanced 400,000*l.* to government without interest; and delivered up to be cancelled 1,775,027*l.* 17*s.* 10*d.* Exchequer bills, in consideration of their receiving an annuity of 106,501*l.* 13*s.*, being at the rate of 6 per cent. - - - -	2,175,027	17	10
1713.	Charter continued by 12 Anne, stat. 1. c. 11. till 12 months' notice after 1st of August, 1742, on payment, &c.			
	In 1716, by the 3 Geo. 1. c. 8., Bank advanced to government, at 5 per cent. - - - - - - - - -	2,000,000	0	0
	And by the same act, the interest on the Exchequer bills cancelled in 1708 was reduced from 6 to 5 per cent.			
	In 1721, by 8 Geo. 1. c. 21., the South Sea Company were authorised to sell 200,000*l.* government annuities, and corporations purchasing the same at 26 years' purchase were authorised to add the amount to their capital stock. The Bank purchased the whole of these annuities at 20 years' purchase - - - - - - - -	4,000,000	0	0
	5 per cent. interest was payable on this sum to Midsummer, 1727, and thereafter, 4 per cent.	9,375,027	17	10
	At different times between 1727 and 1738, both inclusive, the Bank received from the public, on account of permanent debt, 3,275,027*l.* 17*s.* 10*d.*, and advanced to it on account of ditto, 3,000,000*l.*: difference - - - - - - - - - -	275,027	17	10
	Debt due by the public in 1738 - - - - - -	9,100,000	0	0
1742.	Charter continued by 15 Geo. 2. c. 13. till 12 months' notice after 1st of August, 1764, on payment, &c.			
	Under this act the Bank advanced 1,600,000*l.* without interest, which being added to the original advance of 1,200,000*l.*, and the 400,000*l.* advanced in 1710, bearing interest at 6 per cent., reduced the interest on the whole to 3 per cent. - - - - - -	1,600,000	0	0
	In 1745, under authority of 19 Geo. 2. c. 6., the Bank delivered up to be cancelled 986,000*l.* of Exchequer bills, in consideration of an annuity of 39,472*l.* being at the rate of 3 per cent. - - -	986,000	0	0
	In 1749, the 23 Geo. 2. c. 6. reduced the interest on the 4 per cent. annuities held by the Bank to 3½ per cent. for 7 years from the 25th of December, 1750, and thereafter to 3 per cent.			
1764.	Charter continued by 4 Geo. 3. c. 25. till 12 months' notice after 1st of August, 1786, on payment, &c.			
	Under this act the Bank paid into the Exchequer 110,000*l.* free of all charge.			

Account of the successive Renewals of the Charter, &c.—*continued*.

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
1781.	Charter continued by 21 Geo. 3. c. 60. till twelve months' notice after 1st of August, 1812, on payment, &c.			
	Under this act the Bank advanced 3,000,000*l.* for the public service for 3 years at 3 per cent.			
1800.	Charter continued by 40 Geo. 3. c. 28. till 12 months' notice after 1st of August, 1833, on payment, &c.			
	Under this act the Bank advanced to government 3,000,000*l.* for 6 years without interest; but in pursuance of the recommendation of the committee of 1807, the advance was continued without interest till 6 months after the signature of a definitive treaty of peace.			
	In 1816, the Bank, under authority of the act 56 Geo. 3. c. 96., advanced at 3 per cent., to be repaid on or before 1st of August, 1833 -	3,000,000	0	0
1833.	Charter continued by 3 & 4 Will. 4. c. 98. till 12 months' notice after 1st of August, 1855, with a proviso that it may be dissolved on 12 months' notice after 1st of August, 1845, on payment, &c.	14,686,800	0	0
	This act directs that in future the Bank shall deduct 120,000*l.* a year from their charge on account of the management of the public debt; and that a fourth part of the debt due by the public to the Bank, or 3,638,250*l.*, be paid off - - - - - - - - -	3,638,250	0	
	Permanent advance by the Bank to the public, bearing interest at 3 per cent., independent of the advances on account of dead weight, &c. - - - - - - - - - -	11,048,550	0	0

For further details as to this subject, see the *Appendix* No. 1. *of the Report of* 1832 *on the Renewal of the Bank Charter*, and the Acts of Parliament referred to in it; see also *Postlethwayt's History of the Revenue*, pp. 301—310.; and *Fairman on the Funds*, 7th ed. pp. 83—88, &c.

The capital of the Bank on which dividends are paid has never exactly coincided with, though it has seldom differed very materially from, the permanent advance by the Bank to the public. We have already seen that it amounted, in 1708, to 4,402,343*l.* Between that year and 1727 it was increased to near 9,000,000*l.* In 1746, it amounted to 10,780,000*l.* From this period it underwent no change till 1782, when it was increased 8 per cent., or to 11,642,400*l.* It continued stationary at this sum down to 1816, when it was raised to 14,553,000*l.* by an addition of 2·5 per cent. from the profits of the Bank, under the provisions of the act 56 Geo. 3. c. 96. The act for the renewal of the charter, 3 & 4 Will. 4. c. 98., directed that the sum of 3,638,250*l.* of the debt due to the Bank should be repaid by the public, giving the directors power, if they thought fit, to deduct it from the Bank capital; but this was not done, and the sum was reinvested in a government annuity, terminable in 1860.

The Bank of England has been frequently affected by panics amongst the holders of its notes. In 1745, the alarm occasioned by the advance of the Highlanders under the Pretender as far as Derby, led to a run upon the Bank; and in order to gain time to concert measures for averting the run, the directors adopted the device of paying in shillings and sixpences! But they derived a more effectual relief from the retreat of the Highlanders; and from a resolution agreed to at a meeting of the principal merchants and traders of the city, and very numerously signed, declaring the willingness of the subscribers to receive Bank notes in payment of any sum that might be due to them, and pledging themselves to use their utmost endeavours to make all their payments in the same medium.

During the tremendous riots in June, 1780, the Bank incurred considerable danger. Had the mob attacked the establishment at the commencement of the riots, the consequences might have proved fatal. Luckily, however, they delayed their attack till time had been afforded for providing a force sufficient to insure its safety. Since that period a considerable military force is nightly placed in the interior of the Bank, as a protection in any emergency that may occur.

In the latter part of 1792 and beginning of 1793, there was, in consequence of a previous over-issue on their part, a general run on most of the private banks; and about a *third* part of these establishments were forced to stop payment. This led to a considerable demand for coin from the Bank.

The year 1797 is, however, the most important epoch in the recent history of the Bank. Owing partly to events connected with the war in which we were then engaged — to loans to the Emperor of Germany — to bills drawn on the treasury at home by the British agents abroad — and partly, and chiefly, perhaps, to the advances most unwillingly made by the Bank to government, which prevented the directors from having a sufficient control over their issues, — the exchanges became unfavourable in 1795, and in that and the following year large sums in specie were drawn from the Bank. In the latter end of 1796 and beginning of 1797, considerable apprehensions were entertained of invasion, and rumours were propagated of descents having been actually made on the coast. In consequence of the fears that were thus excited, runs were made on the provincial banks in different parts of the country; and some of them having failed,

the panic became general, and extended itself to London. Demands for cash poured in upon the Bank from all quarters; and on Saturday, the 25th of February, 1797, she had only 1,272,000*l.* of cash and bullion in her coffers, with every prospect of a violent run taking place on the following Monday. In this emergency an order in council was issued on Sunday, the 26th, prohibiting the directors from paying their notes in cash until the sense of parliament had been taken on the subject. And after parliament met, and the measure had been much discussed, it was agreed to continue the restriction till six months after the signature of a definitive treaty of peace.

As soon as the order in council prohibiting payments in cash appeared, a meeting of the principal bankers, merchants, traders, &c. of the metropolis, was held at the Mansion House, when a resolution was agreed to, and very numerously signed, pledging, as had been done in 1745, those present to accept, and to use every means in their power to cause Bank notes to be accepted as cash in all transactions. This resolution tended to allay the apprehensions that the restriction had excited.

Parliament being sitting at the time, a committee was immediately appointed to examine into the affairs of the Bank; and their report put to rest whatever doubts might have been entertained with respect to the solvency of the establishment, by showing that at the moment when the order in council appeared the Bank was possessed of property to the amount of 15,513,690*l.*, after all claims upon her had been deducted.

Much difference of opinion has existed with respect to the policy of the restriction in 1797; but, considering the peculiar circumstances under which it took place, its expediency seems abundantly obvious. The run did not originate in any over-issue of Bank paper; but grew entirely out of political causes. So long as the alarms of invasion continued, it was clear that no Bank paper immediately convertible into gold would remain in circulation. And as the Bank, though possessed of ample funds, was without the means of instantly retiring her notes, she might, but for the interference of government, have been obliged to stop payment; an event which, had it occurred, must have produced consequences in the last degree fatal to the public interests.

It had been generally supposed, previously to the passing of the Restriction Act, that Bank notes would not circulate unless they were immediately convertible into cash; but the event showed, conformably to principles that have since been fully explained, that this was not really the case. Though the notes of the Bank of England were not, at the passing of the Restriction Act, publicly declared to be legal tender, they were rendered so in practice, by being received as cash in all transactions on account of government, and of the vast majority of individuals. For the first three years of the restriction, their issues were so moderate that they not only kept on a par with gold, but actually bore a small premium. In the latter part of 1800 however, their quantity was so much increased that they fell to a discount of 8 per cent. as compared with gold, but they soon after rose nearly to par; and it was not until 1808 that the decline of their value excited any considerable attention. Early in 1810, they were at a discount of about 13½ per cent.; and this extraordinary fall having attracted the attention of the legislature, the House of Commons appointed a committee to inquire into the circumstances by which it had been occasioned. The committee examined several witnesses; and in their report, which was drawn up with considerable ability, they justly ascribed the fall to the over-issue of Bank paper, and recommended that the Bank should be obliged to resume cash payments within two years. This recommendation was not, however, acted upon; and the value of Bank paper continued to decline, as compared with gold, till 1814.

At the period when the restriction on cash payments took place in 1797, it is supposed that there were about 280 country banks in existence; but so rapidly were these establishments multiplied, that they amounted to above 900 in 1813. The price of corn, influenced partly by the depreciation of the currency, and the facility with which discounts were obtained, but far more by deficient harvests, and the unprecedented difficulties which the war threw in the way of importation, had risen to an extraordinary height during the five years ending with 1813. But the harvest of that year being unusually productive, and the intercourse with the Continent being then also renewed, prices, influenced by both circumstances, sustained a very heavy fall in the latter part of 1813, and the beginning of 1814. And this fall having ruined a considerable number of farmers, and produced a general want of confidence, such a destruction of provincial paper took place as has rarely been paralleled. In 1814, 1815, and 1816, no fewer than 240 country banks stopped payment; and *eighty-nine* commissions of bankruptcy were issued against these establishments, being at the rate of *one* commission against every *ten and a half* of the total number of banks existing in 1813.

The great reduction that had been thus suddenly and violently brought about in the quantity of country bank paper, by extending the field for the circulation of Bank of

England paper, raised its value in 1817 nearly to a par with gold. The return to cash payments being thus facilitated, it was fixed, in 1819, by the act 59 Geo. 3. c. 78., commonly called Sir Robert Peel's Act, that they should take place in 1823. But to prevent any future over-issue, and at the same time to render the measure as little burdensome as possible, it was enacted, in pursuance of a plan suggested by the late Mr. Ricardo, that the Bank should be obliged, during the interval from the passing of the act till the return to specie payments, to pay her notes, if required, in bars of standard bullion of not less than sixty ounces weight. This plan was not, however, acted upon during the period allowed by law; for, a large amount of gold having been accumulated at the Bank, the directors preferred recommencing specie payments on the 1st of May, 1821. — (See Table I. for an account of the price of bullion, the depreciation of paper, &c. from 1800 to 1821.)

A great diversity of opinion has been entertained with respect to the policy of the return to the old standard, in 1819. By one party it has been represented as a wise and politic measure: they contend that Sir Robert Peel's Act not only put an end to those fluctuations in the value of money, which had previously been productive of great mischief, and gave effect to the solemn engagements into which the public had entered with the national creditor, but that it did this without adding anything material to the national burdens. But another, and also a very numerous party, take a totally different view of this measure: they contend that the public was not really bound to return to cash payments at the old standard at the termination of the war; that the return has very greatly enhanced the value of the currency; and that this enhancement, by adding proportionally to the fixed burdens laid on the industrious classes, has been most injurious to their interests. It will, however, be found in this, as in most cases of the sort, that the statements of both parties are exaggerated; and that if, on the one hand, the measure has not been so advantageous as its eulogists represent, neither, on the other, has it been nearly so injurious as its enemies would have us believe.

In discussing this question, it is material to observe that the value of paper, which had been in 1815 and 1816 about 16¾ per cent. below that of gold, rose in 1817 and 1818, from the causes already mentioned, without any interference whatever on the part of government, to within little more than 2½ per cent. of the value of gold; and that in 1819 the depreciation only amounted to 4½ per cent. — (See Table I.) It is, therefore, quite ludicrous to ascribe to the act of 1819, as is often done, the whole rise that has taken place in the value of the currency since the peace, seeing that the currency had been for *three years previously to its enactment* from 12½ to 14½ per cent. above its value in 1815, and from 21 to 23 per cent. above its value in 1814! The main object which the promoters of the act of 1819 had in view, was to sustain the value of the currency at the point to which it had recovered itself without legislative interference. This, however, could not be done without recurring to specie payments; and the difference of 4½ per cent. that obtained in 1819 between the value of gold and paper, was not deemed sufficiently considerable to warrant a departure from the old standard, and from the acts engaging to restore it.

But it is alleged, that those who suppose that the act of 1819 added only 4½ per cent. to the value of the currency mistake altogether the effect of the measure. It is admitted, indeed, that paper was then only 4½ per cent. less valuable than gold; but by reverting to specie payments, we made an unexpected purchase of *thirty millions* of gold; and it is affirmed that this novel and large demand, concurring simultaneously with the contraction of paper in several of the Continental states, and with a falling off in the supply of bullion from the mines, had the effect of adding very greatly to the value of gold itself, and consequently to that of the currency. It is very difficult, or rather, perhaps, impossible, to determine the precise degree of credit that should be attached to this statement; but while we incline to think that it is well founded to a certain extent, we see no grounds for believing that it is so to anything like the extent that has been stated. The gold imported into Great Britain, to enable the Bank to resume specie payments, was not taken from any particular country or district, but was drawn from the market of the world; and considering the vast extent of the supply whence it was derived, it is against all reason to suppose that its value could be materially influenced by our purchases. We doubt, too, whether the contraction of the paper currency of some of the Continental states, and the substitution of specie in its stead, was not more than balanced by the cessation of the demand for specie for the military chests of the different armies, by the stoppage of the practice of hoarding, and the greater security consequent to the return of peace. And with respect to the falling off in the supplies from the mines, it is not a circumstance, supposing it to have had a considerable influence, that parliament could take into account. It could neither determine the extent to which bullion had been raised, nor at what point the rise would stop, nor how soon it might again begin to decline. The diminution in the supply of

bullion had then continued for too short a period, and its influence on the value of gold was much too uncertain, to make it a ground for interfering in any degree with the standard.

The decline in the price of most articles that has taken place since the peace has been often referred to, as a conclusive proof of the great enhancement in the value of bullion. But the inference is by no means so certain as has been represented. The prices of commodities are as much affected by changes in the cost of their production, as by changes in the quantity of money afloat. Now, there is not one of the great articles of commerce the cost of which has not been considerably reduced, or which has not been supplied from new and more productive sources, within the last few years. The growth of corn, for example, has been vastly extended in France, Prussia, and generally throughout the Continent, by the splitting of large estates, and the complete subversion of the feudal system; and the reduction of its price in this country has been wholly owing to the astonishing improvements made in agriculture, and to the increase of imports from Ireland. The fall in the price of wool is most satisfactorily accounted for by the introduction and rapid multiplication of Merino sheep in Germany, where they seem to succeed even better than in Spain; and by the large and rapidly growing imports from Australia, where little more than 50 years ago there was not a single sheep! And a very large portion, if not the whole, of the fall in the price of colonial products, is admitted, on all hands, to be owing to the destruction of the monopoly system, and the vast extension of cultivation in Cuba, Brazil, Java, Louisiana, &c. Although, therefore, we do not deny that the falling off in the supply of bullion from the mines must have had some influence over prices, we hold it to be the greatest imaginable error to ascribe to it the entire fall that has taken place since the peace. Were its effect rated at from 5 to 10 per cent., we believe it would be very considerably overstated. — (See art. Precious Metals.)

On the whole, therefore, we are disposed to approve of the conduct of those who framed the act of 1819. That it added to the burdens of the industrious classes, and has been in so far hostile to the public interests, it seems impossible to doubt; but it has not done this in anything like the degree which its enemies represent. The period, too, when it was passed is now so distant, that the existing engagements amongst individuals have almost all been formed with reference to the altered value of the currency; so that whatever injury it may have occasioned in the first instance must be nearly gone by. To modify or change the standard at this late period, would not be to repair injustice, but to commit it afresh. At the end of the war, the circumstances were considerably different. The standard had been really abandoned for the previous 18 years; and perhaps we may now say, that it would have been better, all things considered, had the mint price of bullion been raised, in 1815, to the market price. But having surmounted all the difficulties attendant upon the restoration of the old standard, and maintained it since 1821, it would be in the last degree impolitic to subject it to new alterations. Should the country become, at any future period, unable to make good its engagements, it will better consult its honour and its interest by fairly compounding with its creditors, than by endeavouring to slip from its engagements by resorting to the underhand and dishonest expedient of enfeebling the standard.

The price of corn, which had been very much depressed in 1821 and 1822, rallied in 1823; and this circumstance contributed, along with others peculiar to that period, to promote an extraordinary rage for speculation. The issues of the country banks being in consequence far too much extended, the currency became redundant in the autumn of 1824; and the exchanges having been depressed, a drain for gold began to operate upon the Bank of England. But the directors of the Bank having entered, in the early part of that year, into an engagement with government to pay off such holders of 4 per cent. stock as might dissent from its conversion into a 3½ per cent. stock, they were obliged to advance a considerable sum on this account after the depression of the exchange. This tended to counteract the effect of the drain on the Bank for gold; and, in consequence, the London currency was not very materially diminished till September, 1825. When, however, the continued demand of the public on the Bank for gold had rendered money scarce in the metropolis, the pressure speedily extended to the country. Such of the provincial banks — and they were a numerous class — as had been originally established without sufficient capital, or had conducted their business upon erroneous principles, began to give way the moment they experienced an increased difficulty of obtaining pecuniary accommodations in London. The alarm, once excited, soon became general; and confidence and credit were, for a while, almost wholly suspended. In the short space of 6 weeks, above 70 banking establishments were destroyed, notwithstanding the very large advances made to them by the Bank of England; and the run upon the Bank for cash to supply the exigencies of the country banks was so heavy, that she was well nigh drained of all the coin in her coffers, and obliged, as already remarked, to issue about a million of 1*l.* and 2*l.* notes.

To guard against a recurrence of the wide-spread mischief and ruin produced by this and the previous bankruptcies of the country banks, it was resolved, in 1826, with consent of the Bank of England, to make a change in the law of 1708, limiting the number of partners in banking establishments to 6 only. And it was accordingly enacted, that thenceforth any number of partners might form themselves into associations to carry on the business of banking, including the issue of notes, any where not within *sixty-five miles* of London. The directors of the Bank of England came, at the same time, to the resolution of establishing branches in some of the principal towns; and these have since been established in Gloucester, Manchester, Birmingham, Leeds, Liverpool, Bristol, Exeter, Newcastle-upon-Tyne, Hull, Norwich, &c.

The branch banks have been highly useful; but the benefits which it was supposed would result from the formation of joint-stock banks have, if realized in any degree, certainly not been nearly so great as was anticipated. — (See *post*, BANKS (ENGLISH PROVINCIAL).) So long as every one is allowed to issue notes without any sort of check or control, a thousand devices may be fallen upon to insure a certain circulation to those that are most worthless. At best, the formation of joint-stock banks is but a feeble palliative of inveterate disorders. It is quite illusory to expect to make any real improvement upon the system of country banking in England, by the mere introduction of a plan for *allowing* banking establishments with large capitals to be set on foot. There have always been, and are at this moment, a great number of such establishments in England. What is really wanted is the adoption of a system that will exclude the possibility of notes being discredited, by *preventing* all individuals or associations from issuing such as have not been previously guaranteed.

Besides attempting to lessen the frequency of bankruptcy among the country banks by repealing the law limiting the number of partners, it was further resolved, in 1826, to prohibit the issue of 1*l.* notes. The policy and effects of this measure gave rise to much dispute. It seems clear that it has gone far to shut up one of the most convenient channels by which the inferior class of country bankers contrived to get their notes into circulation, and must, in so far, have done good. But there are many other channels still open to them; and to imagine that this measure was to place the provincial currency on that solid basis on which it should be placed, was quite visionary. There were no notes under 5*l.* in circulation in 1792; and yet fully *one third* part of the country banks then in existence became bankrupt! The truth is, as already stated, that it is not possible to guard against loss and fraud from the proceedings of the country bankers, otherwise than by compelling them to give security for their issues; and as security may as easily be given for 1*l.* notes as for those of 5*l.*, the suppression of the former does not appear to be essential. No doubt can, however, be entertained, that the representations as to the extreme injury occasioned by the withdrawal of 1*l.* notes were greatly exaggerated; — though it is at the same time obvious that the means of the bankers to make advances, as well as the profit derived from making them, must both have been diminished by the suppression of the small notes; and it would be foolish to deny that this circumstance must have occasioned some loss and inconvenience to many individuals.

These remarks are meant to apply only to the case of the country banks. The extraordinary extent to which the forgery of the 1*l.* notes of the Bank of England was carried affords, perhaps, a sufficient vindication of the policy of their suppression. But the comparatively limited circulation of the country banks, and perhaps we may add the greater attention paid to the manner in which their notes were engraved, hindered their forgery from becoming injuriously prevalent.

(2.) *Cash kept by the Bank. Regulation of her Issues.* — Of late years the Bank directors have endeavoured, as a general rule, to have *as much coin and bullion in their coffers as may together amount, when the exchange is at par, to a third part of the Bank's liabilities, including deposits as well as issues;* so that, in the event of the notes afloat, and the public and private deposits in the coffers of the Bank, amounting to 27,000,000*l.* or 30,000,000*l.*, they would not consider the establishment in a perfectly satisfactory state, unless she was, generally speaking, possessed of about 9,000,000*l.* or 10,000,000*l.* of coin and bullion. And though such a supply seems to afford every requisite security, the experience of recent years has shown that the Bank may be so seriously affected by demands for gold to send abroad in payment of corn in years of deficient harvests, and by the misconduct of the provincial bankers and other causes, that it is if any thing too small.

The issues of the Bank are wholly governed, at least in ordinary cases, by what Mr. Horsley Palmer expressively called "the action of the public:" — that is, they are increased during a favourable exchange, or when bullion is sent to the Bank to be exchanged for notes; and diminished during an unfavourable exchange, or when notes are sent to the Bank to be paid. If the exchange were so favourable that the Bank was

accumulating considerably more bullion than was equivalent to the third part of her liabilities, the directors would seem to be justified in adding to the currency by buying a larger amount of government securities, or by increasing their discounts, &c.; and conversely, if the exchange were so unfavourable as to depress the supply of coin and bullion considerably below the average proportion. But the most intelligent directors seem to think that this would be an undue interference; and, in all but extraordinary cases, the rule of the Bank is, to *allow the public to regulate the currency for itself through the action of the exchange.*

It is frequently said that the value of money, and consequently that the price of all sorts of property, depends on the fiat of the Bank, by which it is capriciously elevated at one time and depressed at another. But the account now given of the mode in which the issues of the Bank are regulated completely disproves such statements; and independently of this, every one who knows that the Bank must pay her notes in coin when presented, and that coin may be at all times obtained from the Mint without any charge, in exchange for bullion, must know that the very supposition of their being true involves a contradiction.

(3.) *Bank of England in its Connexion with Government and the Public.* — The Bank of England conducts the whole banking business of the British government. "It acts not only," says Dr. Smith, "as an ordinary bank, but as a great engine of state. It receives and pays the greater part of the annuities which are due to the creditors of the public; it circulates Exchequer bills; and it advances to government the annual amount of the land and malt taxes, which are frequently not paid till some years thereafter."

(4.) *Advances by the Bank in Discounts, &c.* — The greater part of the paper of the Bank has generally been issued in the way of advances or loans to government, upon security of certain branches of the revenue, and in the purchase of Exchequer bills and bullion; but her issues through the medium of discounts to individuals have, notwithstanding, been at all times considerable, while during war, and in periods of distress, they have been occasionally very great. Generally speaking, however, the directors do not think it advisable to enter into competition with private bankers in the transacting of ordinary banking business, or in the discounting of mercantile paper. Mr. Horsley Palmer is decidedly of opinion, that all banking business, apart from the issue of notes, is better transacted by private bankers than by public bodies. — (*Min. of Evidence, Report of* 1832, p. 37.) He also thinks, that were the Bank to come fairly into competition, at all times, with the private bankers and other individuals, in discounting, it would be very apt to lead, every now and then, to an excess of the currency, and a fall of the exchange, producing fluctuations that could not fail to be most injurious. At present, therefore, and generally since the peace, the rate of interest charged by the Bank for loans has been somewhat above the market rate. The consequence is, that, in ordinary periods, very few applications are made to her for discounts. But, at the same time, every one who has any reasonable security to offer, knows where they may always be had; while the rate of interest charged by the Bank necessarily forms a *maximum* rate which no other establishment can exceed. When, however, any circumstances occur to occasion a pressure in the money market, or a difficulty of obtaining accommodations in the usual channels, the market rate of interest immediately rises to the rate fixed by the Bank; and on such occasions the private bankers, and the public generally, resort to the Bank for aid. She then becomes, as it were, a *bank of support*; and has, as such, on many trying occasions, particularly in 1793, 1815 and 1816, 1825–26, and 1838, rendered essential service to public credit, and to the commercial interests of the country. The usual limited amount of the Bank's discounts does not therefore proceed, as has been absurdly enough stated, from any indisposition on the part of the directors to render every assistance in their power to the commercial classes, but is, in fact, the effect of such disposition. They consider, and we believe justly, that, except under peculiar circumstances, the business of discounting and banking is best conducted by private parties; and that by abstaining from coming into competition with them, they are better able to act as a bank of support — that is, to sustain public and private credit, by making extraordinary advances in seasons of distress and difficulty. This is not to neglect the interests of the mercantile classes, but to promote them in the best and most efficient manner, even though it should be at the expense of the Bank.

At the same time, however, it must be admitted that the interference of the Bank in assisting the commercial interest is a matter that requires the greatest consideration, and that it can only be safely undertaken under very peculiar circumstances. It should always be borne in mind that however a drain for gold may originate, the fact of its existence is of itself a conclusive proof that gold is more valuable abroad than here, and consequently that the currency is redundant and ought to be diminished. Under such circumstances it is the bounden duty of the Bank to narrow her issues, by preventing the vacuum caused by the exchange of bullion for notes from being again filled up by

the issue of fresh notes. This may be done in various ways; but the best and surest way certainly is by raising the rate of discount so as to lessen the number of applicants for loans. — (See *post.*) It is at such periods, however, that the applications for assistance are the most urgent; and it is exceedingly difficult to yield to them, and at the same time to enforce that systematical and continuous reduction of the issues that is indispensable to reduce the currency to its proper level, and to restore the exchange to par. Unquestionably the Bank allowed the stock of bullion in her coffers to be reduced in 1839 a great deal too low. And though, perhaps, as things turned out, less hardship was in the end inflicted on individuals than if the directors had adhered more to the stern path of duty, still it is extremely hazardous to trust in matters of such vast importance to the chapter of accidents; and we incline to think that in this, as in most other cases, the safest plan, or the systematic reduction of the issues whenever the exchange becomes unfavourable, is that also which, speaking generally, is most advantageous to all classes.

In 1839, and we believe, also, on a previous occasion, the Bank negotiated credits abroad, and endeavoured to restore the exchange to par by selling bills on the Continent. The policy of this measure gave rise to a good deal of discussion at the time; but, without entering on the consideration of particular cases, we incline to think that sound policy would dictate the expediency of the Bank's holding a considerable amount of easily convertible foreign securities, and drawing bills against them when the exchange is unfavourable; or, it might be better, perhaps, for the bank to negotiate credits on some of the principal foreign banks, on which she could at any time draw. The costly plan of accumulating a large stock of bullion to be kept locked up in the Bank's coffers for no purpose whatever, except to meet the demand occasioned by a fall of the exchange, though indispensable under the system hitherto pursued, might be to a considerable extent dispensed with by the Bank holding foreign securities, and having credits on some of the principal foreign banks. She might, were she to adopt this plan, probably dispense with the half of what is now reckoned a proper supply of bullion; holding, in its stead, productive securities, which might always be sold at an advantage when the exchange is against us, or which might be pledged to the foreign banks for temporary loans. What merchants want during an adverse exchange is good foreign bills, it being only in default of such that they export bullion; and the Bank, by supplying them with such bills, and getting, of course, her notes in exchange, is able to diminish her issues quite as effectually as if her notes were sent in for bullion. Another advantage of this plan is, that no one knows when it is in operation, and, consequently, that it goes far to obviate that internal discredit and alarm that are apt to be produced when the stock of bullion in the Bank is reduced unusually low. In fact, had the Bank not acted, in part at least, on this plan in 1839, the probability is that she must have suspended payments.

No doubt the Bank would be exposed, if she adopted this plan, to the contingency of losing by her foreign securities in the event of the breaking out of hostilities, or of the occurrence of any event by which their value might be reduced. These events may, however, be in general foreseen and provided against; and if the Bank's investments were judiciously made, not in one only but in several quarters, the risk they would involve does not appear to be at all equivalent to the advantage. The Bank should never, if it be possible to prevent it, allow her stock of bullion to sink below 4½ or 5 millions; and she may always keep it above this amount, provided there be no panic at home, by selling bills drawn against foreign credits or securities, and not reissuing the notes received for them. Perhaps, as the law now stands, there may be legal objections to the Bank's holding foreign securities; but if it be expedient that she should do so, the law might be easily altered.

The amount of the discounts of private paper at the Bank and her branches varies, as already seen, greatly in different periods; and depends, indeed, wholly on contingent and accidental circumstances. Thus on the 1st of January, 1839, the bills discounted in London amounted to only 396,000*l.*, whereas on the 3d of December of the same year they amounted to 3,926,000*l.*

The annual average loss by bad debts on the discounts of the Bank of England in London, from 1791 to 1831, both inclusive, was 31,698*l.* — (*Appen. to Rep. on Bank Charter*, No. 60.)

(*5.*) *Advances by the Bank to Government.* — These are made on account of the produce of taxes not yet received, and on the security of Exchequer bills, &c. They varied, from 1792 down to 1810, from about 10,000,000*l.* to about 16,000,000*l.* During the remainder of the war, and down to 1820, they were a good deal larger; but in 1819 provision was made for reducing the amount of these advances; and they do not at present, excluding the permanent advance on account of the dead weight, exceed a fourth part of their amount in 1820. They are represented by the Exchequer bills and deficiency bills in the hands of the Bank.

(6.) *Balances of Public Money.* — In point of fact, however, a very large part of these advances has been nominal only, or has been virtually cancelled by the balances of public money in the hands of the Bank. Thus, from 1806 to 1810, both inclusive, the average advances to government amounted to 14,492,970*l.* But the average balance of public money in possession of the Bank during the same period amounted to about 11,000,000*l.*; so that the real advance was equal only to the difference between these two sums, or to about 3,500,000*l.* This statement completely negatives, as Mr. Tooke has justly stated, the supposition so commonly entertained and reasoned upon as a point beyond doubt, that the Bank was rendered, by the restriction, a mere engine in the hands of government for facilitating its financial operations. — (*First Letter to Lord Grenville*, p. 64.)

The Bank being enabled to employ the greater part of the balances of public money in her hands as capital, they have formed one of the main sources of the profit she has derived from her transactions with the public. This subject was brought very prominently forward in the Second Report of the Committee of the House of Commons on Public Expenditure in 1807. And it was agreed in the same year, that the Bank should, in consideration of the advantages derived from the public balances, continue the loan of 3,000,000*l.* made to government in 1800 for 6 years, without interest, on the same terms, till 6 months after the signature of a definitive treaty of peace. In 1816, this sum was finally incorporated with the debt due by government to the Bank, at an interest of 3 per cent.

The following statement, taken from the official return in the Second Report on Banks of Issue in 1841, contains

An Account of the Liabilities and Assets (exclusive of the Sum lent by the Bank to the Public) of the Bank of England on the 2d of March, 1841; exhibiting the Amount of the Bank Notes in Circulation in Town and Country, of Public and Private Deposits, and of Public and Private Securities, Bullion, &c. in the Possession of the Bank.

Liabilities.	£.	£.
Circulation:		
London	12,279,000	
Country	4,169,000	
		16,448,000
Deposits, Public, viz.:		
Exchequer Account	707,000	
For payment of Dividends	535,000	
Savings Banks	49,000	
West India Compensation	8,000	
Other Public Accounts	1,375,000	
		2,674,000
Deposits, Private, viz.:		
London Bankers	627,000	
East India Company	450,000	
Loan from ditto		
Bank of Ireland, and Royal Bank of Scotland	94,000	
Other Deposits	2,309,000	
Deposits at Branches	435,000	
		3,895,000
	£.	23,017,000

Assets.	£.	£.
Public Securities.		
Advances on Exchequer Bills:		
Deficiency	2,594,000	
Other Exchequer Bills	559,000	
Exchequer Bills purchased	197,000	
Stock and Annuities	10,615,000	
		13,765,000
Private Securities.		
Bills discounted:		
London	1,105,000	
Country	3,353,000	
		4,458,000
East India Bonds		
City Bonds, &c.	419,000	
Mortgages	1,177,000	
Advances:		
Bills of Exchange	1,456,000	
Exchequer Bills, Stock, &c.	41,000	
		3,123,000
		21,346,000
Bullion		4,502,000
	£.	25,848,000

(7.) *Management of Public Debt.* — Previously to 1786, the Bank received an allowance on this account — that is, for trouble in paying the dividends, superintending the transfer of stock, &c. of 562*l.* 10*s.* a million. In 1786, this allowance was reduced to 450*l.* a million, the Bank being, at the same time, entitled to a considerable allowance for her trouble in receiving contributions on loans, lotteries, &c. This, however, though long regarded as a very improvident arrangement on the part of the public, was acquiesced in till 1808, when the allowance on account of management was reduced to 340*l.* per million on 600,000,000*l.* of the public debt; and to 300*l.* per million on all that it exceeded that sum, exclusive of some separate allowances for annuities, &c. The impression, however, was still entertained, that the allowances for management should be further reduced; and the act 3 & 4 Will. 4. c. 98., for the renewal of the charter, directed that 120,000*l.* a year should be deducted from their amount. During the year ended the 5th of January, 1842, the Bank received 160,282*l.* 12*s.* 9½*d.* for the management of the public debt, and annuities.

It should be observed, that the responsibility and expense incurred by the Bank in managing the public debt are very great. The temptation to the commission of fraud in transferring stock from one individual to another, and in the payment of the dividends, is well known; and notwithstanding the skilfully devised system of checks adopted by the Bank for its prevention, she has frequently sustained very great losses by forgery and otherwise. In 1803, the Bank lost, through a fraud committed by one of her principal cashiers, Mr. Astlett, no less than 340,000*l.*; and the forgeries of Fauntleroy the banker cost her a still larger sum! At an average of the 10 years

ending with 1831, the Bank lost, through forgeries on the public funds, 40,204*l.* a year.* — (*Report on Bank Charter, Appen.* p. 165.)

The total sums paid by the public to the Bank on account of the loans raised, Exchequer bills funded, transfer of 3½ per cent. stock, &c. from 1793 to 1820, both included, amounted to 426,795*l.* 1*s.* 11*d.* — (*Parl. Paper* No. 81. Sess. 1822.)

(8.) *Dead Weight.* — Besides the transactions alluded to, the Bank entered, on the 20th of March, 1823, into an engagement with government with respect to the public pensions and annuities, or, as they have been more commonly termed, the *dead weight*. At the end of the war, the naval and military pensions, superannuated allowances, &c. amounted to above 5,000,000*l.* a year. They would, of course, have been gradually lessened and ultimately extinguished by the death of the parties. But it was resolved, in 1822, to attempt to spread the burden equally over the whole period of *forty-five* years, during which it was calculated the annuities would continue to decrease. To effect this purpose, it was supposed that, upon government offering to pay 2,800,000*l.* a year for 45 years, capitalists would be found who would undertake to pay the entire annuities, according to a graduated scale previously determined upon, making the first year a payment of 4,900,000*l.*, and gradually decreasing the payments until the forty-fifth and last year, when they were to amount to only 300,000*l.* This supposition was not, however, realized. No capitalists were found willing to enter into such distant engagements. But in 1823 the Bank agreed, on condition of receiving an annuity of 585,740*l.* for *forty-four* years, commencing on the 5th of April, 1823, to pay, on account of the pensions, &c., at different specified periods, between the years 1823 and 1828, both inclusive, the sum of 13,089,419*l.* — (4 *Geo.* 4. c. 22.)

(9.) *Rate of Discount.* — The Bank discounted private bills at 5 per cent. during nearly the whole period from her establishment till 1824, when the rate was reduced to 4 per cent. It was again raised to 5 per cent. on the 13th December 1825, since which period the variations have been as under:

From 5 July 1827, to 21 July 1836	- - 4 per cent.	From 1 Aug. 1839 to 23 Jan. 1840	- - 5 per cent.
21 July to 1 Sept. - -	- - 4½	15 Oct. 1840. Discounts limited to bills having not more than 65 days to run.	
1 Sept. 1836 to 15 Feb. 1838	- - 4		
15 Feb. 1838 to 16 May 1839	- - 5	3 June 1841. Discounts extended to bills having 95 days to run.	
16 May to 20 June - -	- - 5½		
20 June to 1 Aug. - - -	- - 6	7 April 1842 - - - -	- 4 per cent.

When the currency happens, from any cause, to become redundant, its contraction, always a matter of some difficulty, is to be effected only (if she hold no foreign securities) by the sale of bullion or public securities by the Bank, or by a diminution of the usual discounts, or both. But were the Bank to throw any considerable amount of public securities upon the market, the circumstance would be apt to excite alarm; and, even though it did not, it would be difficult to dispose of them without a heavy loss. Hence, when a reduction is determined upon, it is most commonly effected, in part at least, by a contraction of discounts; and it is plain that such contraction cannot be made except by rejecting altogether some of the bills sent in for discount, or, which is in effect the same thing, by shortening their dates, or by raising the rate of interest, so that fewer may be sent in. Of these methods, the last seems to be in every respect the most expedient. When bills are rejected for no other reason than that the currency may be contracted, the greatest injury is done to individuals who, entertaining no doubt of getting their usual accommodations from the Bank, may have entered into transactions which they are thus deprived of the means of completing. When the reduction is made by raising the rate of interest, it principally affects those who are *best*

* We subjoin an abstract of the principal provisions in the statute 1 Will. 4. c. 66., with respect to the forgery of bank notes, powers of attorney, &c.

It is enacted, that if any person shall forge or alter, or shall offer, utter, dispose of, or put off, knowing the same to be forged or altered, any Exchequer bill or Exchequer debenture, or any indorsement on or assignation of any such bill or debenture, or any East India bond, or indorsement upon or assignation of the same, or any note or bill of the Bank of England, or a bank post bill, or any indorsement on or assignment of any bank note, bank bill of exchange, or bank post bill, with intent to defraud any person whatsoever, he shall be guilty of felony, and shall upon conviction suffer death as a felon. — § 3.

Persons making false entries in the books of the Bank of England, or other books in which accounts of public stocks or funds are kept, with intent to defraud, shall suffer death as felons. — § 5.

By the same act, the forging of any transfer of any share of, or interest in, or dividend upon, any public stock, or of a power of attorney to transfer the same, or to receive dividends thereon, is made capital. If any person, falsely personating the owner of any share, interest, or dividend of any of the public funds, thereby transfer such share, &c., and receive the money due to the lawful owner, he shall upon conviction suffer death as a felon. — § 6.

And any person *endeavouring* by such false personation to procure the transfer of any share, interest, &c. in the public funds, may, upon conviction, be transported beyond seas for life, or for any term not less than seven years, or be imprisoned for any term not more than four nor less than two years. — § 7.

The forgery of the attestation to any power of attorney for the transfer of stock is to be punished by transportation for seven years, or by imprisonment for not more than two and not less than one year. — § 8.

Clerks or servants of the Bank of England knowingly making out or delivering any dividend warrant for a greater or less amount than the party in whose behalf such warrant is made out is entitled to, may, upon conviction, be transported beyond seas for the term of seven years, or imprisoned for not more than two nor less than one year. — § 9.

able to bear it; at the same time that its operation, instead of being, like the rejection of bills, arbitrary and capricious, is uniform and impartial. It does, therefore, seem that the Bank should seldom or never throw out good bills that she may contract her issues; but that when she has resolved upon such a measure she should, provided the contraction cannot be made by the sale of bullion and public securities, raise the rate of discount so as to lessen the demands upon her for loans.

The dividends on Bank stock, from the establishment of the Company to the present time, have been as follows: —

Years.	Dividend.	Years.	Dividend.
1694	8 per cent.	Lady-day - - 1747	5 per cent.
1697	9 —	Ditto - - 1753	4½ —
1708 }	Varied from 9 to	Michaelmas - 1764	5 —
1729 }	5½ per cent.	Ditto - - 1767	5½ —
Lady-day - 1730	6 —	Ditto - - 1781	6 —
Michaelmas - 1730	5⅘ —	Lady-day - 1788	7 —
Lady-day - 1731	6 —	Ditto - - 1807	10 —
Michaelmas - 1731	5⅘ —	Ditto - - 1823	8 —
Lady-day - 1732	6 —	Lady-day - 1839	7 —
Michaelmas - 1732	5⅘ —		

Previously to 1759, the Bank of England issued no notes for less than 20*l.* She began to issue 10*l.* notes in 1759; 5*l.* notes in 1793; and 1*l.* and 2*l.* notes in March, 1797. The issue of the latter may be said to have ceased in 1821; though they were again issued on the emergency in 1825.

(10.) *Interest on Deposits.* — The Bank of England does not allow, either in London or at her branches, any interest on deposits; but it would be exceedingly desirable if she could safely make some alteration in this respect. The want of the power readily to invest small sums productively, and, at the same time, with perfect security, tends to weaken the motives to save and accumulate. Nothing has contributed more to diffuse a spirit of economy, and a desire to save, amongst all classes of the population of Scotland, than the readiness with which deposits of small sums are received by banks of undoubted solidity in that part of the country, and the allowance of interest upon them. — (See Banks (Scotch).) This advantage is now, however, in some degree secured in England, not only by the institution of savings banks, but by the joint stock banks that have been opened in most parts of the country. The receiving of deposits is indeed an essential part of the proper business of a bank. "A banker is a dealer in capital, an intermediate party between the borrower and the lender. He borrows of one party, and lends to another; and the difference between the terms at which he borrows and those at which he lends is the source of his profit. By this means, he draws into active operation those small sums of money which were previously unproductive in the hands of private individuals, and at the same time furnishes accommodation to another class, who have occasion for additional capital to carry on their commercial transactions." — (See *Gilbart's Practical Observations on Banking*, p. 52.)

In further corroboration of what has now been stated, it may be mentioned that it is estimated by the best authorities that the deposits in the Scotch banks may amount at present (1843) to about 28,000,000*l.*, of which more than a half consists of sums of from 10*l.* to 200*l.* This is a most satisfactory proof of the vast importance of the system. Perhaps it is not going too far to affirm, that but for the receiving of deposits by the banks, and the allowing of interest upon them, not a third part of the sums under 200*l.*, and not a half of those above it, would ever have been accumulated. (See Banks (Scotch).)

We are not, however, able to say whether the Bank of England could offer interest on deposits without having so large a sum forced upon her as might in periods of distrust seriously endanger her stability. And it were better that the system should continue as at present, than that any risk of this sort should be incurred.

Since 1826, the private deposits in the hands of the Bank have nearly doubled. Their increase is mainly ascribable to the preceding panic, and the loss that was then occasioned by the failure of private banks.

The composition paid by the Bank at the rate of 3,500*l.* per million, as an equivalent for the stamp duty on her notes, amounts at an average to about 70,000*l.* a year.

(11.) *Method of conducting Business at the Bank.* — All accounts kept at the Bank with individuals are termed *drawing accounts;* those with whom they are opened being entitled to draw checks upon them, and to send the bills and drafts in their favour to be presented by the Bank, exactly as if they dealt with private bankers. There is no fixed sum with which an individual must open a drawing account; nor is there any fixed sum which the Bank requires him to keep at his credit to indemnify them for their trouble in answering his drafts, &c. Mr. Horsley Palmer gave in his evidence, in 1832, the following statement as to the facilities granted by the Bank in drawing accounts since 1825: —

1. The Bank receives dividends by power of attorney for all persons having drawing accounts at the Bank.
2. Dividend warrants are received at the Drawing-office for ditto.
3. Exchequer bills and other securities are received for ditto; the bills exchanged, the interest received, and the amount carried to their respective accounts.
4. Checks may be drawn for 5*l.* and upwards, instead of 10*l.* as heretofore.
5. Cash-boxes taken in, contents unknown, for such parties as keep accounts at the Bank.
6. Bank notes are paid at the counter, instead of drawing tickets for them on the pay clerks as heretofore.
7. Checks on city bankers paid in by three o'clock may be drawn for between four and five; and those paid in before four will be received and passed to account the same evening.
8. Checks paid in after four are sent out at nine o'clock the following morning, received and passed to account, and may be drawn for as soon as received.
9. Dividend warrants taken in at the Drawing-office until five in the afternoon, instead of three as heretofore.
10. Credits paid in to account are received without the Bank book, and are afterwards entered therein without the party claiming them.
11. Bills of exchange accepted payable at the Bank are payable with or without advice; heretofore with advice only.
12. Notes of country bankers payable in London are sent out the same day for payment.
13. Checks are given out in books, and not in sheets as heretofore.

A person having a drawing account *may* have a *discount account;* but no person can have the latter without, at the same time, having the former. When a discount account is opened, the signatures of the parties are entered in a book kept for the purpose, and powers of attorney are granted, empowering the persons named in them to act for their principals. No bill of exchange drawn in the country is discounted by the Bank *in London* under 20*l.*, nor London *note* under 100*l.*, nor for a longer date, under existing regulations, than three months.

The number of holidays formerly kept at the Bank has recently been reduced about a half, in the view, as stated by the directors, of preventing the interruption of business. There are no holidays in the months of March, June, September, and December, excepting Christmas; Easter Monday and Tuesday are no longer kept.

We subjoin an account of the days for transferring stock, and when the dividends are due at the Bank, the South Sea House, and the East India House: —

Transfer Days at the Bank.	Dividends Due.
Bank Stock. — Tues. Wed. Thurs. and Frid.	April 5.
3 per Cent. Red. — Tues. Wed. Thurs. and Frid.	Oct. 10.
3½ per Cent. 1818. — Tues. Wed. Thurs. and Frid.	
3 per Cent. 1726. — Tues. Wed. Thurs. and Frid.	Jan. 5.
3 per Cent. Cons. — Tues. Wed. Thurs. and Frid.	July 5.
3½ per Cent. Red. — Tues. Wed. Thurs. and Frid.	April 5.
Long Annuit. to Jan. 1860. — Tues. Wed. Thurs. and Frid.	Oct. 10.
New 3½ per Cent. Annuit. — Tues. Wed. Thurs. and Frid.	Jan. 5.
New 5 per Cent. Annuit. — Tues. Wed. Thurs. and Frid.	July 5.
Annuities for Terms of Years, some payable on	April 5. Oct. 10.
Ditto, others on	Jan. 5. July 5.
Life Annuit., if transferred between Jan. 5. and April 4., or between July 5. and Oct. 9.	Jan. 5. July 5.

	Dividends Due.
Life Annuit., if transferred between April 5. and July 4., or between Oct. 10. and Jan. 4.	April 5. Oct. 10.
At the South Sea House.	
3½ per Cents. — Mond. Wed. and Frid.	Jan. 5. July 5.
3 per Cent. Old Annuit. — Mond. Wed. and Frid.	April 5. Oct. 10.
3 per Cent. New Annuit. — Tues. Thurs. and Sat.	Jan. 5.
3 per Cent. 1751. — Tues. and Thurs.	July 5.
At the East India House.	
India Stock. — Tues. Thurs. and Sat.	Jan. July
Interest on India Bonds, due	Mar. 30. Sept. 30.

Tickets for preparing transfer of stock must be given in at each office before *one* o'clock: at the East India House, before two o'clock. Private transfers may be made at other times than as above, the books not being shut, by paying, at the Bank and India House, 2*s.* 6*d.* extra for each transfer; at the South Sea House, 3*s.* 6*d.*

Transfer at the Bank must be made by half-past two o'clock: at the India House, by three: at the South Sea House, by two:

Expense of transfer in Bank Stock, for 25*l.* and under, 9*d.*; above that sum, 12*s.*
India Stock, for 10*l.* ..... 1*l.* 10*s.* ..... 1*l.* 11*s.*
South Sea Stock, if under 100*l.* ..... 9*s.* 6*d.* ..... 12*s.*

Powers of attorney for the sale or transfer of stock to be left at the Bank, &c. for examination, one day before they can be acted upon; if for receiving dividends, they may be left at any time.

The expense of a power of attorney is 1*l.* 1*s.* 6*d.* for each stock; but for Bank, India, and South Sea stock, 1*l.* 11*s.* 6*d.* If wanted for the same day, half-past twelve o'clock is the latest time for receiving orders. The boxes for receiving powers of attorney for sale close at two.

Probates of wills, letters of administration, and other proofs of decease, must be left at the Bank, &c. for registration, from two to three clear days, exclusive of holidays.

Stock cannot be added to any account (whether single or joint) in which the decease of the individual, or one or more of a joint party, has taken place; and the decease to be proved as soon as practicable. Powers of attorney, in case of the death of the party or parties granting them, become void.

The unaltered possession of 500*l.* or upwards Bank stock, for six months clear, gives the proprietor a vote.

(12.) *Branch Banks of the Bank of England.* — The Bank of England, as already observed, has within these few years established branch banks at several of the most considerable towns throughout the country. The mode and terms of conducting business at these establishments have been described as follows: —

"The branch bank of Swansea (and the same is true of those established in other places) is to be a secure place of deposit for persons having occasion to make use of a bank for that purpose; such persons are said to have *drawing accounts:* to facilitate to the mercantile and trading classes the obtaining discounts of good and unexceptionable bills, founded upon real transactions, two approved names being required upon every bill or note discounted; these are called *discount accounts.* The applications of parties who desire to open discount accounts at the branch are forwarded to the parent establishment for approval, and an answer is generally received in about ten days. When approved, good bills may be discounted at the branch without reference to London. Bills payable at Swansea, London, or any other place where a branch is established, are discounted under this regulation. The dividends on any of the public funds, which are payable at the Bank of England, may be received at the branch, by persons who have opened 'drawing accounts,' after signing powers of attorney for that purpose, which the

branch will procure from London. No charge is made in this case, except the expense of the power of attorney and the postages incurred in transmitting it. Purchases and sales of every description of government securities are effected by the branch at a charge corresponding to that made by the local bankers where the branch is situated. A commission, including brokerage in London, and all expenses of postage, is charged on paying at the Bank of England bills accepted by persons having drawing accounts at Swansea, such bills to be advised by the branch; also for granting letters of credit on London, or on the other branches. The branch grants bills on London, payable at seven days' date, without acceptance, for sums of 10*l.* and upwards. Persons having drawing accounts at Swansea may order money to be paid at the Bank in London to their credit at Swansea, and *vice versâ*, at a charge of 6*d.* in lieu of postage. The branch may be called upon to change any notes issued and *dated* at Swansea; but they do not change the notes of the Bank in London, nor receive them in payment, unless as a matter of courtesy where the parties are known. Bank post bills, which are accepted and due, are received at the branch from parties having drawing accounts, and taken to account without any charge for postage; but unaccepted Bank post bills, which must be sent to London, are subject to the charge of postage, and taken to account when due. No interest is allowed on deposits. No advance is made by the branch upon any description of landed or other property, nor is any account allowed to be overdrawn. The notes are the same as those issued by the parent establishment, except being dated Swansea, and made payable there and in London. No note issued exceeds the sum of 500*l.*, and none are for a less amount than 5*l.*"

(13.) *Act for the Renewal of the Charter.* — We subjoin a full abstract of the act 3 & 4 Will. 4. c. 98., continuing the charter, and regulating the exclusive privileges of the Bank of England.

The first section, after referring to the acts 39 & 40 Geo. 3. c. 28., and the 7 Geo. 4. c. 46., goes on to declare that it is expedient that certain exclusive privileges of banking be continued to the Governor and Company of the Bank of England, for the period and upon the terms and conditions hereinafter mentioned. — § 1

No Banking Company of more than 6 *Persons to issue Notes payable on Demand within London, or* 65 *Miles thereof.* — That during the continuance of the said privilege, no body politic or corporate, and no society or company, or persons united or to be united in covenants or partnerships, exceeding 6 persons, shall make or issue in London, or within 65 miles thereof, any bill of exchange or promissory note, or engagement for the payment of money on demand, or upon which any person holding the same may obtain payment on demand: provided always, that nothing herein or in the said act of the 7 Geo. 4. c. 46. contained shall be construed to prevent any body politic or corporate, or any society or company, or incorporated company or corporation, or co-partnership, carrying on and transacting banking business at any greater distance than 65 miles from London, and not having any house of business or establishment as bankers in London, or within 65 miles thereof, (except as hereinafter mentioned,) to make and issue their bills and notes, payable on demand or otherwise, at the place at which the same shall be issued, being more than 65 miles from London, and also in London, and to have an agent or agents in London, or at any other place at which such bills or notes shall be made payable, for the purpose of payment only, but no such bill or note shall be for any sum less than 5*l.*, or be re-issued in London, or within 65 miles thereof. — § 2.

Companies or Partnerships may carry on Banking in London, or within 65 *Miles thereof.* — And whereas the intention of this act is, that the Bank of England should, during the period stated in this act (subject nevertheless to such redemption as is described in this act), continue to hold and enjoy all the exclusive privileges of banking given by the act 39 & 40 Geo. 3. c. 28. as regulated by the act 7 Geo. 4. c. 46., or any prior or subsequent act or acts of parliament, but no other or further exclusive privilege of banking: and whereas doubts have arisen as to the construction of the said acts, and as to the extent of such exclusive privilege; and it is expedient that all such doubts should be removed, be it therefore declared and enacted, that any body politic or corporate, or society, or company, or partnership, although consisting of more than 6 persons, may carry on the trade or business of banking in London, or within 65 miles thereof, provided that such body politic or corporate, or society, or company, or partnership, do not borrow, owe, or take up in England any sum or sums of money on their bills or notes payable on demand, or at any less time than 6 months from the borrowing thereof, during the continuance of the privileges granted by this act to the said Governor and Company of the Bank of England. — § 3.

All Bank of England Notes payable on Demand issued out of London payable at the Place where issued, &c. — From and after the 1st of August, 1834, all promissory notes payable on demand of the Governor and Company of the Bank of England issued at any place in England out of London, where the trade and business of banking shall be carried on for and on behalf of the said Governor and Company, shall be made payable at the place where such promissory notes shall be issued; and it shall not be lawful for the said Governor and Company, or any committee, agent, cashier, officer, or servant of the same, to issue at any place out of London any promissory note payable on demand not made payable at the place where the same shall be issued, any thing in the said act 7 Geo. 4. c. 46. to the contrary notwithstanding. — § 4.

Exclusive Privileges to end upon One Year's Notice at the End of 10 *Years after August*, 1834. — Upon one year's notice given within 6 months after the expiration of 10 years from the 1st of August, 1834, and upon repayment by parliament to the said Governor and Company, or their successors, of all principal money, interest, or annuities which may be due from the public to the said Governor and Company at the time of the expiration of such notice, as is hereinafter stipulated and provided in the event of such notice being deferred until after the 1st of August, 1855, the exclusive privileges of banking granted by this act shall cease and determine at the expiration of such year's notice; and any vote or resolution of the House of Commons, signified by the Speaker of the said house in writing, and delivered at the public office of the said Governor and Company, or their successors, shall be deemed and adjudged to be a sufficient notice. — § 5.

Bank Notes to be a legal Tender, except at the Bank and Branch Banks. — From and after the 1st of August, 1834, unless and until parliament shall otherwise direct, a tender of a note or notes of the Governor and Company of the Bank of England, expressed to be payable to bearer on demand, shall be a legal tender to the amount expressed in such note or notes, and shall be taken to be valid as a tender to such amount for all sums above 5*l.* on all occasions on which any tender of money may be legally made, so long as the Bank of England shall continue to pay on demand their said notes in legal coin: provided always, that no such note or notes shall be deemed a legal tender of payment by the Governor and Com-

pany of the Bank of England, or any branch bank of the said Governor and Company; but the said Governor and Company are not to become liable or be required to pay and satisfy, at any branch bank of the said Governor and Company, any note or notes of the said Governor and Company not made specially payable at such branch bank; but the said Governor and Company shall be liable to pay and satisfy at the Bank of England in London all notes of the said Governor and Company, or of any branch thereof.—§ 6.

Bills not having more than 3 Months to run not subject to Usury Laws. — No bill of exchange or promissory note made payable at or within 3 months after the date thereof, or not having more than 3 months to run, shall, by reason of any interest taken thereon or secured thereby, or any agreement to pay or receive or allow interest in discounting, negotiating, or transferring the same, be void; nor shall the liability of any party to any bill of exchange or promissory note be affected by reason of any statute or law in force for the prevention of usury; nor shall any person or persons drawing, accepting, indorsing, or signing any such bill or note, or lending or advancing any money, or taking more than the present rate of legal interest in Great Britain and Ireland respectively for the loan of money on any such bill or note, be subject to any penalties under any statute or law relating to usury, or any other penalty or forfeiture; any thing in any law or statute relating to usury in any part of the United Kingdom to the contrary notwithstanding.— § 7.

Accounts of Bullion and of Notes in Circulation to be sent weekly to the Chancellor of the Exchequer. — An account of the amount of bullion and securities in the Bank of England belonging to the said Governor and Company, and of notes in circulation, and of deposits in the said Bank, shall be transmitted weekly to the Chancellor of the Exchequer for the time being, and such accounts shall be consolidated at the end of every month, and an average state of the Bank accounts of the preceding 3 months, made from such consolidated accounts as aforesaid, shall be published every month in the next succeeding London Gazette.—§ 8.

Public to pay the Bank ¼ Part of 14,686,800*l.* — One fourth part of the debt of 14,686,800*l.*, now due from the public to the Governor and Company of the Bank of England, shall and may be repaid to the said Governor and Company.—§ 9.

Capital Stock of the Bank may be reduced. — A general court of proprietors of the said Governor and Company of the Bank of England shall be held some time between the passing of this act and the 5th of October, 1834, to determine upon the propriety of dividing and appropriating the sum of 3,638,250*l.* out of or by means of the sum to be repaid to the said Governor and Company as before mentioned, or out of or by means of the fund to be provided for that purpose amongst the several persons, bodies politic or corporate, who may be proprietors of the capital stock of the said Governor and Company on the said 5th of October, 1834, and upon the manner and the time for making such division and appropriation not inconsistent with the provisions for that purpose herein contained; and in case such general court, or any adjourned general court, shall determine that it will be proper to make such division, then, but not otherwise, the capital stock of the said Governor and Company shall be and the same is hereby declared to be reduced from the sum of 14,553,000*l.*, of which the same now consists, to the sum of 10,914,750*l.*, making a reduction or difference of 3,638,250*l.* capital stock, and such reduction shall take place from and after the 5th of October, 1834; and thereupon, out of or by means of the sum to be repaid to the said Governor and Company as hereinbefore mentioned, or out of or by means of the fund to be provided for that purpose, the sum of 3,638,250*l.* sterling, or such proportion of the said fund as shall represent the same, shall be appropriated and divided amongst the several persons, bodies politic or corporate, who may be proprietors of the said sum of 14,553,000*l.* Bank stock on the said 5th of October, 1834, at the rate of 25*l.* sterling for every 100*l.* of Bank stock which such persons, bodies politic and corporate, may then be proprietors of, or shall have standing in their respective names in the books kept by the said Governor and Company for the entry and transfer of such stock, and so in proportion for a greater or lesser sum.—§ 10.

Governor, Deputy, or Directors not to be disqualified by Reduction of their Share of the Capital Stock. — The reduction of the share of each proprietor in the capital stock of the said Governor and Company of the Bank of England, by the repayment of such ¼ part thereof, shall not disqualify the present governor, deputy-governor, or directors, or any or either of them, or any governor, deputy governor, or director who may be chosen in the room of the present governor, deputy governor, or directors, at any time before the general court of the said Governor and Company to be held between the 25th of March and the 25th of April, 1835: provided that at the said general court, and from and after the same, no governor, deputy governor, or director of the said corporation shall be capable of being chosen such governor, deputy governor, or director, or shall continue in his or their respective offices, unless he or they respectively shall at the time of such choice have, and during such his respective office continue to have, in his and their respective name, in his and their own right, and for his and their own use, the respective sums or shares of and in the capital stock of the said corporation in and by the charter of the said Governor and Company prescribed as the qualification of governor, deputy governor, and directors respectively.—§ 11.

Proprietors not to be disqualified. — Provided also, and be it enacted, that no proprietor shall be disqualified from attending and voting at any general court of the said Governor and Company to be held between the said 5th of October, 1834, and the 25th of April, 1835, in consequence of the share of such proprietor of the capital stock of the said Governor and Company having been reduced by such repayment as aforesaid below the sum of 500*l.* of the said capital stock; provided such proprietor had in his own name the full sum of 500*l.* of the said capital stock on the said 5th of October, 1834; nor shall any proprietor be required, between the said 5th of October, 1834, and the 25th of April, 1835, to take the oath of qualification in the said charter.—§ 12.

Bank to deduct 120,000*l. from Sum allowed for Management of National Debt.* — From and after the 1st of August, 1834, the said Governor and Company, in consideration of the privileges of exclusive banking given by this act, shall, during the continuance of such privileges, but no longer, deduct from the sums now payable to them, for the charges of management of the public unredeemed debt, the annual sum of 120,000*l.*, any thing in any act or acts of parliament or agreement to the contrary notwithstanding: provided always, that such deduction shall in no respect prejudice or affect the right of the said Governor and Company to be paid for the management of the public debt at the rate and according to the terms provided by the act 48 Geo. 3. c. 4., intituled "An Act to authorize the advancing for the Public Service, upon certain Conditions, a Proportion of the Balance remaining in the Bank of England for Payment of unclaimed Dividends, Annuities, and Lottery Prizes, and for regulating the Allowances to be made for the Management of the National Debt."—§ 13.

Provisions of Act of 39 & 40 *Geo. 3. to remain in force, except as altered by this Act.* — All the powers, authorities, franchises, privileges, and advantages given or recognised by the said recited act of the 39 & 40 Geo. 3. c. 28. aforesaid, as belonging to or enjoyed by the Governor and Company of the Bank of England, or by any subsequent act or acts of parliament, shall be and the same are hereby declared to be in full force, and continued by this act, except so far as the same are altered by this act, subject nevertheless to such redemption upon the terms and conditions following; (that is to say,) that at any time, upon 12 months' notice to be given after the 1st of August, 1855, and upon repayment by parliament to the said Governor and Company, or their successors, of the sum of 11,015,100*l.*, being the debt which will remain due from the public to the said Governor and Company after the payment of the ¼ of the debt of 14,686,804*l.* as hereinbefore provided, without any deduction, discount, or abatement whatsoever, and upon payment to the said Governor and Company and their successors of all arrears of the sum of 100,000*l.* per annum in the said act of 39 & 40 Geo. 3. aforesaid mentioned, together with the interest or annuities payable upon the said debt or in respect thereof, and also upon repayment of all the principal and interest which shall be owing unto the said Governor and Company and their successors upon all such tallies, exchequer orders, exchequer bills, or parliamentary funds which the said Governor and Com-

pany, or their successors, shall have remaining in their hands or be entitled to at the time of such notice to be given as last aforesaid, then and in such case, and not till then, (unless under the proviso hereinbefore contained,) the said exclusive privileges of banking granted by this act shall cease and determine at the expiration of such notice of 12 months. — § 14.

Tables exhibiting a view of the Circulation, Deposit, Profits, &c. of the Bank of England.

No. I.—An Account of the Average Market Price of Bullion in each Year, from 1800 to 1821 (taken from Official Documents); of the Average Value per Cent. of the Currency, estimated by the Market Price of Gold for the same Period; and of the Average Depreciation per Cent.

Years.	Average Price of Gold per oz.	Average per Cent. of the Value of the Currency.	Average Depreciation per Cent.	Years.	Average Price of Gold per oz.	Average per Cent. of the Value of the Currency.	Average Depreciation per Cent.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
1800	3 17 10½	100 0 0	Nil.	1811	4 4 6	92 3 2	7 16 10
1801	4 5 0	91 12 4	8 7 8	1812	4 15 6	79 5 3	20 14 9
1802	4 4 0	92 14 2	7 5 10	1813	5 1 0	77 2 0	22 18 0
1803	4 0 0	97 6 10	2 13 2	1814	5 4 0	74 17 6	25 2 6
1804	4 0 0	97 6 10	2 13 2	1815	4 13 6	83 5 9	16 14 3
1805	4 0 0	97 6 10	2 13 2	1816	4 13 6	83 5 9	16 14 3
1806	4 0 0	97 6 10	2 13 2	1817	4 0 0	97 6 10	2 13 2
1807	4 0 0	97 6 10	2 13 2	1818	4 0 0	97 6 10	2 13 2
1808	4 0 0	97 6 10	2 13 2	1819	4 1 6	95 11 0	4 9 0
1809	4 0 0	97 6 10	2 13 2	1820	3 19 11	97 8 0	2 12 0
1810	4 10 0	86 10 6	13 9 6	1821	3 17 10½	100 0 0	Nil.

No. II. — The following is an Account of all Distributions made by the Bank of England amongst the Proprietors of Bank Stock, whether by Money Payments, Transfer of 3 per Cent. Annuities, or otherwise, under the Heads of Bonus, Increase of Dividend, and Increase of Capital, betwixt the 25th of February, 1797, and 31st of March, 1832, in addition to the ordinary Annual Dividend of 7 per Cent. on the Capital Stock of that Corporation, existing in 1797, including therein the whole Dividend paid since June, 1816, on their increased Capital; stating the Period when such Distributions were made, and the Aggregate Amount of the Whole. — (*Appen. No.* 29.)

Denomination and Periods of Distribution.	Amount.
	£
In June, 1799: 10*l.* per cent. bonus in 5 per cents. 1797, on 11,612,400*l.* is	1,161,240
May, 1801: 5*l.* per cent. ditto, in Navy 5 per cents. ditto	582,120
November, 1802: 2*l.* 10*s.* per cent. ditto, ditto, ditto	291,060
October, 1804: 5*l.* per cent. ditto, cash, ditto	582,120
October, 1805: 5*l.* per cent. ditto, ditto, ditto	582,120
October, 1806: 5*l.* per cent. ditto, ditto, ditto	582,120
From April, 1807, to Oct. 1822, both inclusive (16 years) — Increase of dividends at the rate of 5*l.* per cent. per annum on 11,612,400*l.*, is,	5,588,352
From April, 1823, to Oct. 1829, both inclusive (7 years) — Increase of dividends at the rate of 1*l.* per cent. per annum on 11,612,400*l.*, is,	814,968
In June, 1816 — Increase of capital at 25 per cent., is	2,910,600
From Oct. 1816, to Oct. 1822, both inclusive (capital, is, 6½ years) — Dividend at the rate of 10*l.* per cent. per annum on 2,910,600*l.*, increased £	1,891,890
From April, 1823, to Oct. 1831, both inclusive (capital, is, 9 years) — Dividend at the rate of 8*l.* per cent. per annum on 2,910,600*l.*, increased	2,095,632
Aggregate amount of the whole	£17,318,070
Annual dividend payable on Bank stock in 1797, on a capital of 11,612,400*l.* at the rate of 7*l.* per cent. per annum	£814,968
Annual dividend payable since June, 1816, on a capital of 14,553,000*l.*, to October, 1822, inclusive, at the rate of 10*l.* per cent. per annum	£1,455,300
Annual dividend payable from April, 1823, to the 31st of March, 1832, both inclusive, on a capital of 14,553,000*l.*, at the rate of 8*l.* per cent. per annum	£1,164,240

Bank of England, 27th of June, 1832. WILLIAM SMEE, Dep. Acct.

No. III. — An Account of the Profits of the Bank of England, in the Year ending 29th of February, 1832; stating the Description of the Securities held by the Bank, and the Sources from which the said Profits have accrued. — (*No.* 15. *Appen. to Report.*)

	£
Interest on commercial bills	130,695
Interest on Exchequer bills	201,109
Annuity for 45 years (the dead-weight account)	451,115
Interest on capital received from government	446,502
Allowance received for management of the public debt	251,896
Interest on loans on mortgages	60,684
Interest on stock in the public funds	15,075
Interest on private loans	56,941
Profit on bullion, commission, rent, receipts on discounted bills unpaid, management of the business of the Banks of Ireland, of Scotland, and Royal Bank of Scotland, and sundry items	71,859
	£1,689,176

No. IV. — Expenses of the Bank of England, for the Year ending 29th of February, 1832.

Dr.	£	Cr.	£
National debt department	164,143	Salaries and pensions	218,003
Bank notes	106,092	House expenses	39,187
Banking department	69,165	Directors' allowance	8,000
		Rent	40,000
		Expenses at eleven branches, arising from the banking department	5,702
		Expenses attending the circulation of 2,500,000*l.* of branch Bank of England notes, at eleven branches	28,508
	£339,400		£ 339,400

No. V. — An estimated Account of Profit derived by the Bank from Circulation of Promissory Notes, and from Government Business. — (*Appen. No.* 23.)

	£
Circulation - -	20,000,000
Government deposits -	4,000,000
	24,000,000, of which two thirds are estimated to be invested in securities, and one third in bullion.

	£	£	£
Securities of 16,000,000*l.*: viz.			
9,000,000 Exchequer bills - - - - - - at 2½ per cent.	202,500		
800,000 stock - - - - - - — 3 —	24,000		
1,000,000 advances for circulation on discount - - - - - — 3 —	30,000		
500,000 country discount - - - - - - — 3½ —	17,500		
4,700,000 - - - - - - - — 4½ —	193,875		
16,000,000		467,875	
Deduct,			
Expense of circulation - - - - - - -	106,000		
Expense of government deposits - - - - - -	10,000		
Stamp duty on circulation - - - - - -	70,000		
1 per cent. on capital (held by government at 3 per cent.) - -	147,000		
		353,000	131,875
The Public Debt.			
Amount received from government for management of the public debt, for the year ending 5th of April, 1832, including life annuities - - - - -	251,000		
Management of life annuities, supposed to be transferred - - -	33,000		
		218,000	
Deduct,			
Expenses for management of the national debt - - - -	101,000		
Average of forgeries per annum, during the last ten years - - -	10,000		
		201,000	
			44,000
	Estimated profit - -		£178,875

No. VI. — Account of the Liabilities and Assets of the Bank of England (exclusive of the Sum lent by the Bank to the Public, on the 7th of January 1843), exhibiting the Amount of the Bank Notes in Circulation in Town and Country, of public and private Deposits, and of public and private Securities, Bullion, &c. in the Possession of the Bank. — (*Furnished by order of the Directors.*)

Liabilities.	£	£
Circulation:		
London - - -	13,501,000	
Country - - -	5,211,000	
		18,518,000
Deposits, Public, viz.:		
Exchequer accounts -	693,000	
For payment of dividends -	8,589,000	
Savings banks - -	17,000	
West India compensation -	5,000	
Other public accounts -	1,752,000	
		11,056,000
Deposits, Private, viz.:		
London bankers - -	767,000	
East India Company -	442,000	
Bank of Ireland, Royal Bank of Scotland, &c. - -	95,000	
Other deposits - -	3,267,000	
Deposits at branches -	907,000	
		5,478,000
	£	35,052,000

Assets.	£	£
Public Securities.		
Advances on Exchequer Bills:		
Deficiency - - -	8,000,000	
Other Exchequer Bills -	nil.	
Exchequer Bills purchased -	523,000	
Stock and Annuities - -	11,583,000	
		19,706,000
Private Securities.		
Bills discounted:		
London - - -	503,000	
Country - - -	2,500,000	
		3,003,000
East India Bonds - -	120,000	
City Bonds, &c. - -	1,554,000	
Mortgage - - -	774,000	
Advances:		
Bills of Exchange - -	1,166,000	
Exchequer Bills, Stock, &c. -	904,000	
		3,997,000
		26,706,000
Bullion - - - -		10,932,000
		£37,638,000

No. VII. — An Account of the Notes, Post Bills, &c. of the Bank of England in Circulation, on the 28th of February and 31st of August in each year, from 1698 to 1792 both included, as near as the same can be made up.

Year	28th Feb.	31st Aug.	Year	28th Feb.	31st Aug.	Year	28th Feb.	31st Aug.	Year	28th Feb.	31st Aug.
	£	£		£	£		£	£		£	£
1698	1,221,290	1,240,400	1722	2,365,640	3,006,430	1746	3,383,720	3,842,500	1770	5,237,210	5,736,780
1699	743,850	519,150	1723	3,516,110	3,482,210	1747	4,107,420	3,652,310	1771	6,822,780	6,014,110
1700	938,240	781,430	1724	3,232,830	3,857,710	1748	3,894,650	3,789,720	1772	5,962,160	5,987,570
1701	298,860	763,860	1725	3,734,480	3,343,400	1749	3,737,110	4,183,390	1773	6,037,060	6,362,220
1702	926,730	1,030,900	1726	3,076,850	3,152,340	1750	3,964,970	4,318,490	1774	7,550,780	9,886,220
1703	933,760	1,214,040	1727	3,888,180	4,677,640	1751	4,022,160	5,195,310	1775	9,135,930	8,398,310
1704	961,990	946,010	1728	4,574,920	4,513,790	1752	4,444,960	4,750,350	1776	8,699,720	8,551,090
1705	556,610	1,043,150	1729	4,152,590	4,199,910	1753	4,401,580	4,420,290	1777	8,712,230	7,753,590
1706	996,840	805,410	1730	3,998,280	4,416,870	1754	4,062,870	4,081,280	1778	7,440,330	6,758,070
1707	959,820	824,860	1731	4,451,720	5,249,880	1755	3,950,650	4,115,280	1779	9,012,610	7,276,540
1708	648,680	598,940	1732	4,251,660	4,592,400	1756	4,106,790	4,516,360	1780	8,410,790	6,341,600
1709	707,470	691,350	1733	4,385,060	4,543,000	1757	5,319,130	5,149,940	1781	7,092,450	6,309,430
1710	601,580	480,920	1734	4,203,070	4,671,930	1758	5,320,590	4,864,110	1782	8,028,880	6,759,310
1711	477,510	573,230	1735	4,627,990	4,738,550	1759	4,586,840	4,809,790	1783	7,675,090	6,307,270
1712	738,920	2,025,200	1736	4,907,750	5,077,570	1760	4,969,250	4,936,280	1784	6,202,760	5,592,510
1713	1,221,880	800,810	1737	5,215,010	4,414,690	1761	5,632,350	5,246,680	1785	5,923,090	6,570,650
1714	623,640	1,651,780	1738	4,766,280	4,609,420	1762	5,741,090	5,886,980	1786	7,581,960	8,184,330
1715	972,160	978,840	1739	4,347,270	4,152,420	1763	5,999,910	5,314,600	1787	8,329,840	9,685,720
1716	1,460,660	1,579,730	1740	4,550,980	4,444,000	1764	5,501,300	6,210,680	1788	9,561,120	10,002,880
1717	2,053,150	2,188,030	1741	4,841,840	4,084,450	1765	6,316,670	5,356,490	1789	9,807,210	11,121,800
1718	2,782,420	1,806,640	1742	4,471,510	4,911,390	1766	5,617,570	5,240,410	1790	10,040,540	11,433,340
1719	1,807,010	1,939,550	1743	4,654,890	4,250,180	1767	5,510,990	4,883,440	1791	11,439,200	11,672,320
1720	2,466,880	3,032,460	1744	4,253,610	4,270,590	1768	5,778,990	5,415,530	1792	11,307,380	11,006,300
1721	2,244,280	2,206,260	1745	4,279,610	3,465,350	1769	5,707,190	5,411,450			

N. B. — No previously published table of the circulation of the Bank of England extends further back than 1777: we are indebted to the Court of Directors for being able to supply this striking defect, and to exhibit, for the first time, the circulation of the Bank, from within four years of its establishment down to the present day.

No. VIII. — Account of the Circulation, Deposits, Securities, Bullion, and Surplus, (exclusive of Capital,) of the Assets over the Liabilities of the Bank of England at (or as near thereto as the accounts can be made up) the under-mentioned Dates in each of the following Years. — (Compiled principally from the *Parl. Paper* No. 580. Sess. 1842.)

Dates.	Circulation.	Deposits.	Securities.	Bullion.	Rest, or Surplus of Assets over Liabilities.
	£	£	£	£	£
1793 February 28	11,888,910	5,346,450	16,005,250	4,010,680	2,780,570
August 31	10,865,050	6,442,810	14,809,680	5,324,010	2,825,630
1794 February 28	10,744,020	7,891,810	14,554,550	6,087,110	2,875,850
August 30	10,286,780	5,935,710	12,446,460	6,770,110	2,994,080
1795 February 28	14,017,510	5,973,020	16,811,340	6,127,720	2,948,530
August 31	10,862,200	8,154,980	16,989,920	5,136,390	3,109,090
1796 February 28	10,729,520	5,702,360	17,139,840	2,539,630	3,247,290
August 31	9,246,790	6,650,320	17,025,470	2,122,950	3,245,510
1797 February 28	9,674,780	4,891,530	16,837,750	1,086,170	3,357,610
August 31	11,114,120	7,765,350	18,261,170	4,089,620	3,471,320
1798 February 28	13,095,830	6,148,900	16,799,500	5,828,940	3,383,710
August 31	12,180,610	8,300,720	17,349,610	6,516,100	3,414,110
1799 February 28	12,959,800	8,131,820	17,059,030	7,563,900	3,511,310
August 31	13,389,490	7,619,240	16,930,430	7,000,780	3,892,490
1800 February 28	16,844,170	7,062,680	21,424,050	6,144,250	3,661,150
August 31	15,047,180	8,335,060	22,158,420	5,150,450	3,906,050
1801 February 28	16,213,280	10,745,840	26,424,730	4,640,120	4,105,730
August 31	14,556,110	8,153,830	22,209,570	4,335,260	3,854,890
1802 February 28	15,186,880	6,858,210	21,959,820	4,152,950	4,067,680
August 31	17,097,950	9,739,140	27,153,350	3,891,780	4,193,570
1803 February 28	15,319,930	8,050,210	23,914,900	3,776,750	4,521,480
August 31	15,983,330	9,817,240	26,918,840	3,592,500	4,710,770
1804 February 29	17,077,830	8,676,830	26,998,970	3,372,140	4,616,450
August 31	17,153,890	9,715,530	25,826,680	5,879,190	4,850,150
1805 February 28	17,871,170	12,087,620	28,858,300	5,883,800	4,990,400
August 31	16,589,400	11,048,980	27,772,850	7,624,500	4,960,850
1806 February 28	17,730,120	9,980,790	26,591,070	5,987,190	4,867,350
August 31	21,027,470	9,636,350	29,473,100	6,215,020	5,024,320
1807 February 28	16,950,680	11,829,320	27,408,460	6,142,840	4,771,500
August 31	19,678,360	11,789,200	29,936,950	6,484,350	4,955,740
1808 February 29	18,188,860	11,991,960	27,884,780	7,755,470	5,088,750
August 31	17,111,290	13,012,510	29,244,090	6,015,940	5,136,230
1809 February 28	18,542,860	9,982,950	29,118,200	4,488,700	5,081,090
August 31	19,574,180	12,257,180	33,435,270	3,652,480	5,256,590
1810 February 28	21,019,600	12,457,310	35,378,580	3,501,410	5,403,080
August 31	21,793,990	13,617,520	40,973,770	3,191,850	5,271,110
1811 February 28	23,360,220	11,187,650	37,122,350	3,350,940	5,667,420
August 31	23,286,850	11,075,660	37,083,280	3,243,300	5,964,070
1812 February 29	23,108,320	11,595,200	38,026,290	2,983,190	6,005,960
August 31	23,026,880	11,848,910	38,176,120	3,099,270	6,399,400
1813 February 27	23,210,030	11,268,180	37,930,950	2,881,530	6,336,340
August 31	24,828,120	11,159,730	40,106,080	2,712,270	6,860,200
1814 February 28	24,901,080	12,155,460	41,296,910	2,770,430	6,937,800
August 31	28,368,290	14,849,040	48,345,960	2,097,680	7,225,410
1815 February 28	27,261,650	11,702,250	44,558,500	2,036,910	7,631,510
August 31	27,248,670	12,696,000	44,854,180	3,409,010	8,318,550
1816 February 29	27,013,620	12,588,890	43,401,310	4,640,880	8,659,680
August 31	26,758,720	11,899,380	39,779,540	7,582,780	8,227,920
1817 February 28	27,397,900	10,825,810	34,278,650	9,680,270	5,736,090
August 30	29,513,780	9,084,590	32,605,630	11,668,260	5,645,920
1818 February 28	27,770,970	7,997,550	30,905,330	10,055,460	5,192,270
August 31	26,202,150	7,[illegible]7,730	32,370,760	6,363,160	4,604,010
1819 February 27	25,126,700	6,413,370	31,455,000	4,184,620	4,099,590
August 31	25,255,690	6,301,160	31,740,350	3,595,360	3,751,000
1820 February 29	23,484,110	4,093,550	26,187,490	4,911,050	3,520,880
August 31	21,299,340	4,120,910	23,846,120	8,211,080	3,336,950
1821 February 28	23,884,920	5,622,890	20,796,270	11,869,900	3,158,360
August 31	20,295,300	5,818,450	18,475,540	11,233,590	3,595,380
1822 February 28	18,665,350	4,689,940	15,973,080	11,057,150	3,674,910
August 31	17,161,790	6,379,240	16,077,510	10,053,440	3,523,340
1823 February 28	18,392,240	7,181,100	18,319,750	10,384,250	3,130,220
August 30	19,231,240	7,827,550	17,467,570	12,658,210	3,067,020
1824 February 28	19,736,090	10,097,850	18,872,000	13,810,060	2,847,220
August 31	20,132,120	9,679,810	20,004,530	11,787,430	2,880,030
1825 February 28	20,755,760	10,168,780	24,951,330	8,779,100	2,807,890
August 31	19,598,840	6,410,040	25,146,230	5,031,390	2,930,350
1826 February 28	25,467,910	6,935,940	32,918,580	2,459,510	2,974,240
August 31	21,563,560	7,199,860	25,083,630	6,754,230	3,074,440
1827 February 28	21,890,610	8,801,660	23,529,530	10,159,020	2,996,280
August 31	22,747,600	8,052,090	23,199,320	10,163,770	2,863,400
1828 February 29	21,980,710	9,198,140	23,581,270	10,347,290	2,749,710
August 30	21,557,510	10,201,260	23,201,530	10,498,880	2,845,620
1829 February 28	19,870,850	9,553,960	25,384,750	6,835,020	2,794,960
August 31	19,547,380	9,035,070	24,661,810	6,295,530	2,874,890
1830 February 27	20,050,730	10,763,150	21,201,390	9,171,000	2,561,510
August 30	21,464,700	11,620,840	24,565,690	11,150,180	2,630,630
1831 February 28	19,606,140	11,211,530	25,207,090	8,117,050	2,619,360
August 31	18,558,650	9,069,310	23,905,630	6,439,760	2,736,850
1832 February 29	18,051,710	8,937,170	24,333,490	5,293,150	2,637,760
August 28	18,320,000	10,278,000	23,420,000	7,514,000	2,336,000
1833 February 26	19,372,000	12,455,000	23,850,000	10,205,000	2,228,000
August 27	19,925,000	11,927,000	23,245,000	10,871,000	2,264,000
1834 February 25	19,050,000	13,087,000	25,232,000	9,225,000	2,300,000
August 26	19,195,000	13,300,000	27,732,000	7,303,000	2,540,000
1835 February 24	18,510,000	10,071,000	24,895,000	6,289,000	2,603,000
August 25	18,085,000	13,725,000	28,173,000	6,[illegible]55,000	2,618,000
1836 February 23	18,181,000	14,044,000	27,368,000	7,787,000	2,930,000
August 30	18,018,000	12,010,000	27,697,000	5,250,000	2,889,000
1837 February 28	18,165,000	10,007,000	27,297,000	4,077,000	3,392,000
August 29	18,887,000	10,040,000	25,357,000	6,518,000	3,978,000
1838 February 27	18,975,000	10,825,000	21,958,000	10,471,000	2,629,000
August 28	19,488,000	8,922,000	21,611,000	9,540,000	2,741,000
1839 February 26	18,098,000	7,739,000	21,741,000	6,773,000	2,677,000
August 27	17,982,000	6,488,000	20,141,000	2,420,000	3,091,000
1840 February 25	16,504,000	6,556,000	21,611,000	4,311,000	2,892,000
August 25	17,170,000	6,254,000	22,075,000	4,299,000	2,950,000
1841 February 23	16,399,000	6,407,000	21,344,000	4,335,000	2,873,000
August 31	17,370,000	6,975,000	22,602,000	4,824,000	3,079,000
1842 February 22	16,920,000	8,239,000	22,121,000	6,119,000	3,084,000
August 27	20,332,000	8,690,000	22,159,000	9,799,000	2,866,000
1843 February 25	20,218,000	11,520,000	25,564,000	11,016,000	2,872,000

No. IX.—Statement exhibiting the Town and Country Circulation, Deposits, Securities, Bullion, &c. of the Bank of England, on the undermentioned days of the following years.

Dates.	Notes in Circulation. In London.	Notes in Circulation. In the Country.	Deposits.	Total Liabilities.	Securities.	Bullion.	Total Assets.	Balance of Assets over Liabilities.
	£	£	£	£	£	£	£	£
1832 July 3	14,369,000	2,734,000	8,558,000	25,661,000	21,230,000	6,616,000	27,846,000	2,185,000
1833 January 1	14,298,000	2,778,000	12,725,000	29,801,000	21,947,000	10,026,000	31,973,000	2,172,000
July 2	15,783,000	3,159,000	12,836,000	31,778,000	22,683,000	11,391,000	34,074,000	2,296,000
1834 January 7	14,193,000	3,229,000	19,889,000	37,311,000	24,694,000	10,142,000	39,836,000	2,525,000
July 1	15,518,000	3,171,000	15,373,000	34,062,000	27,171,000	8,885,000	36,556,000	2,294,000
1835 January 6	13,850,000	3,155,000	17,894,000	34,899,000	30,933,000	6,838,000	37,771,000	2,872,000
July 7	14,081,000	3,529,000	17,702,000	35,112,000	31,145,000	6,536,000	37,981,000	2,869,000
1836 January 5	13,318,000	3,306,000	20,429,000	37,143,000	32,057,000	7,097,000	39,754,000	2,611,000
July 5	13,715,000	3,595,000	16,016,000	33,326,000	29,597,000	6,714,000	36,311,000	2,785,000
1837 January 3	13,023,000	4,074,000	16,678,000	33,775,000	32,447,000	4,221,000	36,668,000	2,893,000
July 4	13,119,000	3,735,000	10,257,000	27,141,000	24,589,000	5,577,000	30,166,000	3,025,000
1838 January 2	13,369,000	3,723,000	11,230,000	28,322,000	20,927,000	9,909,000	30,836,000	2,514,000
July 3	11,699,000	4,038,000	9,199,000	27,936,000	20,590,000	9,980,000	30,570,000	2,634,000
1839 January 1	13,161,000	4,068,000	11,327,000	28,856,000	22,377,000	9,018,000	31,427,000	2,569,000
July 2	13,112,000	4,169,000	7,489,000	25,100,000	24,061,000	3,676,000	27,737,000	2,637,000
1840 January 7	11,021,000	3,926,000	14,518,000	30,065,000	28,411,000	4,508,000	32,919,000	2,854,000
July 7	12,641,000	3,921,000	7,293,000	23,905,000	21,915,000	4,819,000	26,734,000	2,829,000
1841 January 5	11,950,000	3,921,000	8,479,000	24,100,000	22,850,000	4,063,000	26,913,000	2,813,000
July 6	12,357,000	4,167,000	14,728,000	31,252,000	28,947,000	5,319,000	34,266,000	3,014,000
1842 January 4	11,815,000	4,361,000	9,008,000	25,187,000	22,512,000	5,602,000	28,114,000	2,927,000
July 2	13,261,000	4,963,000	8,670,000	26,894,000	21,092,000	8,593,000	29,595,000	2,701,000
1843 January 7	13,304,000	5,214,000	16,534,000	35,052,000	26,706,000	10,932,000	37,638,000	2,586,000

No. X.—A Return of the Average Aggregate Amount of Promissory Notes, payable to Bearer on Demand, in Circulation in the United Kingdom in the Months of January and July, distinguishing those circulated by the Banks of England and Ireland, and by Private and Joint Stock Banks in England, Scotland, and Ireland, together with the Bullion in the Bank of England, from September, 1833, to January, 1843.

Date.	England. Bank of England.	England. Private Banks.	England. Joint Stock Banks.	England. Unreturned.	Scotland. Private and Joint Stock Banks.	Ireland. Bank of Ireland.	Ireland. Private and Joint Stock Banks.	Total Issues in the United Kingdom.	Bullion in the Bank of England.
	£	£	£	£	£	£	£	£	£
1833 September	19,014,000	6,165,037	1,115,521	2,347,086	2,614,495	3,678,950	1,112,155	36,035,244	10,844,250
1834 January	19,234,500	6,621,623	1,260,685	2,195,989	3,004,983	4,017,600	1,520,578	37,855,958	9,952,500
July	19,488,400	6,368,122	1,537,511	2,054,514	3,108,239	3,638,500	1,134,764	37,329,850	8,403,600
1835 January	18,547,500	6,670,988	1,822,491	1,867,577	3,056,828	3,858,560	1,702,956	37,526,900	6,552,500
July	18,864,750	6,535,365	2,130,968	1,821,730	3,058,053	3,191,175	1,276,589	37,178,630	6,268,500
1836 January	17,955,300	6,842,803	2,472,267	1,898,915	3,091,510	3,484,620	2,035,709	37,779,324	7,652,000
July	18,582,750	6,716,850	3,371,942	1,191,240	3,230,966	3,320,600	1,940,976	38,654,404	6,224,950
1837 January	18,735,000	6,831,724	3,001,659	740,983	3,149,321	3,187,150	2,118,361	38,549,195	3,990,600
July	19,174,500	6,229,418	3,355,911	346,242	2,977,539	3,091,300	1,444,762	36,619,672	5,857,000
1838 January	18,948,000	6,659,282	3,763,197	271,498	3,000,288	3,312,600	2,246,424	38,201,279	9,912,000
July	20,249,400	6,762,555	4,259,333	250,719	3,121,882	3,222,350	1,896,768	39,743,007	9,680,800
1839 January	18,554,800	7,539,120	4,566,369	232,592	3,214,603	3,551,525	3,090,216	40,779,255	8,318,800
July	18,107,800	6,817,002	4,243,419	84,891	3,165,761	3,193,175	2,074,122	38,016,170	3,118,800
1840 January	17,315,000	6,626,674	3,941,507	62,576	3,076,585	3,265,550	2,715,645	37,003,137	4,364,500
July	17,681,000	6,536,824	3,697,014	57,924	3,228,595	2,979,950	1,876,651	35,857,982	4,199,750
1841 January	16,852,250	6,301,992	3,587,319	164,717	3,174,555	3,213,200	2,366,264	35,660,297	3,965,250
July	17,076,000	5,907,682	3,418,810		181,594	3,055,025	1,905,672	35,444,783	5,011,000
1842 January	16,293,000	5,478,189	3,012,197		3,070,075	3,205,875	2,515,677	33,605,013	5,629,000
July	19,008,000	5,166,581	2,939,195		2,715,680	2,892,775	1,680,987	35,303,218	8,883,000
1843 January	18,283,000	4,942,825	2,839,909		2,770,858	3,112,950	2,099,641	34,049,163	11,054,000

III. Banks (English Private and Provincial).

Besides charging the usual rate of interest on bills discounted, the provincial bankers are mostly in the habit of charging *5s.* or *6s.* per cent. as commission. They also charge a commission on all payments, and derive a profit from charges for the transmission of money, &c. They usually allow from 2 to 3 per cent. on money deposited; but the numerous failures that have taken place amongst them have, by generating a feeling of insecurity in the minds of the depositors, confined this branch of their business within comparatively narrow limits. When their customers overdraw their accounts, they are charged with interest at the rate of 5 per cent.

Country banks, established by individuals possessed of adequate funds, and managed with due discretion, are productive of the greatest service. They form commodious reservoirs, where the floating and unemployed capital of the surrounding districts is collected, and from which it is again distributed, by way of loan, to those who will employ it to the best advantage. It is, therefore, of the utmost importance, in a public point of view, that these establishments should be based upon solid foundations. But in England, unfortunately, this has been but little attended to; and the destruction of country banks has, upon three different occasions,—in 1792, in 1814, 1815, and 1816, and in 1825 and 1826,—produced an extent of bankruptcy and misery that has never perhaps been equalled, except by the breaking up of the Mississippi scheme in France. Government is bound to interfere to hinder the recurrence of such disastrous results, and we have already stated how this may be effected.—(See *antè*, p. 79, &c.)

The following is an account of the number of commissions of bankruptcy issued against country bankers in England from 1809 to 1830, both inclusive:—

Years.	Commissions.	Years.	Commissions.	Years.	Commissions.	Years.	Commissions.
1809	4	1815	25	1821	10	1826	43
1810	20	1816	37	1822	9	1827	8
1811	4	1817	3	1823	9	1828	3
1812	17	1818	3	1824	10	1829	3
1813	8	1819	13	1825	37	1830	14
1814	7	1820	4				

(*Appen. to Report on Bank Charter*, p. 116.)

Exclusive of the above, many banks stopped payments, to the great injury of their creditors and the public, that afterwards resumed them; at the same time that the affairs of some bankrupt concerns were arranged without a commission. During the whole of this period not a single Scotch bank gave way.

The stamp duties on country bank notes have been already specified (p. 74.).

Besides the stamp duties payable on notes, each individual or company issuing them must take out a licence, renewable annually, which costs 30*l.* This licence specifies the names and places of abode of the body corporate, person or persons, in the firm to whom it is granted, the name of such firm, the place where the business is carried on, &c.; and a separate licence is to be taken out for every town or place where any notes shall be issued by or on account of any banker, &c. Unless the licence granted to persons in partnership set forth the names and places of abode of all persons concerned in the partnership, whether their names appear on the notes issued by them or not, such licence shall be absolutely void.—(*55 Geo.* 3. c. 184. s. 24.) For the regulations as to the issue of unstamped notes, see *antè*, p. 69.

The issue of notes for less than 5*l.* was prohibited in England, as previously shown, from 1777 to 1797; but they continued to be issued from the latter period down to the 5th of April, 1829, when their further issue ceased, in consequence of an act passed in 1826. This act did not extend to Scotland or Ireland, and was intended to give greater stability to the system of country banking in England, by shutting up one of the principal channels through which the inferior class of bankers had been in the habit of getting their notes into circulation.

The joint-stock banks established in different parts of England and Wales, under the provisions of the act 7 Geo. 4. c. 46. authorising their establishment, consist of bodies of partners, varying from seven, the minimum, to any greater number. Each partner holds one or more shares of the company's stock, and is individually liable for the entire debts and engagements of the company; so that a person holding a 50*l.* or 100*l.* share in a joint-stock bank may, in the event of its becoming bankrupt, be called upon to make payment of as many thousands of pounds! They are uniformly almost managed by boards of directors appointed by, and generally responsible to, the body of shareholders. The conditions of co-partnery vary materially in different associations; but the above are distinguishing features common to them all. The shares in many joint-stock banks are very small, few being above 100*l.*, the greater number not exceeding 50*l.*, whilst many are only 25*l.*, and some not more than 10*l.*, and even 5*l.*! Generally, too, it is understood, or rather it is distinctly set forth in the prospectus, that not more than five, ten, or twenty per cent. of these shares is to be called for; so that an individual who has ten or twenty shillings to spare may become a shareholder in a bank. And owing to a practice, or rather a flagrant abuse, introduced into the management of various banks, by which they make large advances or discounts on the credit of the stock held by the shareholders, not a few individuals in doubtful, or even desperate circumstances, take shares in them, in the view of obtaining loans, and bolstering up their credit! The great danger arising from such banks is obvious; and were one of them to stop payment, it is plain, even though the claims on it should be ultimately made good, that they could be so only at the cost, and perhaps ruin, of such of its proprietors as had abstained from the abusive practices resorted to by others. It may well, indeed, excite astonishment, that any one who can really afford to make a *bonâ fide* purchase of shares in a bank should be foolhardy enough to embark in such concerns.

No doubt a joint-stock bank, if it possess adequate capital and be discreetly managed, may afford ample security to its shareholders and the public. But there is no foundation for the notion, that because a bank has 50 or 100 partners it will, therefore, be better managed than if it had only 5 or 10. On the contrary, the fair presumption is that it will not be so well managed. A few wealthy individuals engaged in banking, or any other sort of business, must, if they would protect themselves from ruin, pay unremitting attention to their concerns, and act in a discreet and cautious manner. But the partners and managers of a great joint-stock company act under no such direct and pressing responsibility. "I think," said the highest authority on such subjects, "that joint-stock banks are deficient in every thing requisite for the conduct of banking business, except extended responsibility; the banking business requires peculiarly persons

attentive to all its details, constantly, daily, and hourly watchful of every transaction, much more than mercantile or trading businesses. It also requires immediate, prompt decisions, upon circumstances when they arise, — in many cases a decision that does not admit of delay for consultation; it also requires a discretion to be exercised with reference to the special circumstances of each case. Joint-stock banks being, of course, obliged to act through agents, and not by a principal, and therefore under the restraint of general rules, cannot be guided by so nice a reference to degrees of difference in the character or responsibility of parties; nor can they undertake to regulate the assistance to be granted to concerns under temporary embarrassment by so accurate a reference to the circumstances, favourable or unfavourable, of each case."—(*Evidence of S. J. Loyd, Esq., before the Committee of* 1832 *on the Renewal of the Bank Charter.*)

In fact more than nine tenths of the partners in joint-stock banks are wholly ignorant of banking business, and have nothing better to trust to than the supposed honesty and intelligence of the directors; and, even if they were acquainted with the business, the result would be nearly the same, as it would not be possible for any one, by a mere cursory inspection of the books of any bank (if such were permitted), to form any accurate estimate of its condition, or of the mode in which it transacted business. And hence the directors in these establishments are practically all but absolute. If they be worthy of the confidence placed in them, all goes on smoothly; and this also is the case when they are most unworthy, till they have involved the concern in inextricable difficulties! The history of the Norwich Bank, of the Northern and Central Bank, the Marylebone Bank, the Manchester Bank, and a host of others, sufficiently attests the truth of what has now been stated. The responsibility of the directors to the shareholders has not been found, in any of these instances (and it is, indeed, ludicrous to suppose that it ever should be otherwise), to have been any check whatever over their frauds and improvidence. The whole paid-up capital of the Manchester Bank, amounting to about 750,000*l.*, had been wasted in the most improvident speculations, and additional debts incurred, before the great body of the shareholders had the least suspicion that the company was otherwise than prosperous!

We may observe, by the way, that the mischief occasioned by an establishment of this sort, when perverted from its proper objects, and mismanaged, is not to be estimated by the ruin it entails on its partners, and probably, also, on its customers. It becomes, in fact, a public nuisance, and entails privations on many who might be supposed to be beyond the sphere of its influence. Within the ten years ending with 1842, we believe it may be moderately estimated that about 1,500,000*l.* of banking capital has been wholly dissipated in Manchester and its immediate vicinity! And as nine tenths of this enormous loss was occasioned by advances made to manufacturers who had little or no capital of their own, it is not easy to imagine what a ruinous stimulus it must have given to the most reckless competition, and how very injurious it must have been to parties trading on their own capital. Indeed, no inconsiderable portion of the late distress in Manchester may be traced to this source.

A knowledge of the agency by which certain joint-stock banks had been established, of the way in which some of them were conducted, and a well-founded anticipation of the evils of which they would, most likely, be productive, led in 1836 to the appointment of a secret committee by the House of Commons, to inquire into the operation of the act 7 Geo. 4. cap. 46., permitting the establishment of joint-stock banks; and whether it was expedient to make any alteration in its provisions. The report of this committee, and portions of the evidence taken before it, were afterwards published, and confirmed all the conclusions of those who had contended that the existing system required material amendment. The committee state that—

"Subject to the local restrictions imposed for the protection of the privilege of the Bank of England, it is open to any number of persons to form a company for joint-stock banking, whether for the purpose of deposit, or of issue, or of both.

"1. The law imposes on the joint-stock banks no preliminary obligation beyond the payment of a licence duty, and the registration of the names of shareholders at the Stamp Office.

"2. The law does not require that the deed of settlement shall be considered or revised by any competent authority whatever; and no precaution is taken to enforce the insertion in such deeds of clauses the most obvious and necessary.

"3. The law does not impose any restrictions upon the amount of nominal capital. This will be found to vary from 5,000,000*l.* to 100,000*l.*; and in one instance an unlimited power is reserved of issuing shares to any extent.

"4. The law does not impose any obligation that the whole or any certain amount of shares shall be subscribed for before banking operations commence. In many instances banks commence their business before one half of the shares are subscribed for, and 10,000, 20,000, and 30,000 shares are reserved to be issued at the discretion of the directors.

"5. The law does not enforce any rule with respect to the nominal amount of shares. These will be found to vary from 1,000*l.* to 5*l.* The effects of this variation are strongly stated in the evidence.

"6. The law does not enforce any rule with respect to the amount of capital paid up before the commencement of business. This will be found to vary from 105*l.* to 5*l.*

"7. The law does not provide for any publication of the liabilities and assets of these banks, nor does it enforce the communication of any balance-sheet of the proprietors at large.

"8. The law does not impose any restrictions by which care shall be taken that dividends are paid out of banking profits only, and that bad or doubtful debts are first written off.

"9. The law does not prohibit purchases, sales, and speculative traffic on the part of these companies in their own stock, nor advances to be made on the credit of their own shares.

"10. The law does not provide that the guarantee fund shall be kept apart and invested in government or other securities.

"11. The law does not limit the number of branches, or the distance of such branches from the central bank.

"12. The law is not sufficiently stringent to insure to the public that the names registered at the Stamp Office are the names of persons *bonâ fide* proprietors, who have signed the deed of settlement, and who are responsible to the public.

"13. The provisions of the law appear inadequate, or, at least, are disregarded, so far as they impose upon banks the obligation of making their notes payable at the places of issue.

"All these separate questions appear to your committee deserving of the most serious consideration, with a view to the future stability of the banks throughout the United Kingdom, the maintenance of commercial credit, and the preservation of the currency in a sound state."

Remedial Measures that should be adopted. — We do not, however, think that it would be at all necessary, in providing for a secure system of joint-stock banking, to make any regulations with respect to many of the points noticed by the committee as to which the law is silent. At present every partner in a joint-stock bank is liable to the public for the whole debts of the firm; and this may be truly said to be the saving principle of the system, and without which it would be an unmixed evil. No individual should, however, by merely withdrawing from a joint-stock concern, get rid of his liabilities in connection with it. To prevent fraud, and to ensure due caution, these ought to continue for a period of three years at least after he has publicly withdrawn his name. The public, too, are clearly entitled to know the partners in joint-stock associations; that is, to be informed who the individuals are with whom they are dealing, and who are responsible to them. But, unluckily, no effective means are taken for supplying this necessary information, or, consequently, of properly discriminating between one establishment and another. The act of 1833 (3 & 4 Will. 4. c. 83.) directed that an account of the places where they carry on business, and of the names and residences of the partners, should be quarterly transmitted to the Stamp Office. But doubts have been entertained as to the correctness of these returns, and comparatively little use has been, or, indeed, can be made of them. The accounts of the names and residences of the proprietors are not published, but are secluded from the public eye in the repositories of Somerset House! It is true that these lists may be seen by those who choose to apply at the office for a small fee, and that certified copies may be procured at no great expense. But few know that such returns exist; and fewer still have the opportunity, or think of availing themselves of them as sources of information. To render them of any real utility, they should be brought under the public eye, by being hung up in the offices of the banks to which they refer, and periodically published in the newspapers of the places where they carry on business. By this means the public would know exactly to whom they had to look, and would act accordingly. They would not be deceived, as they are liable to be at present, by supposing that, because a bank has a number of partners, some of them must be opulent and trustworthy. They would know the precise state of the fact; and if it were seen, from the quarterly returns, that opulent and intelligent individuals were withdrawing from a bank, every one would be put on his guard, and would naturally conclude that the parties had very sufficient reasons for quitting the concern. Thus far publicity may be made effectual, and would be of the greatest importance. Neither is it possible to allege a single plausible objection to this proposal. It interferes in no degree, nor in any way, with the proceedings of the parties: all that it does is to declare who and what they are; and to this degree of publicity no honest man will object.

But we have great doubts whether it be possible to carry publicity farther than this. The committee state that "the law does not provide for any publication of the liabilities and assets of these banks, nor does it enforce the publication of any balance-sheet to the proprietors at large;" and it has been proposed to compel the periodical publication of a statement of this sort; but it is very questionable whether any such publication would not be a great deal worse than useless. It is not proposed that commissioners should be appointed to inspect the accounts of the different banks, and to see that the returns are accurate: this would be too inquisitorial, too cumbrous, and too costly a plan to be thought of for a moment. There would be nothing for it, in fact, but to trust entirely to the *honour* of the parties! Hence, in all cases in which a disclosure would be really useful, the publication of an account of assets and liabilities would afford the means of deceiving the public, and of representing a bankrupt concern as being in a prosperous condition. Supposing, however, that the parties were, in all instances, perfectly honest, still the publication of a balance-sheet would be good for nothing. Every one knows how sanguine people are in relation to their own affairs; and that debts and obligations that other parties would hardly reckon worth any thing, are estimated by them as if they were so much bullion. But, independently of this, the futility of the thing is obvious. A bank with a capital of 100,000*l.*

discounts bills and other obligations to the extent, perhaps, of 300,000*l.* or 400,000*l.*; the fact that it has discounted them shows that it believes these bills and obligations to be good; and they will, consequently, be reckoned among its assets. But should a revulsion take place, or any circumstance occur to shake credit, these bills may not be worth 100,000*l.*; and those who have dealt with the bank, on the hypothesis of its having capital and assets more than enough to meet all its obligations, may find, to their cost, that it is not possessed of a single shilling, but is, on the contrary, some 200,000*l.* or 300,000*l.* worse than nothing!

The committee seem to think that some regulation should be enacted, providing that a certain portion of its capital should be paid up before a bank begins business. But the better way would be to prohibit all advertising of *nominal* capital. This, in fact, is a mere device by which to entrap and delude the public. A bank is announced with a capital of 1,000,000*l.*, 2,000,000*l.*, or 3,000,000*l.*; and a great number of people, perhaps the majority, immediately conclude that there can be no risk in dealing with an establishment possessed of so great an amount of property. But what is the fact? The capital advertised is nominal merely; not more perhaps than a tenth or a fifth part of it has been received into the coffers of the bank, and we have nothing better than the statement of the bank proprietors, or their agents, that they will pay up the remainder, if necessary; of which necessity they of course are to be the only judges! Practically this is neither more nor less than a fraud upon the public; it is a contrivance for making 10,000*l.* pass in the public estimation for 100,000*l.*, and for procuring the same degree of credit to its holders. This, however, is not all. Where is the security that if a greater amount of capital were really required, it would be forthcoming? The notion that the bulk of the shareholders in many, we are pretty sure we might safely say most of the joint-stock banks now in existence, could pay up the full amount of their shares, is too ludicrous to deserve notice. We might as well call upon a man worth 5*l.* to extinguish a debt of 500*l.*

There can be no doubt, therefore, unless it be meant to affirm that deception and fallacious statements are indispensable to the success of joint-stock banking schemes, that all advertising of nominal capitals should be put an end to; and that no association should be allowed to represent its capital as exceeding the sum actually paid up by the proprietors. But though this would obviate one source of fraud and deception, there would still be abundant means of practising on the credulity of the public at the disposal of parties inclined to use them. Admit that a bank has a capital of 500,000*l.* actually received into its coffers, what is to hinder the directors from lending out the whole of this sum, or even more, to themselves or to partners in the bank? or supposing them not to do this, who can tell whether the entire capital, or some considerable part of it, be not wholly engulphed in ruinous speculations? It is indeed alleged, and truly too, that this could not happen with any "respectable" bank; that "gentlemen of character" would not lend themselves to such transactions! Unluckily, however, there are no decisive marks or tests by which the public can, *à priori*, say what is or what is not a "respectable" bank, or who is or is not a "gentleman of character;" and it is not a little hazardous in such matters to indulge in speculative remarks. Hence it is that the Marylebone Bank, the Bank of Manchester, and indeed all banks, are held to be respectable, that is, solvent, till the event prove the contrary; and that all gentlemen connected with banks are held to be "men of character," paragons, in fact, of honour, honesty, and intelligence, till their fraud or ignorance has involved hundreds or thousands in bankruptcy and ruin.

We do not state these circumstances in order to raise any prejudice against joint-stock banks or other associations, for they apply equally to banks with one or a small number of partners; but we state them to show the folly of placing any reliance on statements as to the capital of any bank, or the character of its managers. Such statements may be either true or false; but, as the public cannot tell which, they are plainly good for nothing. The only real security is to be found, if it exist at all, in the names of the partners responsible for the debts and obligations of the bank. The number of such partners is a very inferior consideration. There cannot, in truth, be a greater error than to suppose that because a bank has a great number of partners, its security may be safely depended upon. A single individual worth 100,000*l.* is an incomparably better security than fifty individuals worth 2,000*l.* each; and a hundred individuals worth 1,000*l.* would hardly be any security at all; at least for a sum of 10,000*l.* or 20,000*l.* A private bank with *six* may be a safer place of deposit than a joint-stock bank with *six hundred* partners. Every thing depends upon *the available wealth* of those responsible for the debts of the concern; and hence the propriety and justice, whether the firm consist of one or of many partners, of publicly declaring and specifying their names.

We are decidedly hostile to a proposition we have heard mooted, and which seems to be countenanced by the committee on joint-stock banks, for obliging all banks to establish a guarantee fund; that is, for obliging them to accumulate a *portion of their profits*

as a reserve stock. Where is the security that such reserve would be always deducted from profits? The truth is, that bankrupt and fraudulent concerns, and none else, would gain by such a regulation; inasmuch as it would enable them, by appearing to be prosperous, the better to deceive the public, and to blind them to the real state of their affairs. It is worse than absurd to induce the public to depend on guarantees that cannot be enforced, and which, consequently, must be good for nothing. The knowledge of whom the partners in banks really consist, and their unlimited responsibility, are the only securities that, speaking generally, are worth a pinch of snuff. If these cannot protect the public from fraud or loss, nothing else will; and the question will come to be, not whether the system should be reformed, but whether it should be abated as an incurable nuisance. On this ground also we should be disposed to dissent from any attempt to prevent, by legislative enactment, the making of loans upon the credit of bank stock. We do not question the advantage of such a regulation, provided it were honestly carried into effect. But it is useless to say that, whenever the parties were disposed to defeat such a regulation, it would be quite inoperative.

Some of the joint-stock banks have an extraordinary number of branches; and the multiplication of these subordinate establishments all over the country is not one of the least striking features of the system. Neither is it very difficult to discover why banks of issue, at least, are so very anxious about the formation of these outworks. They are bound, it seems, by the present law to pay their notes *only at the parent establishment;* so that by issuing them at a branch bank, perhaps a hundred miles distant from the head bank, the chances are ten to one that they will continue for a much longer period in circulation, and that they will consequently be able to carry on business with a less amount of capital, than if they were, as they ought to be, obliged to pay their notes at the branches as well as at the principal office. It is obvious. indeed, that the convertibility of the paper, even of first-class banks, into either cash or Bank of England notes, is at present exceedingly imperfect; and that very great facilities are afforded for getting the worst class of notes into circulation, and for keeping them afloat, even after their quality may be suspected. This defect in the law should, undoubtedly, be amended, by obliging all banks that issue notes to pay them indifferently at any of their offices. But we incline to think that parliament might go further than this; and that it should enact that no branch be established, whether for the issue of notes or otherwise, beyond a certain distance (say fifty miles) from the head office.

Several of the points recapitulated by the committee, as to which the law is silent, respect the rights and interests of the partners in joint-stock banks, in relation to each other, and not as between them and the public. But it is always a very difficult matter to interfere to dictate the footing on which parties in any undertaking should stand among themselves. Much should, in such cases, be left to the judgment of the parties; and public regulations, if enforced at all, should only go to prevent obvious and acknowledged abuse; the parties may, in most cases, be safely left to take care of themselves. The protection of the public interest is the paramount consideration; and we do not well know what can be done to effect this, in the case at least of such banks as do not issue notes, other than the making known who their partners are.

The joint-stock banks formed in the city of London offer a fair rate of interest for deposits; and if they go on successfully in doing this, they will confer no slight advantage on the community, and will become, as it were, so many savings banks for the middle classes, and for the rich as well as the poor. But the responsibilities this system will bring along with it are neither few nor small. A bank with a numerous body of partners of undoubted wealth and integrity that should give 2 per cent. interest on all deposits of 10*l.* and upwards, how short soever the period for which the deposit might remain in the bank, would, there is little doubt, speedily have ample funds at its disposal. In quiet and prosperous times, the system would work exceedingly well; and the bank and the public would be vastly well pleased with each other. But when the cycle of prosperity has gone by, and the cycle of adversity has begun; when the waters are out and the winds begin to blow,—it is doubtful whether either the bank or its depositors may feel quite at ease. The former will probably raise the rate of interest; but it is doubtful whether that will have the wished-for effect. Should the exchange set against us, and the Bank of England be forced to narrow her issues, and should bankruptcy and a feeling of insecurity begin to prevail, as they have done hitherto on all similar occasions, a run for deposits may, and most probably will, be made upon the bank; and in such a case her situation, however well she may have been managed, will be most critical. She will be compelled to dispose of or pledge securities in a market where they may be all but unsaleable; and it will be impossible for her suddenly to pull up in discounting, without exposing herself to the imminent danger of extra loss, by bringing on the stoppage of those who have been accustomed to trust to her for loans.

It will be said, perhaps, that this is all imaginary, and that nothing of the sort ever occurs in Scotland! But it would really be about as much to the purpose to say that nothing of the sort ever occurs in Japan. London is the pivot on which the foreign exchanges turn, and when they become depressed many of the London depositors will do what the Scotch depositors never so much as dreamed of; that is, they will demand their deposits, convert them into gold, and either send this gold abroad, or get a profit from those who will. From this source of annoyance and loss the Scotch banks are perfectly free; and this, by exhausting the resources of the London banks, and subjecting the weaker ones to difficulties, occasions discredit, and, in the end, runs or panics. Nothing, therefore, can be more perfectly futile than to contend that because this system has proved profitable for the Scotch banks, it will also be profitable for the London banks. We do not presume to affirm that such will not, and we hope that it may, be the case. But it would be rather illogical to affirm, because wheat succeeds remarkably well in the vale of Gloucester, that it will succeed equally well on the Welsh mountains.

The joint-stock banks may, if they do not already, endeavour to obviate some of the difficulties now stated, by declining to pay interest on deposits unless they lie for a certain time, or by stipulating for a certain notice before they are paid. But either the one condition or the other is subversive of what is meant by granting interest on deposits, and goes far to make the announcements to that effect little better than a hoax upon the public. All, or nearly all, the existing banks are banks of deposit in this sense of the word; that is, they give interest on deposits of a certain amount, provided they be not called for till after the lapse of an agreed-on period, and that the depositors give them no farther trouble. But it is doubtful whether money deposited at 2 per cent. under such conditions, and still more under an engagement to give notice of demand, be as well laid out as if it were deposited with the Bank of England, or any other bank of undoubted solidity, at no interest, but payable on demand. Most men of business would, undoubtedly, prefer the latter. Nobody, indeed, not wishing to get into difficulties, would be disposed to deal with any bank that required notice of demand; and it is questionable whether any such stipulation should be sanctioned by law.

The committee on joint-stock banks omitted all reference to what is by far the most prominent evil in our banking system — we mean the power conceded to all private and joint-stock banks and companies, whether with or without property or character, to issue paper money or notes payable on demand, without let or hindrance of any sort. This abuse should certainly be put down; and if it be determined to allow private and joint-stock banks to continue to issue notes, they should, as already seen, be compelled to give security for their payment. It has been sufficiently shown that nothing short of this will be found effectual to protect the public from loss by the issue of worthless paper.

Responsibility ought not, in any Case, to be limited. — We protest against the proposal for allowing the partners in banks not issuing notes to limit their responsibility. Such a measure would be good for nothing, except to serve as a premium on every species of fraud. What check would there be, under such a system, to hinder the partners of a bank going on for a series of years dividing large profits, when, perhaps, they were really incurring a loss, until every farthing of its capital and deposits was absorbed? To talk of subjecting such persons to punishment as fraudulent bankrupts, on evidence derived from their books, is absurd; for, supposing that it was the intention of the parties to defraud, they might easily keep their books so that they could afford no information that was not false or misleading. The annexed list of joint-stock banking companies shows that there is no disinclination on the part of individuals to engage in such concerns, even with the present unlimited responsibility. And the way in which some of them are conducted proves sufficiently, if such proof were wanted, that the serious liabilities incurred by the partners are not more than enough for the protection of the public. To lessen them would be an act of gratuitous folly. If we are to interfere, let them be increased, not diminished. But in the case of banks not issuing notes, enough is done, if measures be taken to prevent deception by letting the public know the partners in them, and making sure that they shall have no means of evading the responsibility attaching to their engagements. The first object may be secured by compelling all banking associations whatever to publish annually a list of the names and addresses of their partners, with the amount of their paid-up capital; and to accomplish the latter object, we have merely to abstain from interference, and to let the law take its natural course.

Accounts of Issues. — The acts 3 & 4 Will. 4. c. 86. and the 4 & 5 Vict. c. 50. direct that all persons or associations carrying on banking business, and issuing promissory notes payable on demand, shall keep weekly accounts of their issues; and shall, at the end of every month, make up from the weekly accounts an average return of their issues during the preceding month, verified on oath, which shall be transmitted to the Stamp Office in London; and the commissioners are directed to make up from these separate monthly returns an aggregate monthly return of the notes in circulation, distinguishing

between private and joint-stock banks, which is to be published in the Gazette. Penalty for neglecting or refusing to make and transmit such account, 500*l.* on the corporation, company, persons, &c. issuing the notes, and 100*l.* on the secretary so offending. The wilful sending a false return to be punished as perjury.

Drawing on London. — The act 3 & 4 Will. 4. c. 83. repeals the regulation in the 7 Geo. 4. c. 46., prohibiting banks with more than 6 partners from drawing on London on demand, or otherwise, for sums of less than 50*l.* — § 2.

An Account of the Number of Private and Joint Stock Banks registered in each Year, from 1820 to 1842, both inclusive.—(*Parl. Paper* No. 85. Session 1843.)

Year.	Number of Private Banks.	Number of Joint Stock Banks.	Year.	Number of Private Banks.	Number of Joint Stock Banks.
1820 to 1821	521	—	1831 to 1832	424	25
1821 to 1822	526	—	1832 to 1833	416	35
1822 to 1823	547	—	1833 to 1834	416	47
1823 to 1824	547	—	1834 to 1835	411	55
1824 to 1825	544	—	1835 to 1836	407	100
1825 to 1826	554	—	1836 to 1837	351	107
1826 to 1827	465	6	1837 to 1838	341	104
1827 to 1828	456	7	1838 to 1839	332	108
1828 to 1829	460	11	1839 to 1840	332	113
1829 to 1830	439	15	1840 to 1841	321	115
1830 to 1831	436	19	1841 to 1842	311	118

An Account of all the Joint Stock Banks existing in England and Wales on the 1st Day of January, 1840; specifying their Names, the Dates of their Establishments, the Places where they had Branches established, with the Number of Partners in each, on the 1st Day of January 1840, the 1st Day of January 1841, and the 1st Day of January 1842; distinguishing between those Banks that issued and those that did not issue Notes.

Note.—Those marked thus (*) do not issue Notes.

Name of the Bank.	Date of Establishment.	Places where they had Branches established on 1st of January, 1842.	Number of Partners.		
			1 Jan. 1840.	1 Jan. 1841.	1 Jan. 1842.
*Alliance Bank of Manchester	19 Oct. 1839	Manchester	104	244	234
Ashton, Stalybridge, Hyde, and Glossop Bank.	14 Mar. 1838	Ashton-under-Lyne	277	272	267
*Bank of Birmingham	2 Aug. 1832	Birmingham	215	no account rendered.	209
*Bank of Bolton	30 May 1836	Great Bolton	153	152	152
Bank of Liverpool	23 April 1831	Liverpool	528	508	581
Bank of Manchester	19 Mar. 1829	Manchester, Stockport, Bolton, and Newtown.	657	644	555
Bank of Stockport	3 May 1836	Stockport	297	254	260
Bank of Walsall and South Staffordshire.	10 Aug. 1835	Walsall	149	142	143
Bank of Westmoreland	8 June 1833	Kendal	150	148	146
Bank of Whitehaven	23 Jan. 1837	Whitehaven and Wigton	115	115	114
Barnesley Banking Company	25 Jan. 1832	Barnsley	102	100	92
Bilston District Bank	31 Aug. 1836	Bilston	121	117	115
Birmingham Banking Company	30 Sept. 1839	Birmingham	457	438	427
Birmingham Borough Bank	28 Mar. 1837	Birmingham	90	90	93
Birmingham and Midland Bank	18 Aug. 1836	Birmingham	169	155	143
*Birmingham Town and District Banking Company.	4 July 1836	Birmingham	362	334	310
Borough Bank of Sheffield	31 Aug. 1839	Sheffield	73	69	64
Bradford Banking Company	7 July 1827	Bradford	163	156	154
Bradford Commercial Joint-Stock Bank.	27 Feb. 1833	Bradford	158	156	148
Bristol Old Bank	16 June 1826	Ceased as a joint-stock bank	7	7	ceased.
Burton, Uttoxeter, and Staffordshire Union Banking Company.	16 Oct. 1839	Burton-upon-Trent and Uttoxeter	173	181	189
Bury Banking Company	14 June 1836	Bury	100	91	87
Carlisle City and District Banking Company.	20 Feb. 1837	Carlisle and Cockermouth	307	298	305
Carlisle and Cumberland Joint-Stock Bank.	8 Oct. 1836	Carlisle, Wigton, and Appleby	263	258	256
Cheltenham and Gloucestershire Bank	19 May 1836	Cheltenham and Tewkesbury	156	153	150
Chesterfield and North Derbyshire Banking Company.	21 Dec. 1833	Chesterfield	97	92	92
Commercial Bank of England	1 July 1834	Manchester, Burslem, Newport	599	542	557
County of Gloucester Bank	1 Aug. 1836	Gloucester, Cheltenham, Burford, Cirencester, Faringdon, Tetbury, Stroud, Dursley, and Northleach.	269	268	271
Coventry Union Banking Company	12 May 1836	Coventry, Atherstone, and Coleshill	153	146	133
Coventry and Warwickshire Banking Company.	13 Dec. 1835	Coventry and Nuneaton	265	259	248
Cumberland Union Banking Company	13 Mar. 1829	Workington, Cockermouth, Maryport, Penrith, Wigton, and Keswick.	158	164	170
Darlington District Joint-Stock Banking Company.	22 Dec. 1831	Darlington, Stockton, Stokesley, Barnard Castle, North Allerton, Guisbro', Bedale, Yarm, Masham, Bishop Auckland, Hartlepool, Middlesboro, Thirsk, and Middleton-in-Teesdale.	221	216	215
Derby and Derbyshire Banking Company.	28 Dec. 1833	Derby and Belper	188	175	168
Devon and Cornwall Banking Company	31 Dec. 1831	Plymouth, Devonport, Exeter, Kingsbridge, Tavistock, Totnes, Ashburton, Saint Austell, Liskeard, Crediton, Bodmin, Dartmouth, Newton Abbott, Collumpton, and Launceston.	204	211	212
Dudley and West Bromwich Banking Company.	30 Dec. 1833	Dudley and West Bromwich	170	160	159

Joint Stock Banks in England and Wales — *continued.*

Name of the Bank.	Date of Establishment.	Places where they had Branches established on 1st of January, 1842.	Number of Partners. 1 Jan. 1840.	1 Jan. 1841.	1 Jan. 1842.
East of England Bank - - -	27 Feb. 1836	Norwich, Aylsham, East Dereham, Fakenham, Foulsham, Kenninghall, North Walsham, Thetford, Great Yarmouth, Beccles, Bungay, Halesworth, Harleston, Lowestoft, Wrentham, Ipswich, Eye, Saxmundham, Stowmarket, Woodbridge, Swaffham, Watton, Bury St. Edmund's, Ixworth, Mildenhall, and King's Lynn.	437	460	448
Glamorganshire Banking Company -	8 Sept. 1836	Swansea and Neath - - -	100	101	130
Gloucestershire Banking Company -	28 June 1834	Gloucester, Cheltenham, Tewkesbury, Stroud, Newnham, and Evesham.	269	260	250
Halifax Joint-Stock Bank - -	11 Nov. 1829	Halifax - - - - -	206	200	199
Halifax Commercial Banking Company	21 June 1836	Halifax - - - -	165	159	147
Halifax and Huddersfield Union Bank	29 June 1836	Halifax and Huddersfield - -	369	357	357
Hampshire Banking Company - -	29 April 1834	Southampton, Fareham, Romsey, Newport, Ryde, and Cowes.	145	156	166
Helston Banking Company - -	4 Aug. 1836	Helston - - - -	16	13	13
Herefordshire Banking Company -	5 Aug. 1836	Hereford, Leominster, and Evesham.	122	114	88
Huddersfield Banking Company -	June 1827	Huddersfield, Holmfirth, and Dewsbury.	300	278	293
Hull Banking Company - - -	30 Nov. 1833	Hull, Barton, Beverley, & Grimsby.	238	227	204
Imperial Bank of England - -	16 Dec. 1836	Manchester, Burslem, Knutsford, Congleton, Nantwich, Macclesfield, Sandbach, and Northwich.	134	129	ceased.
Knaresborough and Claro Banking Company.	14 Sept. 1831	Knaresborough, Wetherby, Ripon, Easingwold, Pateley Bridge, Boroughbridge, Masham, Otley, and Harrogate.	158	136	138
Lancaster Banking Company - -	9 Oct. 1826	Lancaster, Ulverstone, and Preston	126	122	118
*Leamington Bank - - -	8 May 1835	Leamington - - -	152	125	112
Leamington Priors and Warwickshire Banking Company.	27 Aug. 1835	Leamington, Warwick, Southam, Kenilworth, and Banbury.	93	81	71
Leeds Banking Company - -	22 Nov. 1832	Leeds - - - - -	396	388	371
Leeds Commercial Banking Company -	21 June 1836	Leeds - - - - -	256	247	221
Leeds and West Riding Banking Comp.	28 Nov. 1835	Leeds and Bradford - -	202	188	157
Leicestershire Banking Company -	28 Aug. 1829	Leicester, Ashby-de-la-Zouch, Hinckley, Market Harborough, Melton Mowbray, Market Bosworth and Atherstone.	173	194	197
Leicestershire and Warwickshire Joint-Stock Banking Company.	11 Sept. 1840	Hinckley, Atherstone, Ashby-de-la-Zouch, and Market Bosworth.	12	28	29
*Lichfield, Rugeley, and Tamworth Banking Company.	21 Nov. 1835	Lichfield, Rugely, and Tamworth -	154	159	158
Lincoln and Lindsay Banking Company	10 Aug. 1833	Lincoln, Gainsborough, Louth, Horncastle, Brigg, Market Rasen, Caistor, Sleaford, Alford, Epworth, Spilsby, and Partney.	225	210	217
Liverpool Albion Bank - - -	12 May 1836	Liverpool - - - -	306	253	212
Liverpool Banking Company - -	22 Mar. 1836	Liverpool - - - -	180	175	155
Liverpool Borough Bank - -	28 June 1836	Liverpool - - - -	388	373	371
Liverpool Commercial Banking Comp.	29 Dec. 1832	Liverpool - - - -	309	295	292
*Liverpool Phœnix Bank - -	26 Jan. 1837	Liverpool - - - -	125	110	108
Liverpool Union Bank - - -	26 Jan. 1837	Liverpool - - - -	342	325	333
Ludlow and Tenbury Bank - -	2 Nov. 1840	Ludlow - - - -	- -	11	11
Manchester and Salford Bank - -	15 June 1836	Manchester - - -	220	198	190
Manchester and Liverpool District Bank	26 Nov. 1829	Manchester, Liverpool, Oldham, Ashton-under-Lyne, Warrington, Bury, Blackburn, Wigan, Preston, Staley Bridge, Rochdale, Todmorden, Stockport, Nantwich, Hyde, Hanley, Stafford, Burslem, Leek, Lane End, Cheadle, Market Drayton, & Glossop.	1293	1197	1113
Monmouthshire and Glamorganshire Banking Company.	28 July 1836	Abergavenny, Bridgend, Cardiff, Chepstow, Monmouth, Newport, Pontypool, Swansea, Tredegar, and Usk.	355	351	348
Moore and Robinson's Nottinghamshire Banking Company.	12 July 1836	Nottingham - - - -	154	147	145
*Nantwich and South Cheshire Bank -	25 July 1839	Nantwich - - - -	17	19	19
National Provincial Bank of England -	27 Dec. 1833	Aberystwith, Amlwch, Bangor, Llangefni, Barnstaple, Torrington, Bath, Marshfield, Shepton Mallet, Bideford, Birmingham, Blandford, Sturminster, Wareham, Boston, Spalding, Brecon, Hay, Bristol, Bury St. Edmund's, Cardiff, Bridgend, Cowbridge, Cheltenham, Darlington, Barnard Castle, Dartmouth, Brixham, Devonport, Deal, Dolgelly, Bala, Machynleth, Dursley, Exeter, Okehampton, Teignmouth, Gloucester, Hereford, Holywell, Denbigh, Mold, Honiton, Ilfracombe, Ipswich, Woodbridge, Kingsbridge, Knutsford, Leominster, Leicester, Lichfield, Manchester, Newport, Northwich, Peterborough, Whittlesea, Croyland, Ramsay, Plymouth, Portsea, Portsmouth, Pwllheli, Portmadoc, Ramsgate, Rugby, Rugeley, Southampton, Southmolton, Stockton-on-Tees, Stokesley, Hartlepool, Tamworth, Tiverton, Wem, Whitechurch, Wimborne, Poole, Ringwood, Wisbeach, Chatteris, Long Sutton, Holbeach, March, Worcester, Bromyard, Ledbury, Wootton-under-Edge, Chipping Sodbury, Yarmouth, Lowestoffe, Halesworth, and Shrewsbury.	684	674	646

Joint Stock Banks in England and Wales — *continued.*

Name of the Bank.	Date of Establishment.	Places where they had Branches established on 1st of January, 1842.	Number of Partners.		
			1 Jan. 1840.	1 Jan. 1841.	1 Jan. 1842.
Newcastle Commercial Banking Company.	16 July 1836	Newcastle-upon-Tyne - -	182	212,	214
Newcastle, Shields, and Sunderland Union Joint-Stock Banking Company.	11 July 1836	Newcastle-upon-Tyne, North Shields, South Shields, Sunderland, Hartlepool, Durham, Bishop Auckland, Alnwick, Morpeth, Hexham, and Alston.	472	507	503
Newcastle-upon-Tyne Joint-Stock Banking Company.	27 June 1836	Newcastle-upon-Tyne and Darlington.	132	140	122
Northamptonshire Banking Company -	13 May 1836	Northampton, Daventry, Wellingborough, and Stamford.	285	273	262
Northamptonshire Union Banking Company.	23 May 1836	Northampton, Wellingborough, and Daventry.	433	425	425
North of England Joint-Stock Banking Company.	28 Nov. 1832	Newcastle-upon-Tyne, Sunderland, North Shields, South Shields, Berwick-upon-Tweed, Morpeth, Belford, Hexham, Durham, Wooler, Alston, Blyth, Alnwick, Haltwhistle, Bishop Auckland, Wolsingham, Stanhope, Stockton, Darlington, Barnard Castle, Hartlepool, and Sedgefield.	610	598	561
*Northern and Central Bank of England.	12 Mar. 1831	Manchester - - - -	1065	550	468
Northumberland and Durham District Banking Company.	23 May 1836	Newcastle-upon-Tyne, Alnwick, Hexham, Morpeth, Blyth, North Shields, Sunderland, Durham, South Shields, and Hartlepool.	409	no account rendered.	461
North and South Wales Bank - -	30 April 1836	Bangor, Chester, Oswestry, Cardigan, St. Asaph, Amlwch, Mold, Holywell, Welchpool, Newtown, Brecon, Denbigh, Pwllheli, Ruthin, Wrexham, Swansea, Pembroke, Dolgelly, Aberystwith, Carnarvon, Holyhead, Haverfordwest, Llanrwst, Llanfyllin, Llangefni, Bishop's Castle, Merthyr Tydvil, Festiniog, Portmadoc, Ellesmere, Llandilo, Newport, Cardiff, Kington, Shrewsbury, Tremadoc, Conway, Carmarthen, Neath, Abergavenny, and Llanelly.	462	396	357
North Wilts Banking Company -	6 Nov. 1835	Melksham, Devizes, Bradford, Trowbridge, Calne, Chippenham, Westbury, Warminster, Marlborough, Malmesbury, Swindon, and Wootton Bassett.	227	223	216
Nottingham and Nottinghamshire Banking Company.	12 April 1834	Nottingham, Newark, Mansfield, Worksop, East Retford, Tuxford, Alfreton, and Loughborough.	335	325	321
Oldham Banking Company - -	30 Sept. 1836	Oldham - - - -	56	54	49
Pares' Leicestershire Banking Company	15 Mar. 1836	Leicester, Hinckley, Loughborough, and Melton Mowbray.	83	90	90
Portsmouth, Portsea, Gosport, and South Hants Banking Company.	18 April 1839	Portsea and Gosport - -	60	59	57
*Royal Bank of Liverpool - -	30 April 1836	Liverpool - - - -	256	251	235
Saddleworth Banking Company -	29 June 1833	Saddleworth, Ashton-under-Lyne, and Oldham.	108	105	101
Sheffield Banking Company - -	24 June 1831	Sheffield and Rotherham - -	207	191	195
Sheffield and Hallamshire Bank -	20 May 1836	Sheffield - - - -	613	588	565
Sheffield and Rotherham Joint-Stock Banking Company.	25 June 1836	Sheffield, Rotherham, and Bakewell.	276	276	270
Shropshire Banking Company - -	27 May 1836	Shiffnall, Wellington, Newport, Colebrook Dale, Holbeach, and Audnam.	269	272	266
South Lancashire Bank - - -	25 May 1836	Manchester - - - -	312	297	248
Southern District Banking Company -	22 Nov. 1837	Southampton, Guernsey and Jersey, Portsmouth, Portsea, Gosport, Newport, Ryde, and Cowes.	76	73	73
Stamford, Spalding, and Boston Banking Company.	28 Dec. 1831	Stamford, Bourne, Spalding, Market Deeping, Boston, Spilsby, Crowland, Wainfleet, Burgh, Swineshead, Donington, Holbeach, Partney, Grantham, Oundle, Peterborough, Oakham, and Uppingham.	86	82	79
Stockton and Durham County Bank -	8 Dec. 1838	Stockton-on-Tees and Guisboro' -	132	129	127
Storey's and Thomas's Banking Company.	27 Feb. 1840	Shaftesbury and Hindon - -	- -	12	13
Stourbridge and Kidderminster Banking Company.	9 April 1834	Stourbridge, Kidderminster, Bromsgrove, Redditch, Shipston-on-Stour, Stratford-upon-Avon, Henly-in-Arden, Alcester, Chipping Norton, and Moreton-in-the-Marsh.	206	189	187
Stuckey's Banking Company - -	9 Oct. 1826	Bristol, Bridgewater, Taunton, Langport, Wells, Bath, Frome, Shepton Mallet, Glastonbury, Wincanton, Chard, Crewkerne, Yeovil, Axbridge, Banwell, Weston-super-Mare, Midsomer Norton, Bruton, Castle Cary, Ilchester, Somerton, South Petherton, Martock, Ilminster, Wellington, Williton, and Stowey.	46	50	50
Sunderland Joint-Stock Banking Company.	4 Aug. 1836	Sunderland - - - -	132	157	143
Swaledale and Wensleydale Banking Company.	30 Dec. 1836	Richmond, Leyburn, Bedale, Hawes, Reeth, Middleham, Askrigg, and Masham.	224	223	221
Union Bank of Manchester -	6 May 1836	Manchester - - - -	387	357	331
Wakefield Banking Company (now called Wakefield and Barnsley Union Bank).	25 Oct. 1832	Wakefield and Barnsley - -	194	183	183

Joint Stock Banks in England and Wales — *continued.*

Name of the Bank.	Date of Establishment.	Places where they had Branches established on 1st of January 1842.	Number of Partners.		
			1 Jan. 1840.	1 Jan. 1841.	1 Jan. 1842.
Warwick and Leamington Banking Company.	10 Sept. 1834	Warwick, Leamington, Henley-in-Arden, Stratford-on-Avon, Southam, Shipston-on-Stour, and Alcester.	95	87	85
West of England and South Wales District Bank.	23 Dec. 1834	Bristol, Bath, Barnstaple, Bridgewater, Cardiff, Exeter, Newport, Taunton, Wells, Axbridge, Merthyr Tidvil, and Somerton.	532	518	489
Western District Banking Company -	1 Sept. 1836	Devonport, Falmouth, Totnes, Truro, Plymouth, Penzance, Kingsbridge, and St. Columb.	279	278	237
West Riding Union Banking Company	29 Dec. 1834	Huddersfield, Dewsbury, and Wakefield.	467	482	467
Whitehurch and Ellesmere Banking Company.	14 Jan. 1840	Whitehurch and Ellesmere -	- -	32	25
Whitehaven Joint-Stock Bank - -	23 Jan. 1837	Whitehaven and Penrith - -	224	223	226
Wilts and Dorset Banking Company -	11 Jan. 1836	Axminster, Blandford, Dorchester, Gillingham, Sherborne, Wimborne, Chippenham, Devizes, Malmesbury, Marlborough, Mere, Trowbridge, Salisbury, Warminster, Wotton Bassett, Christchurch, Fordingbridge, Lymington, Frome, and Yeovil.	412	389	390
Wolverhampton and Staffordshire Banking Company.	28 Dec. 1831	Wolverhampton - - -	216	216	215
Worcester City and County Banking Company.	4 Nov. 1840	Worcester - - - -	- -	32	33
York City and County Banking Company.	2 Mar. 1830	York, Malton, Scarborough, Howden, Selby, Goole, Ripon, and Boroughbridge.	257	254	256
Yorkshire Agricultural and Commercial Banking Company.	27 July 1836	York, Whitby, Driffield, Malton, Hull, Leeds, and Pocklington.	655	610	589
Yorkshire District Bank - - -	30 July 1834	Leeds, York, Hull, Sheffield, Doncaster, Selby, Thirsk, Malton, Bradford, Pontefract, Knaresborough, Ripon, Huddersfield, Beverley and Sheffield.	1084	998	1000
York Union Banking Company - -	23 April 1833	York, Great Driffield, Burlington, Malton, Thirsk, Tadcaster, Pocklington, Market Weighton, Helmsley, Kirkby Moorside, and Pickering.	268	259	258

IV. Banks (Scotch).

The act of 1708, preventing more than 6 individuals from entering into a partnership for carrying on the business of banking, did not extend to Scotland. In consequence of this exemption, several banking companies, with numerous bodies of partners, have always existed in that part of the empire.

Bank of Scotland. — This institution was projected by Mr. John Holland, merchant of London, and was established by act of the Scotch parliament (Will. 3. Parl. 1. § 5.) in 1695, by the name of the Governor and Company of the Bank of Scotland. Its original capital was 1,200,000*l.* Scotch, or 100,000*l.* sterling, distributed in shares of 1,000*l.* Scotch, or 83*l.* 6*s.* 8*d.* sterling, each. The act exempted the capital of the bank from all public burdens, and gave it the exclusive privilege of banking in Scotland for 21 years. The objects for which the bank was instituted, and its mode of management, were intended to be, and have been, in most respects, similar to those of the Bank of England. The responsibility of the shareholders is limited to the amount of their shares.

The capital of the bank was increased to 200,000*l.* in 1744, and was enlarged by subsequent acts of parliament, the last of which (44 Geo. 3. c. 23.) was passed in 1804, to 1,500,000*l.*, its present amount. Of this sum, 1,000,000*l.* has been paid up. The last-mentioned act directed that all sums relating to the affairs of the bank should henceforth be rated in sterling money; that the former mode of dividing bank stock by shares should be discontinued; and that, for the future, it should be transferred in any sums or parcels. On the union of the two kingdoms in 1707, the Bank of Scotland undertook the recoinage, and effected the exchange of the currency in Scotland: it was also the organ of government in the issue of the new silver coinage in 1817.

The Bank of Scotland is the only Scotch bank constituted by act of parliament. It began to establish branches in 1696, and issued notes for 1*l.* so early as 1704. The Bank also began, at a very early period, to receive deposits on interest, and to grant credit on cash accounts; a minute of the directors with respect to the mode of keeping the latter being dated so far back as 1729. It is, therefore, entitled to the credit of having introduced and set on foot the distinctive principles of the Scotch banking system, which, whatever may be its defects, is probably superior to every other system hitherto established. Generally speaking, the Bank of Scotland has always been conducted on sound and liberal principles; nor can there be a doubt that it has been productive, both directly and as an example to other banking establishments, of much public utility and advantage.

It may be worth mentioning, that the act of Will. 3., establishing the Bank of Scotland, declared that all foreigners who became partners in the bank should, by doing so, become, to all intents and purposes, naturalised Scotchmen. After being for a long time forgotten, this clause was taken advantage of in 1818, when several aliens acquired property in the bank in order to secure the benefit of naturalisation. But after being suspended, the privilege was finally cancelled in 1822.

We subjoin an *official* abstract of the constitution and objects of the Bank of Scotland, printed for the use of the proprietors; — the terms and mode of transacting business are, of course, sometimes altered, according to circumstances.

I. The Bank of Scotland is a public national establishment; erected and regulated by the legislature alone: and expressly as a public bank in this kingdom; for the benefit of the nation, and for the advancement of agriculture, commerce, and manufactures; and for other objects of public policy. — (*Will.* Parl. 1. § 5.; 14 *Geo.* 3. c. 32.; 24 *Geo.* 3. c. 8.; 32 *Geo.* 3. c. 25.; 34 *Geo.* 3. c. 19.; 44 *Geo.* 3. c. 23.)

II. The statutory capital is at present 1,500,000*l.* sterling. It is raised by voluntary subscription; and has been subscribed for. 1,000,000*l.* has been called for, and paid in. — (44 *Geo.* 3. c. 23.)

III. Subscribers, if not under obligation to the Bank, may, at pleasure, transfer their right. If under obligation to the Bank, the obligation must be previously liquidated; or the proceeds of the sale, at a price to the satisfaction of the directors, must be applied towards such liquidation. Transfers are made by a short assignment and acceptance thereof, both in a register appointed for that purpose. The expense, beside the government stamp, is 11*s.* — (*Will.* Parl. 1. § 5.)

IV. Bank of Scotland stock may be acquired, in any portions, by any person, community, or other lawful party whatsoever; without selection, exclusion, or limitation of numbers. — *Will.* Parl. 1. § 5.; 44 *Geo.* 3. c. 23.)

V. Bank of Scotland stock may be conveyed by will, and, if specially mentioned, without expense of confirmation. It cannot be arrested: the holder's right may be adjudged. Dividends may be arrested. — (*Will.* Parl. 1. § 5.)

VI. The Bank of Scotland is a public corporation by act of parliament. The Bank's transactions are distinct from those of the stockholders; and theirs from those of the Bank. — (*Will.* Parl. 1. § 5.)

VII. The establishment is expressly debarred from any other business than that of banking. — (*Will.* Parl. 1. § 5.)

VIII. The management is vested, by statute, in a governor, deputy governor, twelve ordinary, and twelve extraordinary directors. They are chosen annually, on the last Tuesday of March, by the stockholders having 250*l.* of stock or upwards. Those above 250*l.* have a vote for every 250*l.*, to 5,000*l.*, or 20 votes. No person can have more than 20 votes. The governor must hold, at least, 2,000*l.* of stock; the deputy governor 1,500*l.*; and each director 750*l.* They swear to be equal to all persons; and cannot hold any inferior office in the Bank. — (*Will.* Parl. 1. § 5.; 14 *Geo.* 3. c. 32.; 44 *Geo.* 3. c. 23.)

IX. The executive part is conducted by a treasurer, secretary, and other public officers, all sworn. Those having the official charge of cash find due security. — (*Will.* Parl. 1. § 5.)

X. The Board of directors sits for the general administration of the Bank, at the Bank's Public Head Office in Edinburgh. The local business of that distirct is also conducted at that office. For the local business in the other parts of the kingdom, the Bank has its regular public offices in the principal towns. At each of these offices there is the Bank agent or cashier, who gives due security, and conducts the Bank's business for that district in the manner after mentioned. There is also the Bank's accountant for that office; who is appointed by the directors. — (*Will.* Parl. 1. § 5.)

XI. The Bank takes in money, at all its public offices, on deposit receipts or promissory notes, or on current deposit account.* At the Head Office, draughts on London, or on any of the agencies, are given: at each agency, draughts on London, or on the Head Office, are given. All these documents are on *the Bank's check* (and *sealed with the Bank's seal* †). They bear, in words, to be "For the Bank of Scotland;" or, "For the Governor and Company of the Bank of Scotland." These documents are signed, if at Edinburgh, by the treasurer, and countersigned by the principal accountant: if at an agency, they must be signed by the Bank's agent *as agent*, and *countersigned by the Bank's accountant* for that agency; otherwise they infer no obligation on the Bank. — (*Resolution of Court*, 28th Feb. 1793.)

XII. Bills on London, Edinburgh, or any town where the Bank has its official correspondents, are discounted and purchased at all the Bank's public offices. The Bank's agents judge, in ordinary cases, of the bills presented; so that parties meet with no delay. The Bank does not sell, at any of its offices, the bills which it has discounted and purchased. Its agents cannot indorse its bills, unless officially to the treasurer. — (*Resolution of Court*, 23d Feb. 1789.)

XIII. Government stock and other public funds, transferable in London, may be purchased or sold, and dividends thereon may be received, through the Bank.

XIV. The bank gives credit on cash accounts at any of its offices, on bond, with security. The security may be personal co-obligants, conjunctly and severally; or Bank of Scotland stock; or both: or such other security as may be specially agreed on. Applications for cash accounts are given in to the office where the cash account is wanted, and must specify the credit desired, and the security proposed; and the individual partners, where copartneries are proposed. Cash accounts are granted by the directors only; and are not recalled unless by their special authority. It is understood that these credits are not used as dead loans, to produce interest only. In the fair course of business, the advantage of the Bank is consulted by an active circulation of its notes, and by frequent repayments to it in a way least affecting that circulation. — (*Resolution of Court*, 6th Nov. 1729, and 23d Feb. 1789.)

XV. The Bank's dividend of profits has been for some considerable period 6 per cent. per annum, on its paid up capital of 1,000,000*l.* sterling. The dividends are paid regularly twice a year, without expense. They may be drawn either at the Bank's Head Office, or at any of its other offices, as most agreeable to the stockholder.

Most of the other Scotch banks are conducted on the same principles and in the same way as the Bank of Scotland, so that the details as to its management will nearly apply to them all.

The *Royal Bank of Scotland* was established in 1727. Its original capital of 151,000*l.* has been increased to 2,000,000*l.*

The *British Linen Company* was incorporated in 1746, for the purpose, as its name implies, of undertaking the manufacture of linen. But the views in which it originated

* The Bank has always allowed interest on deposits. The rate allowed varies, of course, with the variations in the market rate. During the greater part of the late war it was as high as 4 per cent.; but at present (June 1843) it is only 2½ per cent.

† The seal is now dispensed with, except on the Bank's notes.

were speedily abandoned; and it became a banking company only. Its capital amounts to 500,000*l.*

None of the other banking companies established in Scotland are chartered associations, with limited responsibility; the partners being jointly and individually liable, to the whole extent of their fortunes, for the debts of the firms. Some of them, such as the National Bank, the Commercial Banking Company, the Dundee Commercial Bank, the Perth Banking Company, &c., have very numerous bodies of partners. Their affairs are uniformly conducted by a Board of directors, annually chosen by the shareholders.

The Bank of Scotland began, as already stated, to issue 1*l.* notes so early as 1704; and their issue has since been continued without interruption. "In Scotland," to use the statement given in the Report of the Committee of the House of Commons of 1826 on the Promissory Notes of Scotland and Ireland, "the issue of promissory notes payable to the bearer on demand, for a sum of not less than 20*s.*, has been at all times permitted by law; nor has any act been passed limiting the period for which such issue shall continue legal in that country. In *England*, the issue of promissory notes for a less sum than 5*l.* was prohibited by law from the year 1777 to the period of the Bank Restriction in 1797. It has been permitted since 1797; and the permission will cease, as the law at present stands, in April, 1829."

There have been comparatively few bankruptcies among the Scotch banks. In 1793 and 1825, when so many of the English provincial banks were swept off, there was not a single establishment in Scotland that gave way. This superior stability seems to be ascribable partly to the formation of so many banks with numerous bodies of partners, which tends to prevent any company with only a few partners, unless they are known to possess considerable fortunes, from getting paper into circulation; partly to the less risk attending the business of banking in Scotland; and partly to the facility afforded by the law of Scotland of attaching a debtor's property, whether it consist of land or moveables, and making it available to the payment of his debts.

In the Report already quoted, the last-mentioned topic is touched upon as follows: —"The general provisions of the law of Scotland bearing upon this subject are calculated to promote the solidity of banking establishments, by affording to the creditor great facilities of ascertaining the pecuniary circumstances of individual partners, and by making the private fortunes of those partners available for the discharge of the obligations of the bank with which they are connected. There is no limitation upon the number of partners of which a banking company in Scotland may consist; and, excepting in the case of the Bank of Scotland and the two chartered banks, which have very considerable capitals, the partners of all banking companies are bound jointly and severally, so that each partner is liable, to the whole extent of his fortune, for the whole debts of the company. A creditor in Scotland is empowered to attach the real and heritable, as well as the personal estate of his debtor, for payment of personal debts, among which may be classed debts due by bills and promissory notes; and recourse may be had, for the purpose of procuring payment, to each description of property at the same time. Execution is not confined to the real property of a debtor merely during his life, but proceeds with equal effect upon that property after his decease.

"The law relating to the establishment of records gives ready means of procuring information with respect to the real and heritable estate of which any person in Scotland may be possessed. No purchase of an estate in that country is secure until the seisine (that is, the instrument certifying that actual delivery has been given) is put on record, nor is any mortage effectual until the deed is in like manner recorded.

"In the case of conflicting pecuniary claims upon real property, the preference is not regulated by the date of the transaction, but *by the date of its record.* These records are accessible to all persons; and thus the public can with ease ascertain the effective means which a banking company possesses of discharging its obligations; and the partners in that company are enabled to determine, with tolerable accuracy, the degree of risk and responsibility to which the private property of each is exposed."

Deposits. — As was previously observed, all the Scotch banks receive deposits of so low a value as 10*l.*, and sometimes lower, and allow interest upon them.

"The interest," say the committee, "allowed by the Bank upon deposits varies, from time to time, according to the current rate of interest which money generally bears. At present (1826) the interest allowed upon deposits is 4 per cent." (At this moment (1843) the interest allowed on deposits is 2½ per cent.) "It has been calculated that the aggregate amount of the sums deposited with the Scotch banks amounts to about 20,000,000*l.* or 21,000,000*l.*" (It is believed to be now (1843) little, if any thing, under 28,000,000 or 30,000,000*l.*) "The precise accuracy of such an estimate cannot of course be relied on. The witness by whom it was made thought that the amount of deposits could not be less than 16,000,000*l.*, nor exceed 25,000,000*l.*, and took an intermediate sum as the probable amount. Another witness, connected for many years with different banks in Scotland, and who has had experience of their concerns at

Stirling, Edinburgh, Perth, Aberdeen, and Glasgow, stated that more than one half of the deposits in the banks with which he had been connected were in sums from ten pounds to two hundred pounds. Being asked what class of the community it is that makes the small deposits, he gave the following answer; from which it appears that the mode of conducting this branch of the banking business in Scotland has long given to that country many of the benefits derivable from the establishment of savings banks.

"*Question.* What class of the community is it that makes the smallest deposits? — *Answer.* They are generally the labouring classes in towns like Glasgow: in country places, like Perth and Aberdeen, it is from servants and fishermen, and that class of the community, who save small sums from their earnings till they come to be a bank deposit. There is now a facility for their placing money in the Provident Banks, which receive money till the deposit amounts to 10*l.* When it comes to 10*l.* it is equal to the minimum of a bank deposit. The system of banking in Scotland is an extension of the Provident Bank system. Half-yearly or yearly those depositors come to the bank, and add the savings of their labour, with the interest that has accrued upon the deposits from the previous half-year or year, to the principal; and in this way it goes on, without being at all reduced, accumulating (at compound interest) till the depositor is able either to buy or build a house, when it comes to be 100*l.*, or 200*l.*, or 300*l.*, or till he is able to commence business as a master in the line in which he has hitherto been a servant. A great part of the depositors of the bank are of that description, and a great part of the most thriving of our farmers and manufacturers have arisen from such beginnings."

Cash Accounts, or Credits. — The loans or advances made by the Scotch banks are either in the shape of discounts, or upon cash credits, or, as they are more commonly termed, *cash accounts.*

This species of account does not differ in principle from an over-drawing account at a private banker's in England. A cash credit is a credit given to an individual by a banking company for a limited sum, seldom under 100*l.* or 200*l.*, upon his own security, and that of two or three individuals approved by the bank, who become sureties for its payment. The individual who has obtained such a credit is enabled to draw the whole sum, or any part of it, when he pleases, replacing it, or portions of it, according as he finds it convenient; interest being charged upon such part only as he draws out. "If a man borrows 5,000*l.* from a private hand, besides that it is not always to be found when required, he pays interest for it whether he be using it or not. His bank credit costs him nothing, except during the moment it is of service to him, and this circumstance is of equal advantage as if he had borrowed money at a much lower rate of interest." — (*Hume's Essay on the Balance of Trade.*) This, then, is plainly one of the most commodious forms in which advances can be made. Cash credits are not, however, intended to be a *dead loan;* the main object of the banks in granting them is to get their notes circulated, and they do not grant them except to persons in business, or to those who are frequently drawing out and paying in money.

The system of cash credits has been very well described in the Report of the Lords' Committee of 1826 on Scotch and Irish Banking. "There is also," say their lordships, "one part of their system, which is stated by all the witnesses, (and, in the opinion of the committee, very justly stated,) to have had the best effects upon the people of *Scotland,* and particularly upon the middling and poorer classes of society, in producing and encouraging habits of frugality and industry. The practice referred to is that of cash credits. Any person who applies to a bank for a cash credit is called upon to produce two or more competent sureties, who are jointly bound; and, after a full inquiry into the character of the applicant, the nature of his business, and the sufficiency of his securities, he is allowed to open a credit, and to draw upon the bank for the whole of its amount, or for such part as his daily transactions may require. To the credit of the account he pays in such sums as he may not have occasion to use, and interest is charged or credited upon the daily balance, as the case may be. From the facility which these cash credits give to all the small transactions of the country, and from the opportunities which they afford to persons, who begin business with little or no capital but their character, to employ profitably the minutest products of their industry, it cannot be doubted that the most important advantages are derived to the whole community. The advantage to the banks who give these cash credits arises from the call which they continually produce for the issue of their paper, and from the opportunity which they afford for the profitable employment of part of their deposits. The banks are indeed so sensible that, in order to make this part of their business advantageous and secure, it is necessary that their cash credits should (as they express it) be frequently operated upon, that they refuse to continue them unless this implied condition be fulfilled. The total amount of their cash credits is stated by one witness to be 5,000,000*l.*, of which the average amount advanced by the banks may be one third."

The expense of a bond for a cash credit of *500l.* is *4l.* stamp duty, and a charge of from *5s.* to *10s. 6d.* per cent. for filling it up.

I.—A Return of the Joint Stock Banks existing in Scotland, on the 5th of January, 1839; specifying the Date of the Establishment of each Bank, the Number and Situation of its Branches (where it has any), and the Number of Partners in each Bank, during each of the Years 1836, 1837, and 1838.

Name of the Bank, and Situation of the Head Office.	Year when established.	Number of Branches, and Towns where Branches are established.		Number of Partners.		
		No.	Branches on 5th of January, 1839.	1836.	1837.	1838.
1. The Bank of Scotland - - Head office, Edinburgh.	1695	29	Banchory, Aberdeen, Fraserburgh, Cumnock, Kilmarnock, Ayr, Whithorn, Dumfries, Dundee, Montrose, Dunfermline, Kirkaldy, St. Andrew's, Dunse, Lauder, Leith, Falkirk, Stirling, Glasgow, Airdrie, Strathaven, Haddington, Inverness, Kelso, Kirkcudbright, Perth, Stonehaven, Greenock, and Paisley.	Being chartered banks, these make no return of partners.		
2. The Royal Bank of Scotland - Head office, Edinburgh.	1727	7	Greenock, Port Glasgow, Glasgow, Dundee, Dalkeith, Leith, and Rothesay.			
3. The British Linen Company - Head office, Edinburgh.	1746	4	Wishaw, Carlake, Glasgow, Hamilton, Golspie, Irvine, Paisley, Annan, Dumfries, Langholm, Sanquhar, Leith, Aberdeen, Arbroath, Montrose, Dundee, Brechin, Kerriemuir, Castle Douglas, Coldstream, Dunse, Cupar, Dunfermline, Dunbar, Haddington, Elgin, Forres, Hawick, Jedburgh, Kelso, Melrose, Inverness, Fort William, Kingussie, Kinross, Newton Stewart, Stranraer, Wigtown, Peebles, Perth, Selkirk, Tain, Balfron, Stirlingshire, and Nairn.			
4. The Commercial Bank of Scotland. Head office, Edinburgh.	1810	51	Coupar-Angus, Invergordon, Tain, Aberdeen, Peterhead, Turiff, Alloa, Dumfries, Annan, Beith, Mauchline, Glasgow, Hamilton, Lanark, Biggar, Blairgowrie, Dumblane, Pitlochry, Perth, Crieff, Campbeltown, Colinsburgh, Cupar, Kirkaldy, Newburgh, Leven, Dunfermline, Cromarty, Dalkeith, Leith, Musselburgh, Dumbarton, Dunkeld, Elgin, Evemouth, Falkirk, Stirling, Grangemouth, Gatehouse, Hawick, Kelso, Melrose, Inverness, Kilmarnock, Kirkwall, Linlithgow, Thurso, Wick, Dunbar, Banff, and Kincardine.			
5. The National Bank of Scotland - Head office, Edinburgh.	1825	35	Islay, Inverary, Oban, Sanquhar, Dumfries, Leith and Dalkeith, Aberdeen, Airdrie, Glasgow, Bathgate, Anstruther, Burntisland, Kirkaldy, Banff, Castle Douglas, Dingwall, Stornoway, Dundee, Montrose, Falkirk, Stirling, Forres, Grantown, Fort William, Inverness, Portree, Galashiels, Selkirkshire, Kelso, Jedburgh, Hawick, Kirkwall, Nairn, Perth, and Stromness.			
6. The Aberdeen Bank - - - Head office, Aberdeen.	- -	11	Ellon, Tarland, Peterhead, Fraserburgh, Inverury, Huntly, Fochabers, Cullen, Banff, Keith, and Elgin.	122	163	189
7. The Ayr Bank - - - - Head office, Ayr.	- -	6	Troon, Galston, Kilmarnock, Irvine, Maybole, and Girvan.	10	11	11
8. The Dundee Banking Company - Head office, Dundee.	- -	4	Forfar - - - - - - - -	57	54	52
9. The Dundee Union Bank - - Head office, Dundee.	- -	4	Forfar, Arbroath, Montrose, and Breechin.	79	80	82
10. The Glasgow Bank Company - Head office, Glasgow.	- -	1	Kirkaldy - - - - - - -	27	30	28
11. The Greenock Bank - - - Head office, Greenock.	- -	3	Glasgow, Port Glasgow, and Rothesay - -	(Private Bank.)		
12. The Leith Bank - - - - Head office, Leith.	- -	11	Musselburgh, Portobello, Edinburgh, Dalkeith, Callender, Doune, Crieff, Galashiels, Stirling, Falkirk, and Stenhousemuir.	9	9	
13. The Perth Banking Company - Head office, Perth.	- -	3	Dunkeld, Crieff, and Cupar-Angus.	185	182	182
14. The Renfrewshire Banking Company. Head office, Greenock.	- -	5	Port Glasgow, Glasgow, Inverary, Campbeltown, and Rothesay.	(Private Bank.)		
15. The Aberdeen Town and County Bank. Head office, Aberdeen.	1825	11	Wick, Thurso, Pultney-town, Huntly, Ellon, Inverury, Peterhead, Dingwall, Stonehaven, Keith, and Golspie.	470	474	491
16. The Arbroath Bank - - Head office, Arbroath.	1825	1	Forfar - - - - - - - -	81	83	80
17. The Glasgow Union Banking Company. Head office, Glasgow.	1830	20	Johnstone, Greenock, Paisley, Edinburgh, Mid-Lothian, Port Glasgow, Neilston, Inverary, Lochgilphead, Stranraer, Lerwick, Ayr, Stewarton, Beith, Alloa, Kincardine, Auchtermuchty, Bathgate, Linlithgowshire, Strathaven, Moffat, and Thornhill.	485	484	508
18. The Ayrshire Banking Company Head office, Ayr.	1831	7	Ardrossan, Girvan, Maybole, Kilmarnock, Irvine, Saltcoats, and Cumnock.	98	104	97
19. The Western Bank of Scotland - Head office, Glasgow.	1832	21	Coatbridge, Airdrie, Hamilton, Lanark, Kirkintilloch, North Berwick, Haddington, Campsie, Kilsyth, Dairy, Largs, Greenock, Paisley, Lochwinnoch, Musselburgh, Portobello, Dumfries, Locherbie, Alloa, and Blairgowrie.	497	454	469
20. The Central Bank of Scotland - Head office, Perth.	1834	7	Aberfeldy, Auchterarder, Pitlochry, Dunkeld, Killin, Crieff, Newburgh, and Fifeshire.	469	402	465
21. The North of Scotland Banking Company. Head office, Aberdeen.	1836	21	Fraserburgh, Alford, Tarland, Huntley, Turriff, Ellon, Old Deer, Strichen, Old Meldrum, Inverury, Inchkeith, Dufftown, Aboyne, Aberchirder, Mascluff, Banff, Elgin, Tain, and Invergordon.	830	833	1,564
22. The Clydesdale Banking Company. Head office, Glasgow.	1837	1	Edinburgh - - - - - -	- -	731	818
23. The Southern Bank of Scotland - Head office, Dumfries.	1837	5	Newton-Stewart, Whithorn, Stranraer, Lockerbie, and New Galloway, (now, 1843,) merged in the Edinburgh and Leith Bank).	- -	- -	226
24. The Eastern Bank of Scotland - Head office, Dundee.	1838	1	Edinburgh - - - - - - -	- -	- -	774
25. Edinburgh and Leith Bank - Head office, Edinburgh.	1838	-	- - - - - - - -	- -	- -	785

Note. — No. 1. being established by Act of Parliament, and Nos. 2, 3, 4, and 5. incorporated by Royal Charter, do not require, to lodge List of Partners, in pursuance of the Act 7 Geo. 4. c. 67. The date of establishments of Nos. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16. not ascertained, but licensed to issue Notes in the year 1808, when the Licence Duties were first imposed.

Circulation, &c. — The total number of notes in circulation in Scotland at present (1843) is about 3,500,000*l.*, of which about two thirds are under *5l.*

The Scotch banks draw on London at 20 days' date. This is denominated the par of exchange between London and Edinburgh.

By the act 9 Geo. 4. c. 65., to restrain the negotiation in England of Scotch or Irish promissory notes and bills under *5l.*, it is enacted, that if any body politic or corporate, or person, shall, after the 5th of April, 1829, publish, utter, negotiate, or transfer, in any part of England, any promissory or other note, draft, engagement, or undertaking, payable on demand to the bearer, for any sum less than *5l.*, purporting to have been made or issued in Scotland or Ireland, every such body politic or corporate, or person, shall forfeit for every such offence not more than 20*l.* nor less than *5l.*

Nothing contained in this act applies to any draft or order drawn by any person on his or her banker, or on any person acting as such banker, for the payment of money held by such banker or person for the use of the person by whom such draft or order shall be drawn.

V. Banks (Irish).

"In no country, perhaps," says Sir Henry Parnell, "has the issuing of paper money been carried to such an injurious excess as in Ireland. A national bank was established in 1783, with similar privileges to those of the Bank of England, in respect to the restriction of more than 6 partners in a bank; and the injury that Ireland has sustained from the repeated failure of banks may be mainly attributed to this defective regulation. Had the trade of banking been left as free in Ireland as it is in Scotland, the want of paper money that would have arisen with the progress of trade would, in all probability, have been supplied by joint-stock companies, supported with large capitals, and governed by wise and effectual rules.

"In 1797, when the Bank of England suspended its payments, the same privilege was extended to Ireland; and after this period the issues of the Bank of Ireland were rapidly increased. In 1797, the amount of the notes of the Bank of Ireland in circulation was 621,917*l.*; in 1810, 2,266,471*l.*; and in 1814, 2,986,999*l.*

"These increased issues led to corresponding increased issues by the private banks, of which the number was 50 in the year 1804. The consequence of this increase of paper was a great depreciation of it; the price of bullion and guineas rose to 10 per cent. above the mint price, and the exchange with London became as high as 18 per cent., the par being 8¼. This unfavourable exchange was afterwards corrected, not by any reduction in the issues of the Bank of Ireland, but by the depreciation of the British currency in the year 1810, when the exchange between London and Dublin settled again at about par.

"The loss that Ireland has sustained by the failure of banks may be described in a few words. It appears by the Report of the Committee on Irish Exchanges in 1804, that there were at that time in Ireland 50 registered banks. Since that year a great many more have been established; but *the whole have failed*, one after the other, involving the country from time to time in immense distress, with the following exceptions: —first, a few that withdrew from business; secondly, four banks in Dublin; thirdly, three at Belfast; and, lastly, one at Mallow. These eight banks, with the New Provincial Bank, and the Bank of Ireland, are the only banks now existing in Ireland.

"In 1821, in consequence of 11 banks having failed nearly at the same time in the preceding year in the south of Ireland, government succeeded in making an arrangement with the Bank of Ireland, by which joint-stock companies were allowed to be established at a distance of 50 miles (Irish) from Dublin, and the Bank was permitted to increase its capital 500,000*l.* The act of 1 & 2 Geo. 4. c. 72. was founded on this agreement.

"But ministers having omitted to repeal in this act various restrictions on the trade of banking that had been imposed by 33 Geo. 2. c. 14. no new company was formed. In 1824 a party of merchants of Belfast, wishing to establish a joint-stock company, petitioned parliament for the repeal of this act of Geo. 2., and an act was accordingly passed in that session repealing some of the most objectionable restrictions of it (the 5 Geo. 4. c. 73.).

"In consequence of this act the Northern Bank of Belfast was converted into a joint-stock company, with a capital of 500,000*l.*, and commenced business on the 1st of January, 1825. But the remaining restrictions of 33 Geo. 2. and certain provisions contained in the new acts of 1 & 2 Geo. 3. and 5 Geo. 4., obstructed the progress of this company, and they found it necessary to apply to government to remove them; and a bill was accordingly introduced which would have repealed all the obnoxious clauses of the 33 Geo. 2., had it not been so altered in the committee as to leave several of them in force. In 1825 the Provincial Bank of Ireland commenced business, with

a capital of 2,000,000*l.*; and the Bank of Ireland has of late established branches in all the principal towns in Ireland.

"The losses that have been sustained in Ireland by abusing the power of issuing paper have been so great, that much more is necessary to be done, by way of protecting the public from future loss, than the measure proposed last session (1826) by ministers of abolishing small notes, and the measure already adopted of allowing joint-stock companies to be established in the interior of the country. As the main source of the evil consists in the interference of the law in creating a national bank with exclusive privileges, the first step that ought to be taken for introducing a good system into Ireland is the getting rid of such a bank, and opening the trade of banking in Dublin. The next measure should be the requiring of each bank to give security for the amount of paper that is issued; for after the experience of the ignorance with which the Irish banks have conducted their business, and the derangement of the natural course of the trade by the long existence of the Bank of Ireland, it would be unwise to calculate upon a sound system of banking speedily supplanting that which has been established.

"Under the circumstances in which Ireland is placed, nothing would so much contribute to her rapid improvement in wealth as the introducing of the Scotch plan of cash credits, and of paying interest on deposits. By cash credits, the capital which now exists would be rendered more efficient, and the paying of interest on small deposits would lead to habits of economy, and to the more rapid accumulation of new capital."—(*Observations on Paper Money, &c., by Sir Henry Parnell*, pp. 171—177.)

The capital of the Bank of Ireland at its establishment in 1783 amounted to 600,000*l.*; but it has been increased at various periods, and has, since 1821, amounted to 3,000,000*l.* At present no bank having more than 6 partners can be established any where within 50 Irish miles of Dublin, nor is any such bank allowed to draw bills upon Dublin for less than 50*l.*, or at a shorter date than 6 months. This enactment seems to amount to a virtual prohibition of the drawing of such bills. The Bank of Ireland draws on London at 10 days' date. She neither grants cash credits, nor allows any interest on deposits. She discounts at the rate of 5*l.* per cent.

In 1828 the currency of Ireland was assimilated to that of Great Britain. Previously to that period the currency of the former was 8⅓ per cent. less valuable than that of the latter.

Subjoined is

A Statement exhibiting the Amount of the Liabilities and of the Assets of the Bank of Ireland on the 20th February, 1841.

Liabilities.	£	£	Assets.	£	£
Circulation:			Securities:		
£5 and above		1,833,500	Public		2,772,200
Under		1,411,000	Private, viz.		
		3,244,500	Notes and bills discounted	2,580,800	
Deposits:			All other private securities	597,100	
Public		894,400			3,177,900
Private, and sundry balances		1,805,100	Specie		1,116,300
		2,699,500			
		£5,944,000			£7,066,400

Excess of Assets over Liabilities £1,122,400, exclusive of the capital of the Bank.

Provincial Bank of Ireland. — This important establishment was, as already stated, founded in 1825. Its subscribed capital consists of 2,000,000*l.*, divided into 20,000 shares of 100*l.* each, of which 25 per cent., or 500,000*l.*, has been paid up. Its head office is in London; and at present it has subordinate offices in Cork, Limerick, Clonmel, Londonderry, Sligo, Wexford, Waterford, Belfast, Galway, Armagh, Athlone, Coleraine, Kilkenny, Ballina, Tralee, Youghall, Enniskillen, Monaghan, Banbridge, and Ballymena. The last 5 have been opened since 1831. The entire management of the establishment is vested in the court of directors in London. The business of the branch banks is conducted, under the control of the head office, by the managers, with the advice and assistance of 2 or more gentlemen of respectability in the district, each holding 10 shares in the bank. The business consists of discounting bills; granting cash credits after the manner of the Scotch banks; receiving deposits, on which interest, varying according to circumstances, is allowed; in drawing and giving letters of credit on other places of Ireland, Great Britain, &c.; and of other details incident to banking. It has had several pretty severe runs to sustain. In the course of a single week, in October, 1828, about 1,000,000*l.* in gold was sent from England to Ireland on account of the Provincial Bank! This prompt and ample supply effectually maintained the credit of the establishment, and did much to restore confidence.

The notes of the Provincial Bank have always been payable at the places where they

are issued. The Bank of Ireland began to establish branches in 1825; but the notes issued by her branches were not, at first, payable except at the head office in Dublin. This distinction, which tended to throw the principal pressure of runs in the country on the Provincial Bank and other private companies, was abolished by the act 9 Geo. 4. Several joint-stock banks have been established in Ireland since 1825, especially in 1836. But the greatest of these, the Agricultural and Commercial Bank, which had nearly 4,000 partners and 28 branches, was in no long time obliged to suspend payments, and is now in the course of having its affairs wound up. Some of the others have also been abandoned. There are comparatively few private banks in Ireland.

III. — A Return of Joint Stock Banks existing in Ireland on the 5th day of January, 1839; specifying the Date of the Establishment of each Bank, the Number and Situation of its Branches, and the Number of Partners in each Bank, in the Years 1836, 1837, and 1838.

Bank.	Date of Establishment.	No. of Branches.	Year ending 5th of January, 1839. Situation of Branches.	Number of Partners. 1836.	1837.	1838.
The Hibernian Joint Stock Company.	June 1825	by special	Act, 5 Geo. 4. c. 159			
The Provincial Bank of Ireland.	Sept. 1825	34	Armagh, Athlone, Ballina, Ballymena, Ballyshannon, Banbridge, Bandon, Belfast, Cavan, Clonmel, Coleraine, Cork, Cootehill, Downpatrick, Dungannon, Dungarven, Ennis, Enniskillen, Galway, Kilkenny, Limerick, Londonderry, Lurgan, Mallow, Monaghan, Moneymore, Omagh, Parsonstown, Sligo, Strabane, Tralee, Waterford, Wexford, and Youghal.	643	707	728
The Northern Banking Company.	31 Dec. 1825	11	Armagh, Ballymena, Belfast, Carrickfergus, Coleraine, Downpatrick, Lisburn, Londonderry, Lurgan, Magherafelt, and Newtonlimavady.	210	204	195
The Belfast Company -	30 Dec. 1827	17	Armagh, Ballymena, Ballymoney, Belfast, Coleraine, Cookstown, Derry, Dungannon, Larne, Lurgan, Magherafelt, Monaghan, Newtonlimavady, Newtownards, Portadown, Strabane, Tandaragee.	286	285	280
The National Bank of Ireland	24 Jan. 1835	15	Athlone, Ballinasloe, Ballina, Banagher, Boyle, Castlebar, Castlerea, Galway, Longford, Loughrea, Moate, Roscommon, Sligo, Tuam, and Westport.	250	290	463
The Limerick National Bank of Ireland.	17 Aug. 1835	5	Charleville, Ennis, Kilrush, Limerick, and Rathkeale.	520	554	684
The Agricultural and Commercial Bank of Ireland.	28 Oct. 1834 ceased	28	Armagh, Belfast, Boyle, Castlebar, Clones, Cork, Dungannon, Enniscorthy, Fermoy, Galway, Kilkenny, Killarney Limerick, Londonderry, Mallow, Nenagh, Parsonstown, Roscommon, Roscrea, Skibbereen, Sligo, Strokestown, Thomastown, Thurles, Tipperary, Tralee, Tuam, and Waterford.	2,656	3,892	3,673
The Clonmel National Bank	20 May 1836	3	Cashel, Clonmel, and Thurles -	465	487	446
The Carrick-on-Suir National Bank.	21 May 1836	1	Carrick-on-Suir - - -	391	416	571
The Waterford National Bank.	23 May 1836	4	Dungarven, New Ross, Tallow, and Waterford.	434	451	618
The Wexford and Enniscorthy National Bank.	24 May 1836	2	Enniscorthy and Wexford - -	393	417	589
The Tipperary National Bank.	26 May 1836	5	Fermoy, Mitchelstown, Nenagh, Roscrea, and Tipperary.	429	456	620
The Tralee National Bank -	27 May 1836	6	Cahirciveen, Dingle, Kanturk, Killarney, Tarbert, and Tralee.	411	444	609
The Ulster Banking Company	15 April 1836	9	Antrim, Armagh, Ballymoney, Banbridge, Belfast, Cootehill, Downpatrick, Enniskillen, and Lurgan.	836	789	679
The Royal Bank of Ireland -	Nov. 1836	1	Dublin - - - - -	304	363	324
The Southern Bank of Ireland.	11 Feb. 1837	- -	- - - - - - - -	- -	92	
The Cork National Bank -	17 March 1837	1	Cork - - - - - -	- -	415	530
The Kilkenny National Bank	7 June 1837	1	Kilkenny - - - - -	- -	379	546

VI. Banks (Foreign).

To attempt giving any detailed account of the principal foreign banks would very far exceed our limits; we shall therefore only notice a few of the more celebrated.

The *Bank of Venice* seems to have been the first banking establishment in Europe. It was founded so early as 1171, and subsisted till the subversion of the republic in 1797. It was essentially a deposit bank; and its bills bore at all times a premium or *agio* over the current money of the city.

The *Bank of Amsterdam* was established in 1659. It was a deposit bank; and payments were made by writing off sums from the account of one individual to those of another. According to the principles on which the bank was established, it should have had at all times in its coffers bullion equal to the full amount of the claims upon it. But the directors privately lent about 10,500,000 florins to the states of Holland and Friesland. This circumstance transpired when the French invaded Holland, and caused the ruin of the bank.

The *Bank of the Netherlands* was established in 1814. It is formed on the model of the Bank of England; and has the exclusive privilege of issuing notes. The original capital of 5,000,000 florins was doubled in 1819. The king holds *one tenth* of the shares. The affairs of the bank are managed by a president, secretary, and 5 directors, who are chosen every 6 months, but may be indefinitely re-elected. This bank discounts bills of exchange with three responsible signatures; it takes continuations on stock, and sometimes lends on bullion at such a rate of interest and to such an extent as may be agreed upon. It occasionally, also, makes loans on merchandise, but never at less than 5 per cent. Its notes vary from 1,000 florins to 25 florins; that is, from 83*l.* to 2*l.* The dividends have varied from 3 to 7 per cent. The shares are each 1,000 florins. The responsibility of the shareholders is limited to the amount of their stock. Its original charter, which was limited to 25 years, was prolonged in 1838 for 25 years more.

The *Bank of Hamburgh* is a deposit bank, and its affairs are managed according to a system that insures the fullest publicity. It receives no deposits in coin, but only in bullion of a certain degree of fineness. It charges itself with the bullion at the rate of 442 schillings the mark, and issues it at the rate of 444 schillings; being a charge of $\frac{3}{8}$ths, or nearly $\frac{1}{2}$ per cent., for its retention. It advances money on jewels to $\frac{3}{5}$ths of their value. The city is answerable for all pledges deposited with the bank; they may be sold by auction, if they remain 1 year and 6 weeks without any interest being paid. If the value be not claimed within 3 years, it is forfeited to the poor. The Bank of Hamburgh is universally admitted to be one of the best managed in Europe.

The *Bank of France* was founded in 1803. The exclusive privilege of issuing notes payable to bearer was granted to it for 40 years, and was continued by a law passed in 1840 till 1867. This law was preceded by a very able Report, drawn up by M. Dufaure, in which, among other questions, the policy of having only one bank of issue in Paris is examined, and decided in the affirmative. The capital of the bank consisted at first of 45,000,000 fr.; but it was subsequently increased to 90,000,000 fr., divided into 90,000 shares or *actions* of 1,000 fr. each. Of these shares 67,900 are in the hands of the public: 22,100 having been purchased up by the bank out of her profits were subsequently cancelled; so that her capital consists at present of 67,900,000 fr. (2,716,000*l.*) exclusive of a reserve fund of 10,000,000 fr. represented by 500,000 fr. 5 per cent. rentes. The capital of the bank was divided on the 1st of January, 1840, among 4,207 shareholders. The notes issued by the bank are for 1,000 and 500 fr. The dividend varies from 4 to 5 per cent. Bonuses of 200 fr. and 132 fr. a share were paid out of this reserve to the shareholders in 1820 and 1831. No bills are discounted that have more than three months to run. The customary rate of discount is 4 per cent., but it varies according to circumstances. The discounts in 1839 amounted to 1,188,719,400 fr., of which 136,640,000 fr. were by the bank's branches. At an average of the 10 years ending with 1838, the bank notes in circulation amounted to 213,730,000 fr., and the average amount of the specie in reserve in the bank's coffers during the same period amounted to 188,706,000 fr. The bank is obliged to open a *compte courant* for every one who requires it, and performs services for those who have such accounts similar to those rendered by the private banks of London to their customers. She is not allowed to charge any commission upon current accounts, so that her only remuneration arises out of the use of the money placed in her hands by the individuals whose payments she makes. This branch of the business is said not to be profitable. The bank advances money on pledges of different kinds, such as foreign coin or bullion, government or other securities, &c. It also undertakes the care of valuable articles, as plate, jewels, title-deeds, &c. The charge is $\frac{1}{8}$ per cent. of the value of each deposit for every period of 6 months or under.

The administration of the bank is vested in a council-general of 20 members, viz. a governor and deputy governor, nominated by the king; and 15 directors and 3 censors, chosen by the general body of the shareholders. The institution is extremely well managed, and enjoys unlimited credit. We beg to subjoin

A Statement of the Liabilities and Assets of the Bank of France, on the 25th of December, 1842, deduced from the Official Statement of the Situation of the Bank published in the *Moniteur*.

Liabilities.	Francs.	Cents.
Bank notes in circulation	224,251,652	40
Due on Treasury accounts current	136,102,806	19
Ditto on accounts current of merchants	37,711,930	42
Deposit notes payable at sight	2,010,000	0
Dividends becoming due	5,219,142	73
Outstanding drafts of branch banks	452,762	94
Due on sundry heads	1,271,827	3
	407,923,211	71
Balance, being the capital of the Bank, consisting of 67,900 shares (1194*l.* 25*c.* per share)	81,000,000	0
	488,923,211	71

Assets.	Francs.	Cents.
Cash in hand	107,253,647	72
Commercial bills discounted	158,324,772	45
Advances made on deposits of bullion	4,720,600	0
Advances made on deposits of public securities	16,497,032	50
To be received on accounts current	27,788,541	99
Capital of branch banks	20,000,000	0
Reserve according to law at par	10,000,000	0
Cash vested in public securities	50,201,736	10
Hotel and furniture of the bank	4,000,000	0
Sundries	136,880	65
	488,923,211	71

Commercial Operations of the Bank of France during the Last Quarter of 1842:

	Francs.		Francs.
Commercial bills discounted - -	250,090,600	Received from the Treasury - - -	119,106,500
Cash advanced on bullion - - -	7,685,600	Paid to the Treasury - - -	144,258,400
Cash advanced on public securities -	9,762,500	Cash received - - - -	94,530,000
Cash received on sundry accounts -	1,000,639,500	Bills received - - - -	497,565,500
Cash paid on ditto - - - -	1,003,556,700	Cash paid - - - -	582,180,500

(For farther information as to the Bank of France, see the Report of M. Dufaure, already referred to, in the Appendix (p. 356.) of the Report of 1840 on Banks of Issue; with the *Comptes Rendus* of different years; the returns in the *Moniteur*, &c.)

Banks have also been established in Berlin, Copenhagen, Vienna, and Petersburg. Those who wish for detailed information with respect to these establishments, may consult the 4th vol. of the *Cours d'Economie Politique* of M. Storch, which contains a good account of the paper money of the different Continental states. The objects we have in view will be accomplished by laying before our readers the following details with respect to the *Commercial Bank* of Russia, established in 1818: —

This bank receives deposits in gold and silver, foreign as well as Russian coin, and in bars and ingots. It has a department for transferring the sums deposited with it, on the plan of the Hamburgh Bank. It discounts bills, and lends money on deposits of merchandise of Russian produce or origin. Its capital consists of 8,571,429 silver rubles. It is administered by a governor and 4 directors, appointed by government; and 4 directors, elected by the commercial body of Petersburg. The property in the bank is protected against all taxation, sequestration, or attachment; and it is enacted, that subjects of countries with which Russia may be at war shall be entitled at all times to receive back their deposits without any reservation. It is also declared, that at no time shall the bank be called upon for any part of its capital to assist the government. All deposits must be made for 6 months at least, and be repayable at or before that period, and not be less than 500 paper rubles: sums so deposited to pay ½ per cent. The deposits, if in bars, ingots, or foreign specie, are estimated in Russian silver coin, and so registered in the attestation; and if not demanded back within 15 days of the expiration of 6 months, or the necessary premium paid for the prolongation, the owner loses the right of claiming his original deposit, and must take its estimated value in Russian silver coin. No bills are discounted that have less than 8 days or more than 6 months to run. The rate of discount is 6 per cent. No interest is allowed on money deposited in the bank, unless notice be given that it will be allowed to lie for a year, and 3 months' notice be given of the intention to draw it out, when *six* per cent. interest is allowed. This bank has branches at Archangel, Moscow, Odessa, Riga, &c.

By means of its capital and deposits, which in 1839 amounted together to 161,881,859 silver rbls., the Bank effected in that year the following operations: —

	Rbls.	Cop.
1. Repayments on deposits in transfer -	24,966,101	45
2. Transfers from one city to another -	19,986,513	96
3. Drafts purchased - - - -	3,532,661	64
4. Repayment of deposits at interest -	31,925,776	91
5. Discount of bills of exchange - -	17,217,541	7
6. Advances on deposits of merchandise -	1,348,601	68
7. Advances on the notes of other banks -	650,001	13
8. Discount of notes of the Lombard -	1,928,571	43
9. Advanced on fixed property by branch at Kieff - - - - -	174,070	80

The nett profit during the same year amounted to 656,501 silv. rbls., and the reserve capital of the bank was then also 1,279,976 silv. rbls. —(See Supp. to the *Journal de St. Petersbourg* for 1839, p. 87.)

American Banks.—The system of banking in America has attracted a great deal of attention in this country; principally, perhaps, from the extent to which English capital has been embarked in it; but partly, also, from the peculiar principles on which it has been founded, and the mode in which it has been conducted. And certainly it deserves to be carefully studied and meditated, were it only for the incontestible evidence which it affords that, how flourishing soever in other respects, a country cursed with a vicious banking system may be every now and then involved in the greatest difficulties, and reduced almost to a state of bankruptcy. Considering the peculiarly favourable circumstances under which the United States are placed, the boundless extent of their fertile and unoccupied lands, the lightness of their public burdens, and the intelligence, enterprise, and economy of the people, it might be presumed that distress and bankruptcy would be all but unknown in the Union, and that she would be exempted from those revulsions which so seriously affect less favourably situated communities. But the very reverse of all this is the fact: discredit and bankruptcy are incomparably more prevalent in America than in any European country; and all sorts of industrious undertakings and monied fortunes are infinitely more secure in Russia, and even in Turkey, than in the United States! This anomalous and apparently inexplicable state of things is entirely a consequence of the American banking system, which seems to combine within itself every thing that can make it an engine of unmixed evil. Had a committee of clever men been selected to devise means by which the public might be tempted to engage in all manner of absurd projects, and be most easily duped and swindled, we do not know that they could have hit upon any thing half so likely to effect their object as the existing American banking system. It has no one redeeming quality about it, but is from beginning to end a compound of quackery and imposture. Our own banking system is bad enough,

certainly; but it is as superior to the American as can well be imagined. A radical reform of the latter, or, if that cannot be effected, its entire suppression, would be the greatest boon that can be conferred on the Union, and would be no small advantage to every nation with which the Americans have any intercourse.

The American banks are all joint-stock associations. But instead of the partners being liable, as in England, for the whole amount of the debts of the banks, they are in general liable only for the amount of their shares, or for some fixed multiple thereof. It is needless to dwell on the temptation to commit fraud held out by this system, which has not a single countervailing advantage to recommend it. The worthlessness of the plan on which the banks are founded was evinced by the fact, that between 1811 and the 1st of May, 1830, no fewer than 195 banks became altogether bankrupt, many of them paying only an insignificant dividend; and this exclusive of a much greater number that stopped for a while, and afterwards resumed payments.—(*Report from Secretary of the Treasury of the United States*, 12th February, 1841.) The wide-spread mischief resulting from such a state of things led to the devising of various complicated schemes for insuring the stability and prudent management of banks; but, as they all involved regulations which it was impossible to enforce, they have been practically worse than useless. In Massachusetts, for example, it was provided that no bank for the issue of notes should go into operation in any way until at least half its capital stock had been paid in gold and silver into the bank, and been lodged in its coffers, and seen in them by inspectors appointed for that purpose; and the cashier of every bank was bound to make specific returns once a year of its debts and assets, on being required to do so by the secretary of state. But our readers need hardly be told that these elaborately contrived regulations are really good for nothing, unless it be to afford an easy mode of cheating and defrauding the public. Instances have occurred of banks having borrowed an amount of dollars equal to half their capital for *a single day*, and of such dollars having been examined by the inspectors appointed for that purpose, and reported by them, and sworn by a majority of the directors, to be the first instalment paid by the stockholders of the bank, and intended to remain in it!—(*Gouge's Paper Money and Banking in the United States.*) We do not of course imagine that such disgraceful instances can be of common occurrence; but what is to be thought of a system which permits a company for the issue of paper money, founded on such an abominable fraud, to enter on business with a sort of public attestation of its respectability? The publicity, too, to which the American banks are subject is injurious rather than otherwise. Those who are so disposed may easily manufacture such returns as they think most suitable to their views; and the more respectable banks endeavour, for a month or two previously to the period when they have to make their returns, to increase the amount of bullion in their coffers by temporary loans, and all manner of devices. The whole system is, in fact, bottomed on the most vicious principles. But it is unnecessary, after what has recently occurred, to insist further upon the gross and glaring defects of American banking. Perhaps no instance is to be found in the history of commerce of such a wanton over-issue of paper as took place in the United States in 1835 and 1836. The result was such as every man of sense might have anticipated. The revulsion to which it necessarily led, after producing a frightful extent of bankruptcy and suffering in all parts of the Union, compelled, in May, 1837, every bank within the States, without, we believe, a single exception, to suspend specie payments! In 1838, such of them as were not entirely swept off resumed specie payments; but in 1839, by far the larger number of them, with the Bank of the United States at their head, again suspended payments; and this institution, with many of the others, has been found to be altogether insolvent.

It is stated, in the Report referred to above by the Secretary of the Treasury of the United States, that between 1830 and 1840, 150 banks, having an aggregate capital of 45,000,000 dol., became entirely insolvent; and it farther appears that between the date of the above Report and the 1st of September, 1842, no fewer than 161 additional banks had failed, having (including the Bank of the United States) an aggregate capital of 132,362,339 dol., with notes in circulation to the amount of 43,320,554 dol. (See the list of these banks in *Downe's American Almanac* for 1843, pp. 293–295.) And if we add to the losses thus occasioned the depression in the value of the stocks of the other banks and the diminution of their circulation, the bankruptcy of a vast number of railway, canal, and other joint-stock associations, the discredit of the stocks of most of the States, the avowed bankruptcy of some of those most able to pay their debts, and the violent shock given to all private credit, we may form some faint idea of the injury inflicted on the Union by this revulsion. But the loss to individuals in a pecuniary point of view, vast as it has been, is nothing to the influence of this wretched system on public morals. It bids fair to convert the whole people of America into a nation of gamblers and swindlers. "The greatest injury to society," — — written in the *American Almanac*, "resulting from this state of things, is in the

upheaving of the elements of social order, and the utter demoralization of men by the temptation to speculation, which ends in swindling to retain ill-gotten riches. In illustration, the Journal of Banking chronicles thirty odd millions of plunder by bank defalcations in this single revulsion, as far as they have been discovered and have reached the eye of the editor."—(P. 257.)

Here the writer stops; but he might have added, that "swindling to retain ill-gotten riches" is no longer confined to bank clerks and bank agents. It infects and pollutes every order of society. The repudiating legislatures of Pennsylvania and other states may come into competition for the palm of dishonesty with the worst agents of the worst banking schemes in the Union.

The United States Bank, originally incorporated by Congress in 1816 for 20 years, had a paid-up capital of 35,000,000 dollars, or of more than *seven millions* sterling. The question, whether the charter should be renewed, was debated with extraordinary vehemence in all parts of the Union. The then president, General Jackson, was violently opposed to the re-incorporation of the bank; and rejected a bill for that purpose that had been approved by the other branches of the legislature. He also followed up this blow by removing the government deposits from the bank in 1833. But, notwithstanding this hostility on the part of the executive government, the credit of the institution continued unimpaired; and, in 1835 and 1836, the Bank of the United States, like other banks in the Union, made enormous additions to her issues; which went on increasing till the issue of the famous treasury circular of the 11th of July, 1836, directing that all deposits of money on sales of public lands (the speculations in which had been pushed to an unprecedented extent) should be paid in specie. This may be said to have been the first step in that extraordinary reaction that has overspread America with public and private bankruptcy, and from the effects of which she has not yet recovered (1843), and will not speedily recover.

But, despite the opposition of the president, the Bank of the United States succeeded, in 1836, in obtaining a charter of incorporation from the legislature of Pennsylvania. But there can be no doubt that its capital had been seriously impaired before it received this charter; and this diminution of its strength, combined with the reckless improvidence with which it made advances on state stocks, the stocks of public companies, and the cotton and other products of private individuals, completed its ruin. We have seen no very late statement of its affairs on which we should be inclined to place any reliance; but it is certain that the bankruptcy is of the very worst description, and that all, or nearly all, the capital belonging to the bank has been lost.

Out of the 350,000 shares into which the capital stock of the Bank of the United States was divided, it is understood that in the latter period of its existence about 84,000 were held by foreigners, and mostly by Englishmen. The question, whether the charter will be adequate to protect these parties in their limited liability, is one that may not improbably be mooted, should the bank not be able to discharge the various claims upon her. If they are protected, we incline to think that the sooner the law is changed the better.

Had the United States Bank not opened an agency office here, the case would have been different; but having opened an office, and transacted a large amount of business in London, it became to all intents and purposes an English establishment; and the partners belonging to it in England must, one should think, be amenable to English law, and not to the law of Pennsylvania. If this be not the case, it will necessarily follow that any institution, though consisting wholly of Englishmen, that obtained a charter from any foreign state, even though it were not generally known that it was chartered, as the foreign law might not require this to be divulged, might open places of business in London and Liverpool, and, after getting some hundreds of thousands of pounds into debt, might suspend payments, and laugh at the credulous dupes they had reduced to beggary and ruin. The legislature of England has wisely refused to allow of partnerships (excepting in extraordinary cases) being instituted here with limited responsibility, being well convinced that, despite every possible precaution, they would be sure, in many instances, to be perverted to the basest purposes. And is it to be endured that foreigners should acquire privileges in this country denied to natives? or that foreign governments should have power to organise and establish institutions amongst us on a principle which parliament justly regards as most objectionable? If the law of England authorise *this*, it is most certainly high time that it were amended, and that a check were given to what must otherwise be one of the safest and most profitable species of swindling. But we hardly think that such can be the law. British subjects who embark their capital in foreign trading associations may, in so far as respects their interest in them, be amenable only to the foreign law, provided the associations to which they belong restrict their operations to foreign countries. But should these associations send agents here, and open offices and carry on business within the United Kingdom, the case is altogether different: the legislature of Pennsylvania may be omnipotent at home, but it is luckily

impotent in England; it may, if it choose, institute trading companies with limited responsibility, or with no responsibility at all; but if these be joined by Englishmen, make England the scene of their operations, and issue their balance sheets in the city of London, what are they in practice but English companies? And such of our countrymen as have embarked in them would seem to have but slender grounds of complaint, should they be taught that they are responsible to *our* law; that the law of a foreign country cannot protect them; and that they will be made liable, in the event of the concern becoming bankrupt, to the utmost shilling of their fortunes for its liabilities to British subjects.

Owing to the privilege claimed by the different states, and exercised without interruption from the Revolution downwards, it is, we fear, impossible to effect the suppression of local paper in America, or to establish a paper currency which should at all times vary in amount and value, as if it were metallic. But the states have it in their power to do that which is next best: they may compel all banks which issue notes to give security for their issues. This, though it would not prevent oscillations in the amount and value of the currency, would, at all events, prevent those ruinous and ever-recurring stoppages and bankruptcies of the issuers of paper money that render the American banking system one of the severest scourges to which any people was ever subjected. Common sense and experience alike demonstrate the inefficacy of all the regulations enacted by the American legislatures to prevent the abuse of banking. It is in vain for them to lay it down that the issues shall never exceed a certain proportion of the capital of the bank, and so forth. Such regulations are all very well, provided the banks choose to respect them; but there are no means whatever of insuring their observance, and their only effect is to make the public look for protection and security to what is altogether impotent and worthless for any good purpose. If the suppression of local issues be impossible in America, there is nothing left but to take security from the issuers of notes. The reader may be assured that all schemes for the improvement of banks, by making regulations as to the proportion of their issues and advances to their bullion, capital, &c., are downright delusion and quackery.

Owing to the extensive destruction of bank paper, and the still more extensive destruction of bills and other substitutes for money, occasioned by the total prostration of private credit, there has latterly been a great scarcity of currency in the Union, and very large quantities of specie have been imported, most of which has found its way into the coffers of the existing banks. We may, therefore, at no distant day, expect a revival of credit and of all sorts of speculations in the Union. Whether Englishmen will be again stupid enough to adventure their money in the new projects that will then, no doubt, be set on foot, remains to be seen; but if they do, they will certainly deserve to lose every farthing they may so invest. They may be assured that unless the present banking system be cut up by the roots, of which there is not the smallest prospect, an increase of specie in the banks is only giving them the means of entering on a new career of over-issue and swindling.

Comparative View of the Condition of all the Banks in the United States, near the Commencement of each Year, from 1845 to 1st September 1842.

	According to Returns nearest 1st January.							
	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
Whole number of banks and branches in operation -	704	713	788	829	840	901		
	dollars.	*dollars.*	*dollars.*	*dollars.*	*dollars.*	*dollars.*	*dollars.*	*dollars.*
Capital paid in -	231,250,337	251,875,292	290,772,091	317,636,778	327,132,512	358,442,692	335,469,514	203,107,125
Loans and discounts -	365,163,831	457,506,080	525,115,702	485,631,687	492,278,015	462,896,523		330,000,000?
Specie - -	43,937,625	40,019,594	37,915,340	35,184,112	45,132,673	33,105,155	37,131,522	26,812,951
Circulation - -	103,692,195	140,301,058	149,185,890	116,138,910	135,170,995	106,968,572	115,905,312	63,874,790
Deposits - -	85,081,365	115,104,440	127,397,185	84,691,184	90,240,146	75,696,857		40,000,000?

It is seen from this table that while the loans and discounts, specie, circulation, and deposits, amounted near the 1st of Jan. 1839, to 762,821,821 doll., they did not amount, in September 1842, to 460,000,000 (for the estimated numbers are known to be very near the truth), showing a decrease of no less than 302,000,000 doll.!

VII. Banks for Savings,

Are banks established for the receipt of small sums deposited by the poorer class of persons, and for their accumulation at compound interest. They are managed by individuals who derive no benefit whatever from the deposits. All monies paid into any Savings Bank established according to the provisions of the act 9 Geo. 4. c. 92. are ordered to be paid into the Banks of England and Ireland, and vested in Bank annuities or Exchequer bills. The interest payable to depositors is not to exceed 2½*d.* per cent. *per diem*, or 3*l.* 8*s.* 5¼*d.* per cent. *per annum*. No depositor can contribute more than 30*l.*, exclusive of compound interest, to a Savings Bank in any one year; and the total

deposits to be received from any individual are not to exceed 150*l.*; and whenever the deposits, and compound interest accruing upon them, standing in the name of any one individual, shall amount to 200*l.*, no interest shall be payable upon such deposit so long as it shall amount to 200*l.* The commissioners for the reduction of the national debt have the disposal of the sums vested in the public funds on account of Savings Banks.

This system began in 1817; and on the 20th of November, 1842, there was due to depositors, including interest accruing on deposits, 25,319,336*l.* It farther appears that from the 6th of August, 1815, down to the 20th of November, 1842, the public paid on account of interest and charges on the sums due to Savings Banks and Friendly Societies under the act 9 Geo. 4. c. 92., 14,070,341*l.* 2*s.* 6*d.*, and that the dividend received during the same period on the stock and other public securities in which the commissioners for the reduction of the national debt invested the said sums, amounted to 12,039,781*l.* 8*s.* 6*d.*, leaving a balance of 2,030,559*l.* 14*s.*, which consequently may be said to be the sum which the system has cost the public. — (*Parl. Paper* No. 258. Sess. 1843.)

The principle and object of Savings Banks cannot be too highly commended. In the metropolis, and many other parts of England, public banks do not receive small deposits, and until recently they did not pay any interest on them. And even in Scotland, where the public banks allow interest upon deposits, they do not generally receive less than 5*l.* or 10*l.* But few poor persons are able to save even this much except by a lengthened course of economy. The truth, therefore, is, that until Savings Banks were established, the poorest classes were every where without the means of securely and profitably investing those small sums they are not unfrequently in a condition to save; and were consequently led, from the difficulty of disposing of them, to neglect opportunities for making savings, or, if they did make them, were tempted, by the offer of high interest, to lend them to persons of doubtful characters and desperate fortunes, by whom they were, for the most part, squandered. Under such circumstances, it is plain that nothing could be more important, in the view of diffusing habits of forethought and economy amongst the labouring classes, than the establishment of Savings Banks, where the smallest sums are placed in perfect safety, are accumulated at compound interest, and are paid, with their accumulations, the moment they are demanded by the depositors. The system is yet little more than in its infancy; but the magnitude of the deposits already received, sets its powerful and salutary operation in a very striking point of view.

We subjoin a copy of the rules of the St. Pancras Savings Bank, which may be taken as a model for similar institutions, inasmuch as they have been drawn up with great care, and closely correspond with the provisions in the act 9 Geo. 4. c. 92.

1. *Management.* — This bank is under the management of a president, vice-presidents, trustees, and not less than fifty managers, none of whom are permitted to derive any benefit whatsoever, directly or indirectly, from the deposits received, or the produce thereof. One or more of the managers attend when the Bank is open for business.

2. *Superintending Committee.* — A committee of not less than ten managers, three of whom form a quorum, is empowered to superintend, manage, and conduct the general business of this Bank; to add to their number from among the managers; to fill up vacancies in their own body, and to appoint a treasurer or treasurers, agent or agents, auditors, an actuary and clerks, and other officers and servants, and to withdraw any such appointments, and to appoint others, should it be considered necessary so to do. — The proceedings of this committee are regularly laid before the general meetings of the Bank.

3. *Elections.* — The superintending committee is empowered to add to the number of managers, until they amount to one hundred and twenty, exclusively of the president, vice-presidents, and trustees. And any vacancies of president, vice-presidents, and trustees are to be filled up at a general meeting.

4. *General Meetings.* — A general meeting of the president, vice-presidents, trustees, and managers of this Bank shall be held once a year, in the month of February. The superintending committee shall lay before every such meeting a report of the transactions of the Bank, and state of the accounts. The superintending committee for the succeeding year shall be elected at such general meeting; and failing such election, the former committee shall be considered as reappointed.

5. *Special Meetings.* — The superintending committee are authorised to call special general meetings when they think proper; and also, on the requisition of any ten managers, delivered in writing to the actuary, or to the manager in attendance at the bank; and of such meeting seven days' notice shall be given.

6. *Liability of Trustees, Managers, Officers, &c.* — No trustee or manager shall be personally liable except for his own acts and deeds, nor for any thing done by him in virtue of his office, except where he shall be guilty of wilful neglect or default; but the treasurer or treasurers, the actuary, and every officer intrusted with the receipt or custody of any sum of money deposited for the purposes of this institution, and every officer, or other person, receiving salary or allowance for their services from the funds thereof, shall give good and sufficient security, by bond or bonds, to the clerk of the peace of the county of Middlesex, for the just and faithful execution of such office of trust.

7. *Investment and Limitation of Deposits.* — Deposits of not less than *one shilling*, and not exceeding *thirty pounds* in the whole, exclusive of compound interest, from any one depositor, or trustee of a depositor, during each and every year ending on the 20th of November, will be received and invested, pursuant to 9 Geo. 4. c. 92. s. 11., until the same shall amount to *one hundred and fifty pounds* in the whole; and when the principal and interest together shall amount to *two hundred pounds*, then no interest will be payable on such deposit, so long as it shall continue to amount to that sum. But depositors, whose accounts amounted to, or exceeded, *two hundred pounds*, at the passing of the said act, on the 28th of July, 1828, will continue to be entitled to interest and compound interest thereon.

8. *Interest to be allowed to Depositors.* — In conformity with the 24th clause of the 9 Geo. 4. c. 92., an interest at the rate of 2½*d.* per cent. per day, being 3*l.* 8*s.* 5½*d.* per cent. per annum (*the full amount authorised by the said act*), will be allowed to depositors, and placed to their accounts as a cash deposit, in the month of *November* in each year. Depositors demanding payment of the whole amount of their

deposits in this Bank, will be allowed the interest due on such deposits up to the day on which notice of withdrawing shall be given, but no interest will be allowed, in any case, on the fractional parts of a pound sterling

9. *Description and Declaration.* — Every person desirous of making any deposit in this Bank, shall, at the time of making their first deposit, and at such other times as they shall be required so to do, declare their residence, occupation, profession, or calling, and sign (either by themselves, or, in case of infants under the age of seven years, by some person or persons to be approved of by the trustees or managers, or their officer), a declaration that they are not directly or indirectly entitled to any deposit in, or benefit from, the funds of any other Savings Bank in England or Ireland, nor to any sum or sums standing in the name or names of any other person or persons in the books of this Bank. And in case any such declaration shall not be true, every such person (or the person on whose behalf such declaration may have been signed) shall forfeit and lose all right and title to such deposits, and the trustees and managers shall cause the sum or sums so forfeited to be paid to the commissioners for the reduction of the national debt; but no depositor shall be subject or liable to any such forfeiture, on account of being a trustee on behalf of others, or of being interested in the funds of any Friendly Society legally established.

10. *Trustees on behalf of others.* — Persons may act as trustees for depositors, whether such persons are themselves depositors in any Savings Bank or not, provided that such trustee or trustees shall make such declaration on behalf of such depositor or depositors, and be subject to the like conditions in every respect, as are required in the case of persons making deposits on their own account, and the receipt and receipts of such trustee or trustees, or the survivor of them, or the executors or administrators of any sole trustee, or surviving trustee with or without (as may be required by the managers) the receipt of the person on whose account such sum may have been deposited, shall be a good and valid discharge to the trustees and managers of the institution.

11. *Minors.* — Deposits are received from, or for the benefit of, minors, and are subject to the same regulations as the deposits of persons of 21 years of age and upwards.

12. *Friendly and Charitable Societies.* — Friendly Societies, legally established previous to the 28th of July, 1828, may deposit their funds through their treasurer, steward, or other officer or officers, without any limitation as to the amount. But Friendly Societies formed and enrolled after that date are not permitted to make deposits exceeding the sum of 300*l.*, principal and interest included; and no interest will be payable thereon, whenever the same shall amount to, or continue at, the said sum of 300*l.* or upwards.

Deposits are received from the trustees or treasurers of Charitable Societies, not exceeding 100*l.* per annum, provided the amount shall not at any time exceed the sum of 300*l.*, exclusive of interest.

13. *Deposits of Persons unable to attend.* — Forms are given at the office, enabling persons to become depositors, who are unable to attend personally; and those who have previously made a deposit, may send additional sums, *together with their book*, by any other person.

14. *Depositors' Book.* — The deposits are entered in the books of the Bank at the time they are made, and the Depositor receives a book with a corresponding entry therein; which book must be brought to the office every time that any further sum is deposited, also when notice is given for withdrawing money, and at the time the repayment is to be made, so that the transactions may be duly entered therein.

15. *Withdrawing Deposits.* — Depositors may receive the whole or any part of their deposits on any day appointed by the managers, not exceeding *fourteen* days after notice has been given for that purpose; but such deposits can only be repaid to the depositor personally, or to the bearer of an order under the hand of the depositor, signed in the presence of either the minister or a churchwarden of the parish in which the depositor resides, of a justice of the peace, or of a manager of this Bank.

☞ *The Depositor's Book must always be produced when notice of withdrawing is given.*

16. *Money withdrawn may be re-deposited.* — Depositors may withdraw any sum or sums of money, and re-deposit the same at any time or times within any one year, reckoning from the 20th day of November, provided such sum or sums of money re-deposited, and any previous deposit or deposits which may have been made by such depositor in the course of the year, taken together, shall not exceed, at any time in such year, the sum of 30*l.* additional principal money bearing interest.

17. *Return or Refusal of Deposits.* — This Bank is at liberty to return the amount of the deposits to all or any of the depositors, and may refuse to receive deposits in any case, where it shall be deemed expedient so to do.

18. *Deposits of a deceased Depositor exceeding Fifty Pounds.* — In case of the death of any depositor in this Bank, whose deposits, and the interest thereon, shall exceed in the whole the sum of *fifty pounds*, the same shall only be paid to the executor or executors, administrator or administrators, on the production of the probate of the will, or letters of administration.

19. *Deposits of a deceased Depositor not exceeding Fifty Pounds.* — In case a depositor in this Bank shall die, whose deposits, including interest thereon, shall not exceed the sum of fifty pounds, and that the trustees or managers shall be satisfied that no will was made and left, and that no letters of administration will be taken out, they shall be at liberty to pay the same to the relatives or friends of the deceased, or any or either of them, or according to the statute of distribution, or require the production of letters of administration, at their discretion. And the Bank shall be indemnified by any such payments from all and every claim in respect thereof by any person whatsoever.

20. *Certificate.* — In all cases wherein certificates shall be required of the amount of deposits in this Bank belonging to depositors therein, for the purpose of obtaining, free of stamp duties, a probate of will, or letters of administration, such certificate shall be signed by a manager, and countersigned by the actuary for the time being, as a true extract from the Ledger of the institution.

21. *Arbitration of Differences.* — In case any dispute shall arise between the trustees or managers of this Bank, or any person or persons acting under them, and any individual depositor therein, or any trustee of a depositor, or any person claiming to be such executor, administrator, or next of kin, then, and in every such case, the matter so in dispute shall be referred to the barrister at law appointed by the commissioners for the reduction of the national debt, under the authority of the 9 Geo. 4. c. 92. s. 45.; and whatever award, order, or determination shall be made by the said barrister, shall be binding and conclusive upon all parties, and shall be final, to all intents and purposes, without any appeal.

Purchase of Government Annuities by Depositors in Savings Banks. — The act 2 & 3 Will. 4. c. 14. enables depositors in Savings Banks and others to purchase government annuities for life or for years, and either immediate or deferred. At present these annuities are limited to 20*l.* a year. The money advanced is returnable in case the contracting party does not live to the age at which the annuity is to become payable, or is unable to continue the monthly or annual instalments. That this measure was benevolently intended, and that it may be productive of advantage to many individuals, cannot be doubted; but we look upon all attempts, and particularly those made by government, to get individuals to exchange capital for annuities, as radically objectionable; and as being subversive of principles which ought to be strengthened rather than weakened. — (See FUNDS.) We subjoin

An Account exhibiting a Summary View of the Number and State of the Savings Banks in England, Wales, Scotland, and Ireland respectively, on the 20th of November 1841.

Summary of Savings Banks in England.

Population (including Guernsey and Jersey) 15,071,602.

In England (including Guernsey and Jersey) there were, on the 20th Nov. 1841, 428 Savings Banks, containing

Depositors.			Amount.	Average Amount of each Depositor.
384,634	not exceeding	£ 20 each	£ 2,528,654	£ 6
175,697	—	50 —	5,438,897	30
76,498	—	100 —	5,283,164	69
26,483	—	150 —	3,191,335	116
14,849	—	200 —	2,533,055	170
2,856	exceeding	200 —	681,028	240
680,997	depositors -	- -	19,656,133	28
7,225	friendly societies	- -	967,414	130
7,569	charitable societies	- -	412,643	54
695,791	accounts.	Total	£21,036,190	£ 30

Summary of Savings Banks in Wales.

Population 911,321.

In Wales there were, on the 20th Nov. 1841, 23 Savings Banks, containing

Depositors.			Amount.	Average Amount of each Depositor.
8,186	not exceeding	£ 20 each	£ 64,183	£ 7
4,835	—	50 —	149,576	30
1,769	—	100 —	122,307	69
545	—	150 —	65,278	119
236	—	200 —	40,062	161
54	exceeding	200 —	12,888	238
15,625	depositors -	- -	454,294	29
419	friendly societies	- -	62,525	149
176	charitable societies	- -	10,869	62
16,220	accounts.	Total	£ 527,688	£ 32

Summary of Savings Banks in Scotland.

Population, 2,628,957.

In Scotland there were, on the 20th November 1841, 28 Savings Banks, containing

Depositors.			Amount.	Average Amount of each Depositor.
41,045	not exceeding	£ 20 each	£ 203,155	£ 5
7,127	—	50 —	217,019	30
1,578	—	100 —	107,318	68
226	—	150 —	27,063	120
42	—	200 —	6,932	165
	exceeding	200 —		
50,018	depositors -	- -	562,087	11
376	charitable societies	- -	15,499	41
225	friendly societies	- -	30,923	182
50,619	accounts.	Total	£ 608,509*	£ 12

Summary of Savings Bank in Ireland.

Population, 8,175,238.

In Ireland there were, on the 20th Nov. 1841, 76 Savings Banks. One has made no return; the remaining Banks contain

Depositors.			Amount.	Average Amount of each Depositor.
36,537	not exceeding	£ 20 each	£ 271,676	£ 7
28,196	—	50 —	860,823	31
9,042	—	100 —	606,923	67
2,531	—	150 —	295,564	117
1,094	—	200 —	180,853	165
122	exceeding	200 —	27,787	228
77,522	depositors -	- -	2,243,426	29
657	charitable societies	- -	59,085	61
395	friendly societies	- -	19,791	50
78,574	accounts.	Total	£ 2,302,302	£ 29

In England, Wales, Scotland, and Ireland there were, on the 20th November 1841, 555 Savings Banks. One has made no return; the remaining contain

Depositors.			Amount.	Average of each Deposit.
470,402	not exceeding	£ 20 each	£ 3,067,668	£ 7
215,855	—	50 —	6,666,315	31
88,887	—	100 —	6,120,312	69
29,785	—	150 —	3,579,040	120
16,221	—	200 —	2,760,902	170
3,012	exceeding	200 —	721,703	240
824,162	depositors -	- -	22,915,940	28
8,778	charitable societies	- -	478,096	54
8,264	friendly societies	- -	1,080,653	131
841,204	accounts -	- Total	£21,474,689	£ 29

These returns have been extracted from the History of Savings Banks, published in 1842 by Mr. Tidd Pratt, the very intelligent barrister appointed to certify the rules on which Savings Banks, Friendly Societies, &c. have been founded.

* The comparatively small amount of the deposits in Savings Banks in Scotland is wholly a consequence of the unusual facilities so long afforded in that part of the United Kingdom for the investment of comparatively small sums at interest in public banks of undoubted solidity. We have previously noticed the very great amount of these investments.

BANGKOK, the capital of the kingdom of Siam, situated about 20 miles from the sea on both sides the river Menam, but chiefly on its left or eastern bank, in lat. 13° 40′ N., long. 101° 10′ E. The Menam opens in the centre nearly of the bottom of the Gulf of Siam. There is a bar at its mouth, consisting, for the most part, of a mud flat 10 miles in depth. The outer edge of this flat, which is little more than 200 yards broad, is sandy and of harder materials than the inner part; which is so soft that when a ship grounds on it during the ebb, she often sinks 5 feet in the mud and clay, which supports her upright, so that she is but little inconvenienced. The highest water on the bar of the Menam, from February to September, is about 13½ feet; and in the remaining 4 months, somewhat more than 14 feet,—a difference probably produced by the accumulation of water at the head of the bay after the south-west monsoon, and by the heavy floods of the rainy season. On account of the deficiency of water on the bar, vessels sent to Bangkok had better, perhaps, not exceed 200 or 250 tons burden. In all other respects, the river is extremely safe and commodious. Its mouth is no sooner approached, than it deepens gradually; and at Paknam, two miles up, there are 6 and 7 fathoms water. This depth increases as you ascend, and at Bangkok is not less than 9 fathoms. The only danger is, or rather was, a sand bank off Paknam, bare at low water; but on this a fort or battery has been erected within the last few years, affording at all times a distinct beacon. The channel of the river is so equal, that a ship may range from one side to another, approaching the banks so closely that her yards may literally overhang them. The navigation is said to be equally safe all the way up to the old capital of Yuthia, 80 miles from the mouth of the river.

The city of Bangkok extends along the banks of the Menam to the distance of about 2½ miles; but is of no great breadth, probably not exceeding 1½ mile. On the left bank there is a long street or row of

floating houses; each house or shop, for they are in general both, consisting of a distinct vessel, which may be moored any where along the banks. Besides the principal river, which at the city is about a quarter of a mile broad, the country is intersected by a great number of tributary streams and canals, so that almost all intercourse at Bangkok is by water. The population has been computed at 50,000 or 60,000, half of whom are Chinese settlers.

The total area of the kingdom of Siam has been estimated at 190,000 square miles, and the population at only 2,790,500, principally resident in the rich valley of the Menam. Of the entire population, it is supposed that not less than 440,000 are Chinese. The common necessaries of life at Bangkok are exceedingly cheap. A cwt. of rice may always be had for 2*s.* and very often for 1*s.* Other necessaries, such as salt, palm-sugar, spices, vegetables, fish, and even flesh, are proportionally cheap. The price of good pork, for example, is 2½*d.* per lb. A duck may be had for 7*d.* and a fowl for 3*d.* The neighbourhood of Bangkok is one of the most productive places in the world for fine fruits; for here are assembled, and to be had in the greatest perfection and abundance, the orange and lichi of China, the mangoe of Hindostan, and the mangostein, durian, and shaddock of the Malay countries.

Monies, Weights, and Measures. — Gold and copper are not used as money in Siam, and the currency consists only of cowrie shells and silver. The denominations are as follow: — 200 bia or cowries make 1 p'hai-nung; 2 p'hai-nungs, 1 sing-p'hai; 2 sing-p'hais, 1 fuang; 2 fuangs, 1 salung; 4 salungs, 1 bat or tical; 80 ticals, 1 cattie; 100 catties, 1 picul.

The standard coin is the bat, which Europeans have called a tical; but there are also coins, though less frequently, of the lower denominations. These are of a rude and peculiar form. They are, in fact, nothing more than small bits of a silver bar bent, and the ends beaten together. They are impressed with two or three small stamps, not covering the whole surface of the coin. The cattie and picul are, of course, only used in speaking of large sums of money. Gold and silver are weighed by small weights, which have the same denominations as the coins. The p'hai-nung, the lowest of these, is in this case subdivided into 32 sagas, or red beans, the *Abrus precatorius* of botanists.

The bat, or tical, was assayed at the mint of Calcutta; it was found to weigh 236 grains; its standard, however, was uncertain, and the value of different specimens varied from 1 rupee 3 anas and 3 pice, to 1 rupee 3 anas and 7 pice. The value, therefore, in sterling money, is about 2*s.* 6*d.*, and it is so considered.

In respect to ordinary measures, the Siamese cattie is double the weight of the Chinese cattie, which, as is well known, is equal to 1⅓ lb. avoirdupois. The picul, however, is of the same weight, consisting in the one case of 50 catties only, and in the other of 100. In weighing rice and salt, a large measure is used, consisting, in respect to the first of 22 piculs, and of the last of 25 piculs. Rice is also measured by the basket, of which 100 go to the large measure above mentioned.

The long measures are as follow: — 12 finger breadths make 1 span; 2 spans, 1 cubit; 4 cubits, 1 fathom; 20 fathoms, 1 sen; and 100 sen, 1 yuta, or, as it is more commonly pronounced by the Siamese, yut. The fathom is the measure of most frequent use, and the Siamese have a pole of this length divided into its fractional parts. This, as nearly as can be ascertained, is equal to about 6 feet 6 inches. The sen appears to be also used in the admeasurement of land, and to be the name of a square measure of 20 fathoms to the side.

Port Regulations and Duties. — As soon as a European ship reaches the bar of Siam, she must, according to the regulations of the country, communicate with the chief of the village of Paknam, at the mouth of the Menam, and from him obtain a pilot. At Paknam, the rule is to land ammunition, cannon, and small arms; but this regulation is not very rigidly insisted on. The duties and other imposts levied on external trade are somewhat complex, and differ in some degree according to the class of vessels subjected to them, and which consist of junks carrying on trade with China Proper, junks of the island of Hai-nan, junks trading to the Malay islands, and European shipping. The imposts consist of a duty on the measurement or dimensions of the vessel; an *ad valorem* duty upon imports; and a rated tariff in most cases, with an *ad valorem* duty in a few, on exports. The first named class of vessels, viz. the large junks trading with the principal ports of China, pay no measurement or import duties, because these are vessels belonging to the king, or to the princes, or courtiers, licensed to engage freely in this branch of trade. The Hai-nan junks pay 40 ticals per Siamese fathom, on the extreme breadth of the vessel. The junks trading to the Malay countries, in lieu of measurement duty, pay 130 ticals each, without regard to size. Neither of these vessels pay import duties. The measurement duties on European vessels are estimated at 118 ticals per fathom, besides an inconsiderable impost in the form of an anchorage fee. The cargoes of these alone pay an import duty, which is reckoned at 8 per cent. *ad valorem*, levied in kind.

The tariff on exports consists of specific duties, of which the following are specimens: —

Ivory	per picul	2½ ticals.
Stick lac		½
Sugar, if exported under a European flag		1½
Ditto — an Indian flag		1
Cotton wool		⅛

Trade. — The foreign trade of Siam is conducted with China, Cochin China, Cambogia, and Tonquin, Java, Singapore, and the other British ports within the Straits of Malacca, with an occasional intercourse with Bombay and Surat, England and America. The most important branch of the foreign trade is that with China, which is wholly carried on in vessels of Chinese form, navigated by Chinese, the greater portion of them being, however, built in Siam. The imports from China are very numerous, consisting of what are called in commercial language "assorted cargoes." The following is a list of the principal commodities: — Coarse earthenware and porcelain, spelter, quicksilver, tea, lacksoy (vermicelli), dried fruits, raw silk, crapes, satins, and other silk fabrics, nankeens, shoes, fans, umbrellas, writing paper, sacrificial paper, incense rods, and many other minor articles. Not the least valuable part of the importations are immigrants.

The exports from Siam are also very various, including among others black pepper, sugar, tin, cardamoms, eagle-wood, sapan-wood, red mangrove bark, rose-wood for furniture and cabinet work, cotton, ivory, stick lac, rice, areca nuts, salt fish; the hides and skins of oxen, buffaloes, elephants, rhinoceroses, deer, tigers, leopards, otters, civet cats, and pangolins; of snakes, and rays, with the belly-shell of a species of land tortoise; the horns of the buffalo, ox, deer, and rhinoceros; the bones of the ox, buffalo, elephant, rhinoceros, and tiger; dried deer's sinews; the feathers of the pelican, of several species of storks, of the peacock and kingfisher, &c.; and, finally, esculent swallows' nests. The tonnage carrying on the China trade amounts in all to probably about 130 junks in number, a few of which are 1,000 tons burden, and the whole shipping is not short of 35,000 tons.

The trade with the different countries of the Malay Archipelago is, also, very considerable. In this intercourse, the staple exports of Siam are sugar, salt, oil, and rice; to which may be added the minor articles of stick lac, iron pans, coarse earthenware, hogs' lard, &c. The returns are British and Indian piece goods, opium, with a little glass ware, and some British woollens from the European settlements, with commodities suited for the Chinese market, such as pepper, tin, dragon's blood, rattans, biche-de-mer, esculent swallows' nests, and Malay camphor from the native ports.

The total exports of clayed sugar and black pepper, the staple articles of Siamese export, may be estimated, the former at about 10,000 tons, and the latter from 3,500 to 4,000 tons.

[From the communications of John Crawfurd, Esq., who ascertained the particulars on the spot.]

BANKRUPT AND BANKRUPTCY. In the general sense of the term bank-

rupt, is equivalent to insolvent, and is applied to designate any individual unable to pay his debts. But in the law of England bankrupts form that particular class of insolvents who are engaged in trade, or who "seek their living by buying and selling," and who are declared, upon the oath of one or more of their creditors, to have committed what the law has defined to be an *act of bankruptcy*. At present, however, we shall merely lay before the reader a few observations with respect to the principles and leading provisions embodied in the law as to bankruptcy and insolvency; referring the reader to the article INSOLVENCY AND BANKRUPTCY, for a detailed statement of these and the other provisions in that law.

"All classes of individuals, even those who have least to do with industrious undertakings, are exposed to vicissitudes and misfortunes, the occurrence of which may render them incapable of making good the engagements into which they have entered, and render them bankrupt or insolvent. But though bankruptcy is most frequently, perhaps, produced by uncontrollable causes, it is frequently also produced by the thoughtlessness of individuals, or by their repugnance to make those retrenchments which the state of their affairs demands; and sometimes also by fraud or bad faith. Hence it is that the laws with respect to bankruptcy occupy a prominent place in the judicial system of every state in which commerce has made any progress, and credit been introduced. They differ exceedingly in different countries and stages of society; and it must be acknowledged that they present very many difficulties, and that it is not possible, perhaps, to suggest any system against which pretty plausible objections may not be made.

"The execrable atrocity of the early Roman laws with respect to bankruptcy is well known. According to the usual interpretation of the law of the twelve tables, which Cicero has so much eulogised *, the creditors of an insolvent debtor might, after some preliminary formalities, cut his body to pieces, each of them taking a share proportioned to the amount of his debt; and those who did not choose to resort to this horrible extremity, were authorised to subject the debtor to chains, stripes, and hard labour; or to sell him, his wife, and children, to perpetual foreign slavery *trans Tyberim!* This law, and the law giving fathers the power of inflicting capital punishments on their children, strikingly illustrate the ferocious and sanguinary character of the early Romans.

"There is reason to think, from the silence of historians on the subject, that no unfortunate debtor ever actually felt the utmost severity of this barbarous regulation; but the history of the republic is full of accounts of popular commotions, some of which led to very important changes, that were occasioned by the exercise of the power given to creditors of enslaving their debtors, and subjecting them to corporal punishments. The law, however, continued in this state till the year of Rome 427, 120 years after the promulgation of the twelve tables, when it was repealed. It was then enacted, that the persons of debtors should cease to be at the disposal of their creditors, and that the latter should merely be authorised to seize upon the debtor's goods, and sell them by auction in satisfaction of their claims. In the subsequent stages of Roman jurisprudence, further changes were made, which seem generally to have leaned to the side of the debtor; and it was ultimately ruled, that an individual who had become insolvent without having committed any fraud, should upon making a *cessio bonorum*, or a surrender of his entire property to his creditors, be entitled to an exemption from all personal penalties. — (*Terasson, Histoire de la Jurisprudence Romaine*, p. 117.)

"The law of England distinguishes between the insolvency of persons engaged in trade, and that of others. The former can alone be made bankrupts, and are dealt with in a comparatively lenient manner. 'The law,' says Blackstone, 'is cautious of encouraging prodigality and extravagance by indulgence to debtors; and therefore it allows the benefit of the laws of bankruptcy to none but actual traders, since that set of men are, generally speaking, the only persons liable to accidental losses, and to an inability of paying their debts without any fault of their own. If persons in other situations of life run in debt without the power of payment, they must take the consequences of their own indiscretion, even though they meet with sudden accidents that may reduce their fortunes; for the law holds it to be an unjustifiable practice for any person but a trader to encumber himself with debts of any considerable value. If a gentleman, or one in a liberal profession, at the time of contracting his debts has a sufficient fund to pay them, the delay of payment is a species of dishonesty, and a temporary injustice to his creditors; and if at such time he has no sufficient fund, the dishonesty and injustice are the greater: he cannot, therefore, murmur if he suffer the punishment he has voluntarily drawn upon himself. But in mercantile transactions the case is far otherwise; trade cannot be carried on without mutual credit on both sides: the contracting of debts is here not only justifiable, but necessary; and if, by accidental calamities, as by the loss of a ship in a tempest,

* Fremant omnes, licet! dicam quod sentio; bibliothecas, mehercule, omnium philosophorum unus mihi videtur duodecim tabularum libellus; siquis legum fontes et capita viderit et authoritatis pondere et utilitatis ubertate superare. — *De Oratore*, lib. i.

the failure of brother traders, or by the nonpayment of persons out of trade, a merchant or trader becomes incapable of discharging his own debts, it is his misfortune and not his fault. To the misfortunes, therefore, of debtors, the law has given a compassionate remedy, but denied it to their faults; since, at the same time that it provides for the security of commerce, by enacting that every considerable trader may be declared a bankrupt, for the benefit of his creditors as well as himself, it is also, to discourage extravagance, declared that no one shall be capable of being made a bankrupt but only a trader, nor capable of receiving the full benefit of the statutes but only an *industrious* trader.'—(*Commentaries*, book ii. cap. 31.)

"After the various proceedings with respect to bankruptcy have been gone through, the bankrupt may apply for a certificate or discharge liberating his person and any property he may afterwards acquire from the claims of his creditors. The power to grant this certificate was formerly vested in the creditors: but the statute 5 & 6 Vict. c. 122. has enacted that the power to grant certificates shall be vested in the court, which, after hearing such creditors as may be opposed to the allowance of a certificate, shall, on taking all the circumstances into account, refuse or grant it, as may seem most conformable to justice. In the event of the certificate being granted, the bankrupt is entitled to a reasonable allowance out of his effects; which is, however, made to depend partly on the magnitude of his dividend. Thus, if his effects will not pay half his debts, or 10*s.* in the pound, he is left to the discretion of the court, to have a competent sum allowed him, not exceeding 3 per cent. upon his estate, or 300*l.* in all; but if his estate pay 10*s.* in the pound, he is to be allowed 5 per cent. provided such allowance do not exceed 400*l.*; if it pay 12*s.* 6*d.*, then 7½ per cent. under a limitation as before of its not exceeding 500*l.*; and if it pay 15*s.* in the pound, then the bankrupt shall be allowed 10 per cent. upon his estate, provided it do not exceed 600*l.*

"According to our present law, when a person not a trader becomes insolvent, he may, after being actually imprisoned at the suit of some of his creditors for fourteen days, present a petition to the court to be relieved; and upon surrendering his entire property, he is, unless something fraudulent be established against him, entitled to a discharge. While, however, the certificate given to the bankrupt relieves him from all future claims on account of debts contracted previously to his bankruptcy, the discharge given to an insolvent only relieves him from imprisonment; in the event of his afterwards accumulating any property, it may be seized in payment of the debts contracted anterior to his insolvency. This principle was recognised in the *cessio bonorum* of the Romans, of which the insolvent act is nearly a copy.

"It may be questioned, however, notwithstanding what Blackstone has stated, whether there be any good ground for making a distinction between the insolvency of traders and other individuals. There are very few trades so hazardous as that of a farmer, and yet should he become insolvent, he is not entitled to the same privileges he would have enjoyed had he been the keeper of an inn, or a commission agent! The injustice of this distinction is obvious; but, without dwelling upon it, it seems pretty clear that certificates should be granted indiscriminately to all honest debtors. Being relieved from all concern as to his previous incumbrances, an insolvent who has obtained a certificate is prompted to exert himself vigorously in future, at the same time that his friends are not deterred from coming forward to his assistance. But when an insolvent continues liable to his previous debts, no one, however favourably disposed, can venture to aid him with a loan; and he is discouraged, even if he had means, from attempting to earn any thing more than a bare livelihood; so that, while creditors do not, in one case out of a hundred, gain the smallest sum by this constant liability of the insolvent, his energies and usefulness are for ever paralysed.

"The policy of imprisoning for debt seems also exceedingly questionable. Notwithstanding the deference due to the great authorities who have vindicated this practice, we confess we are unable to discover any thing very cogent in the reasonings advanced in its favour. Provided a person in insolvent circumstances intimate his situation to his creditors, and offer to make a voluntary surrender of his property to them, he has, as it appears to us, done all that should be required of him, and ought not to undergo any imprisonment. If he have deceived his creditors by false representations, or if he conceal or fraudulently convey away any part of his property, he should of course be subjected to the pains and penalties attached to swindling; but when such practices are not alleged, or cannot be proved, sound policy, we apprehend, would dictate that creditors should have no power over the persons of their debtors, and that they should be entitled only to their effects. The maxim, *carcer non solvit*, is not more trite than true. It is said, that the fear of imprisonment operates as a check to prevent persons from getting into debt, and so no doubt it does. But then it must, on the other hand, be borne in mind, that the power to imprison tempts individuals to trust to its influence to enforce payment of their claims, and makes them less cautious in their inquiries as to the condition and circumstances of those to whom they give credit. The carelessness of tradesmen, and their

extreme earnestness to obtain custom, are, more than any thing else, the great causes of insolvency, and the power of imprisoning merely tends to foster and encourage these habits. If a tradesman trust an individual with a loan of money or goods, which he is unable to pay, he has made a bad speculation. But why should he, because he has done so, be allowed to arrest the debtor's person? If he wished to have perfect security, he either should not have dealt with him at all, or dealt with him only for ready money. Such transactions are, on the part of tradesmen, perfectly voluntary; and if they place undue confidence in a debtor who has not misled them by erroneous representations of his affairs, they have themselves only to blame.

"It would really, therefore, as it appears to us, be for the advantage of creditors, were all penal proceedings against the persons of honest debtors abolished. The dependence placed on their efficacy is deceitful. A tradesman ought rather to trust to his own prudence and sagacity to keep out of scrapes, than to the law for redress: he may deal upon credit with those whom he knows; but he should deal for ready money only with those of whose circumstances and characters he is either ignorant or suspicious. By bringing penal statutes to his aid, he is rendered remiss and negligent. He has the only effectual means of security in his own hands, and it seems highly inexpedient that he should be taught to neglect them, and put his trust in prisons.

"It is pretty evident, too, that the efficacy of imprisonment in deterring individuals from running into debt has been greatly overrated. Insolvents who are honest must have suffered from misfortune, or been disappointed in the hopes they entertained of being able, in one way or other, to discharge their debts. The fear of imprisonment does not greatly influence such persons; for when they contract debts, they have no doubt of their ability to pay them. And though the imprisonment of *bonâ fide* insolvents were abolished, it would give no encouragement to the practices of those who endeavour to raise money by false representations; for these are to be regarded as swindlers, and ought as such to be subjected to adequate punishment. (See CREDIT.)

"At present, indeed, the law is much too indulgent to this description of persons. Traders, or others, who endeavour to obtain goods or loans of money, whether by concealing or misrepresenting the real state of their affairs, are, in fact, about the very worst species of cheats; and the temptation to resort to such practices, and the facility with which they may be carried into effect, should make them, when detected, be visited with a proportionally increased severity of punishment, on the principle laid down by Cicero, that *ea sunt animadvertenda peccata maxime, quæ difficillime præcaventur.** But honesty and dishonesty are not to be treated alike; and unless fraud of some sort or other be established, the imprisonment or penal pursuit of debtors appears to be alike oppressive and inexpedient. The legislature appears, indeed, to be coming round to this way of thinking; for under a recent act (5 & 6 Vict. c. 116.), all persons not liable to the bankrupt laws, and those liable to them whose debts are under 300*l.*, may, on giving certain notices, and making over all their property, present and future, for the benefit of their creditors, obtain from the Bankruptcy Court a protection against all process whatever, unless fraud, or other offence of that kind, be proved against them.

"We may further observe, that the regulations with respect to bankruptcy and insolvency differ materially in other respects. Until the act 1 & 2 Vict. c. 110., an individual could not be subjected to the insolvent law except by his own act, that is, by his petitioning for relief from actual imprisonment for debt. But under that act, any creditor who may have taken a debtor in execution may, unless his debt be satisfied within 21 days from the date of the debtor's imprisonment, get the latter subjected to the insolvent laws, and procure the vesting of his property in an assignee for the benefit of his creditors, in the same way as if the debtor had himself petitioned for relief. An individual cannot, however, in any case, be made a bankrupt, and subjected to the bankrupt law, except by the act of another, that is, of a petitioning creditor †, as he is called, swearing that the individual in question is indebted to him, and that he believes he has committed what is termed an act of bankruptcy.

"While, however, the law of England has always given the creditor an unnecessary degree of power over the debtor's person, it did not, till very recently, give sufficient power over his property. In this respect, indeed, it was so very defective, that one is almost tempted to think it had been intended to promote the practices of fraudulent debtors. The property of persons subject to the bankrupt and insolvent laws was, it is true, nominally placed at the disposal of assignees or trustees, for the benefit of their creditors; but when a person possessed of property, but not subject to the bankrupt laws, contracted debt, if he went abroad, or lived within the rules of the King's Bench

* Oratio pro Sexto Roscio, § 40.

† One creditor whose debt is to the amount of 50*l.* or upwards; or two, whose debts amount to 70*l.*, or three whose debts amount to 100*l.*

or the Fleet, or remained in prison without petitioning for relief, he continued most probably to enjoy the income arising from that property without molestation.

"The law, no doubt, said that creditors should be authorised to seize the debtor's lands and goods; a description which an unlearned person would be apt to conclude was abundantly comprehensive: but the law used to be so interpreted, that neither funded property, money, nor securities for money, was considered goods: if the debtor had a copyhold estate, it could not be touched in any way whatever; if his estate were freehold, the creditor might, after a tedious process, receive the rents and profits, but no more, during the lifetime of his debtor. If the debtor died before judgment against him in a court had been obtained, then, unless the debt were on bond, the creditor had no recourse upon the land left by the debtor, whatever might be its tenure; 'nay, though his money, borrowed on note or bill, had been laid out in buying land, the debtor's heir took that land wholly discharged of the debt!' *

"In consequence of the facilities thus afforded for swindling, an individual known to have a large income, and enjoying a proportionally extensive credit, was able, if he went to Paris or Brussels, or confined himself within the rules of the King's Bench or the Fleet, to defraud his creditors of every farthing he owed them, without their being entitled to touch any part of his fortune. All owners of funded, monied, and copyhold property, had thus, in fact, a licence given them to cheat with impunity: the only wonder is, not that some did, but that a vast number more did not, avail themselves of this singular privilege.

"But we are glad to have to state, that this preposterous system has been materially changed within the last dozen years. The acts 3 & 4 Will. 4. c. 104. and the 1 & 2 Vict. c. 110. have made copyhold as well as freehold estates, with the monied, funded, and other property, of deceased and living debtors, against whom judgment has been obtained, available for the satisfaction of their just debts. Hence it is no longer in the power of any knave, who might choose to reside abroad or in prison, to preserve his property from the grasp of those to whom he is really indebted. Indeed, there is now little to object to in this peculiar department of the law, unless it be the expensive machinery (Court of Chancery) under which the administration of a deceased debtor's effects is conducted in litigated cases. Speaking generally, however, the various proceedings with respect to bankruptcy and insolvency are still, perhaps from their extreme difficulty, in an unsatisfactory state; and it is probable they will, at no distant date, be materially changed."—(See the *Principles of Political Economy*, by the author of this work, 3d. ed. pp. 270—279.)

BARCALAO, or BACALAO, the Spanish name for cod.

BARCELONA, the capital of Catalonia, and the principal town of Spain, on the Mediterranean, lat. 41° 22′ 58″ N., long. 2° 8′ 11″ E. It is a strongly fortified, well-built city. The population is supposed to amount to about 120,000. Barcelona is eminently distinguished in the history of the middle ages for the zeal, skill, and success with which her citizens prosecuted commercial adventures at a very early period. She would seem also to be entitled to the honour of having compiled and promulgated the famous code of maritime law known by the name of the *Consolato del Mare*; and the earliest authentic notices of the practice of marine insurance and of the negotiation of bills of exchange are to be found in her annals.† Catalonia has continued, amidst all the vicissitudes it has undergone, to be the most industrious of the Spanish provinces. Several extensive manufactures have been established in Barcelona, especially of cotton, and no fewer than 23 steam engines were erected in Catalonia in 1842, the greater number being in Barcelona. Latterly, however, her commerce, owing to a variety of causes, but principally to oppressive restrictions on the importation of foreign goods, the emancipation of South America, and internal dissensions, has very much declined.

The Harbour, which is naturally bad, is formed by a mole or jetty, which has recently been a good deal enlarged, running out to a considerable distance in a southerly direction, and having a light-house and some batteries near its extremity. The depth of water within the mole is from 18 to 20 feet; but there is a bar between the mole and Monjui, which has frequently not more than 10 feet water; and which would, it is believed, entirely shut up the harbour, were it not occasionally lowered by means of dredging machines. Vessels in the harbour moor at a short distance from the mole; where, though exposed to the southerly gales, they are so well protected that no accident of any consequence has taken place since the dreadful storm of 1821. Large ships must anchor outside the mole, and in winter are much incommoded by winds. Vessels entering the harbour are under no obligation to take a pilot on board; but they are always in attendance, and it is generally deemed safest to have their assistance in passing the bar.

* Brougham's "Speech on the State of the Law," p. 108.

† For proofs of this, see the articles MARITIME LAW, INSURANCE, &c. in this Dictionary. The *Memorias Historicas sobre la Marina, Comercio, &c. de Barcelona*, by Capmany, in 4 vols. 4to, is one of the most valuable and authentic works that has been published on the commerce, arts, and commercial and maritime legislation of the middle ages. The first volume is the most interesting, at least to the general reader; the others consisting principally of extracts from the archives of the city. There is a brief but pretty good account of the early trade of Barcelona, drawn principally from Capmany, in the work of Depping, *Histoire du Commerce entre le Levant et l'Europe depuis les Croisades*, &c. tom. i. c. 5.

Custom-house and Warehousing Regulations, same as at ALICANT; which see.

Port Charges.—The following are the various charges of a public nature that would be paid by a Spanish and a British ship, each of 300 tons burden, unloading and loading mixed cargoes in Barcelona:—

Spanish Vessels.	Reals.	British Vessels.	Reals.
Anchorage - -	75	Anchorage - -	75
New do. - -	15	Double do. - -	75
Cleaning of port -	10	New do. - -	15
Lantern - -	6	Cleaning of port -	10
Captain of the port -	8	Lantern - -	6
Light-house of Tarrifa	105	Captain of the port -	8
Loading(1 real per ton)	300	Light-house of Tarrifa	211
Extraordinary contribution -	40	New mole (8 reals per ton) - - -	2,400
New mole - -	16	Loading(1 real per ton)	300
		Extraordinary contribution -	40
Total -	575		3,140
		Consular fees usually required - -	160
		Total -	3,300

Taking the real at 4*d.*, this would be 9*l.* 11*s.* 2*d.* on the Spanish ship, and 55*l.* on the British do.

Commission is at the rate of 2½ per cent. on goods shipped, and 2 per cent. on those received on consignment. Goods are sometimes sold for ready money, and sometimes on credit for 3 or 4 months; mercantile discount is ½ per cent. per month. There are no banking establishments in Barcelona.

Insurance on ships is effected by individuals, but insurances on houses, lives, &c. are unknown.

Tares.—At the Custom-house, real tares only are allowed: and the nett weights must be rigorously manifested. A surplus of 3 per cent. is, however, allowed to cover any inexactness in the proportion between foreign and Spanish weights; but if the weight of any parcel should turn out to be 3 per cent. greater than is marked in the manifest, the surplus is seized, at the same time that the importer loses the benefit of the 3 per cent. allowed by law, and becomes liable to the penalties of smuggling. The tares usually allowed by merchants are, on Havanna sugar 13 per cent.; on coffee 2 per cent., exclusive of the barrel, bag, &c. in which it is contained; on cocoa and pepper 2 per cent.; Pernambuco cotton 4 lbs. per bale; other cotton 1 lb. per cwt.

Sea-stores of all sorts are dear at Barcelona, but they may always be obtained. Beef costs about 7*d.* per lb., and biscuit about 8 dollars per cwt.

Money.—Accounts are kept in *libras* of 20 *sueldos*, 240 *dineros*, or 480 *mallas*. The libras is likewise divided into *reals de plata Catalan*, of 3 *sueldos* each; and into *reales ardites*, of 2 *sueldos* each. Hence, 6·7 of the former, or 10 of the latter, = 1 *libra Catalan*.

The *libra Catalan* is = 2*s.* 4*d.* sterling nearly.

The *peso duro*, or hard dollar, is valued at 37½ *sueldos Catalan*, eight such dollars making 15 *libras*.

Weights and Measures.—There are endless discrepancies amongst the weights and measures in the different Spanish provinces, and there is a very great discrepancy in the accounts of the authors who have written upon them. The following statements are taken from Nelkenbrecher:—

The quintal is divided into 4 *arrobas*, or 104 lbs. of 12 oz. to the pound. The pound = 6,174 English grains = 4 kilog. = 8325·6 as of Holland. 100 lbs. of Barcelona = 88·215 lbs. avoirdupois.

The yard, named *cana*, is divided into 8 *palmos*, of 4 *quartas*, and is = 21 inches very nearly. Hence, 100 canas = 53·499 metres = 77·5 yards of Amsterdam = 53·514 English yards.

The *quartera*, or measure for grain, is divided into 12 *cortanes* and 48 *picotins*. 100 quarteras = 23·536, or 23½ Winchester quarters.

The *carga*, or measure for liquids, is divided into 12 *cortanes* or *arrobas*, 24 *cortarinas*, and 72 *mitadellas*. It is = 32·7 English wine gallons. 4 cargas = 1 *pipe*. The pipe of Majorca oil contains 107 cortanes.

Imports.—The principal articles of import are raw cotton; sugar, coffee, cocoa, and other colonial products, principally from Cuba and Porto Rico; salted fish, hides, and horns; iron and hardware, &c. Most species of manufactured goods are prohibited; but it is needless to add that they are notwithstanding largely imported into this as into most other parts of Spain. The trade with the colonies, France, and the coasting trade is pretty active. The imports from England are not very considerable, and the exports little or nothing. In 1842, no fewer than 3,667 vessels entered the port; but these were mostly coasters of small size, the burden of the whole being only 189,117 tons.

Exports.—The principal exports are wrought silks, soap, fire-arms, paper, hats, laces, ribands, steel, &c. But no vessels, except a few that take on board manufactured goods for the Spanish West Indies, are loaded here; and even this trade is much fallen off. Upwards of 2,000 hands used formerly to be employed in the city in the manufacture of shoes for the colonies; but their export has now nearly ceased. The principal articles of native produce that Catalonia has to export are most conveniently shipped at Villanova, Tarragona, and Salon. They consist of wine, brandy, nuts, almonds, cork bark, wool, fruits, &c. Of these, Cuba takes annually about 12,000 pipes of wine, worth at an average 4*l.* per pipe, and about 3,000 pipes of brandy, worth 8*l.* per do.; South America, 16,000 pipes of wine, and 6,000 do. brandy; the north of Europe, 2,000 pipes of wine, and 2,000 do. brandy. A good deal of brandy is sent to Cadiz and Cette: most part of the former finds its way into the wine vaults of Xeres; and the latter, being conveyed by the canal of Languedoc to the Garonne, is used in the preparation of the wines of Bordeaux. From 25,000 to 30,000 bags of nuts are annually sent from Tarragona to England. Tarragona also exports about 12,000 bags of almonds.

The ships belonging to the port carry on no foreign trade except to the Spanish West Indies; they are few in number, and are daily decreasing. Those engaged in the coasting trade are usually of very small burden.

(We have derived these details from various sources; but principally from *Consular Returns*, and from *Inglis's Spain in* 1830, vol. ii. pp. 384–387. and 362.)

BARILLA (Du. *Soda*; Fr. *Soude, Barille*; Ger. *Soda, Barilla*; It. *Barriglia*; Port. *Solda, Barrilha*; Rus. *Socianka*; Sp. *Barilla*; Arab. *Kali*), carbonate of soda—(see ALKALIES), is found native in Hungary, Egypt, and many other countries. It is largely used by bleachers, manufacturers of hard soaps, glass-makers, &c. The barilla of commerce consists of the ashes of several marine and other plants growing on the sea-shore. The best, or Alicant barilla, is prepared from the *Salsola soda*, which is very extensively cultivated for this purpose in the *huerta* of Murcia, and other places on the eastern shores of Spain.—(*Townsend's Travels in Spain*, vol. iii. p. 195.) The plants are gathered in September, dried, and burned in furnaces heated so as to bring the ashes into a state of imperfect fusion, when they concrete into hard, dry, cellular masses of a greyish blue colour. Sicily and Teneriffe produce good barilla, but inferior to that of Alicant and Carthagena. Kelp, which is a less pure alkali, is formed by the incineration of the common sea-weed.—(See KELP.)

The Saracens established in Spain seem to have been the first who introduced the manufacture of barilla into Europe. They called the plants employed in its preparation *kali*; and this, with the Arabic article *al* prefixed, has given rise to the modern chemical term alkali. Prime quality in barilla is to be distinguished by its strong smell when wetted, and by its whitish colour. Particular attention should be paid to have as little small or dust as possible. The duties on barilla have recently been very considerably reduced.—(See TARIFF.)

The manufacture of artificial soda (*soude factice*), now very extensively carried on, has occasioned an extraordinary decline in the imports of barilla, the quantity entered for home consumption in 1834, amounting to 237,712 cwt., having been reduced in 1841 to 47,380 cwt. Considerable quantities used formerly to be imported from Teneriffe, but it now comes principally from Alicant in Spain and Sicily. Thus, of 42,618 cwt. imported in 1841, 20,341 came from Spain, 18,570 from Italy (Sicily), and only 3,696 from the Canaries. The duty on barilla was reduced in 1842 from 2*l.* to 5*s.* per ton. It remains to be seen what effect this reduction may have on its consumption; but the entries in 1842 were rather less than in 1841.—(See *Parl. Papers*, No. 261. Sess. 1839, and No. 45. Sess. 1843.)

BARK, the outer rind of plants. There is an immense variety of barks known in

commerce, as cinnamon, Peruvian bark, oak bark, quercitron, &c. The term "bark" is, however, generally employed to express either Peruvian bark, or oak bark; and it is these only that we shall notice in this place.

1. *Peruvian or Jesuits' Bark* (Fr. *Quinquina*; Ger. *Kron-china*; Du. *China-bast*; Sp. *Quina, Quinquina*; Lat. *Quinquina, Cortex Peruvianus*). There are three principal species of this bark known in commerce, which have been elaborately described by Dr. A.T. Thomson, from whose account the following particulars are selected.

The first species is the *pale* bark of the shops. It is the produce of the *Cinchona lancifolia*, and is the original cinchona of Peru. It is now very scarce. It is imported in chests covered with skins, each containing about 200 lbs., well packed, but generally mixed with a quantity of dust and other heterogeneous matter. It consists of pieces 8 or 10 inches long, some of them being scarcely one tenth of an inch thick, singly and doubly quilled, or rolled inwards, the quills generally being in size from a swan's quill to an inch and a half. It is internally of a pallid fawn or cinnamon hue, but approximates, on being moistened, to the colour of a pale orange. When in substance it has scarcely any odour, but during decoction the odour is sensible, and agreeably aromatic. The taste is bitter, but not unpleasant, acidulous, and austere.

The second species, or red bark, is obtained from the *Cinchona oblongifolia*, growing on the Andes. It is imported in chests containing from 100 to 150 lbs. each. It consists of variously sized pieces, most of them flat, but some partially quilled or rolled. The internal part is woody, and of a rust red colour: it has a weak peculiar odour, and its taste is much less bitter, but more austere and nauseous, than that of the other barks.

The third species, or yellow bark of the shops, is obtained from the *Cinchona cordifolia*, growing in Quito and Santa Fe. It is imported in chests containing from 90 to 100 lbs. each, consisting of pieces 8 or 10 inches long, some quilled, but the greater part flat. The interior is of a yellow colour, passing to orange. It has nearly the same odour in decoction as the pale; the taste is more bitter and less austere, and it excites no astringent feeling when chewed. The goodness decreases when the colour varies from orange yellow to pale yellow; when of a dark colour, between red and yellow, it should be rejected.

It is needless to add, that bark is one of the most valuable medical remedies. The Indians were unacquainted with its uses, which seem to have been first discovered by the Jesuits. It was introduced into Europe in 1632, but was not extensively used till the latter part of the seventeenth century. According to M. Humboldt, the Jesuits' bark annually exported from America amounts to from 12,000 to 14,000 quintals. Of these, 2,000 are furnished by Santa Fe, and 110 by Loxa; Peru furnishing the remainder, which is shipped at Callao, Guayaquil, &c.

2. *Oak Bark* (Fr. *Ecorce de la Chêne*; Ger. *Eichenrinde*; It. *Corteccia della Quercia*; Lat. *Quercûs cortex*). The bark of the common oak is a powerful astringent, and is preferred to all other substances for tanning leather. The bark of the larch is now, however, used for the same purpose. Though the importation of oak bark for tanning has somewhat declined of late years, it is still very considerable. It is impossible, however, to state its exact amount, inasmuch as a species of oak bark, called quercitron, the produce of the *Quercus tinctoria*, imported from abroad, and used to give a yellow dye to silk and wool, is mixed up in the custom-house returns with bark for tanning. The latter, which is by far the most important, is brought principally from Belgium and Holland, Germany, Italy and Spain, Norway and Australia. Quercitron comes principally from the United States. The quality of bark differs according to the age and size of the tree, the season when it is barked, &c., so much that its price varies from 5*l.* to 10*l.* a ton. The duty on bark for tanning and dyeing, which previously to 1842 was 8*d.* a cwt. on that imported from a foreign country, was then reduced to 3*d.* We subjoin an

Account of the Quantities of Bark for Tanning and Dyeing imported into the United Kingdom during the 11 Years ending with 1841, specifying the Countries from whence they came, and the Quantities brought from each (from the Tables published by the Board of Trade).

Countries.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.
Sweden - - -	5,492	15,253	15,983	3,972	4,122	127	-	1,653	1,401		
Norway - - -	48,150	47,058	52,257	32,327	20,044	17,484	16,856	24,168	31,798	25,967	9,731
Denmark - - -	21,755	8,000	7,266	4,957	12,515	20,758	13,219	10,851	14,232	11,310	6,772
Germany - - -	62,437	76,416	110,532	79,535	60,238	75,630	50,686	44,712	62,152	35,153	16,971
Holland - - -	608,304	410,485	162,699	215,822	161,273	185,167	213,103	186,786	194,153	171,735	138,229
Belgium			267,111	310,968	340,355	318,065	335,794	257,978	209,361	191,511	185,457
Spain, and the Balearic Islands - - -	78,067	10,758	2,597	2,268	2,052	780	-	3,383	-	7,122	1
Gibraltar - - -	9,309	29,696	75,775	48,018	62,208	34,160	11,707	3,292	32,590	57,240	50,526
Italy, and the Italian Islands	95,163	105,681	112,353	111,356	95,817	54,729	78,126	47,890	73,648	78,718	37,720
British Settlements in Australia -	-	28,408	24,540	26,433	39,490	42,607	12,381	12,879	15,492	14,201	8,017
United States of America -	-	12,418	18,458	12,704	24,410	22,999	22,431	22,436	41,764	37,776	60,014
All other Countries -	2,594	232	2,721	973	1,040	2,331	2,080	2,037	2,430	11,901	8,581
Total - - -	931,071	774,406	852,192	819,293	826,566	772,117	786,786	618,345	689,350	642,643	522,952

The quantities of Bark entered for consumption, with the nett amount of duty thereon, in 1840, 1841, and 1842, were

Years.	Quantities. Cwts.	Qrs.	lbs.	Duty. £	s.	d.
1840 - -	639,586	1	8	28,972	19	4
1841 - -	506,277	2	22	16,592	11	1
1842 - -	659,429	0	17	13,490	16	1

(*Parl. Paper* No. 45. Sess. 1843

We are indebted for the discovery and application of the useful properties of quercitron to Dr. Bancroft. The doctor obtained a patent for his invention in 1775; but the American war breaking out soon after, deprived him of its advantages. In consideration of this circumstance, parliament passed, in 1785, an act (25 Geo. 3. c. 38.) securing to him the privileges conveyed by his patent for 14 years. At the expiration of the latter period the House of Commons agreed to extend the doctor's privilege for an additional 7 years, but the House of Lords rejected the bill. Like too many discoverers, Dr. Bancroft profited but little by his invention, though it has been of great use to the arts and manufactures of the country. — (*See Bancroft on Permanent Colours*, vol. ii. p. 112., and the *Report of the Committee of the House of Commons on Patents, Appendix*, p. 175.)

Oak bark, the produce of Europe, is not to be imported into the United Kingdom for home consumption, except in British ships, or in ships of the country of which it is the produce, or in ships of the country from which it is imported, on pain of forfeiting the goods, and 100*l.* by the master of the vessel.— (3 & 4 *Will.* 4. c. 54.)

BARLEY (Fr. *Orge*; Ger. *Gerstengraupen*; Du. *Ryg*; It. *Orzo*; Sp. *Cebada*; Rus. *Fatschmea*; Lat. *Hordeum*; Arab. *Dhourra*; Hind. *Jow*), a species of bread-corn (*Hordeum* Lin.), of which there are several varieties. It is extensively cultivated in most European countries, and in most of the temperate districts of Asia and Africa. It may also be raised between the tropics; but not at a lower elevation than from 3,000

to 4,000 feet, and then it is not worth cultivating. Large quantities of barley have been, for a lengthened period, raised in Great Britain. Recently, however, its cultivation has been supposed, though probably on no good grounds, to be declining. In 1765, Mr. Charles Smith estimated the number of barley consumers in England and Wales at 739,000; and as a large proportion of the population of Wales, Westmoreland, and Cumberland continue to subsist chiefly on barley bread, we are inclined to think that this estimate may not, at present, be very wide of the mark. But the principal demand for barley in Great Britain is for conversion into malt, to be used in the manufacture of ale, porter, and British spirits; and though its consumption in this way has not certainly increased proportionally to the increase of wealth and population, still there does not seem to be any grounds for supposing that it has diminished. Barley is also extensively used in fattening black cattle, hogs, and poultry. It now generally follows turnips, and is a very important crop in the rotation best adapted to light soils. The principal barley counties of England are Norfolk, Suffolk, Cambridge, Bedford, Herts, Leicester, Nottingham, the upper parts of Hereford, Warwick, and Salop. The produce varies, according to soil, preparation, season, &c., from about 20 to 60 or 70 bushels an acre. The most usual crop is from 28 to 36 or 38 bushels. The Winchester bushel of good English barley generally weighs about 50 lbs., but the best Norfolk barley sometimes weighs 53 or 54 lbs. Its produce in flour is about 12 lbs. to 14 lbs grain. Barley is a tender plant, and easily hurt in any stage of its growth. It is more hazardous than wheat, and is, generally speaking, raised at a greater expense; so that its cultivation should not be attempted except when the soil and climate are favourable for its growth. — (For details as to the prices of barley, the quantities imported and exported, &c., see CORN LAWS AND CORN TRADE. And for further details as to its consumption and culture, see *Smith's Tracts on the Corn Trade*, 2d ed. p. 182.; *Brown on Rural Affairs*, vol. ii. p. 42.; *Loudon's Encyc. of Agriculture*, &c.)

BARRATRY, in navigation, is, in its most extensive sense, any fraudulent or unlawful act committed by the master or mariners of a ship, contrary to their duty to their owners, and to the prejudice of the latter. It appears to be derived from the Italian word *barratrare*, to cheat. It may be committed by running away with a ship, wilfully carrying her out of the course prescribed by the owners, delaying or defeating the voyage, deserting convoy without leave, sinking or deserting the ship, embezzling the cargo, smuggling, or any other offence whereby the ship or cargo may be subjected to arrest, detention, loss, or forfeiture.

It is the practice in most countries to insure against barratry. Most foreign jurists hold, that it comprehends every fault which the master and crew can commit, whether it arise from fraud, negligence, unskilfulness, or mere imprudence. But in this country it is ruled, that no act of the master or crew shall be deemed barratry, unless it proceed from a *criminal* or *fraudulent* motive.

"Barratry can only be committed by the master and mariners by some act contrary to their duty in the relation in which they stand to the owners of the ship. It is, therefore, an offence against them, and consequently an owner himself cannot commit barratry. He may, by his fraudulent conduct, make himself liable to the owner of the goods on board, but not for *barratry*. Neither can barratry be committed against the owner *with his consent*; for though he may be liable for any loss or damage occasioned by the misconduct of the master to which he consents, yet this is not barratry. Nothing is more clear than that a man can never set up as a crime an act done by his own direction or consent."—(*Marshall on Insurance*, book i. c. 12. § 6.)

When, therefore, the owner of a ship is also the master, no act of barratry can be committed; for no man can commit a fraud against himself.

It is a maxim in law, that fraud shall not be presumed, but must be clearly proved; and it is a rule in questions of insurance, that he who charges barratry must substantiate it by conclusive evidence.

It is not necessary, to render an act barratrous, that it should be committed with a criminal intent as respects the owners, in order to injure them, or to benefit the captain or crew. It may even be committed with a view to promote the owner's interests; for *an illegal act* done without the authority or privity of the owners, and which proves detrimental to them, is barratry, whatever be the motives in which it originated. Lord Ellenborough, in an able judgment, has laid it down as clear law, "that a breach of duty by the master in respect of his owners, with a fraudulent or criminal intent, or *ex malefício*, is barratry; that it makes no difference whether this act of the master be induced by motives of advantage to himself, malice to the owner, or *a disregard of those laws which it was his duty to obey*; and that it is not for him to judge or suppose, in cases not intrusted to his discretion, that he is not breaking the trust reposed in him, when he endeavours to advance the interests of his owners by means which the law forbids, and which his owners also must be taken to have forbidden."

The circumstance of the owners of ships being permitted to insure against the barratry of the master and mariners can hardly fail, it may be not uncharitably presumed, of rendering them less scrupulous in their inquiries with respect to their character than they would otherwise be. Perhaps, therefore, it might be expedient to prohibit such insurances, or to lay some restrictions upon them. They were, indeed, expressly forbidden by the Ordinance of Rotterdam; and Lord Mansfield, whose authority on all points connected with the law of insurance is so deservedly high, seems to have thought that it would be well to exclude barratry entirely from policies, and to cease "making the underwriter become the insurer of the conduct of the captain whom he does not appoint, and cannot dismiss, to the owners who can do either." But though it were expedient to prevent the owners from making an insurance of this sort, nothing can be more reasonable than that third parties, who freight a ship, or put goods on board, should be allowed to insure against such a copious source of loss. — (For a further discussion of this subject, see the article MARINE INSURANCE; and *Marshall on Insurance*, book i. c. 12. § 6., and *Park on Insurance*, c. 5.)

Owners, masters, or seamen, who wilfully cast away, burn, or destroy ships, to the prejudice of freighters or insurers, incur the penalty of death. — (See SEAMEN.)

BARREL, a cask or vessel for holding liquids, particularly ale and beer. Formerly the barrel of beer in London contained only 32 ale gallons = 32⅛ Imperial gallons: but it was enacted by 43 Geo. 3. c. 69. that 36 gallons of beer should be taken to be a

barrel; and by the 6 Geo. 4. c. 58. it is enacted, that whenever any gallon measure is mentioned in any excise law, it shall always be deemed and taken to be a standard Imperial gallon. At present, therefore, the barrel contains 36 Imperial gallons. It may be worth while observing that the barrel or cask is exclusively the produce of European ingenuity; and that no such article is known to any nation of Asia, Africa, or America, who have not derived it from Europeans.

BARWOOD, a red dye wood brought from Africa, particularly from Angola, and the river Gaboon. The dark red which is commonly seen upon British Bandana handkerchiefs is for the most part produced by the colouring matter of barwood, saddened by sulphate of iron.—(*Bancroft on Colours.*) The imports of barwood, in 1841, amounted to 2,012 tons. It brought, in January 1843, from 3*l.* to 4*l.* a ton (duty 2*s.* included) in the London market.

BASKETS (Fr. *Corbeilles;* Ger. *Körbe;* It. *Paniere;* Sp. *Canastas, Canastos;* Rus. *Korsinii*) are made, as every one knows, principally of the interwoven twigs of willow, osier, birch, &c., but frequently also of rushes, splinters of wood, straw, and an immense number of other articles. They are used to hold all sorts of dry goods, and are constructed of every variety of quality and shape. Besides the vast quantities produced at home, some of the finer kinds are imported under an *ad valorem* duty, which, previously to 1842, was 20, but has since been only 10 per cent. In 1841, the old duty produced 2,060*l.*, showing that the value of the foreign baskets entered for home consumption in that year had been 10,300*l.*

BAST, for straw hats or bonnets. See HATS.

BATAVIA, a city of the island of Java, the capital of the Dutch possessions in the East Indies, and the principal trading port of the Oriental islands, lat. 6° 12′ S., long. 106° 54′ E., on the north-west coast of the island, on an extensive bay. The harbour, or rather road, lies between the main land and several small uninhabited islands, which, during the boisterous or north-western monsoon, afford sufficient shelter and good anchorage. Ships of from 300 to 500 tons anchor at about 1¼ mile from shore. A small river runs through the town, which is navigable for vessels of from 20 to 40 tons, a couple of miles inland; a number of canals branch off from it into different parts of the town, affording great conveniences for trade. Batavia was formerly so very insalubrious, that General Daendels was anxious to transfer the seat of government to Sourabaya; but being thwarted in this, he set about building a new town, a little further inland, on the heights of Weltevreden, whither the government offices were immediately removed. Most of the principal merchants have now their residences in the new town, repairing only to the old city, when business requires it, during a portion of the day. In consequence, the old town is at present principally occupied by Chinese, and the descendants of the ancient colonists, several of its streets having been deserted and demolished. More recently, however, the Baron Capellen, whose enlightened administration will long be gratefully remembered in Java, sensible of the superior advantages of the old town as a place of trade, exerted himself to prevent its further decay, by removing the causes of its unhealthiness; to accomplish which, he widened several of the streets, filled up some of the canals, and cleaned others, demolished useless fortifications, &c.; and the effect of these judicious measures has been, that Batavia is now as healthy as any other town in the island. The population, according to an accurate census taken in 1824, consisted of 3,025 Europeans and their descendants, 23,108 natives, 14,708 Chinese, 601 Arabs, and 12,419 slaves; in all, 53,861 persons, exclusive of the garrison. As the population has increased since, it may at present be estimated at from 60,000 to 70,000, independently of the military, of which there are always a considerable number. Among the principal merchants are Dutch, English, Americans, French, and Germans. The island of Java forms the most important portion of the Dutch possessions in the East, and is, in fact, one of the finest colonies in the world. It contains an area of 50,000 square miles, with a population of (probably) about 7,000,000 individuals, or 140 to the square mile.

During the year 1841 the total imports into Java and Madura, on account of private parties, amounted to

Merchandise	20,156,276 fl.	21,363,281 fl.
Specie	1,207,005 fl.	
The goods and specie imported on account of government amounted to		8,119,882 fl.
Total amount of imports		29,483,163 fl.

The merchandise imported consisted of the produce of Europe and America, 12,987,724 fl. West Indies and Bengal, 610,241 fl. China, Manilla, and Siam, 1,758,714 fl. Japan, 4,986 fl. Eastern Archipelago, 4,794,611 fl.—Total Merchandise, 20,156,276 fl.

The produce of Europe and America chiefly consisted of

	Florins.		Florins.
Glass, crystal, and earthenware	397,441	Furniture	80,342
Dutch cloth and woollen stuffs	174,931	Gold and silver work, and ditto wire	10,640
Foreign ditto ditto	224,483	Lace, and military ornaments	3,034
Dutch linen and cotton goods	4,966,818	Fashionable articles, articles of luxury, perfumes, and jewellery	128,814
Foreign ditto ditto	2,717,612	Books, music and musical instruments	58,021
Leather, saddlework, and carriages	65,721	Brass and brass ware	427,467
Wearing apparel	83,314	Steel and steel ware	35,054
Opium (from the Levant)	152,000	Drugs, medicines, and dyeing materials	22,556
Ship stores	107,373	Iron and iron works and machines	970,658
Writing materials	59,523	Silk stuffs	146,637
Provisions	559,382	Bags for coffee	135,564
Wines and strong liquors	1,059,242		

Arrivals of Shipping in 1841.

Flags.	Ships.	Lasts.	Flags.	Ships.	Lasts.
Dutch (from foreign ports)	187	52,411	Knighausen	1	150
Ditto (from E. Archipelago)	1,267	44,751½	American	19	3,573½
English	78	13,258½	Spanish	1	90
French	4	557	Chinese	4	262
Swedish	1	21,676½	Cochin-Chinese	1	150
Danish	5	774	Siamese	5	275
Belgian	1	137	Various Asiatic	301	2,733
Hamburgh	1	870			
Bremen	2	352	Total ships and vessels	1905	124,228½
Portuguese	10	2,227½			

	Florins.
The duties on Imports in 1839 amounted to	3,443,884
Ditto Exports ditto	2,480,556
Ditto Entrepôt and minor duties	268,686
Total	6,193,126

Account of the Principal Articles of Produce exported from Java and Madura in 1830, 1835, 1839, and 1841.

Years.	Coffee.	Pepper	Indigo.	Hides.	Cloves.	Nutmegs.	Sugar.	Tin.	Rice.	Ratans.	Mace.	Arrack.
	Pic.	*Pic.*	*Lbs.*	*No.*	*Pic.*	*Pic.*	*Pic.*	*Pic.*	*Cayans.*	*Pic.*	*Pic.*	*Leags.*
1830	288,710	6,061	22,063	30,219	803	1,304	108,610	21,426	13,521	5,090	177	1,927
1835	466,871	11,868	535,753	139,995	4,566	5,022	439,543	40,836	25,577	4,905	1,606	2,075
									Pic.			
1839	757,476	11,044	595,818	- -	2,334	5,027	842,017	47,631	1,103,378	- -	1,581	4,602
1841	961,467	13,477	913,693	120,472	- -	- -	1,046,576	48,340	676,213	37,017	- -	4,672

Account of the Quantities and Values of the Principal Articles exported from Java and Madura in 1836 and 1841, with the Total Value of the Imports and Exports in 1839.

Principal Articles.	Quantities exported in 1836.	Value of Exports in 1836.	Quantities exported in 1841.	Value of Exports in 1841.
		Florins.		*Florins.*
Arrack	1,477 leaguers	115,995	4,672 leaguers	286,313
Hides	109,908 p. and 816 piculs	217,715	120,472 hides	210,142
Indigo	407,798 lbs.	1,122,382	913,693 lbs.	5,939,002
Coffee	498,078 piculs	15,090,362	961,467 piculs	28,843,998
Pepper	7,006 —	125,035	13,477 —	243,503
Rice	30,450 coyans	3,389,615	676,213 —	3,012,954
Spices, Mace	991 piculs	396,268	- - -	292,974
Cloves	2,185 —	153,036	- - -	608,835
Nutmegs	5,886 —	1,711,600	- - -	1,281,446
Sugar	509,514 —	9,083,141	1,046,576 piculs	12,512,470
Tobacco	2,477 kodies	709,850	3,161 kodies	1,106,393
Tin	47,739 piculs	2,718,810	48,340 piculs	2,175,282
All other articles and Treasure	- - -	7,367,833	- - -	3,717,373
Total value of Exports from Java and Madura in 1836 - Flor.		42,261,642	In 1841 Flor.	60,290,688
— Ditto —		- -	1839	57,674,434

The trade of Java was greater in 1840 than in either 1839 or 1841, in consequence partly of the great crops of 1839, and partly of the peculiar excitement which prevailed in the early part of 1840.

Bank of Batavia. — A bank, for the issue of notes and other banking business, was established at Batavia in 1827, with branches at Samarang and Sourabaya; the history of which is not uninstructive. The capital of the bank, consisting of 2,000,000 fl., divided into 4,000 shares, was subscribed with difficulty; and the most unfavourable anticipations were entertained of the success of the establishment. No sooner, however, had the bank been set on foot, than she began to enjoy a large share of prosperity. The rapid increase of cultivation and commerce in Java led to a corresponding demand for capital, and to the payment of a very high rate of interest on loans; and as the loans made by the bank consisted of bank notes, which cost next to nothing, the profits became quite enormous; so much so that they amounted in 1837 to 33 per cent., the price of the 500 fl. share of bank stock being then also 1,550 fl.! But this prosperity was as brief as it was signal. — The offer of an exorbitant interest had tempted, in not a few cases, the bank to make advances on doubtful security; and in Java, as elsewhere, issues of paper payable on demand necessarily stop the moment the circulation has been fully saturated with notes; and this result having been attained in 1838, and the notes issued by the bank being henceforth returned on her for payment, she speedily became involved in the greatest difficulties; many of those who depended on her advances for support were no longer able to meet their engagements; and the whole island was subjected to a severe pecuniary and commercial crisis: in fact, but for the intervention of the government, in 1840, when bank notes were made *legal tender* for a limited period, she must have stopped payments! This intervention has, however, given her time to recover from the difficulties into which she had been precipitated; and having again, after sustaining a very heavy loss, resumed specie payments, it is to be hoped that she may profit in future by her past experience. — We subjoin

An Account of the Dividends paid by the Bank of Java from 1829 to 1840, both inclusive.

	Dividend.		Dividend.		Dividend.
1829	9 per cent.	1833	20 per cent.	1837	33 per cent.
1830	12	1834	27	1838	26
1831	12	1835	30	1839	26
1832	18	1836	32	1840	9

(See *the Brochure of M. d'Argout on Java, Singapore, &c., Paris*, 1842.)

General Remarks on Java. — The previous statements show that the produce and trade of Java have increased during the last dozen years with a rapidity unknown in any other colony, Cuba, perhaps, excepted. And if the resources and capabilities of this noble island be fully developed, it is quite impossible to say how much farther her trade may be extended. It would far exceed our limits, and, even were this not the case, it would involve us in discussions nowise suitable for this work, were we to enter into any detailed examination of the means by which the extension of culture in Java has been brought about. We may, however, shortly mention that the produce for exportation is principally raised on account of government, partly by contributions in kind, and partly and principally by contributions of compulsory labour applied to its production. And, provided these contributions be not carried to an excess, we incline to think that they are at once the least onerous mode in which the natives can be made to pay their taxes, and the most profitable for the government. It is, we apprehend, idle to suppose that industry, if left to itself, will ever become flourishing in a country like Java, where the wants of the inhabitants are so few and so easily satisfied, or where

the climate indisposes to exertion. No doubt the system of compulsory labour may be easily abused, and converted into an instrument of the most grinding oppression; but so long as it is managed with discretion and good sense, we are disposed to believe, from all we can learn, that it is preferable to every other system hitherto devised for developing the resources of tropical countries. (For some remarks on this subject see the learned and able *Dissertatio Historico-Politica*, on the Dutch East India Company, by Van Lijnden, published in 1839, pp. 161—171.)

Very great public improvements have also been already effected, and are still in progress, in the island. Among others, an excellent high road has been constructed through its whole length, from Bantam on its W. to Sourabaya on its E. coast, whence cross roads lead to all the principal stations. A number of forts have, also, been constructed in commanding situations in the interior, the principal of which at Suraekarta, near the centre of the island, is a regular and strong citadel. It is said to be the intention to transfer the seat of government thither from Batavia. These forts have been erected principally to keep the natives in check, and to prevent those outbreaks that have done so much to retard the prosperity of the island. Several important establishments have also been recently founded along the S. coast, which had previously been all but neglected. (See *Aryout sur Java, Singapore, &c.*)

Rice used to be the staple product of Java; but it is now far surpassed by coffee and sugar, the culture of both of which has been astonishingly increased. In proof of this we may mention that the exports of coffee, which in 1830 amounted to 288,740 piculs, had increased in 1841 to 961,467 do., or to 57,230 tons; while the exports of sugar, which in 1830 amounted to 108,640 piculs, had increased, in 1841, to 1,046,576 piculs, or 62,207 tons. More than half the trade of the island centres in Batavia.

Indigo has also become an important product. The other principal articles of export are tin from Banca, tobacco, and birds' nests.

The imports comprise cottons, woollens, and other manufactured goods; wines and spirits, with iron, hardware, and machinery; opium from the Levant and from Bengal; and a great variety of other articles.

Port Regulations.—The following is the substance of the port regulations of Batavia:—1st. The commander of a ship arriving in the roads, is not to land himself, or permit any of his crew or passengers to land, until his vessel be visited by a boat from the guard ship.—2d. The master, on landing, is first to wait on the master attendant, and afterwards report himself at the police office.—3d. A manifest of the whole cargo must be delivered at the Custom-house within 24 hours of the ship's arriving in the roads.—4th. The master of a vessel must lodge the ship's papers with the master attendant when he first lands, which are duly delivered up to him when he receives his port clearance from the same authority.—5th. No goods can be shipped or landed after sunset, under a penalty of 500 florins.—6th. No goods can be shipped on Sunday without a special permission from the water fiscal, which, however, is never refused on application.—7th. No muskets or ammunition can be imported; but the prohibition does not extend to fowling pieces exceeding 100 florins value.

Tariff.—After a good deal of negotiation, it has been fixed that goods imported in English vessels shall pay an *ad valorem* duty of 25 per cent., and under the Netherlands flag, of 12½ per cent.; that is, a duty upon the wholesale price at Batavia, not in bond. The export duty on coffee, if exported on a foreign bottom to a foreign country, is 5 florins per picul; if on a foreign bottom to a port in the Netherlands, 1 florins; and if on a Netherlands bottom to a Netherlands port, 2 florins. Sugar exported on a foreign bottom pays 2 florins per picul; but if exported on a Netherlands bottom, 1 florin. Rice, on whatever bottom exported, and to whatever country, pays a duty of 3 florins per coyang of 27 piculs. Tin, exported on a foreign ship to whatever port, 4 florins per picul; and by a Netherlands ship, 2 florins per picul. The trade in spices is monopolised by the Netherlands Trading Company.

Goods are received in *entrepôt* not only at Batavia, but at the ports of Samarang, Sourabaya, and Anjier in Java, and Rhio in the Straits of Malacca, on payment of a duty of 1 per cent. levied on the invoice value.

Money.—Accounts are kept, at Batavia, in the florin or guilder, divided into centimes, or 100 parts, represented by a copper coinage or doits. The florin is a new coin made expressly for India, but of the same value as the florin current in the Netherlands. It is usually estimated at the rate of 12 to the pound sterling, but the correct par is 11 florins 58 cent. per pound. Doubloons, and the coins of Continental India, are receivable at the Custom-house at a fixed tariff; the Spanish dollar, for example, at the rate of 100 for 260 florins.

Weights.—The Chinese weights are invariably used in commercial transactions at Batavia, and throughout Java and the other Dutch possessions in India. These are the picul and the cattie, which is its hundredth part. The picul is commonly estimated at 125 Dutch, or 133⅓ lbs. avoirdupois, but at Batavia it has been long ascertained and considered to be equal to 136 lbs. avoirdupois.—(*Hogendorp, Coup d'Œil sur l'Ile de Java*, cap. 8, &c.; *Evidence of Gillian Maclaine, Esq. before the Select Committee of the House of Commons on the Affairs of the East India Company*, 1831; *Nederlandsche Staats-Courant*, 13 August, 1842, and other *official information*.

BATTEN, a name in common use for a scantling of wood 2½ inches thick and 7 wide. If above 7 inches wide, it is called deal.

BAZAAR, a term used in the East to designate a market, or building in which various articles of merchandise are exposed for sale. Bazaars are now met with in most large cities of Europe. There are several in London, of which the one in Soho-square is the most considerable.

BDELLIUM (Arab. *Aflatoon*), a gum-resin, semi-pellucid, and of a yellowish brown or dark brown colour according to its age, unctuous to the touch, but brittle; soon, however, softening between the fingers; in appearance it is not unlike myrrh, of a bitterish taste, and moderately strong smell. Two kinds have been distinguished: the *opocalpasum* of the ancients, which is thick like wax; and the common dark sort. It is found in Persia and Arabia, but principally in the latter; all that is met with in India is of Arabic origin. The tree which produces it has not been clearly ascertained.—(*Ainslie's Materia Indica.*)

BEACONS, in commerce and navigation, public marks or signals to give warning of rocks, shoals, &c. No man is entitled to erect a light-house, beacon, &c., without being empowered by law. The Trinity House corporation are authorised to set up beacons in whatever places they shall think fit; and any person who shall wilfully remove or run down any buoy, beacon, &c. belonging to the Trinity House, or to any other corporation, individual or individuals, having authority to establish it, shall, besides being liable to the expense of replacing the same, forfeit a sum of not less than 10*l.* nor more than 50*l.* for every such offence.—(*6 Geo. 4 c. 125. § 91.*)—(See BUOYS.)

BEADS (Fr. *Rosaires*; Ger. *Rosenkränze*; Du. *Paternosters*; It. *Corone*; Sp. *Coronas*), small globules or balls used as necklaces, and made of different materials; as pearl, steel, amber, garnet, coral, diamonds, crystal, glass, &c. Roman Catholics use beads in rehearsing their Ave Marias and Paternosters. Glass beads or bugles are imported in large quantities into India and Africa, 288,058 lbs. having been shipped from this country to the W. coast of the latter in 1841. Large quantities are sent from China to India, the Eastern islands, &c. The glass beads sent from England are nearly all imported, principally from Venice, where they are very largely produced. Their non-manufacture in this country is said to be a consequence of the excise regulations as to the manufacture of glass; but the truth is, that the Venetian manufacturers colour them better, and give them a better finish than the English.

BEANS (Fr. *Fèves*; Ger. *Bohnen*; It. *Fave*; Rus. *Boobü*; Sp. *Habas*; Lat. *Fabæ*; a well-known vegetable of the pulse species, largely cultivated both in gardens and, fields. Its cultivation is of much importance in rural economy, inasmuch as it has gone far to supersede fallows on strong loams and clays.

BEAVER. See SKINS.

BEECH (*Fagus sylvatica*), a forest tree to be met with every where in England. There is only one species, the difference in the wood proceeding from the difference of soil and situation. A considerable quantity of beech is grown in the southern parts of Bucks. It is not much used in building, as it soon rots in damp places; but it is used as piles in places where it is constantly wet. It is manufactured into a great variety of tools, for which its great hardness and uniform texture render it superior to all other sorts of wood; it is also extensively used in making furniture.

BEEF, as every one knows, is the flesh of kine. It is used either fresh or salted. Formerly it was usual for most families, at least in the country, to supply themselves with a stock of salt beef in October or November, which served for their consumption until the ensuing summer, but in consequence of the universal establishment of markets where fresh beef may be at all times obtained, the practice is now nearly relinquished, and the quantity of salted beef made use of as compared with fresh beef is quite inconsiderable. Large supplies of salted beef are, however, prepared at Cork and other places for exportation to the East and West Indies. During the war, large supplies were also required for victualling the navy. The vessels engaged in the coasting trade, and in short voyages, use only fresh provisions.

The English have at all times been great consumers of beef; and at this moment more beef is used in London, as compared with the population, than any where else.—Previously to 1842 the importation of fresh beef was prohibited; and salt beef from a foreign country was at the same time charged with a duty of 12*s.* a cwt. The entries of the latter for consumption were in consequence inconsiderable, having amounted in 1840 to only 3,892, and in 1841 to 1,698 cwts. (principally hung beef from Hamburg). Both fresh and salted beef may now be imported on paying a duty of 8*s.* a cwt. For farther details with respect to the consumption of beef, &c. see arts. CATTLE and PROVISIONS.

BEER. See ALE and BEER.

BELL-METAL (Fr. *Metal de Fonte ou de cloches*; Ger. *Glockengut*; Du. *Klokspys*; Sp. *Campanil*; Rus. *KolokInaja mjed*), a composition of tin and copper, usually consisting of 3 parts of copper and 1 of tin. Its colour is greyish white; it is very hard, sonorous, and elastic. Less tin is used for church bells than for clock bells; and in very small bells, a little zinc is added to the alloy.—(*Thomson's Chemistry.*)

BENZOIN. See BALSAM.

BERGEN, the first commercial city of Norway, situated at the bottom of a deep bay, in lat. 60° 24′ N., long. 5° 20′ E. Population 22,500. The bay is inclosed on all sides by rugged rocks and islands: the water is deep; but, owing to the number and intricacy of the passages, the access to the town is attended at all times with a good deal of difficulty, and should never be attempted without a pilot. Codfish, salted or dried, is the principal article of export; when dried, it is called stock-fish, and goes chiefly to Italy and Holland. The fishery is the principal employment; and considerable quantities of fish and other products are also brought hither for exportation from the more northerly parts of the kingdom. At an average, from 25,000,000 to 30,000,000 lbs. salted and dried fish are annually exported. Herrings, whale oil, skins, bones, tar, lobsters, &c. are also largely exported. The exports of timber from Bergen are inconsiderable, and none has latterly gone to England. Norway timber is not so large as that brought from Prussian ports, nor so free from knots; but, being of slower growth, it is more compact, and less liable to rot. The planks are either red or white fir or pine: the red wood is produced from the Scotch fir; the white wood, which is inferior in price and estimation, is the produce of the spruce fir: each tree yields three pieces of timber of 11 or 12 feet in length; and is 70 or 80 years of age before it arrives at perfection. The planks or deals of Bergen are, however, a good deal inferior to those of Christiana.

The imports into Bergen principally consist of grain from the Baltic; and salt, hardware, coffee, sugar, &c. from England.

For *Monies*, *Weights*, and *Measures*, see CHRISTIANA; where there are further details as to the trade and navigation of Norway.

BERRIES (*Baccæ*), the fruits or seeds of many different species of plants. The berries quoted in London Price Currents are bay, juniper, Turkey, and Persian.

1. *Bay Berries* (Fr. *Baies de Laurier*; Ger. *Lorbeeren*; It. *Bacchi di Lauro*; Sp. *Bayas*), the fruit of the *Laurus nobilis*. This tree is a native of the south of Europe, but is cultivated in this country, and is not uncommon in our gardens. The berry is of an oval shape, fleshy, and of a dark purple colour, almost black; it has a sweet fragrant odour, and an aromatic astringent taste. Bay berries, and the oil obtained by boiling them in water, are imported from Italy and Spain.—(*Thomson's Dispensatory.*)

2. *Juniper Berries* (Fr. *Genévrier*; Du. *Sevenboom*; It. *Ginepro*; Sp. *Enebro*), the fruit of the common juniper (*Juniperus communis*). They are round, of a black purple colour, and require two years to ripen. They have a moderately strong, not disagreeable, but peculiar smell, and a warm, pungent, sweetish taste, which, if they be long chewed, or previously well bruised, is followed by a considerable bitterness. They are found in this country; but most of those made use of here are imported from Holland, Germany, and Italy. They should be chosen fresh, not much shrivelled, and free from mouldiness, which they are apt to contract in keeping. On distillation with water, they yield a volatile essential oil, very subtile and pungent, and in smell greatly resembling the berries. The peculiar flavour and diuretic qualities of Geneva depend principally on the presence of this oil. English gin is said to be, for the most part, flavoured with oil of turpentine.—(*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

The duty on juniper berries, previously to 1832, was 11*s.* 1*d.* a cwt., being more than 100 *per cent. on their price in bond.* The oppressiveness of this duty seems to have been the principal reason why turpentine, which in point of flavour and all other respects is so inferior, was largely used in preference to juniper berries in the preparation of gin. This oppressive duty was reduced, in 1832, to 2*s.*, and again, in 1842, to 1*s.* 6*d.*; and we entertain little doubt that this wise and liberal measure will at no distant period occasion the receipt of an equal amount of revenue, at the same time that it can hardly fail materially to improve the beverage of a large proportion of the people. In 1842, 7,773¼ cwt. juniper berries were entered for consumption.

Italian juniper berries fetch at present (Jan. 1843), in the London market, from 10*s.* to 12*s.* a cwt., duty included; and German and Dutch ditto, from 9*s.* to 10*s.*

3. *Turkey Yellow Berries*, the unripe fruit of the *Rhamnus infectorius* of Linnæus. They are used as a dye drug, in preparing a lively but very fugitive yellow, for topical application in calico-printing. Considerable quantities of them are exported from Salonica, to which they are brought from Thessaly and Albania. An inferior sort is produced in France.—(*Bancroft on Colours.*) The duty on Turkey berries is 1*s.*; and their price, duty included, in the London market, is (Jan. 1843) 34*s.* to 36*s.* a cwt.

4. *Persian Yellow Berries* are said by the merchants to be of the same species as the Turkey yellow berries. The colours which they yield are more lively and lasting. They are high priced, fetching (duty 1*s.* included) from 110*s.* to 130*s.* a cwt. The entries of yellow berries (Turkey as well as Persian) for home consumption, amounted in 1842 to 4,594¼ cwt.

BERYL, called by the jewellers *Aquamarine*. This stone was suspected by Pliny to be a variety of the emerald; a conjecture which modern mineralogists have completely confirmed. The term emerald is applied to that particular variety which presents its own peculiar colour, or *emerald green*; while that of beryl is given indiscriminately to all the other varieties; as the sea green, pale blue, golden yellow, and colourless. Pliny says that the beryl is found in India, and rarely elsewhere; but besides India, it is found in Peru and Brazil; at Nantes and Limoges, in France; in the Wicklow mountains, in Ireland; in the district of Cairngorm, in Scotland; and in various other places.—(*Plin. Hist. Nat.* lib. xxxvii. cap. 5.; *Ency. Brit.* new edit.)

"Those only which are of good colour and sufficient depth are manufactured; they have a pretty, lively effect, if in good proportion and well polished. Large stones, from one to three and four ounces, are not uncommon, but from their bulk are only in request as specimens for the cabinet; smaller stones suitable for necklaces may be bought at low prices, within the reach of every description of purchasers: ring stones may be had at a few shillings each; and larger, for brooches or seals, from 1*l.* to 5*l.* and often lower."—(*Mawe on Diamonds, &c.* 2d edit.)

BETEL-NUT, OR ARECA (Sans. and Hind. *Supari*; Malay, *Pinang*; Javan. *Jambi*), the fruit of the *Areca catechu*, a slender and graceful palm, rising to the height of about 30 or 40 feet; it produces fruit at the age of five or six years, and continues bearing till its 25th or 30th year. The fruit, which is the only part of the palm that is made use of, is eaten both in its unripe and in its mature state. When ripe, it is of the size of a small egg, and of an orange colour; the exterior part consists of a soft, spongy, fibrous matter, inclosing a nucleus resembling a nutmeg in shape, internal structure, and colour, but usually larger, and always harder. A single tree produces, according to its situation, age, culture, &c., from 200 to 800 nuts. They are objects of great importance in the East, forming the principal ingredient of a compound in universal use as a masticatory in all Central and Tropical Asia. The other ingredients are the leaf of the Betel pepper—(which see), in which the areca nut is wrapped; a little CHUNAM—(which see); and generally, but not always, a little *catechu* or terra japonica—(see CATECHU). The whole compound is called *betel*, and is used to an extent of which it is difficult for a European to form a just idea. All individuals, without exception of age or sex, begin at an early period to accustom themselves to betel. They are unceasingly masticating it, and derive a gratification from its use that strangers can neither understand nor explain. It reddens the saliva, gives a bright hue to the lips, and, in course of time, renders the teeth quite black. It is said to dispel nausea, excite appetite, and strengthen the stomach. Besides being used as an article of luxury, it is a kind of ceremonial which regulates the intercourse of the more polished classes of the East. When any person of consideration visits another, after the first salutations,

betel is presented: to omit it on the one part would be considered neglect, and its rejection would be judged an affront on the other. No one of inferior rank addresses a dignified individual without the previous precaution of chewing betel; two people seldom meet without exchanging it; and it is always offered on the ceremonious interviews of public missionaries. The areca nut is, in consequence, an article of very extensive trade. The countries which yield it most largely for exportation are Malabar, Ceylon, and Sumatra. Of the extent of this trade some notion may be formed from the fact, that the imports of areca into Calcutta in 1841-42 amounted to 53,633 Ind. maunds, or 1,966 tons, and those into Canton, in 1837, by British ships only, amounted to 25,978 piculs, or 1,502 tons, notwithstanding Bengal and Southern China are countries in which areca is largely produced. — (See the article *Betel* in the new edition of the *Ency. Britannica*; *Bell's Review of the External Commerce of Bengal*; *Crawfurd's Indian Archipelago*, vol. i. p. 102., vol. iii. p. 414.; *Chinese Kalendar and Register.*)

BETEL-LEAF (Hind. *Pan*; Malay, *Sireh*; Javan. *Suro*), the leaf alluded to in the foregoing article. It is the produce of a species of pepper vine (*Piper Betle*), and somewhat resembles the ivy leaf. In their fresh state, betel leaves form an important article of Eastern traffic, being every where used in the preparation of betel. The *Piper Betle* is a scandent plant, and poles are placed in the ground, round which it twines itself. In consequence of the great consumption of its leaves, it is extensively cultivated throughout Tropical Asia. It grows in the greatest perfection in rich soils close to the equator; and is raised with more difficulty the further we recede from it. — (*Ency. Britannica*, new edition, article *Betel*; *Crawfurd's Indian Archipelago*, vol. i. p. 403.)

BEZOAR (Arab. *Faduj*; Hind. *Zeher-morah*; Pers. *Padzehr Kanie*), a concretion found in the stomach of an animal of the goat kind; it has a smooth glossy surface, and is of a dark green or olive colour: the word bezoar, however, has lately been extended to all the concretions found in animals; — such as the *hog bezoar*, found in the stomach of the wild boar in India; the *bovine bezoar*, found in the gall-bladder of the ox, common in Nepaul; and the *camel bezoar*, found in the gall-bladder of the camel: this last is much prized as a yellow paint by the Hindoos. The finest bezoar is brought to India from Borneo and the sea-ports of the Persian Gulf; the Persian article is particularly sought after, and is said to be procured from animals of the goat kind, *Capra Gazella*. Many extraordinary virtues were formerly ascribed to this substance, but without any sufficient reason. — (*Ainslie's Materia Indica.*)

BILBAO, or (as it is commonly, though incorrectly, written in this country) BILBOA, a sea-port town of Spain, in the province of Biscay, on the river Ybai Cabal, about 9 miles from Portugalete. Population 15,000.

Port. — The bay of Bilbao lies between *Punto Galea* on its east, and *Punto Luzuero* on its western side, distant about 3 miles. It stretches S. E. to within ⅔ of a mile of Portugalete, in lat. 43° 15′ 47″ N., long. 2° 45′ W., near the mouth of the river on which Bilbao is built. The water in the bay varies from 5 to 10 and 14 fathoms. There is a bar at the mouth of the river, between Santurce and Portugalete, on which there is not above 4 feet water at ebb tide. High water at full and change at 3 h. P.M. Spring tides rise about 13 feet; and large ships taking advantage of them sometimes ascend the river as far as Bilbao; but they usually load and unload by lighters, either at Portugalete, or at Olaviaga, 4 miles below the town. Pilots are to be had at Santurce, without the bar. In winter, a heavy sea sometimes sets into the bay; but if the pilot cannot go off, he places himself on one of the batteries to the N. W. of Santurce, and makes signals with a red flag, so as to direct the ship to the best anchorage ground. —(See *Laurie's Chart of the Bay of Biscay*, with the *Sailing Directions* that accompany it.)

Trade. — Bilbao is favourably situated for commerce. The Biscayans are distinguished for the zeal and courage with which they have defended their peculiar privileges, and for their industry and activity. Bilbao and Santander are the principal ports through which the extensive province of Old Castile, and large portions of Leon and Navarre, most easily communicate with foreign countries. They have, in consequence, particularly the former, a pretty considerable foreign trade. Wool is one of the principal articles of export; but since the introduction of Merino sheep into Germany, and their extraordinary increase in that country, this branch of Spanish commerce, though still of a good deal of importance, has materially declined. Since the abolition, in 1820, of all restrictions on the exportation of corn, flour, &c., the shipments of wheat from Bilbao have been, in some years, very considerable. The supplies are principally brought from the provinces of Palencia, Valladolid, and Zamora, which yield immense quantities of wheat. The distance is from 130 to 140 English miles; and owing to the badness of the roads, and the deficient means of transport, the rate of carriage advances enormously when there is any extraordinary foreign demand. If the *Canal of Castile*, intended to unite the Douro with Reynosa, Bilbao, and Santander, were completed, it would make a considerable revolution in this trade. The *campos*, or plains, on the south side of the Douro, are amongst the finest wheat countries in the world; the crops being frequently so abundant, that the peasants decline reaping the fields at a distance from the villages! In 1831, 146,234 quarters of Spanish wheat, principally from Bilbao, were imported into Great Britain; but from that period down to 1839 the exports of corn to this country were quite inconsiderable. In 1840 they amounted to 46,939 quarters. The iron manufactures of Biscay are in a state of considerable activity, and some part of the produce is exported. The principal articles of importation are wove fabrics, cod-fish, cutlery, and jewellery; sugar, coffee, cacao, and other colonial products, spices, indigo, &c. — (See *Foreign Quarterly Review*, No. 9. art. *Spain*; and *private information.*)

Monies, Weights, and Measures, same as those of CADIZ; which see. We may mention, however, that the fanega, or measure for grain, is equivalent to 1·65 Winchester quarters.

BILL OF EXCHANGE. See EXCHANGE.

BILL OF HEALTH, a certificate or instrument signed by consuls or other proper authorities, delivered to the masters of ships at the time of their clearing out from all ports or places suspected of being particularly subject to infectious disorders, certifying

the state of health at the time that such ship sailed. A *clean* bill imports that at the time that the ship sailed no infectious disorder was known to exist. A *suspected* bill, commonly called a *touched* patent or bill, imports that there were rumours of an infectious disorder, but that it had not actually appeared. A *foul* bill, or the absence of clean bills, imports that the place was infected when the vessel sailed. — (See QUARANTINE.)

BILL OF LADING, is a *formal receipt* subscribed by the master of a ship in his capacity of carrier, acknowledging that he has received the goods specified in it on board his ship, and binding himself (under certain exceptions) to deliver them, in the like good order as received, at the place and to the individual named in the bill, or his assigns, on his or their paying him the stipulated freight, &c. When goods are sent by a ship hired by a charterparty, the bills of lading are delivered by the master to the merchant by whom the ship is chartered; but when they are sent by a *general ship*, — that is, by a ship not hired by charterparty, but employed as a general carrier, — each individual who sends goods on board, receives a bill of lading for the same. In all cases, therefore, the bill of lading is the evidence of and title to the goods shipped.

The liability of a carrier, at common law, to deliver the goods intrusted to his care, is cancelled only by "the act of God and the king's enemies." But to limit this responsibility, the following exception is now, invariably almost, introduced into the clause in bills of lading, binding the master to the delivery of the goods: — "*The act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, excepted.*"

Bills of lading are not, in general, immediately given by the master on receiving the goods. The usual practice is for the master or his deputy to give a common receipt for the goods, which is delivered up on receiving the bill of lading. The latter should always be required within 24 hours after the goods are received on board.

Three sets of all bills of lading are made out on stamped paper: one of these should he remitted by the first post to the person to whom the goods are consigned, a second being sent to him by the ship; the third is retained by the shipper of the goods. The master ought always to retain copies of the bills of lading for his government. A stamp duty of 3*s.* is charged on all bills of lading, whether for goods exported or carried coastwise.

The usual form of a bill of lading is as follows: —

W. B. No. 1. *a.* 10. } *N. B.* — SHIPPED, in good order and well conditioned, by *A. B.* merchant, in and upon the good ship called whereof *C. D.* is master, now in the river Thames, and bound for , the goods following, viz. [*here describe the goods.*] marked and numbered as *per* margin, to be delivered, in the like good order and condition, at aforesaid, (*the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, excepted,*) unto the said *A. B.* or his assigns, he or they paying for the said goods at the rate of *per* piece freight, with primage and average accustomed. In witness whereof, I, the said master of the said ship, have affirmed to three bills of lading, of this tenour and date; any one of which bills being accomplished, the other two are to be void.

London, this day of , 1843. C. D., *Master.*

But in the case of ships homeward bound from the West Indies, which send their boats to fetch the cargo from the shore, the exception in the bill of lading is usually expressed as follows: — "The act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, *save risk of boats, so far as ships are liable thereto*, excepted." Other exceptions may be and are sometimes introduced; but the above is the general form.

Transfer of Bills of Lading. — Bills of lading are transferable either by blank or special indorsement, like bills of exchange. And whatever may be the character of the person to whom the goods are consigned, whether he be a buyer, or merely the factor, agent, or broker of the consignor, the *bonâ fide* holder of a bill of lading indorsed by the consignee is entitled to the goods, and may claim them from the master, if he can prove that he has purchased the bill for a *good consideration*; but unless he can do this, he is not entitled to the goods. — (*Holt, Law of Shipping*, 2d ed. p. 363.)

Formerly, a factor, though he might sell, could not *pledge* the goods of his principal. But the hardship and inconvenience arising from this rule were such, that it was set aside by the act 6 Geo. 4. c. 94. The second section of this act declares, that any person in possession of a bill of lading shall be deemed the true owner of the goods specified in it, so as to make a sale or pledge by him of such goods or bill of lading valid, unless the person to whom the goods are sold or pledged has notice that the seller or pledger is not the actual and *bonâ fide* owner of the goods. — (See FACTOR.)

Delivery under Bill of Lading. — It being usual to sign and deliver three bills of lading, it is possible that there may be conflicting demands upon the captain by the different holders. Nothing, however, is, in such a case, required of him, except that he act with good faith, and to the best of his judgment; and that he make delivery of the goods to the person who first demands them of him, upon presentment of the bill of lading, *provided the circumstances be not such as to justify a suspicion* of his having unfairly

got possession of it. If he act differently, he is answerable, according to the peculiarities of the case, to the person injured by his negligence; the bill of lading being not only the instructions of the merchant to him, as his carrier or servant, but his own especial agreement to deliver according to its conditions.

Where several bills of lading of a different import have been signed, no regard is to be paid to the time when they were first signed by the master; but the person who first gets legal possession of one of them from the owner or shipper, has a right to the consignment; and where such bills of lading, though different upon the face of them, are constructively the same, and the master has acted *bonâ fide*, a delivery according to such legal title will discharge him from all. — (*Holt*, p. 375. and 377.)

BILL OF SALE, a contract under seal, by which an individual conveys or passes away the right and interest he has in the goods or chattels named in the bill. The property of ships is transferred by bill of sale. — (See REGISTRY.)

BILL OF SIGHT. When a merchant is ignorant of the real quantities or qualities of any goods assigned to him, so that he is unable to make a perfect entry of them, he must acquaint the collector or comptroller of the circumstance; and they are authorised, upon the importer or his agent making oath that he cannot, for want of full information, make a perfect entry, to receive an entry by *bill of sight*, for the packages, by the best description which can be given, and to grant warrant that the same may be landed and examined by the importer in presence of the officers; and within 3 days after any goods shall have been so landed, the importer shall make a perfect entry, and shall either pay down the duties, or shall duly warehouse the same. — (3 & 4 *Will.* 4. c. 52. § 24.)

In default of perfect entry within 3 days, such goods are to be taken to the king's warehouse; and if the importer shall not, within 1 month, make perfect entry, and pay the duties thereon, or on such parts as can be entered for home use, together with charges of moving and warehouse rent, such goods shall be sold for payment of the duties. — § 25.

The East India Company are authorised, without the proof before-mentioned, to enter goods by bill of sight, and to make perfect entry, and pay the duties within 3 months. — § 26.

BILL OF STORE, is a licence granted by the Custom-house, to merchants, to carry such stores and provisions as are necessary for a voyage, free of duty.

By the act 3 and 4 Will. 4. c. 52. returned goods may be entered by bill of store, as follows: —

From 5th January, 1826, it shall be lawful to re-import into the United Kingdom, from any place, in a ship of any country, any goods (except as herein-after excepted) which shall have been legally exported from the United Kingdom, and to enter the same by bill of store, referring to the entry outwards, and exportation thereof; provided the property in such goods continue in the person by whom or on whose account the same have been exported; and if the goods so returned be foreign goods which had before been legally imported into the United Kingdom, the same duties shall be payable thereon as would, at the time of such re-importation, be payable on the like goods, under the same circumstances of importation as those under which such goods had been originally imported; or such goods may be warehoused upon a first importation thereof: provided always, that the several sorts of goods enumerated or described in the list following shall not be re-imported into the United Kingdom for *home use*, upon the ground that the same had been legally exported from thence, but that the same shall be deemed to be *foreign* goods, whether originally such or not, and shall also be deemed to be imported for the first time into the United Kingdom; viz.

Goods exported, which may not be re-imported for Home Use.

Corn, grain, meal, flour, and malt; hops, tobacco, tea.

Goods for which any bounty or any drawback of excise had been received on exportation, unless by special permission of the commissioners of customs, and on repayment of such bounty or such drawback.

All goods for which bill of store cannot be issued in manner herein-after directed, except small remnants of British goods, by special permission of the commissioners of customs, upon proof to their satisfaction that the same are British, and had not been sold. — § 33.

The person in whose name any goods so re-imported were entered for exportation, shall deliver to the searcher, at the port of exportation, an exact account signed by him of the particulars of such goods, referring to the entry and clearance outwards, and to the return inwards of the same, with the marks and numbers of the packages both inwards and outwards; and thereupon the searcher, finding that such goods had been legally exported, shall grant a bill of store for the same; and if the person in whose name the goods were entered for exportation was not the proprietor thereof, but his agent, he shall declare upon oath on such bill of store the name of the person by whom he was employed as such agent; and if the person to whom such returns are consigned shall not be such proprietor and exporter, he shall declare upon oath on such bill of store the name of the person for whose use such goods have been consigned to him; and the real proprietor, ascertained to be such, shall make oath upon such bill of store to the identity of the goods so exported and so returned, and that he was at the time of exportation and of re-importation the proprietor of such goods, and that the same had not during such time been sold or disposed of to any other person; and such affidavits shall be made before the collectors or comptrollers at the ports of exportation and of importation respectively, and thereupon the collector and comptroller shall admit such goods to entry by bill of store, and grant their warrant accordingly. — § 34.

BILLINGSGATE, a market for fish, contiguous to the Custom-house in London. It is held every lawful day, and was established in 1669 by stat. 10 & 11 Will. 3. c. 24. Every person buying fish in Billingsgate market may sell the same in any other market-place or places within the city of London or elsewhere, by retail, with this condition, that none but fishmongers be permitted to sell in fixed shops or houses. No person or persons shall purchase at Billingsgate any quantity of fish, to be divided by

lots or in shares amongst any fishmongers or other persons, in order to be afterwards put to sale by retail or otherwise; nor shall any fishmonger engross, or buy in the said market, any quantity of fish, but what shall be for his own sale or use, under the penalty of 20*l.* No person is to have in his possession, or expose to sale, any spawn of fish, or fish unsizeable, or out of season.—(36 *Geo.* 3. c. 118.) The minimum size of the lobsters to be sold at Billingsgate is fixed by statute.—(See LOBSTER.)

Down to 1842 no fish of foreign taking or curing, or in foreign vessels, could be imported into the United Kingdom, under penalty of forfeiture, except turbots and lobsters, stock-fish, live eels, anchovies, sturgeon, botargo, and caviare. But now all sorts of fish may be imported on payment of moderate duties. Fresh fish of British taking, and imported in British ships, may be landed without report, entry, or warrant.—(6 *Geo.* 4. c. 107.)

For some further remarks with respect to this subject, see FISH.

BIRCH (Fr. *Bouleau*; Du. *Berke*; Ger. *Birke*; It. *Betulla*; Lat. *Betula*; Pol. *Brzoza*; Rus. *Bereza*; Sp. *Abedul*, *Betulla*), a forest tree met with every where in the north of Europe. It is applied to various purposes. In Lapland, Norway, and Sweden, the long twigs of the birch are woven into mats and twisted into ropes; the outer bark forms an almost incorruptible covering for houses; and the inner bark is used, in periods of scarcity, as a substitute for bread. Russia leather is prepared by means of the empyreumatic oil of the birch. It is an excellent wood for the turner, being light, compact, and easily worked. Its durability is not very great. It is sometimes used in the manufacture of herring barrels.

BIRDLIME (Ger. *Vogelleim*; Fr. *Glu*; It. *Pania*; Sp. *Liga*; Rus. *Ptitschei Klei*) exudes spontaneously from certain plants, and is obtained artificially from the middle bark of the holly. Its colour is greenish, its flavour sour, and it is gluey, shining, and tenacious. The natural is more adhesive than the artificial birdlime.—(*Thomson's Chemistry.*)

BIRDS' NESTS (Ger. *Indianische Vogelnester*; Du. *Indiaansche Vogelnestjes*; Fr. *Nids de Tunkin*; It. *Nidi di Tunchino*; Sp. *Nidos de la China*; Javan. *Susu*; Malay, *Sarungburung*), the nests of a species of swallow peculiar to the Indian islands (*Hirundo esculenta*), very much esteemed in China. In shape this nest resembles that of other swallows; it is formed of a viscid substance; and in external appearance, as well as consistence, is not unlike fibrous, ill-concocted isinglass. Esculent nests are principally found in Java, in caverns that are most frequently, though not always, situated on the sea-coast. Many conflicting statements have been made as to the substance of nests; some contending that they are formed of sea-foam or other marine products, and others that they are elaborated from the food of the bird, &c. But these are points as to which nothing satisfactory is known.

We borrow from Mr. Crawfurd's valuable work on the *Eastern Archipelago* (vol. iii. pp. 432—437.) the following authentic and curious details as to the traffic in this singular production:—"The best nests are those obtained in deep damp caves, and such as are taken before the birds have laid their eggs. The coarsest are those obtained after the young are fledged. The finest nests are the whitest, that is, those taken before the nest has been rendered impure by the food and *feces* of the young birds. They are taken twice a-year, and, if regularly collected, and no unusual injury be offered to the caverns, will produce very equally, the quantity being very little, if at all, improved by the caves being left altogether unmolested for a year or two. Some of the caverns are extremely difficult of access, and the nests can only be collected by persons accustomed from their youth to the office. The most remarkable and productive caves in Java, of which I superintended a moiety of the collection for several years, are those of *Karang-bolang*, in the province of *Baglen*, on the south coast of the island. Here the caves are only to be approached by a perpendicular descent of many hundred feet, by ladders of bamboo and rattan, over a sea rolling violently against the rocks. When the mouth of the cavern is attained, the perilous office of taking the nests must often be performed by torch-light, by penetrating into recesses of the rock where the slightest trip would be instantly fatal to the adventurers, who see nothing below them but the turbulent surf making its way into the chasms of the rock.

"The only preparation which the birds' nests undergo is that of simple drying, without direct exposure to the sun, after which they are packed in small boxes, usually of half a picul. They are assorted for the Chinese market into three kinds, according to their qualities, distinguished into *first* or *best*, *second*, and *third* qualities. Caverns that are regularly managed, will afford, in 100 parts, 53·3 parts of those of the first quality, 35 parts of those of the second, 11·7 parts of those of the third.

"The common prices for birds' nests at Canton are, for the first sort, no less than 3,500 Spanish dollars the picul, or 5*l.* 18*s.* 1½*d.* per lb.; for the second, 2,800 Spanish dollars per picul; and for the third, 1,600 Spanish dollars. From these prices it is sufficiently evident, that the birds' nests are no more than an article of expensive luxury. They are consumed only by the great; and, indeed, the best part is sent to the capital for the consumption of the court. The sensual Chinese use them, under the imagination that they are powerfully stimulating and tonic; but it is probable that their most valuable quality is their being perfectly harmless. The people of Japan, who so much resemble the Chinese in many of their habits, have no taste for the edible nests; and how the latter acquired a taste for this foreign commodity is no less singular than their persevering in it. Among the western nations there is nothing parallel to it, unless we except the whimsical estimation in which the Romans held some articles of luxury, remarkable for their scarcity rather than for any qualities ascribed to them."

Mr. Crawfurd estimates the whole quantity of birds' nests exported from the Archipelago at 242,400 lbs. worth 284,290*l.* "The value," he observes, "of this immense property to the country which produces it, rests upon the capricious wants of a single people. It is claimed as the exclusive property of the sovereign, and every where forms a valuable branch of his income, or of the revenue of the state. This value, however, is of course not equal, and depends upon the situation and the circumstances connected with the caverns in which the nests are found. Being often in remote and sequestered situations, in a country so lawless, a property so valuable and exposed is subject to the perpetual depredation of freebooters, and it not unfrequently happens that an attack upon it is the principal object of the warfare committed by one

petty state against another. In such situations, the expense of affording them protection is so heavy, that they are necessarily of little value. In situations where the caverns are difficult of access to strangers, and where there reigns enough of order and tranquillity to secure them from internal depredation, and to admit of the nests being obtained without other expense than the simple labour of collecting them, the value of the property is very great. The caverns of *Karang-bolang*, in Java, are of this description. These annually afford 6,810 lbs. of nests, which are worth, at the Batavia prices of 3,000, 2,500, and 1,200 Spanish dollars the picul, for the respective kinds, nearly 139,000 Spanish dollars; and the whole expense of collecting, curing, and packing, amounts to no more than 11 per cent. on this amount. The price of birds' nests is of course a monopoly price, the quantity produced being by nature limited, and incapable of augmentation. The value of the labour expended in bringing birds' nests to market is but a trifling portion of their price, which consists of the highest sum that the luxurious Chinese will afford to pay for them, and which is a tax paid by that nation to the inhabitants of the Indian islands. There is, perhaps, no production upon which human industry is exerted, of which the cost of production bears so small a proportion to the market price." — (See also the valuable work of *Count Hogendorp, Coup d'Œil sur l'Ile de Java*, p. 291.)

BISMUTH (Ger. *Wismuth*; Du. *Bismuth, Bergsteen*; Fr. *Bismuth*; It. *Bismutte*; Sp. *Bismuth, Piedra inga*; Rus. *Wismut*; Lat. *Bismuthum*), a metal of a reddish white colour, and almost destitute of taste and smell. It is softer than copper; its specific gravity is 9·822. When hammered cautiously, its density is considerably increased; it breaks, however, when struck smartly by a hammer, and, consequently, is not malleable, neither can it be drawn out into wire; it melts at the temperature of 476°. — (*Thomson's Chemistry.*)

"Bismuth is used in the composition of pewter, in the fabrication of printers' types, and in various other metallic mixtures. With an equal weight of lead, it forms a brilliant white alloy, much harder than lead, and more malleable than bismuth, though not ductile; and if the proportion of lead be increased, it is rendered still more malleable. Eight parts of bismuth, 5 of lead, and 3 of tin, constitute the fusible metal, sometimes called Newton's, from its discoverer, which melts at the heat of boiling water, and may be fused over a candle in a piece of stiff paper without burning the paper. Pewterers' solder is formed of one part of bismuth, with 5 of lead, and 3 of tin. It forms the basis of a sympathetic ink." — (*Ure.*)

BITUMEN (Ger. *Judenpech*; Du. *Jodenlym*; It. *Asfalto*; Sp. *Asfalto*; Port. *Asphalto*; Rus. *Asfalt*; Lat. *Asphaltum Bitumen Judaicum*). This term includes a considerable range of inflammable mineral substances, burning with the flame in the open air. They differ in consistency, from a thin fluid to a solid; but the solids are for the most part liquefiable at a moderate heat. They are, — 1. *Naphtha*; a fine, white, thin, fragrant, colourless oil, which issues out of white, yellow, or black clays in Persia and Media. This is highly inflammable. Near the village of Amiano, in the state of Parma, there exists a spring which yields this substance in sufficient quantity to illuminate the city of Genoa, for which purpose it is employed. With certain vegetable oils, naphtha is said to form a good varnish. — 2. *Petroleum* is much thicker than naphtha, resembling in consistence common tar. It has a strong disagreeable odour, and a blackish or reddish brown colour. During combustion, it emits a thick black smoke, and leaves a little residue in the form of black coal. It is more abundant than the first-mentioned variety, from which it does not seem to differ, except in being more inspissated. It is found in various countries, and is especially abundant in the Birman empire, where it is met with above Prome, within about 2 miles of the Irrawadi. The gross annual produce of the wells in this place has been estimated at about 80,000,000 lbs., worth on the spot about 1*s.* 8*d.* a cwt; and the supply might, if a market could be found, be indefinitely increased. It is used as a lamp oil, and, when mingled with earth or ashes, as fuel and in the paying of boats. (*Geographical Dictionary*, i. 377.) In the United States it is found abundantly in Kentucky, Ohio, and New York, where it is known by the name of *Seneca* or *Genesee* oil. It is also obtained from wells in the island of Zante. Herodotus tells us, that he had seen these wells — (lib. iv. c. 195.); and the description he has given of them, and of the mode of obtaining the petroleum, corresponds, in all respects, with the accounts of the best modern travellers. The average annual produce of the Zante springs is about 100 barrels. — (*Chandler's Travels in Greece*, 4to. ed. p. 301.; *Holland's Travels in Greece*, 4to. ed. p. 18.) Petroleum is particularly abundant in Persia. "When taken from the pit, it is a thick liquid resembling pitch. The bottoms of most vessels which navigate the Euphrates and Tigris are covered with it, and it is also used in lamps, instead of oil, by the natives. The most productive fountains are those of Kerkook, Mendali, and Badku. The wells in the neighbourhood of the latter seem to be quite inexhaustible, being no sooner emptied than they again begin to fill. Some of them have been found to yield from 1,000 to 1,500 lbs. a day!" — *Kinneir's Persian Empire*, p. 39. and 359.) — 3. *Maltha*, or *Sea-wax*, is a solid whitish substance, not unlike tallow. It melts when heated, and in cooling assumes the consistence of white cerate. This is, most probably, the *bitumen candidum* of Pliny (*Hist. Nat.* lib. xxxv. c. 15). It is not used as pitch; but it affords a better light than petroleum, and emits a less disagreeable smell. It is found on the surface of the Baikal Lake in Siberia, at the foot of the mountains of Bucktiari in Persia, and in some other places. — 4. *Elastic Bitumen* yields easily to pressure; is flexible and elastic. It emits a strong bituminous odour, and is about the weight of water. On exposure to the air it hardens, and loses its elasticity. It takes up the traces of crayons in the same

manner as caoutchouc, or Indian rubber, whence it has obtained the name of *mineral caoutchouc*. It has hitherto been found only in the lead mines of Derbyshire.—*5. Compact Bitumen*, or *Asphaltum*, is of a shining black colour, solid, and brittle, with a conchoidal fracture. Its specific gravity varies from 1 to 1·6. Like the former varieties, it burns freely, and leaves but little residuum. It is found in India, on the shores of the Dead Sea, in France, in Switzerland, and in large deposits in sandstone in Albania; but nowhere so largely as in the island of Trinidad, where it forms a lake three miles in circumference, and of a thickness unknown. A gentle heat renders it ductile, and, when mixed with grease or common pitch, it is used for paying the bottoms of ships, and is said to protect them from the teredo of the West Indian seas. The ancients employed bitumen in the construction of their buildings. The bricks of which the walls of Babylon were built were, it is said (*Herodotus*, lib. i. § 179.), cemented with hot bitumen, which gave them unusual solidity.

BLACKING (Ger. *Schuhschwärze, Wichse;* Fr. *Noir (de cordonnier;)* It. *Nero da ugner le scarpe;* Sp. *Negro de zapatos*). A factitious article, prepared in various ways, used in the blacking of boots and shoes. The principal ingredients in its manufacture are oil, vinegar, and various sorts of blacking matter. It is in very extensive demand. Some of the establishments for its manufacture, especially those in the metropolis, are on a very large scale; and it is in such only that it can be cheaply and advantageously produced. One of the principal, or rather we may say the principal outlay in establishing a blacking business, consists in advertising. Indeed any individual or set of individuals, provided they supply a reasonably good article, may by continuous advertising and puffing attain to the highest eminence in the "blacking line." Exclusive of that used at home, blacking is a considerable article of export.

BLACK-LEAD, PLUMBAGO, OR WAD, (Du. *Potlood;* Fr. *Mine de plomb noir, Plomb de mine, Potelot;* Ger. *Pottloth, Reissbley;* It. *Miniera di piombo, Piombaggine, Corezolo;* Lat. *Plumbago;* Sp. *Piedra mineral de plomo*), a mineral of a dark steel grey colour, and a metallic lustre; it is soft, has a greasy feel, and leaves a dark coloured line when drawn along paper.

This mineral is found only in a state of purity in Borrowdale in Cumberland, the mines in which have been wrought since the days of Elizabeth. The lead is not found in veins but in detached pieces, or in what are called *sops* or *bellies*, so that the supply is very irregular, the miners being frequently employed for a lengthened period in seeking at random for the lead. Its quality also differs very widely. The best is that which is lightest, and the trace of which on paper is easily and completely removed by the application of India rubber. The mine used only to be opened at intervals, but for a considerable number of years past it has been constantly open. The supply, however, has been extremely scanty, and mostly also very inferior. The trade is supplied at sales held on the first Monday of each month, in *Essex Street, Strand*, London.

This lead is now almost wholly employed in making pencils: an inferior variety from Spain and Ceylon being used in the manufacture of crucibles, the polishing of cast iron utensils, the diminishing of friction, and other purposes to which genuine black lead was formerly applied.

BLACK LEAD PENCILS (Du. *Potlootpennen;* Fr. *Crayons noirs;* Ger. *Bleystifte;* It. *Lapis nero;* Port. *Lapis negro;* Rus. *Karanaschii;* Sp. *Lapiz negro*) are formed of black lead, encircled with cedar.

There is hardly, perhaps, any thing in which the temptation to substitute a spurious for a genuine article is greater, or in which, consequently the purchaser is more liable to be deceived, than black lead pencils. This is occasioned by the vast difference between the cost of genuine Cumberland lead, and of the other articles that are or may be substituted for it. Pencils are usually described as follows:—

First quality, or drawing pencils.
Second ditto, or prepared pencils.
Third ditto, or composition pencils.

I. Pencils of the first quality are, when genuine, made of pure Cumberland lead, which costs at present (1843) 30*s.* per lb. or 168*l.* per cwt. From 18 to 20 dozen such pencils are produced from a pound of this lead.

These pencils are usually made by sawing the lead into the pieces inserted in the cedar. Sometimes, however, the lead is in parts gritty and defective, so that a pencil of this kind may, in fact, be very inferior. To obviate this defect, some makers prepare the lead, to free it from the grit or earthy particles; and, provided no antimony or other alloy be mixed up with the prepared lead, the pencils produced from it are most to be depended on.

II. Pencils of the *second* quality are manufactured out of the sawings or dust of pure lead, with the dust of the small pieces picked up by poor people from the rubbish thrown out of the mine, mixed or alloyed with a greater or less quantity of antimony. The goodness of this pencil depends, of course, on the proportion in which the pure lead exceeds the antimony. But as the cost of the former may be taken at 100*l.* a cwt. and that of the latter at only 26*s.*, there is an all but irresistible temptation to increase the proportion of the latter beyond due bounds. This sort of composition produces about 15 or 16 dozen pencils to the pound; their price varying according to the purity of the lead.

III. The *third* quality of pencil is made by using Mexican or Spanish lead dust, costing 45*s.* or 50*s.* a cwt., with antimony costing about 26*s.* per cwt. It produces about 14 or 15 dozen pencils to the lb., which may be sold at from 2*s.* 6*d.* to 12*s.* per gross, according to the cost of the articles employed and the care taken in mixing them. This sort of pencil may take a firm point, and make a fine stroke, but its trace will not obliterate on being rubbed with Indian rubber. The easy and complete obliteration of the strokes is, in fact, the best and perhaps only test of a pencil being of pure Cumberland lead.—(*Private information.*)

BLUBBER (Ger. *Thran, Fischtran;* Du. *Thraan;* It. *Olio di pesce;* Sp. *Grassa, Aceite de pescado;* Rus. *Salo worwannoe, Worwan;* Lat. *Oleum piscinum*), the fat of whales and other large sea-animals, of which train oil is made. The blubber is the *adeps* of the animal: it lies under the skin, and over the muscular flesh: it is about 6

inches in thickness, but about the under lip it is 2 or 3 feet thick. The whole quantity yielded by one of these animals ordinarily amounts to 40 or 50, but sometimes to 80 or more cwt. Formerly train oil was manufactured from the blubber in the seas round Spitzbergen, and other places where whales were caught; but the practice is now to bring the blubber home in casks, and to prepare the oil afterwards.

It is enacted by the 6 Geo. 4. c. 107. § 44., that before any blubber, train oil, spermaceti oil, head matter, or whale fins, shall be entered as being entirely the produce of sea animals caught by the crews of ships fitted out in the United Kingdom, or the islands of Jersey, Guernsey, Sark, and Man, the master of the ship importing such goods shall make oath, and the importer also shall make oath, to the best of his knowledge and belief, that the same are the produce of fish or creatures living in the sea, taken and caught wholly by the crew of such ship, or by the crew of some other ship (naming it) fitted out in the United Kingdom, or in one of the islands of Guernsey, Jersey, Alderney, Sark, or Man (naming which).

Before blubber, train oil, &c. can be entered as from a British possession, a certificate must be obtained from the custom-house officer at such British possession, or in default of such officer being there, from two principal inhabitants, notifying that oath had been made before him or them that such blubber, &c. was the produce of fish or creatures living in the sea, and had been taken by British subjects usually residing in some part of his Majesty's dominions; and the importer is to make oath, to the best of his knowledge and belief, to the same effect.

The gauging of casks of oil and blubber is dispensed with since 1825. They are to be passed at the rate of 126 gallons the pipe, and 63 gallons the hogshead.

BOATS are open vessels, commonly wrought by oars, and of an endless variety of shapes, according to the purposes to which they are to be applied.

It is ordered by stat. 6 Geo. 4. c. 108., that every boat belonging to or attached to any other vessel shall have painted on the outside of the stern of such boat the name of the vessel and place to which she belongs, and the master's name withinside of the transom, in white or yellow Roman letters, 2 inches long, on a black ground, under pain of forfeiture. Boats *not belonging* to vessels are to be painted with the name of the owner and place to which they belong, under penalty of forfeiture. All boats having double sides or bottoms, or secret places for the purpose of concealing goods, or having any hole, pipe, or other device for the purpose of running goods, are to be forfeited.

Regulations of Watermen on the Thames. — From Chelsea Bridge towards Windsor, 3*d.* per half mile for scullers.

Over the water directly between Windsor and Crawley's Wharf, Greenwich (excepting the Sunday ferries), for one person, 3*d.*; two persons, 1*s.*; exceeding two persons, 1*d.* each.

To or from ships westward of Greenwich, for one person, 2*d.*; exceeding one person, 1*d.* each; and, where the distance to the ship does not exceed the distance across the river, the fare across the river shall be taken.

To or from ships eastward of Greenwich, at the rate of 6*d.* per half mile.

To or from vessels for passengers, for one person, 4*d.*; exceeding one person, 3*d.* each, with not exceeding 56 lbs. of luggage for each. After this at the rate of 1*s.* per cwt.

Watermen detained by passengers to be paid for time or distance, at the option of the watermen.

	s.	d.
By Time for a Pair of Oars. — First hour	2	0
Second hour	1	6
Each succeeding hour	1	0
For the day	12	0

To last from 7 A. M. to 5 P. M. between Michaelmas and Lady Day; and from 6 A. M. to 6 P. M. from Lady Day to Michaelmas.

SCULLER'S FARES.

The Bridges, &c. stand in the following order.

London Bridge.	Nine Elms.	Shadwell Dock Stairs.
Southwark Bridge.	Red House, Battersea.	Kidney ditto.
Blackfriars Bridge.	Swan Stairs, Chelsea.	Limehouse Hole ditto.
Waterloo Bridge.	Chelsea Bridge.	Ditto, Torrington Arms.
Westminster Bridge.	Iron Gate.	Deptford, George Stairs.
Lambeth Stairs.	Union Stairs.	Ditto, Low-Water Gate.
Vauxhall Bridge.	King Edward ditto.	Greenwich, Crawley's Wharf.

The fare from either of the above places to the next is 3*d.*, and so on in proportion.

Passage Boats. — Oars' Fare 8 Passengers. Sculler's Fare 6 Passengers.

London Bridge to	each s.	d.	London Bridge to	each s.	d.	London Bridge to	each s.	d.
Chelsea Bridge	0	6	Brentford	1	3	Walton-upon-Thames	1	0
Wandsworth	0	7	Isleworth	1	3	Shepperton	2	0
Putney	0	8	Richmond	1	3	Weybridge	2	0
Fulham	0	8	Twickenham	1	6	Laleham	2	0
Barn's Elms	0	8	Tide-end Town	1	6	Chertsey	2	0
Hammersmith	0	9	Kingston	1	6	Staines	2	6
Chiswick	0	9	Hampton Court	1	9	Datchet	3	0
Barnes	1	0	Hampton Town	1	9	Windsor	3	0
Mortlake	1	0	Sunbury	1	9			
Deptford	0	6	Blackwall	0	9	Gravesend	1	6
Greenwich	0	6	Woolwich	1	0			

For a full boat load of luggage, same as for 8 passengers.
For half a load, same as for 4 passengers.

Penalties. — Taking more than fare, not exceeding 2*l.*

Waterman to have a list of fares in his boat, and on not permitting the passenger to examine it, the passenger is discharged from paying his fare, and the waterman may be fined not exceeding 5*l.*

Refusing to take a passenger, or not answering when called by the number of his boat, not exceeding 5*l.*

Unnecessarily delaying a passenger, not exceeding 5*l.*

Refusing to permit any person to read the name and number of his boat, or to tell his Christian or surname, or the number of his boat, *on being paid his fare*, or making use of any abusive language, not exceeding 5*l.*

Rules and By laws made by the Court of Aldermen, 15th of April, 1823. — Letting his boat remain at any stairs, while wilfully absent, or not being ready to take a passenger into his boat, not exceeding 1*l.*

Refusing to give his name or number, or that of any other waterman, not exceeding 1*l.*

Obstructing any other waterman in taking in or landing a passenger, or obstructing a passenger, not exceeding 1*l.*

Towing or being towed by any other boat without the consent of all the passengers, not exceeding 5*l.*

Agreeing to take any less sum than the rate allowed, and afterwards demanding more than the sum agreed for, not exceeding 2*l.*

Only two boats to be placed aboard any steam-boat at the same time in turn. Waterman, previous to taking turn as aforesaid, to lie with his boat upon his oars at least one boat's length distant from any other boat lying alongside, and shall not approach nearer, until after the former boat shall have proceeded two boats' length, not exceeding 5*l.*

The offices of Harbour-masters are in Little Thames Street, St. Catharine's, and Canal Office, Blackwall.

BOLE, a friable earthy substance, a species of the soapstone family. Specific gravity 1·4 to 2. It is found in the island of Lemnos, whence it is sometimes called Lemnian earth; and in Armenia, Italy, France, Silesia, various parts of South America, &c. Armenian and French boles were at one time not uncommon in this country, being used in the materia medica; but they are now entirely, or almost entirely, discarded. In India, however, Armenian bole still continues to be in extensive demand. It is brought to Bombay from the Persian Gulph. It is soft, feels greasy to the touch, adheres strongly to the tongue, and is very frangible: it is generally of a yellowish brown colour; though sometimes it is seen of a fine flesh red, which is the variety held in the highest estimation.

Some savage nations, such as the Ottomaques, described by M. Humboldt, are in the habit of allaying the pains of hunger by eating boles. The Javanese, when they wish to become thin, eat cakes, called *tanaampo*, made of bole. — (*Lewis, Mat. Medica; Thomson's Chemistry; Ainslie's Mat. Indica.*)

BOHEA, a species of tea. See TEA.

BOMBAY, a sea-port on the western coast of British India, being, after Calcutta, Canton, and perhaps Batavia, the greatest emporium in the East; lat. 18° 56′ N., long. 72° 57′ E. It stands on the south-eastern extremity of a small island of the same name, separated from the main land by an arm of the sea, forming, with the contiguous islands of Colabah, Salsette, Butcher's Island, and Caranjah, one of the best harbours in India. Bombay Island was ceded by the Portuguese to the English in 1661, as the dower of Queen Catherine, wife of Charles II., and was taken possession of in 1664; so that it has been in our occupation about 180 years, being by far the oldest of our possessions in the East. In 1668, it was transferred by the crown to the East India Company, by letters patent, in free and common soccage, on payment of the annual rent of 10*l*. But, by the present charter, it has reverted to the crown, with the rest of the Company's assets, being held by the Company in trust merely. On its cession to the crown of England, in 1661, its population did not exceed 15,000; but at present it has upwards of 230,000 inhabitants. The fort stands on the south-east extremity of the island, on a narrow neck of land, immediately over the harbour. The fortifications are extensive, and on the sea side very strong.

Bombay Harbour is one of the safest and most commodious in India. It is bounded on the west and north by the island of Colabah, or Old Woman's Island, Bombay Island, and the island of Salsette. The first two are separated only by a narrow creek fordable at low water, and Bombay Island was joined to Salsette by a causeway constructed in 1805. On the east side of the harbour, between it and the main land, is Butcher's Island, distant about 1 miles from Bombay; and immediately behind Butcher's Island is the famous island of Elephanta. About 3 miles south from Butcher's Island is the island of Caranjah, on the western side of which, near the harbour, is an extensive shoal. S. W. from Caranjah, distant about 5 miles, is Tull Point; between which and Colabah, or Old Woman's Island, is the entrance to the harbour. There is a light-house on the southern extremity of Colabah Island, elevated about 150 feet above the level of the sea, which in clear weather may be seen at the distance of 7 leagues. The point on which the light-house stands is surrounded on all sides by an extensive reef of rocks divided into prongs: of these, the most dangerous is the prong stretching S. W. about 3 miles, from the light house, and forming the northern boundary of the entrance into the harbour. The reef stretching W. N. W. from Tull Point about 3½ miles, forms the southern boundary of the entrance; the breadth of the channel between them being about 3 miles, with a depth of from 7 to 8 fathoms. In going into the harbour, it is necessary to clear a sunken rock, lying almost due east from the light-house, at about 1½ mile distant; and also a bank, called the middle ground, lying nearly opposite to and about 1¼ mile from the southern extremity of the town. — (See *Nicholson and Watson's Plan of Bombay Harbour.*)

Docks. — Bombay is the only port of consequence in British India in which the rise and fall of the tide are so considerable as to admit of the formation of extensive wet docks. At ordinary spring tides, the rise is about 14 feet, but occasionally as high as 17. The capacious docks constructed by the East India Company are their property, and are for the most part under the direction of Parsees, who, excepting the Chinese, are the most industrious and intelligent people of the East. Merchant vessels of the largest class, or from 1,300 to 1,400 tons burden, for the cotton trade to China, have been built in these docks. Frigates and line-of-battle ships have also been occasionally constructed in them, sometimes under the exclusive direction of Parsee artificers. The timber having to be brought from a great distance, ships built at Bombay are very costly; but being, contrary to the practice in other parts of India, entirely constructed of teak, they are the most durable vessels in the world, requiring little repair, and often running 50 or 60 years. Being for the most part built by natives, without any very strict application of the rules of art, they are commonly, though not always, heavy sailers.

Monies. — Accounts are kept in rupees; each rupee being divided into 4 quarters, and each quarter into 100 reas. The rupee is also divided into 16 annas, or 50 pice. An urdee is 2 reas; a dorees, 6 reas; a dooganey, or single pice, 4 reas; a fuddea, or double pice, 8 reas; a paunchea is 5 rupees; and a gold mohur, 15 rupees. Of these, the annas and reas only are imaginary monies. The coins of Bombay are the mohur, or gold rupee, the silver or Company's rupee, and their divisions; also the double and single pice, the urdee, and dorees, which are copper coins with a mixture of tin or lead. The following is the assay and sterling value of the present gold and silver coinage of Bombay:—

	Gross Wt.	Pure Metal.	Sterling Value.
	grs.	grs.	s.
Gold mohur -	180 -	165 -	27·2
Company's rupee (silver)	180 -	165 -	1·11 if silver be taken at 5*s.* 2*d.* an oz., and 2*s.* 0·4*d.* if silver be taken at 5*s.* 0*d.* an oz.

The Company's rupee has only been coined since the 1st of September, 1835; but it is almost identical in respect of value with the rupees previously in circulation.

The charge of coinage in the Bombay Mint is 2½ per cent for gold, and 5 per cent. for silver, including the charges for refining. The machinery for this mint was sent out from England a few years ago, and is complete, but very costly.

Weights and Measures. — The unit of weight in Bombay, as in other parts of India, is, by the law of 1833, the tola of 180 grains troy, the other weights being derived from it as follows:

8 Ruttees - - = 1 Masha = 15 Troy Grains.
12 Mashas - - = 1 Tola = 180 Troy Grains.
80 Tolas (or Sicca Weight) = 1 Seer = 2½ lb. Troy.
40 Seer = 1 Mun (or Bazaar Maund) = 100 lb. Troy.

The following table shows the commercial weights of the several Presidencies of India, Travancore, China, and England, compared with the new Indian maund introduced into Bengal in 1833, and adopted in the new tariff valuation under the Bombay Presidency since 1840.

		lbs.		Maunds.
The Bombay Maund of	40 Seers	= 28		2·038775
—	41 —	= 29·400		2·738883
The Surat Maund of	40 —	= 31·333		2·201081
— -	41 —	= 38·266		2·156325
— -	42 —	= 39·200		2·099125
— -	43½ —	= 40·566		2·038156
— -	44 —	= 41·066		2·003710
The Bengal Factory Maund		= 74·666		1·102040
Bazaar ditto		= 82·133		1·001855
The Madras Maund -		= 25		3·2914128

Of which the new Indian Maund of 82·2/7ths lb. av. or 82285/114 lb. av. contains

		lbs.		Maunds.
The Bombay Candy of	20	= 560		6·805555
—	21	= 588		7·145833
—	22	= 616		7·486111
The Surat Candy of	20	= 746·666		9·074074
—	21	= 784		9·527777
—	22	= 821·333		9·981481
The Madras Candy of	20	= 500		6·076388
The Travancore Candy of	20	= 640		7·777777
The China Picul -		= 133·333		1·620370
The English Cwt. -		= 112		1·331111
The English Ton of 20 cwt.		= 2240		27·222220

Which contain new Indian Maunds of 82·2/7ths lb. av. or 82285/114 lb. av.

Grain Measure.

				lbs.	oz.	dr.
2 Tipprees	=	1 Seer	=	0	11	3·2
4 Seers	=	1 Pally	=	2	12	12·8
7 Pallies	=	1 Parah	=	19	9	9·6
8 Parahs	=	1 Candy	=	156	12	12·8

Salt Measure.

				cubic inches.
10½ Adowlies	=	1 Parah	=	1,607·61
100 Perahs	=	1 Anna	=	160,761
16 Annas	=	1 Rash	=	2,572,176

The anna weighs 2½ tons, and the rash 40 tons.

Liquor Measure.

(Spirits and Country Arrack.)

The seer weighs 80 Bombay rupees, and equals 1 lb. 8 oz. 8¼ dr.; and 50 seers make the maund.

Long Measure.

				English inches.
16 Tussoos	=	1 Hath	=	18
24 Tussoos	=	1 Guz.	=	27

The English yard is now, however, in common use in Bombay.

Shipping. — In 1843, there belonged to Bombay, and mostly also to native merchants, 58 ships of the aggregate burden of 31,378 tons, of which 6 only were under 200 tons. These ships are partly employed

in the China trade, and partly in the trade to England and other places. They are for the most part navigated by Indian seamen or Lascars, those of Bombay being accounted by far the best in India; the master and superior officers only, and not always, being Englishmen. Besides these large vessels, there is a numerous class of native craft, under various forms and names, amounting in all to about 50,000 tons, of from 2 to 175 tons each. These vessels, besides furnishing the town with firewood, hay, straw, &c. from the neighbouring continent, navigate coastways from Cape Comorin to the Gulf of Cutch, and sometimes cross the sea to Muscat and the Arabian Gulph. During the eight fair months, that is, from October to May, the largest sized vessels perform five or six trips to Damaun, Surat, Cambay, Broach, Jumbosier, and Cutch, bringing from these ports, where they sometimes winter, and where many of their owners reside, cotton, ghee, oil, pulse, wheat, cotton cloths, timber, firewood, putchok, mawah, &c.; and return to the northern ports laden with the produce of Europe, Bengal, and China. The capital employed in this trade, in the minor articles of commerce, exclusive of cotton, has been estimated at 1,500,000*l.* sterling.

Commerce, &c. — The small and sterile island of Bombay affords no produce for exportation; indeed, hardly yields a week's consumption of corn for its inhabitants. Nor does the whole presidency of Bombay, although comprising about 70,000 square miles, and from 10,000,000 to 11,000,000 inhabitants, yield, with the exception of cotton and rice, any of the great colonial staples, such as coffee, sugar, and indigo; a circumstance that seems mainly ascribable to the impolitic restraints upon the employment of British settlers and capital that were long imposed by law, and acted upon with peculiar rigour in this and the sister presidency of Madras, in contradistinction to the greater latitude afforded in Bengal. Bombay is also much less favourably situated, in respect of internal communications, than Calcutta. The Ganges and its tributary streams intersect the richest provinces of India, and give Calcutta a vast command of inland navigation; whereas all the inland trade of Bombay has to be carried on by means of roads, that are seldom available for carriages, and which can be used only by pack-bullocks and camels. The transit duties, by which the inland trade was grievously oppressed, have been recently abolished; and if this judicious measure be followed up by the formation of lines of road to the principal markets in the interior, a great increase of the trade of the town and improvement of the presidency may be expected.

The principal trade of Bombay is carried on with China, Great Britain, the countries on the Persian and Arabian gulphs, Calcutta, Cutch and Sinde, the Malabar coast, foreign Europe, &c. The imports from China consist principally of raw silk, sugar, and sugar-candy, silk piece goods, treasure, &c. The principal articles of export to China are, raw cotton (33,711,049 lbs., in 1840–41), opium (12,022½ chests, in 1840–41.), principally from Malwa, sharks' fins and fish maws, sandal-wood, pearls, &c. The exports to China being much greater than the imports, the returns for several years past have been made to a large extent in bills on London, and on the Indian governments, drawn by the merchants in China.

The trade with the United Kingdom has been regularly increasing since the abolition of the restrictive system. The chief articles of import from Great Britain are, cotton and woollen stuffs, cotton yarn, hardware, copper, iron and lead, glass, apparel, fur, stationery, wine, &c. The principal articles of export to Britain are raw cotton (81,581,688 lbs. in 1840–41), raw silk, from China and Persia, ivory, pepper and spices, piece goods, coffee from the Red Sea, and wool. The export of the last mentioned article has increased with extraordinary rapidity, the quantity shipped for England in 1833–34 being only 69,944 lbs.; whereas the shipments for England in 1840-41 amounted to 3,428,055 lbs.! At present the principal supply of the article is drawn from Cutch and Sinde, and from Marwar, via Guzerat; but active measures have been taken by government for improving the flocks in the pastoral country of the Deccan, so that a further and very considerable increase of this new and important trade may be anticipated.

The trade between Bombay and the ports on the Persian Gulph has materially varied of late years. A large portion of the articles of British produce and manufacture that were formerly exported to Persia, by way of Bombay and Bushire, being now sent through Trebisond and ports in the Levant; and a considerable portion of the raw silk that used to be exported from Persia, via Bombay, being now also sent through the ports referred to. On the other hand, however, there is a considerable increase in the exports and imports of other articles; so that, on the whole, the amount of the trade has not materially varied.

The trade between Bombay and Calcutta is not so great now as it was formerly; the abolition of the restrictive system in 1815 having given Bombay the means of bringing various articles direct from foreign ports which she was previously obliged to import at second-hand from Calcutta, and of exporting directly.

Banks. — Two banks have recently been established in Bombay. The bank of Bombay, incorporated in 1840, has a capital of 5,225,000 rupees (522,500*l.*), divided into shares of 1,000 rupees each. It issues notes, and transacts all sorts of banking business, charging no commission for its trouble, and allowing no interest on deposits. The bank of Western Asia, established in 1842-43, has not hitherto been incorporated. It also issues notes and transacts ordinary banking business, charging a commission of ¼ per cent. on all payments, and allowing interest on deposits. In neither bank is it allowed to overdraw accounts. A branch of the Agra bank is, also, established in Bombay. We subjoin from a Bombay paper of April, 1843, the following particulars respecting these banks:—

Bank of Bombay. — *Discount.* — On Government bills, above 30 days, 6 per cent.

On Government bills, within 30 days, 5 per cent.

On private bills, at or within three months, 8 per cent.

Interest charged. — On loans and cash credit accounts on deposit of Government notes, 6½ per cent.

On loans and cash credit accounts on deposit of bullion, 7 per cent.

On loans and cash credit accounts on deposit of metals and other goods, 8 per cent.

Bank Shares. — 30 to 30½ rupees per cent. premium.

The Bombay Bank takes charge of Government securities, bank and other stock certificates, and realizes interest and dividends on such as are payable in Bombay, for constituents.

Parties discounting bills may take them up at any period prior to their maturity, and the bank will refund the discount for the unexpired portion of the time such bills may have to run.

Post-bills granted payable at three days' sight, free of charge, and bills payable at Calcutta and Agra, granted at the rate of exchange of the day.

Bank of Western India. — *Interest allowed.* — Class 1. On current deposits subject to a commission of ½ per cent., 4 per cent.

Class 2. On current deposits, without commission, 3 per cent.

Class 3. On deposits repayable on a notice of 30 days, 4 per cent.

Interest and Discount charged. — *Interest.* — On loans and credits on Company's paper, Bank of Bombay shares, and bullion, 7 per cent. On loans and credits on other security, 8 per cent.

Discount. — On Government bills, 7 per cent. On private bills, 8 per cent.

Exchange. — For credits payable on application, and draughts on London at one day's sight without grace, 1s. 11½d. per rupee.

For draughts at six months' sight, 2s. per rupee.

Bank shares, 6½ per cent. premium.

Statement of the Number of Ships, with the Amount of their Tonnage, which arrived at and sailed from Bombay in 1840-41 and 1841-42.

Flags.	Arrivals in 1840—41.		Arrivals in 1841—42.		Departures in 1840—41.		Departures in 1841—42.	
	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.
British	256	1,18,203	307	1,48,253	269	1,20,594	281	1,28,942
French	5	1,220	6	1,661	6	1,491	6	1,802
Portuguese	5	1,219	5	971	6	1,895	4	783
American	6	2,107	4	1,359	4	1,465	2	393
Arab	6	3,143	6	1,804	4	2,664	5	2,568
Dutch	1	406	-	-	1	350		
Swedish	1	500	1	352	1	172	2	644
Grand Total	280	1,26,598	329	1,54,400	292	1,28,634	300	1,34,932

Insurance.—Companies for the insurance of lives, shipping, and against fire, have been established in Bombay; and several of the London and Calcutta Insurance Companies have agents here.

Account of the Principal Articles of Export from Bombay (its subordinate Ports in the Concan and Guzerat not included) in the Official Year, 1841-42.

Principal Articles.	Quantity.	Weight. cwt.	Weight. lbs.	Value. rupees.
Coffee	-	-	27,09,787	7,02,380
Cotton	bales 4,29,211½	- -	16,10,96,110	2,16,79,410
Indigo	-	- -	1,57,670½	1,53,256
Ivory, elephants' teeth	-	2,887	33	5,02,866
Opium	chests 16,356	- -	- -	1,12,79,490
Piece goods: British dyed cotton	pieces 4,10,110	- -	- -	14,17,891
— printed	— 30,596	- -	- -	1,79,892
— white	— 8,93,027	- -	- -	42,85,653
— silk	— 1,186	- -	- -	16,243
— shawls	— 5,034	- -	- -	16,160
— yarn	- -	- -	13,18,724	7,86,151
Cashmere shawls	cs. 13 ps. 3,957	- -	- -	9,78,813
China silk	pieces 3,662	- -	- -	82,631
Country silk	— 371	- -	- -	1,250
— of sorts	— 5,83,639½	- -	- -	8,50,501
— yarn	- -	- -	18,692	6,618
Shark-fins and fish maws	- -	9,575	107	3,51,570
Silk, raw	cgs. 384 bdls. 6,995	- -	1,22,425	4,39,255
All other articles	- -	- -	-	91,00,698
			Merchandise total	5,28,33,667
	Treasure { Gold		3,000	
	Silver		33,85,752	
	Copper		110	
				33,88,862
	Horses	- -	-	4,05,380
			Grand total	5,66,27,909

Account of the Total Value of the Imports into, and of the Exports from Bombay, in 1841-42, specifying the Values of those imported from and exported to each Country.

	Value of Imports. Merchandise.	Value of Imports. Treasure.	Total Imports.	Value of Exports. Merchandise.	Value of Exports. Treasure.	Total Exports.
	rupees.	rupees.	rupees.	rupees.	rupees.	rupees.
America	5,041	- -	5,041	11,385	24,000	35,385
Arabian Gulph	10,49,197	9,87,357	20,36,554	17,75,745	28,600	18,04,345
Calcutta	24,62,116	- -	24,62,116	8,17,032	41,000	8,58,032
Cape of Good Hope	637	- -	637	-	-	-
Ceylon	63,171	23,632	86,803	1,29,516	14,45,428	15,74,944
China	47,53,699	56,71,858	1,04,25,478	1,77,85,092	4,765	1,77,89,857
Coast of Africa	5,23,093	53,650	5,76,743	4,20,672	69,452	4,90,124
— Coromandel	1,78,161	- -	1,78,161	1,67,517	- -	1,67,517
Cutch and Scinde	16,25,649	5,74,972	21,78,621	46,14,888	96,900	47,11,788
France	2,15,263	50,000	2,65,263	1,24,201	28,500	1,52,701
France, Isle of	27,751	12,000	39,751	24,824	- -	24,824
Goa, Damaun, and Din	1,71,250	400	1,71,650	1,73,830	63,764	2,37,594
Great Britain	1,74,57,235	2,000	1,72,59,235	1,83,67,092	- -	1,83,67,092
Kurrachee	60,501	- -	60,501	5,69,941	- -	5,69,941
Madeira	7,994	- -	7,994	-	-	-
Malabar and Canara	61,77,927	27,700	62,04,727	17,33,298	14,32,813	31,66,111
Manilla	1,775	- -	1,775	-	-	-
Penang, Singapore, and the Straits of Malacca	17,70,467	1,53,220	19,23,687	23,99,153	2,000	24,01,153
Persian Gulph	27,72,047	9,07,851	36,79,898	41,24,898	151,640	42,76,538
Sonmeanee	4,500	- -	4,500	-	-	-
Stockholm	39,228	- -	39,228	-	-	-
Sydney	2,265	- -	2,265	-	-	-
	3,91,16,288	84,11,640		5,32,39,017	33,88,862	
	Total value of imports		4,75,90,928	Total value of exports		5,66,27,909
Subordinate ports: Concan	1,54,73,185	1,55,416	1,56,28,631	64,08,434	2,37,648	66,46,082
Guzerat	1,72,70,192	2,78,244	1,75,48,706	1,16,40,904	22,53,537	1,38,94,441
	3,27,43,677	4,33,660		1,80,49,338	24,91,185	
	Total value of imports		3,31,77,337	Total value of exports		2,05,40,523
	Grand total of imports		8,07,68,265	Grand total of exports		7,71 68,432

PORT CHARGES.

Buoy and Anchorage Dues.—All ships and vessels or boats not receiving pilots—

From 10 to 20 tons	Rps. 3 0 0	per Ann.
Above 20 to under 30 tons	— 6 0 0	do.
From 30 to 50 tons	— 10 0 0	do.
Above 50 to 100 —	— 20 0 0	do.
— 100 to 150 —	— 25 0 0	do.
— 150 to 200 —	— 30 0 0	do.
— 200 to 250 —	— 35 0 0	do.

Charges for Pilotage.—A ship of the line or of 50 guns: Fair Season Rps. 100, Monsoon 110. A frigate or sloop of war: Fair Season 75, Monsoon 100.

Foreign ships of war are to pay, in addition to the above rates, rupees 40

Square-rigged vessels of all descriptions:

	Fair Season. Rps.	Monsoon.
Above 50 to 300 tons.	50 0 0	75 0 0
— 300 to 400 —	— 55 0 0	80 0 0
— 400 to 500 —	— 60 0 0	85 0 0
— 500 to 600 —	— 65 0 0	90 0 0
— 600 to 700 —	— 70 0 0	95 0 0
— 700 to 800 —	— 75 0 0	100 0 0
— 800 to 900 —	— 80 0 0	105 0 0
— 900 to 1000 —	— 85 0 0	110 0 0
— 1000 to 1100 —	— 90 0 0	115 0 0
— 1100 to 1200 —	— 95 0 0	120 0 0
1200 and upwards	— 100 0 0	125 0 0

Light-house Dues.—All ships and vessels down to 20 tons, at rupees 15 per 100 tons per annum.
All vessels under 29 tons burden, at 2 rupees per annum.

N. B. There are no port charges of any sort at Bombay other than the above.

General Rates of Commission in Bombay.—On the sale or purchase of goods of all denominations (except as under) - - - - - ¾ cent. 5
Purchases of all kinds with the proceeds of goods sold, and on which a commission of 5 per cent. has been previously charged - - - - - 2½
The sale or purchase of ships, houses, and lands - - 2½
The sale or purchase of opium - - - - - 2½
The sale or purchase of diamonds, pearls, and jewellery of all descriptions - - - - - 2½
The sale or purchase of treasure or bullion, exclusive of 1 per cent. on receipt of the proceeds - - - 1
Procuring freight - - - - - 5
Shipping goods of every description - - ½ cent. 2½
Shipping treasure, bullion, and jewellery - - - 1
Ships' disbursements when no commission has been charged on freight or cargo - - - - - 2½
Effecting insurances - - - - - ½
Settling insurance losses, whether partial or total; also on procuring return of premium, exclusive of commission on receipt of cash - - - - - 1
Del credere, or guaranteeing the responsibility of persons to whom goods are sold, on the amount of sales - - 2½
The sale or purchase of cattle - - - - - 2½
Effecting remittances by bills of exchange (not being the proceeds of goods sold) - - - - 1

Collecting house rent	2½
Taking up interest bills from the Company (exclusive of 1 per cent. on remitting)	½
Sale or purchase of public or private bills of exchange	1
Exchanging Company's securities of all descriptions, or investing money therein, and on transferring government paper from one constituent to another	½
Surrendering, or depositing in the treasury, Company's security of all descriptions	½
Procuring money on respondentia or on loan	2
Recovery of bonds or bills for absentees, over due at the period of their being placed in the possession of the agent	2
Debts, when a process at law or by arbitration is necessary, 2½ per cent.; and if recovered by such means	5
Managing the affairs of an estate for an executor or administrator	5
Guaranteeing bills, bonds, or debts in general, by endorsement or otherwise	½
Attending the delivery of contract goods to the Company or individuals	1
Goods consigned, and afterwards withdrawn, on invoice cost	2½
Bills of exchange returned noted or protested, &c. Per cent.	1
Receipt of payment (at the option of the agent) of all monies not arising from proceeds of goods on which commission has been previously charged	1
All cases where the debtor side of the account exceeds the credit side, including the balance of interest, commission chargeable on the debtor side, at the rate of	1
Granting letters of credit	2½
Becoming security to government, or public bodies, in any case	2½
Goods consigned, which are disposed of by outcry or sent to a shop, on net proceeds	2½
Depositing government paper as security for constituents	1

Memorandum. — Sales of European goods, when made at an advance on invoice cost, the amount to be converted into Bombay currency at the exchange of two shillings per rupee.

Dock Regulations. — At daylight the wickets of the gates are opened, and at 7 o'clock the sentry gate. Half an hour after sunset the gates are shut, the wicket of the centre gate being left open till the evening gun be fired. No boats, saving those belonging to the Company's marine department, or her Majesty's navy, are permitted to come to the dock-yard stairs; but must use the piers expressly constructed for their accommodation. No meat, stores, or baggage for the merchant shipping, of any description, are to be passed through the dock-yards. After the firing of the evening gun, nobody belonging to the ships in the harbour, below the rank of a commissioned officer, is to be allowed to land or enter the dock-yard, without the express permission of the master attendant, or other constituted authorities.

Boats' crews are not to be permitted to quit their boat at the stairs, after the hours of shutting the gates. Small craft are not to deliver firewood or any other lading within the limits of the yard, without the superintendent's sanction. The ships and vessels in dock are not to land any lumber whatever on the pier. No cargo of any description is to be landed in or passed through the yard, from or to any ship in dock, without the superintendent's permission in writing. No fire or light is allowed on board any ship or vessel in dock, without the authority of the superintendent, to whom the purposes for which either may be required, must be stated in writing.

(See *Milburn's Oriental Commerce*; *Bombay Calendar and Register for* 1843; *Kelly's Cambist*; *Report on the Commerce of Bombay, &c. in* 1841-2.)

BOMBAZINE, a kind of silk stuff, originally manufactured at Milan, and thence sent into France and other countries. Now, however, it is nowhere manufactured better, or in larger quantities, than in this kingdom.

BONES of cattle and other animals are extensively used in the arts, in forming handles for knives, and various other purposes; but of late years they have been of most importance in agriculture. When employed in the latter they are, in most instances, ground, or reduced to powder, and are commonly used as manure for turnips, being in general drilled in with the seed, though sometimes, also, they are sown broadcast, and with other crops. The quantity used varies from about 25 bushels of *dust* to about 40 bushels *large* an acre. Their effect is said to be considerably increased when they have undergone the process of fermentation. They were first used, in this country, on a large scale, as a manure in Lincolnshire; and there can be no doubt that their extensive employment in that county has been one of the chief causes of its rapid improvement, and of the high state of cultivation to which it has attained. Bone-dust is now, however, very largely used, not only in Lincolnshire, York, and the adjacent counties, but in most other parts of England, and almost every where in Scotland; and its influence in increasing the crops of corn and turnips, and consequently, also, the supplies of butcher's meat and farm manure, has been quite extraordinary. In fact, it is to the employment of this manure, combined with the extension of furrow drainage, and the introduction of steam navigation, that the wonderful improvements that have been made in agriculture since 1820, and the vast increase of agricultural produce, are principally to be ascribed.

In 1827, Mr. Huskisson estimated the real value of the bones annually imported for manure at about 100,000*l.*; but at present (1843) it probably amounts to more than treble that sum. This is evident from the fact that the *ad valorem* duty of 1 per cent. on bones produced, in 1841, 2,933*l.* 5*s.* 3*d.* nett, showing that the value of the imports must then have exceeded 293,000*l.*, of which it is abundantly certain that but a comparatively small portion was employed otherwise than in agriculture. They are principally brought from the Netherlands, Germany, and South America. It is a curious fact, that while the duty on bones imported into Scotland, in 1841, amounted to 749*l.* 4*s.* 4*d.*, the duty on those imported into Ireland amounted to only 2*l.* 10*s.* 1*d.*—(See *Statistical Account of British Empire*, 2d edit. i. 185. and 568., and *Annual Finance Book* for 1841.) The duty on bones was reduced in 1842 to 6*d.* a ton.

BOOK-KEEPING, the art of keeping the accounts and books of a merchant. Book-keeping by double entry means that mode or system in which every entry is double, that is, has both a debtor and a creditor. It is called also the Italian method, because it was first practised in Venice, Genoa, and other towns in Italy, where trade was conducted on an extensive scale at a much earlier date than in England, France, or other parts of Europe. This method, however familiar to merchants and book-keepers, seems intricate to almost all who have not practised it; nor is the dryness and difficulty of the task much lessened by the printed works on the subject, which, having been compiled more by teachers than by practical merchants, contain a number of obsolete rules and unnecessary details. The most effectual mode of giving clearness and interest to our remarks will be, first, to state a few mercantile transactions, and then to explain the nature of the accounts and entries which result from them.

The Journal of a mercantile house ought to open, at the beginning of each year, with an enumeration of their assets and debts, as follows: —

Folio of Ledger.	SUNDRIES Dr. to STOCK. For the following, being the assets of the house.	£	s.	d.
1	Cash; amount at the bankers' this day (1st Jan.)	2,550	0	0
1	Exchequer Bills; amount in hand	5,310	0	0
7	Bills Receivable; in hand, as per bill book	7,300	15	0
1	Three and a half per Cent. Stock, 6000*l.*, valued at 90*l.* per 100*l.* stock	5,400	0	0
8	Debenture Account; drawbacks receivable at the Custom-house	513	0	0
6	Ship Amelia; our three eighths of that vessel	3,000	0	0
7	Adventures in Irish Linen; amount in hand, computed at cost price	2,467	0	0
7	James Bailey & Co. Liverpool; due by them	1,350	10	0
7	Thomas Watson & Co. Dublin; do.	3,550	12	0
7	William Spencer & Co., Plymouth; do.	970	0	10
		£ 32,391	17	10

Folio of Ledger.	STOCK Dr. to SUNDRIES. For the debts of the house, as follows: —	£	s.	d.
6	To Bills Payable; amount of acceptances at this date	2,350	10	0
3	To Insurance; amount of premiums due to underwriters	1,880	15	0
9	To Morris Pittman, Trinidad; balance due to him	1,370	5	0
4	To James Forbes, Demerara; do.	720	5	0
7	To Simon Frazer, London; do.	960	15	0
2	To James Allan & Co., Kingston, Jamaica; do.	1,150	10	0
8	To George and William Fox, Falmouth; do.	320	15	0
		8,753	15	0
	Balance, being the present capital of the house	23,638	2	10
		£ 32,391	17	10

Let the transaction to be first explained be an order for goods from a correspondent abroad. A house in Jamaica sends instructions to the house at home to buy and ship a quantity of manufactured articles, suited to the Jamaica market, as follows: —

Order from James Allan & Co., of Kingston, Jamaica, to Henry Barclay & Co., of London.

J. A. & Co.

Linen; Lint Strelitz Osnaburgs, 14 bales, about 6*d.* per yard.
Best tow Strelitz do., 9 bales, 4*d.* or 4½*d.*
Best white Platillas, 1 case.
Linen tick assorted, 3-4ths width, 9*d.*, 1*s.*, 1*s.* 3*d.*: 10 pieces each, cut up in 22-yard lengths.
Woollens: 5 bales Penistones, 3-4ths wide, best indigo blue, 1*s.* a yard.
Cottons: 50 pieces stout calico, 28 yards each, 3-4ths wide, 4*d.* a yard.
50 do. do. 7-8ths, superior, 5*d.* a yard.
100 do. stout calico shirting, 7-8ths wide, superior, 6*d.* a yard
Hats: 4 dozen gentlemen's superfine black, 20*s.* each.
2 do. do. drab, 20*s.* each.
1 do. youths' do. black, 15*s.* each.
20 do. felt hats, for negroes, 22*s.* per dozen.
Shoes; 10 dozen prime calf-skin shoes, full size, 6*5s.* per dozen.
10 do. youths' do. 52*s.* per dozen.
5 do. gentlemen's dress do. 72*s.* per dozen.

This order the London merchant divides among six, seven, or more wholesale dealers, according to their respective lines of business. Each dealer, or tradesman, as he is commonly called, provides his portion of the order in the course of the fortnight, three weeks, or month, allowed him by the merchant; and when the goods are packed and ready to ship, he sends in his account, or bill of parcels, thus: —

London, 20*th February*, 1843.

Messrs. Henry Barclay & Co.

Bought of Simon Frazer.

J. A. & Co. No. 8.		£	s.	d.
	10 pieces best tow Strelitz Osnaburgs, 116 yards each, at 4*d.* per yard	21	6	8
	Inside wrapper, 16 yards, at 3*d.*	0	4	0
	Cord, bale, and press packing	0	10	0
		25	0	8
	Then follow, stated in like manner, the particulars of 8 bales, No. 9. to 16. both inclusive, amounting to	212	4	2
		£ 237	4	10

London, 20*th February*, 1843.

Messrs. Henry Barclay & Co.

Bought of J. Borradaile & Co.

J. A. & Co.		£	s.	d.	£	s.	d.
39.	Case, 1 dozen and 2 youths' hats and bands, at 15*s.* each	10	10	0			
	Case (small)	0	4	0	10	14	0
40.	Case, 9 dozen felt hats for negroes, at 22*s.* per dozen	9	18	0			
	Case (large)	0	16	0			
41.	Do. the same				10	14	0
					10	14	0
					£ 32	2	0

The merchant, having received the whole of the bills of parcels, fixed on a vessel, and agreed for the freight, proceeds to make an entry at the Custom-house, and to ship the goods. That done, the next step is to prepare the Invoice, or general account of the shipment, as follows: —

INVOICE of Goods shipped by HENRY BARCLAY & Co., in the *Rawlins*, J. Thomson, from London to Kingston in Jamaica, on account and risk of Messrs. JAMES ALLAN & Co. of Kingston.

		£	s.	d.	£	s.	d.
J. A. & Co. No. 1.	Puncheon strong calf-skin shoes, per J. Johnson's bill of parcels	93	7	0			
2.	Do. do. per do.	94	16	4			
3.	French calf-skin shoes, per do.	23	9	0			
4, 5, 6.	3 trunks do. per do.	67	3	7			
					278	15	11
7.	Case linen tick assorted, per J. Wilson's bill of parcels				42	0	0
8. to 16.	9 bales best tow Osnaburgs, 10 pieces each, per Simon Frazer's bill of parcels				236	5	0
17.	1 case white Platillas, per Molling and Co.'s bill of parcels				41	0	8
18. to 24.	7 cases the same,				247	4	8
25. to 38.	14 bales lint Osnaburgs, per J. Mackenzie's bill of parcels				367	10	0
39.	1 case youths' hats and bands, per J. Borradaile and Co.'s bill of parcels				10	14	0
40, 1, 1.	2 cases felt hats, do. per do.				21	8	0
					1,284	18	3
		£	s.	d.			
	Entry; duty on part at ½ per cent.; bond and debenture	4	8	0			
	Cartage, wharfage, and shipping charges	7	9	6			
	Freight and primage 38*l.* 7*s.*; bills of lading 3*s.* 6*d.*	38	10	6			
	Insurance on 1,500*l.* at 40*s.* per 100*l.* £30 0 0						
	Policy duty 3 18 9						
		33	18	9			
	Commission, 5 per cent. on 1,335*l.*	66	15	0			
	Do. ½ per cent. on 1,500*l.* insured	7	10	0			
					158	11	9
					£1,443	10	0

At 6 months' credit; due 6th of September. Errors excepted.

London, 6th of March, 1843. HENRY BARCLAY & Co.

This invoice, being sent out by the vessel to Messrs. Allan & Co., conveys to them a number of particulars in a short space; viz. the mark, the numbers, the value, and the contents of each package. In former times it was the practice to make an invoice very long, inserting in it a literal copy of each bill of parcels, but it has now become usual to make each tradesman deliver a duplicate of his account, to be sent abroad with the goods; in which case the invoice may be, like the above, little more than a summary of the bills of parcels. This method has two advantages: it saves time at the counting-house of the exporter; and it affords to his correspondent an assurance that no more is charged to him than has been actually paid for the articles.

An invoice ought to be made out with the utmost care, for it is a document of great importance in several respects: first, between the exporting merchant and his correspondent abroad; and next, when in the hands of the latter, it may and generally does form a voucher for calculating the import duty, as well as for the sales effected to retailers or other dealers.

The sum insured by the exporting merchant generally exceeds the amount of the invoice by 2 per cent., because the recovery of a loss from insurers involves a charge of fully that amount. It is thus necessary to cover not only the price of the goods, and the charges of shipping, insurance, and freight, but such further sum as may enable the shipper, in case of loss, to carry to the credit of his correspondent the amount of the invoice, clear of any deduction.

JOURNAL ENTRIES resulting from the foregoing Invoice.

Folio of Ledger.	JAMES ALLAN & Co. Drs. to SUNDRIES. For goods shipped to them in the *Rawlins*, Thomson, for Jamaica.	£	s.	d.
1	To JAMES JOHNSON; amount of shoes, per his bills of parcels	278	15	11
1	To JOHN WILSON; linen tick per do.	42	0	0
1	To SIMON FRAZER; tow Osnaburgs per do.	236	5	0
1	To JOHN MACKENZIE; lint Osnaburgs per do.	367	10	0
2	To JAMES BORRADAILE & Co.; hats per do.	32	2	0
2	To MOLLING & Co.; for Platillas per do.	328	5	4
3	To FREIGHT ACCOUNT; freight, primage, and bills of lading	38	10	6
3	To INSURANCE; premium, and policy	33	18	9
3	To CHARGES; entry outward, duty, and shipping charges	11	17	6
3	To PROFIT AND LOSS; for commission	74	5	0
		£1,443	10	0

The preceding invoice, being for account of a mercantile house, who sell again to dealers, comprises a variety of articles: as a further specimen, we subjoin two short invoices, for account of sugar planters, and confined to articles consumed on their estates.

INVOICE of Plantation Stores, shipped by HENRY BARCLAY & Co. in the *Adventure*, J. Williamson, Master, for Kingston, Jamaica, by order of Mr. JAMES THOMSON, Planter, and for his account and risk.

		£	s.	d.	£	s.	d.
J. T. 1. to 6.	6 bales lint Osnaburgs, per bill of parcels from James Anderson	£240	0	0			
	Then follow, in like manner, the mark, number, and contents of various other packages of plantation stores (hats, shoes, nails, &c.), composing the shipment; amounting in all to				2,352	10	0
	CHARGES.	£	s.	d.			
	Custom-house entry, and shipping charges	2	12	6			
	Freight, primage, and bills of lading	18	7	6			
	Commission on 2,374*l.* at 2½ per cent.	59	7	0			
					80	7	0
	Insurance on 2,550*l.* at 2*l.* per cent.	51	0	0			
	Policy duty	6	10	0			
	Commission, ½ per cent.	12	15	0			
					70	5	0
					£2,503	2	0

Errors excepted.

London, 2d of October, 1842. HENRY BARCLAY & Co.

INVOICE of 60 Barrels of Herrings, shipped by HENRY BARCLAY & Co. of London, in the *Barclay*, James Ferrier, bound to Barbadoes, by order and for account and risk of JOHN HENDERSON, Esq., Planter, and consigned to him at Bridgetown, Barbadoes.

London, 18th of Feb. 1843.

J. H.	60 barrels prime white herrings, deliverable at Bridgetown, Barbadoes, free of charges, at 21*s.* per barrel - - -

Freight is chargea on the weight of the produce only; not of the produce and packages together. This allowance is of old standing, and is to be traced less to the reason of the case, than to the competition prevailing among shipmasters.

JOURNAL ENTRIES resulting from the preceding Accounts of Sale.

Folio of Ledger.	June 1843.	£	s.	d.
	THOMAS KEMBLE & Co. Drs. to SUNDRIES.			
4				
2	To SUGAR per *Ceres*.			
	Proceeds of 7 hhds., M. P. 1. to 7., sold by them at one month's credit, from 2d of April -	234	0	0
4	To COFFEE per *Vittoria*.			
	Proceeds of 20 tierces, J. F. 1. to 20., sold at one month's credit, from 3d of April -	676	5	6
		910	5	6
	SUGAR per CERES Dr. to SUNDRIES.			
2				
3	To INSURANCE ACCOUNT; for premium and policy -	5	15	6
3	To FREIGHT ACCOUNT; for freight, primage, and pierage -	24	4	11
4	To CUSTOMS INWARD; duty and entry -	107	5	0
4	CHARGES; dock dues, 52*s.* 10*d.*; warehouse rent, 35*s.* 2*d.*; landwaiters, 16*s.*; sampling, 3*s.* 6*d.*; and fire insurance, 6*s.* -	5	13	6
4	To THOMAS KEMBLE & Co.; brokerage, 1 per cent. -	2	6	9
3	To PROFIT AND LOSS; for commissions - £5 10 10			
	Interest on freight and duty - 1 12 3	7	3	1
4	To MORRIS PITTMAN; proceeds due 2d of May, 1843 -	81	11	3
		234	0	0
	COFFEE per VITTORIA Dr. to SUNDRIES.			
4				
3	To INSURANCE; for premium and policy -	19	6	9
3	To FREIGHT ACCOUNT; freight, primage, and pierage -	44	2	6
3	To CHARGES; dock dues, landwaiters, insurance from fire, and public sale charges -	13	18	7
4	To THOMAS KEMBLE & Co.; brokerage -	6	16	7
3	To PROFIT AND LOSS; for commissions -	20	8	1
4	To JAMES FORBES; nett proceeds due 3d of June, 1842. -	571	13	1
		£676	5	7

We have thus given an example of the transactions which form a great part of the business of our merchants; the export of manufactured goods, and the import and sale of produce received in return. Our next illustration shall be of a merchant's Cash-book. The following is an example of the entries for a month: —

Dr.	CASH.	£	s.	d.
1842.				
Mar. 1	To balance at the bankers -	2,550	0	0
3	To ship *Amelia*, received of James Jacobs, for freight - -	175	3	0
6	To bills receivable, received payment of No. 251. on J. Henderson - - - -	200	0	0
9	To James Bailey & Co., received payment of their draft at sight on J. Bainbridge - -	152	10	0
15	To William Spence & Co., received balance of their account	970	0	10
—	To debenture account, received drawback on tobacco shipped by the *Plover* - - -	15	8	0
18	To bills receivable, discounted at the bankers, Harrison & Co., due 15–18 March -	730	10	0
—	To profit and loss, received 5 per cent. discount, on paying with ready money the accounts per contra, not due till 6 months hence, from			
	James Johnson - £13 19 0			
	John Wilson - 2 2 0			
	Simon Frazer - 11 16 0			
	John Mackenzie - 18 7 6			
	James Borradaile & Co. 0 16 0			
	Molling & Co. - 16 8 3	63	8	9
		£4,857	0	7

1842.	PAID.	£	s.	d.
Mar. 2.	By bills payable, paid No. 261. to James Harding - -	145	10	0
4	By George and William Fox, paid their balance of account -	320	15	0
6	By John Smith and Sons, paid J. Jackson for their account -	98	0	0
7	By bills payable, paid No. 269. to J. Stewart - - -	300	0	0
18	By interest paid, discount on Harrison & Co., 2 months - -	6	1	10
	By J. Johnson, paid his bill of parcels - - - -	278	15	11
	By John Wilson do. -	42	0	0
	By Simon Frazer do. -	236	5	0
	By John Mackenzie do. -	367	10	0
	By James Borradaile & Co. do. -	32	2	0
	By Molling & Co. do. -	328	5	4
31	By charges paid, postage, and petty disbursements this month, per petty cash book - -	15	2	6
—	By balance, carried to next month	2,686	13	0
		£4,857	0	7

These transactions, when put into the Journal form, stand thus: —

Folio of Ledger.	MARCH, 1842. CASH Dr. to SUNDRIES. Received this month.	£	s.	d.
6	To SHIP AMELIA.			
	3d. Freight from James Jacobs - - - - -	175	3	0
6	To BILLS RECEIVABLE.			
	6th. Received payment of J. Anderson, due this day - - £200 0 0			
	18th. Discounted Harrison & Co., due 9th of May - - 730 10 0	930	10	0
7	To JAMES BAILEY & Co.			
	9th. Received their draft on Bainbridge, due - - - - -	152	10	0
7	To WILLIAM SPENCE & Co.			
	15th. Received balance of their account - - - - -	970	0	10
8	To DEBENTURE ACCOUNT.			
	15th. Drawback on tobacco by the *Plover* - - - - -	15	8	0
3	To PROFIT AND LOSS.			
	18th. Received discount on sundry accounts, per cash book - - -	63	8	9
		£2,307	0	7

Folio of Ledger.	SUNDRIES Drs. to CASH. Paid this month as follows:	£	s.	d.
6	BILLS PAYABLE.			
	2d. Paid No. 261. - - - - -	£145	10	0
	7th. Do. 269. - - - - -	192	15	0
		338	5	0
4	CUSTOMS INWARD.			
	23d. Paid duty on sugar, per *Ceres*, 79 cwt. 25 lbs. at 27*s.* per cwt. -	106	19	0
	Entry - - - - - -	0	6	0
		107	5	0
8	SIMON FRAZER.			
	18th. Paid his bill of parcels - - - -	236	5	0
1	26th. Paid J. Jackson for his account - - - -	98	0	0
		334	5	0
8	INTEREST ACCOUNT.			
	18th. Paid discount on Harrison & Co. - - - -		6	1 10
1	JAMES JOHNSON.			
	18th. Paid his bill of parcels - - - - -		278	15 11
1	JOHN WILSON.			
	18th. Paid his bill of parcels - - - - -		42	0 0
1	JOHN MACKENZIE.			
	18th. Paid his bill of parcels - - - - -		367	10 0
2	JAMES HORRADAILE & Co.			
	18th. Paid their bill of parcels - - - - -		32	2 0
2	MOLLINO & Co.			
	18th. Paid their balance of account - - - - -		328	5 4
8	GEORGE AND WILLIAM FOX.			
	21th. Paid their balance of account - - - - -		320	15 0
3	CHARGES.			
	31st. Paid postage, and petty disbursements this month - - -		15	2 6
		£2,170	7	7

The above shows, that for all sums received, the account of cash is made debtor, and the parties paying the same are made creditors; while for all sums paid, the cash is credited, and the parties receiving them are made debtors.

We are next to state the mode of entering bill transactions.

BILLS RECEIVABLE. — We have seen by the Balance sheet that several correspondents are indebted to the house. The debts of correspondents abroad may be reduced by remitting either bills, specie, or merchandise for sale: from correspondents in England, bills are almost the only mode of remitting. When bills come to hand, the rule is to enter each in the bill book, with a minute statement of the date, term, sum, and other particulars, thus: —

No.	*Received.*	*From whom.*	*Drawn by*	*Date.*	*Term.*	*Drawn on*	*To order of*	*Due.*	*Sum* £	*How disp. of.*
630	8 Mar.	Bailey & Co.	W. Adams	Belfast, 1 Mar.	2 mths.	T. Jones, Dublin	A. Williams	1—4 May	350	Rainier & Co.
631	10 do.	Watson & Co.	J. Jacobs	Cork, 3 do.	1 do.	J. Adams, London	G. Wilson	3—6 April	135	Smith & Co.
632	12 do.	Spence & Co.	T. Johnson	Falmo. 5 do.	2 do.	T. Allan, Liverpool	D. Jones	5—8 May	260	Overend & Co.

The Journal Entries for these bills are as follows: —

Folio of Ledger.	BILLS RECEIVABLE Dr. to SUNDRIES. For the following remitted this month.	£	s.	d.
7	To JAMES BAILEY & Co.			
	No. 630. on T. Jones, Dublin, due 4th of May - - - -	350	0	0
7	To T. WATSON & Co.			
	No. 631. on J. Adams, London, due 6th of April - - - -	135	0	0
7	To WILLIAM SPENCE & Co.			
	No. 632. on T. Allan, Liverpool, due 8th of May - - - -	260	0	0
		£745	0	0

BILLS PAYABLE. — The entries under this head are, of course, wholly different from the preceding, being for acceptances of the house given on account of sums owing by it to correspondents. Each acceptance is entered in the book of bills payable, thus: —

No.	*Drawn by*	*Place and Date.*	*To Order of*	*On Account of*	*Term.*	*When accepted.*	*Due.*	*Sum.*
151	J. Allan & Co.	Jamaica, 15 Jan.	J. Jones	J. Allan & Co.	90 days' sight	12 March	10—13 June	£175 10 0
152	G. & W. Fox	Falmouth, 7 Mar.	J. Thomson	G. & W. Fox	15 days' date	14 do.	22—25 Mar.	73 15 0
153	J. Clark	Hull, 5 Mar.	G. Barclay	J. Smith & Sons	1 month's date	16 do.	5—8 ditto.	132 10 0

The Journal entries for these bills are as follows: —

Folio of Ledger.	SUNDRIES Drs. to BILLS PAYABLE. For the following bills accepted.	£	s.	d.
2	JAMES ALLAN & Co. No. 151. their draft, due 13th of June - - - -	175	10	0
8	G. & W. FOX. No. 152. their draft, due 25th of March - - - -	73	15	0
1	SIMON FRAZER. J. Clark's draft on his account, due 8th of March - - -	132	10	0
		£381	15	0
	MAY, 1842.			
	CASH Dr. to THOMAS KEMBLE & CO.			
1	27th. Received from them proceeds of sugar per *Ceres* - - - -	234	0	0
	Less their brokerage - - - - -	2	6	9
		231	13	3
4	30th. Received coffee per *Victoria* - - - - -	676	5	6
	Less brokerage - - - - -	6	16	7
		669	8	11
		£901	2	2

The preceding entries, few as they are compared to the monthly transactions of a house of business, are sufficient to show the nature of a Journal as well as of the sub-

sidiary books, (for cash, bills, invoices, and account sales,) from which it is composed. The Journal, being a complete record of the business of the house, is very varied and comprehensive in its nature, and may be termed an index to every book of consequence in the counting-house. But while in the cash book every payment or receipt is entered on the day it takes place, and in the bill books every bill is registered on the day it comes to hand, or is accepted, the Journal entries, being completed only at the end of the month, admit of being combined to a considerable extent, so as to exhibit a number of transactions in collective sums. Thus all the acceptances of the house paid in the course of the month appear in the Journal entry of Bills Payable Dr. to Cash: they are arranged in this entry as they fall due, after which the whole are added into one sum, which sum alone needs be carried to the Ledger. In like manner, all bills receivable, whether discounted, or kept by the house till they fall due, are collected under the head of Bills Receivable Dr. to Cash, summed up together, and carried to the Ledger in one line; a point of great importance, as we shall see presently, in facilitating the balance of the Ledger.

We proceed to give a specimen of the Ledger: the whole of the Journal entries in the preceding pages, when posted into the Ledger, will stand thus: —

Dr. STOCK. Cr.

1842.	Fo.		£ s. d.	1831.	Fo.		£ s. d.
Jan. 1	1	To sundries - - -	8,753 15 0	Jan. 1	1	By sundries - -	32,391 17 10

Dr. CASH. Cr.

Jan. 1	1	To stock - - -	2,550 0 0	Mar. 31		By sundries - -	2,170 7 7
Mar. 1	4	To sundries - - -	2,307 0 7				
May 30	15	To T. Kemble & Co. -	901 2 2				

Dr. EXCHEQUER BILLS. Cr.

Jan. 1	1	To stock - - -	5,310 0 0				

Dr. THREE AND A HALF ℘ CENT. STOCK. Cr.

Jan. 1	1	To stock - - -	5,400 0 0				

Dr. JAMES JOHNSON, London. Cr.

Mar. 1	4	To cash - - -	278 15 11	Mar. 6	9	By J. Allan & Co. -	278 15 11

Dr. JOHN WILSON, London. Cr

Mar. 1	4	To cash - - -	42 0 0	Mar. 6	9	By J. Allan & Co. -	42 0 0

Dr. SIMON FRAZER, London. Cr.

Mar. 26	4	To cash - - -	334 5 0	Jan. 1	2	By stock - -	960 15 0
31	5	To bills payable - -	132 10 0	Jan. 6	9	By J. Allan & Co. -	236 5 0

Dr. JOHN MACKENZIE, London. Cr.

Mar. 8	4	To cash - - -	367 10 0	Mar. 6	9	By J. Allan & Co -	367 10 0

Drs. JAMES BORRADAILE & Co., London. Crs.

Mar. 1	4	To cash - - -	32 2 0	Mar. 6	9	By J. Allan & Co. -	32 2 0

Drs. MOLLING & Co., London. Crs.

Mar. 1	4	To cash - - -	328 5 4	Mar. 6	9	By J. Allan & Co. -	328 5 4

Drs. J. ALLAN & Co., Kingston, Jamaica. Crs.

Mar. 6	9	To sundries - -	1,443 10 0	Jan. 1	2	By stock - - -	1,150 10 0
31	11	To bills payable - -	175 10 0				

Dr. SUGAR BY THE CERES. Cr.

April 2	11	To sundries - -	234 0 0	April 2	11	By T. Kemble & Co. -	234 0 0

Dr. FREIGHT ACCOUNT. Cr.

				Mar. 6	9	By J. Allan & Co. -	38 10 6
				April 2	11	By sugar per *Ceres* -	24 11 11
				May 3	13	By coffee per *Victoria* -	44 2 6

Dr. INSURANCE ACCOUNT. Cr.

				Jan. 1	2	By stock - - -	1,880 15 0
				Mar. 6	9	By J. Allan & Co. -	33 18 9
				April 2	11	By sugar per *Ceres* -	5 16 6
				May 3	13	By coffee per *Victoria* -	19 6 9

Dr. CHARGES. Cr.

			£	s.	d.				£	s.	d.
Mar. 3	4	To cash	15	2	6	Mar. 6	9	By J. Allan & Co.	11	17	6
						April 2	11	By sugar per *Ceres*	5	13	6
						May 3	13	By coffee per *Vittoria*	13	18	7

Dr. PROFIT AND LOSS. Cr.

									£	s.	d.
						Mar. 6	9	By J. Allan & Co.	74	5	0
						Mar. 8	4	By cash	63	8	9
						April 2	11	By sugar per *Ceres*	7	3	1
						May 3	13	By coffee per *Vittoria*	20	8	1

Dr. CUSTOMS INWARD. Cr.

			£	s.	d.				£	s.	d.
April 2	4	To cash	107	5	0	April 2	11	By sugar per *Ceres*	107	5	0

Dr. COFFEE PER VITTORIA. Cr.

			£	s.	d.				£	s.	d.
April 3	13	To sundries	676	5	6	April 3	11	By T. Kemble & Co.	676	5	6

Dr. MORRIS PITTMAN, Trinidad. Cr.

									£	s.	d.
						Jan. 1	2	By stock	1,370	5	0
						April 2	11	By sugar per *Ceres*	81	11	3

Dr. JAMES FORBES, Demerara. Cr.

									£	s.	d.
						Jan. 1	2	By stock	720	5	0
						May 3	13	By coffee per *Vittoria*	571	13	1

Drs. THOMAS KEMBLE & Co., London. Crs.

			£	s.	d.				£	s.	d.
April 3	11	To sundries	910	5	6	April 7	11	By sugar per *Ceres*	2	6	9
						30	13	By coffee per *Vittoria*	6	16	7
						May 30	15	By cash	901	2	2
									910	5	6

Dr. BILLS RECEIVABLE. Cr.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	7,300	15	0	Mar. 1	4	By cash	930	10	0
Mar. 3	5	To sundries	745	0	0						

Dr. BILLS PAYABLE. Cr.

			£	s.	d.				£	s.	d.
Mar. 7	4	To cash	338	5	0	Jan. 1	2	By stock	2,359	10	0
						Mar. 3	5	By sundries	381	15	0

Dr. SHIP AMELIA. Cr.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	3,000	0	0	Mar. 1	4	By cash	175	3	0

Dr. ADVENTURE IN IRISH LINEN. Cr.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	2,467	0	0						

Drs. JAMES BAILEY & Co., Liverpool. Crs.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	1,350	10	0	Mar. 3	4	By cash	152	10	0
						Mar. 9	5	By bills receivable	350	0	0

Drs. THOMAS WATSON & Co., Dublin. Crs.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	3,530	12	0	Mar. 3	5	By bills receivable	135	0	0

Drs. WILLIAM SPENCE & Co., Plymouth. Crs.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	970	0	10	Mar. 3	4	By cash	970	0	10
						Mar. 5	5	By bills receivable	260	0	0

Drs. GEORGE AND WILLIAM FOX, Falmouth. Crs.

			£	s.	d.				£	s.	d.
Mar. 4	4	To cash	320	15	0	Jan. 1	2	By stock	320	15	0
Mar. 6		To bills payable	73	15	0						

Dr. DEBENTURE ACCOUNT. Cr.

			£	s.	d.				£	s.	d.
Jan. 1	1	To stock	513	0	0	Mar. 5	4	By cash	15	8	0

Dr. INTEREST ACCOUNT. Cr.

			£	s.	d.				£	s.	d.
Mar. 8	4	To cash	6	1	10						

The Ledger is thus a register of all the entries in the Journal; and a register so arranged as to exhibit on one side all the sums at Debtor; on the other all those at Creditor. It is kept in the most concise form, the insertions in it hardly ever exceeding a line each, or containing more than the title of the entry in the Journal. On opening a page in the Ledger, a person unacquainted with book-keeping is apt to consider this brevity unsatisfactory; and it was formerly the practice to add in each line a few explanatory words. Thus the entries in the account of Simon Frazer, which in our preceding page are briefly

		£	s.	d.
March 26.	To cash - - - - - - - - -	334	5	0
31.	To bills payable - - - - - - - -	132	10	0

would, at an earlier date in the practice of book-keeping, have been expanded to

		£	s.	d.
March 18.	To cash paid for goods per Rawlins - - - -	236	5	0
26.	To ditto paid J. Jackson for his account - - -	98	0	0
31.	To bills payable, paid J. Clark's draft for his account - -	132	10	0

This method is still followed in some counting-houses, and such explanatory additions are certainly conducive to clearness; but they are practicable only in a house of limited business: wherever the transactions are numerous and varied, they should be left out of the Ledger, for two reasons; they increase greatly the labour of the book-keeper, and they never can be so full or circumstantial as to supersede the account current book.

The same Ledger may continue in use from one to five years, according to the size of the book, or the extent of the transactions of the house. On opening a new Ledger, it is proper to place in succession accounts of the same class or character: thus, — Stock account ought to be followed by that of the three per cent. consols, Exchequer bills, or other property belonging to the house; and if the business be with the West Indies, it is fit that accounts with Jamaica should be placed near those with Demerara, Trinidad, and other sugar colonies.

Balancing the Ledger. — This important operation is performed by adding up the Debtor and Creditor side of every account in the Ledger, ascertaining the difference or balance in each, and carrying such balance, as the case may be, to the Debtor or Creditor column in the balance sheet. On closing, for example, a few of the preceding Ledger accounts, we find them to stand thus: —

Debtors.				Creditors.			
	£	s.	d.		£	s.	d.
Cash - - - - -	3,587	15	2	Simon Frazer - - - -	730	5	0
James Allan & Co. - - -	408	10	0	Freight account - - -	107	4	11

And so on with every account except Stock, which, having no entries in the current year, is put in the balance sheet exactly as it was in the beginning of the year. Including Stock, the total at the Debtor side of the balance sheet ought to agree exactly with the total at the Creditor side; and if it do not, it is a rule in all well-regulated counting-houses to follow up the examination perseveringly, until they are made to agree. The apparent difference may not exceed a few shillings, or a few pence; still the search is continued, because the smallest discrepancy shows the existence of error, and to an extent perhaps greatly beyond the fraction in question. It often happens, indeed, that, as the examination proceeds, the difference undergoes a change from a smaller to a larger amount, and without increasing the difficulty of discovering the error, which is as likely to have occurred in the case of a large as of a small sum. Differences, when in round sums, such as 10*l.* 100*l.* or 1000*l.*, generally lie in the addition; fractional sums frequently in the posting. All this, however, is uncertain; for the error or errors may be in any month in the year, and in any one of the thousand entries and upwards which have been made in the course of it. Hence the necessity of examining the whole; and young book-keepers are often obliged to pass week after week in the tedious labour of revising, adding, and subtracting. On the other hand, there are sometimes examples of the balance being found on the first trial; but such cases are rare, and occur only to careful and experienced book-keepers. The only effectual means of lessening the labour and perplexity of balancing the Ledger, is to exercise great care in every stage of the book-keeping process; as well in making the additions in the Journal, as in posting from the Journal into the Ledger, and casting up the Ledger accounts; and, lastly, in adding up the balance sheet, which is generally of formidable length.

Accuracy in addition is one of the main requisites in a clerk, and particularly in a book-keeper. Of the extent to which it may be attained by continued practice, those only can judge who have experienced it themselves, or have marked the ease and correctness with which clerks in banking-houses perform such operations. They are in the habit of striking a daily balance which comes within small compass; but a merchant's balance, comprising the transactions of a year, extends commonly over a number of folio pages. It is advisable, therefore, to divide each page into portions of ten lines each, adding such portions separately. This lessens the risk of error, as it is evidently easier to add five or six such portions in succession, than to do at once a whole folio containing fifty or sixty sums.

Another important point towards agreeing a balance, is to limit carefully the number of Ledger entries; in other words, to comprise as much as possible in those aggregate sums in the Journal which are posted in the Ledger. Thus, in the case of the monthly entries for bills, whether receivable or payable, while the inner column of the Journal contains the amount of each specific bill, the final column — that which is carried to the Ledger—should, and generally does, comprise a number of bills in one sum. Entries

in the cash book, which generally form so large a proportion of the transactions of the month, are carried by some book-keepers directly from the cash book into the Ledger, without an intermediate arrangement in the Journal form. In some lines of business this plan may answer; but as a general rule it is better to take the trouble of journalising the cash, thereby comprising in 30 or 40 Ledger entries the transactions of the month, which, when posted separately, would exceed 100. The time required for re-writing or rather re-casting them, will, in most cases, be amply made good, by exhibiting the cash in a proper form, and by facilitating the balance of the Ledger at the close of the year.

We have said the close of the year, because, in nine mercantile houses out of ten, that is the period for striking a balance. In some branches of trade, however, the case is otherwise. Thus, among West India merchants, the 30th of April is the time of balancing, because at that season the sales of the preceding crop are, in general, completed, and those of the current year not yet begun.

Arrears in book-keeping ought to be most carefully avoided — calculated as they are to engender mistakes, and to produce loss from delay in adjusting accounts. The practice of balancing the ledger every six months, and of transmitting as often accounts current to the correspondents and connections of merchants, will, it is to be hoped, become general. It is, however, hardly practicable in cases where, as too often happens in the lesser mercantile establishments, the book-keeper is charged with a share of the active management. Exemption from interruption, and removal from the bustle of current business, are main requisites to accuracy and despatch in accounts. In examining, or, as it is called, collating the books, the book-keeper requires not only a retired apartment, but the assistance of a clerk for the purpose of calling them over. A similar arrangement for another purpose—we mean for composing the Journal, the book-keeper dictating from the subsidiary books to a clerk whose writing forms the draught or rough copy of the Journal, has as yet been seldom adopted; although, when properly applied, it is highly conducive both to accuracy and expedition.

A Ledger must, of course, have an index; but it is very brief, containing merely the titles of the accounts and a reference to the page, as follows: —

	Folio.		Folio.
Allan & Co., James - - - -	2	Bailey & Co., James - - - -	7
Amelia, ship - - - - -	6	Bills payable - - - - -	6

The Subsidiary Books. — In former times, when business in this country was conducted by most persons on a very limited scale, the accounts of a number of merchants, or rather of those dealers whom we should now think it a compliment to call merchants, were often kept on a plan somewhat like that at present followed by our shopkeepers. The merchant or his chief clerk kept a daily record of transactions, whether sales, purchases, receipts, or payments, in a diary, which was called a Waste-book, from the rude manner in which the entries or rather notices in it were written, being inserted, one by one, soon after the transactions in question took place. From this diary the Journal and Ledger were posted; and book-keeping by double entry being in those days understood by few, one person frequently kept the books of several merchants, passing one or two days in the week at the house of each, and reducing these rough materials into the form of regular entries. In process of time, as transactions multiplied and mercantile business took a wider range, separate books were more generally required for particular departments, such as a bill book for all bills of exchange, and a cash book for all ready money transactions. This had long been the case in the large mercantile towns of Italy and Holland; and above a century ago it became a general practice in London and Bristol, which were then the only places of extensive business in England. But in English, as in foreign counting-houses, the bill book and even the cash book were long considered as little more than memoranda of details; not as books of authority, or as fit documents for Journal entries: for that purpose the diary only was used. In time, however, the mode of keeping these subsidiary books improved, and merchants became aware that, when cash or bill transactions were properly entered in them, the Journal might be posted from them as well as from the diary.

Similar observations are applicable to the other subsidiary books, viz. an invoice book for goods shipped, and an account of sales book for goods received and sold. When from the gradual improvement in the management of counting-houses these books were kept in a manner to supply all that was wanted for Journal entries, the use of the diary was dispensed with for such entries also. And at last it was found, that in all well-regulated counting-houses the books kept for separate departments of the business were sufficient for the composition of the Journal, with the exception of a few transactions out or the regular course, which might be easily noticed in a supplementary book called a Petty Journal, or a book for occasional entries. The consequence was, that the diary or waste book, formerly the groundwork of the Journal and Ledger, became excluded from every well-regulated counting-house. This has long been the case, and the name

of waste book would have been forgotten, were it not found in the printed treatises on book-keeping which have appeared from time to time, and have been generally composed by teachers in schools or academies, who, unacquainted with the actual practice of merchants, were content to copy and reprint what they found laid down in old systems of book-keeping.

The subsidiary books required in a counting-house are, the Cash book;

Book of Acceptances of the house, or Bills Payable;

Book of Bills receivable, or bills on other merchants which are or have been in possession of the house;

Bought book, or book for bills of parcels;

Invoice book, or register of goods sold or exported;

Account of Sales book;

Insurance Policy book; containing copies of all policies of insurance;

Petty Journal, or book for such occasional entries as do not belong to any of the preceding.

Such are the authorities from which it is now customary, in every well-regulated house, to compose the Journal. Their number indicates a repartition or subdivision, to a considerable extent, of counting-house work, and nowhere is such repartition productive of greater advantage. How much better is it to enter all bills receivable in one book, all bills payable in another, and all cash transactions in a third, than in any way to blend these very distinct entries. The effect of this subdivision is to simplify the Journal entries in a manner highly conducive to accuracy and despatch; and to present such means of checking or examining them, that many transactions may be stated, and an account extended over a number of folios, without a single error.

The use of most of the subsidiary books is sufficiently pointed out by their names; but it may be well to add a few remarks on the "Bought Book," or receptacle for the accounts of goods purchased. A bill of parcels is the name given to the account of goods supplied by a manufacturer, tradesman, or dealer, to a merchant. Such accounts soon become numerous, and it is evidently of consequence to adopt the best method of keeping them. In former times it was the practice to fold them up in a uniform size, and after writing on the back the names of the respective furnishers, to put them away in bundles. But wherever the purchases of a merchant are extensive, and the bills of parcels numerous, the better mode, after arranging them alphabetically, is to paste them in a large book, generally a folio, made of blue or sugar-loaf paper: this book to have its pages numbered, and to have an alphabetical index. Any single bill of parcels may thus be referred to with the same ease as we turn to an account in a ledger; and one of these folios may be made to hold a very great quantity of bills of parcels; as many as would form a number of large bundles when tied up on the plan of former times.

Book of Bills Payable. — The notice, or, as it is termed, advice of bills payable after sight, generally comes to hand before the bills themselves. As the time of the arrival of the latter is uncertain, the better plan is not to enter them from the advice among the other bills payable, but to appropriate a space of 10 or 12 pages at the beginning or end of the book of bills payable, and to insert there the substance of the advice received.

There are a few books in every counting-house which do not form part of the vouchers or materials for the Journal; viz. the Account Current book, containing duplicates of the accounts furnished by the house to their different correspondents and connections;

The Letter-book, containing copies of all letters written to the correspondents or connections of the house;

The Petty Cash book, or account of petty disbursements, the sum of which is entered once a month in the cash book;

The Order book, containing copies of all orders received;

The Debenture book, or register of drawbacks payable by the Custom-house.

It was formerly a practice in some houses for the book-keeper to go over the letter book at the end of each month, that he might take note of any entries not supplied by the subsidiary books. This, however, is now unnecessary; these books, when carefully kept, containing, in one shape or other, every transaction of the house.

The Principle of Double Entry. — From these explanations of the practice of book-keeping, we must call the attention of our readers to a topic of more intricacy — the origin of the present system, and the manner in which it was adopted. To record the transactions of a merchant in a Journal or day book was an obvious arrangement, and to keep a Ledger or systematic register of the contents of the Journal was a natural result of his business, particularly when conducted on credit. Such, in a rude form, are the books of our shopkeepers, who enter their sales and purchases in a day book, and in their Ledger carry the former to the Dr. of their customers, the latter to the Cr. of the wholesale dealers who supply them with goods. By making at the end of the year a list of the sums due to him by his customers, and of those due by him to wholesale

dealers, a shopkeeper may, after adding to the former the value of his stock on hand, make out an approximate statement of his debts and assets. Now, that which in this manner is done indirectly and imperfectly, it is the object of double entry to do with method and certainty. The shopkeeper makes out a list of debtors on one side and of creditors on the other, but he cannot make them balance, because his entries have been single; that is, they have had no counterpart. On making a purchase of cottons from Messrs. M'Connell of Manchester, or of woollens from Messrs. Gott of Leeds, he merely enters the amount to their credit, but he makes no one Dr. to them, because the goods are not sold; and to introduce an imaginary account would be too great a refinement for a plain practical man. But a person accustomed to double entry would, without any effort of thought, make "Printed Calicoes" Dr. to Messrs. M'Connell, and "Kerseymeres" Dr. to Messrs. Gott, for the respective amounts; after which, as the sales proceeded, he would make the buyers Drs. to these accounts for the amount of their purchases.

We thus perceive that the intricacy in the application of double entry was not with the personal so much as with the nominal accounts. Let us refer to the country where book-keeping was first studied, and take as an example the case of Doria, a merchant in Genoa, shipping, in a former age, silk, of the value of 200*l.*, bought from Flori, in Piedmont, to Henderson and Co., silk manufacturers, in England, on the terms of charging, not an additional price, but a commission of 5 per cent. with interest until reimbursed his advance. In entering the transaction, Doria's book-keeper would, as a matter of course, make Hendersons debtors to Flori 200*l.* for the cost of the silk; but he might not so readily find a creditor for the 10*l.* commission, or the 7*l.* interest eventually due on the advance. The custom in this primitive æra of book-keeping probably was, to introduce the firm of the house into their books, making Hendersons debtors to Doria for the 10*l.* and 7*l.*; but as the practice of book-keeping improved, it was found preferable to avoid inserting, on any occasion, the firm of the house, and to substitute nominal accounts, such as, commission, interest, bills payable, bills receivable. These, attention and practice rendered in time familiar to the book-keeper, who learned to open his Journal at the beginning of a year by making the parties who owed balances to the house debtors, not to the firm by name, but to Stock; and those to whom the house was indebted, creditors by Stock. As the transactions of the year proceeded, he made those to whom money was paid debtors, not to the firm of the house, but to Cash; and those for whose account bills were accepted debtors to Bills payable; so that book-keeping by double entry assumed its present form gradually and almost imperceptibly.

What are the advantages of this method compared to that of single entry? First, it supplies a test of accuracy, inasmuch as, the entries on the debtor side of the Ledger being equal to those on the creditor side, their respective totals ought, as a matter of course, to balance. After going through this proof, personal accounts, of whatever length, may be settled with confidence; while in a general account, such as kerseymeres or printed calicoes, the value sold and the value remaining on hand may be ascertained by merely balancing the account in the Ledger, without the repeated references to the sales book that would otherwise be required. Without double entry, a dealer could hardly estimate his property unless he took stock; but with it an extraction of the Ledger balances fulfils that object, and stock-taking, however proper as a test of the honesty of servants, becomes quite unnecessary as a means of calculation. In short, in regard to any person in trade, whether merchant, dealer, or manufacturer, double entry forms the connecting link of his accounts, and affords a ready solution of any inquiry as to the appropriation, increase, or diminution of his capital.

This advantage may fortunately be obtained without any great sacrifice of time or labour. Of the books of dealers, manufacturers, and retailers, nine parts in ten may continue to be kept by single entry; for the addition of a few pages of double entry in the form of a summary, at the end of the month or quarter, will be sufficient to exhibit the result of a great extent of transactions.

Nominal Accounts. — Of these our limits permit us to notice only two; Profit and Loss, and Merchandise. The former contains on the creditor side all the entries of commissions earned, and gains obtained on particular adventures; while the debtor side exhibits the loss incurred, whether by bad debts or by unsuccessful purchases. Every house keeping regular books must have a profit and loss account, but a merchandise account is altogether optional. Those who have such a head in their Ledger are accustomed to make it Dr. to the dealers or furnishers from whom they make purchases, and to credit it in return by the correspondents or connections to whom they make sales. In many houses, however, there is no such intermediate account; the parties to whom the goods are sent being made Drs. at once to the furnishers of the goods, as in the case of the shipment to Jamaica stated in our preceding pages.

A merchant, before estimating his profits, ought to charge interest on each head of

investment. His clear profit cannot be ascertained without it; and the practice of charging it is a lesson to him to hold no property that does not afford, at least, interest on his advances.

Mercantile books and accounts must be kept in the money of the country in which the partners reside. A house in Rotterdam composed of English partners necessarily keep their accounts in Dutch money, although their transactions may be chiefly with England. Further, books, it is obvious, can be kept in only one kind of money; and when a merchant in England receives from a distant country, accounts which cannot at the time be entered in sterling for want of a fixed exchange, these accounts should be noted in a separate book, until, the exchange being ascertained, they can be entered in the Journal in sterling.

A book-keeper will do well to avoid all such puzzling distinctions as "J. Johnson, my account with him;" and "J. Johnson, his account proper;" on the plain ground that every account in the Ledger ought to be the general account of the person whose name it bears.

Errors excepted. — This expression is merely a proviso, that if any mistakes be discovered in the account in question, they shall be open to correction.

Accounts Current. — An account current generally contains all the transactions of the house with one of its correspondents during a given time, generally 6 or 12 months. The following is an example: —

Messrs. James Allan & Co., Jamaica, in Account Current with Henry Barclay & Co. London.

1842.	Drs.	£	s.	d.	Days to 31 Dec.	Interest.	1842.	Crs.	£	s.	d.	Days to 31 Dec.	Interest.
June 30	To balance of last account	867	10	0	184	1,595	Aug. 10	By proceeds of 20 tierces coffee, per *Louisa*, due Sept. 10.	410	0	0	112	459
July 2	To your draft to J. Smith, due Aug. 15.	128	0	0	140	179		By your remittance on J. Austin, due Oct. 10.	350	0	0	82	287
July 9	To invoice of goods per Amelia, due Oct. 9.	752	0	0	83	624	Sept. 15	By proceeds of 17 hhds. sugar, per *Hercules*, due Oct. 15.	238	0	0	77	173
Oct. 10	To cash paid J. Harvey on your account	75	10	0	82	62	Sept. 20	By cash received from J. Johnson on your account	260	0	0	102	265
	To insurance on produce shipped by you in the *Ann*, Nokes, £1,100, at 2 guineas per cent. £29 8 0 Policy 3 10 0	32	18	0			Dec. 31	Balance of interest carried to Dr.	-	-		-	1,276
Dec. 31	Postage and petty charges during the half year	1	15	0				Balance of account carried to your Dr. in new account	621	8	7		
	To commission, ½ per cent. on £203 paid, Do. on £260 received on your account	4	6	0									
	To balance of interest this half year, 1,276 divided by 73, is	17	9	7									
		£1,879	8	7		2,460			£1,879	8	7		2,460

Errors excepted.

London, 31st of December, 1842. Henry Barclay & Co.

We have here on the Dr. side all the payments made or responsibilities incurred for the correspondents in question, and on the Cr. side the different receipts on their account. The interest for the half year, the commission on receipts and payments, the postage and petty charges, being then added, the account may be closed and the balance carried to next year. Copies of accounts current ought to be sent off as soon as possible after the day to which they are brought down; and with that view they ought to be written out from the Ledger before the close of the year or half year, particularly as the entries for interest and commission can be made only after they are written out. The whole ought then to be copied into the account current book.

But in some counting-houses the account current book, instead of being copied from the Ledger and Journal, is posted, like the latter, from the bill book, the cash book, the invoice book, and the account of sales book. It is then considered a check on the Journal and Ledger; and from the comparative ease with which it is posted, may be completed and made use of before the latter are fully brought up. This is certainly an advantage in houses where, from pressure on the book-keeper, the Journal and Ledger are in arrear, but such ought never to be the case for any length of time; while as to the former point — that of forming a check on the Journal and Ledger — the fact is, that these books, from the mode in which they are kept, are much more likely to be correct than the account current book.

Printed Works on Book-keeping. — To the publications of old date by teachers have succeeded, in the present age, several treatises on book-keeping by accountants. Some of these are of very limited use, being directed more to recommend a favourite practice of the author in some particular branch of book-keeping, than to convey a comprehensive view of the system. The only works on the subject entitled to that character are two: one by the late Benjamin Booth, published above thirty years ago; the other by Mr. Jones, an accountant in London, printed in 1831. Booth was a man of ability,

who had experience both as a merchant and a book-keeper, having passed one part of his life in London, the other in New York. The reader of his work finds a great deal of information in short compass, without being perplexed either by superfluous detail or by fanciful theory. *

The form of Mr. Booth's Journal and Ledger is similar to what we have given in the preceding pages, and to the practice of our merchants for more than a century: it was by much the best work on book-keeping, until Mr. Jones devised several improvements calculated to lessen the risk of error in both Journal and Ledger. One of these improvements is the use of two columns for figures in each page of the Journal, one for the Drs., the other for the Crs.: by inserting each sum twice, the book-keeper obtains the means of proving the Journal additions page by page. The posting from the Journal to the Ledger is also simplified and rendered less subject to error by the use of these columns. In regard to the great task of balancing the Ledger, Mr. Jones's plan is to do it quarter by quarter, making use of a separate book, called a balance book, in which are inserted the totals on each side of the Ledger accounts at the end of 3 months. By these means, the agreement of the general balance is made a matter of certainty after completing the additions. Other parts of Mr. Jones's book, viz. his *formulæ* for books on the single entry plan, and for the accounts of bankers, contain suggestions of evident utility. His volume consists of two parts: the printed part (120 pp.) containing the treatise, with directions; and the lithographed part (140 pp.) giving copious examples in two sets of books, one kept by single, the other by double entry. If, on a reimpression, the author were to divide the work, and to sell the single entry part separately from the double entry, the price of each might be moderate, and a great service would be rendered to the mercantile public.

BOOKS (Ger. *Bücher*; Du. *Boeken*; Da. *Böger*; Sw. *Böcker*; Fr. *Livres*; It. *Libri*; Sp. *Libros*; Port. *Livros*; Rus. *Knigi*; Pol. *Ksiaski*, *Ksiegi*; Lat. *Libri*), written or printed treatises on any branch of science, art, or literature, composed in the view of instructing, amusing, or persuading the reader.

Copyright is the right which the authors of books or treatises claim to the exclusive privilege of printing, publishing, and selling them.

Books are sometimes blank, as account books; but these enjoy no peculiar privileges, and do not come within the scope of our inquiries.

Books are divided into *classes*, according to the mode in which the sheets of the paper on which they are printed or written are folded: viz. *folio*, when the sheet is folded into two leaves; *quarto*, when folded into *four*; *octavo*, when folded into *eight*; *duodecimo*, when the sheet is folded into *twelve*, &c. In making these classifications, no attention is paid to the *size* of the sheet.

I. *Progress and present State of the Law as to the Copyright of Books.* — It has been doubted whether, in antiquity, an author had any exclusive right to a work, or whether, having once published it, he could restrain others from copying it, and selling copies. We incline to think that he could. The public sale of copies of works is often referred to in the classics; and in such a way as warrants the inference that they were productive to the author, which could not have been the case had every one been permitted to copy them at pleasure. Terence, in one of his plays (*Prol. in Eunuch.* l. 20.), says, *Fabulam, quam nunc acturi sumus, postquam ædiles emerunt*; but why should the magistrates have bought it, had it been free to every one to copy it? Martial, in one of his epigrams, says —

> *Sunt quidam, qui me dicunt non esse poëtam;*
> *Sed qui me vendit, bibliopola, putat.* Mart. lib. xiv. Ep. 194.

This evidently conveys the idea that he had assigned the right to sell his book to a single person who profited by it. Passages to the same effect may be found in Horace (*De Arte Poeticâ*, line 345.), Juvenal (*Sat.* 7. line 83.), &c.

It would have been singular, indeed, had it been otherwise. Of all the species of property a man can possess, the fruits of his mental labours seem to be most peculiarly his own. And though it may, we think, be shown, that many serious inconveniences would result from giving the same absolute and interminable property over ideas that is given over material objects, these inconveniences could hardly have been perceived in antiquity.

It will also be observed, that in antiquity a copyright was of much less value than in modern times. Books could then only be multiplied by copying them with the pen; and if any one chose privately to copy a work, or to buy it of another, it must have been very difficult to hinder him: but when printing had been introduced, the greater cheapness of books not only extended the demand for them in far greater proportion, and consequently rendered copyrights more valuable, but it also afforded the means of pre-

* The title of the book is "A Complete System of Book-keeping, by Benjamin Booth." London, 1799, thin 4to. Printed for Grosvenor and Chater, and for the late J. Johnson, St. Paul's Churchyard.
Mr. Jones's book is entitled "The Science of Book-keeping exemplified." 4to. London, 1831. 4*l.* 4*s.*

venting their piracy. Printing is not a device by which a few copies of a book can be obtained at a cheap rate. It is productive of cheapness only when it is employed upon a large scale, or when a considerable impression is to be thrown off. And hence, after its invention, piracy could hardly be committed in secret: the pirated book had to be brought to market; the fraud was thus sure to be detected, and the offending party might be prosecuted and punished.

For a considerable time after the invention of printing, no questions seem to have occurred with respect to copyrights. This was occasioned by the early adoption of the licensing system. Governments soon perceived the vast importance of the powerful engine that had been brought into the field; and they endeavoured to avail themselves of its energies by interdicting the publication of all works not previously licensed by authority. During the continuation of this system, piracy was effectually prevented. The licensing act (13 & 14 Chas. 2. c. 2.) and the previous acts and proclamations to the same effect, prohibited the printing of any book without consent of the owner, as well as without a licence. In 1694, the licensing act finally expired, and the press then became really free. Instead, however, of the summary methods for obtaining redress for any invasion of their property enjoyed by them under the licensing acts, authors were now left to defend their rights at *common law*; and as no author or bookseller could procure any redress for a piracy at common law, except in so far as he could *prove damage*, property in books was virtually annihilated; it being in most cases impossible to prove the sale of one printed copy out of a hundred. Under these circumstances, applications were made to parliament for an act to protect literary property, by granting some speedy and effectual method of preventing the sale of spurious copies. In consequence, the statute 8 Anne, c. 19. was passed, securing to authors and their assignees the exclusive right of printing their books for 14 years certain, from the day of publication, with a contingent 14 years, provided the author were alive at the expiration of the first term. Persons printing books protected by this act, without the consent of the authors or their assignees, were to forfeit the pirated copies, and 1*d.* for every sheet of the same. Such books as were not entered at Stationers' Hall were excluded from the benefit of this act.

It had been customary, for some time previous to this period, for the libraries of the Universities of Oxford and Cambridge, &c. to get a copy of most books entered at Stationers' Hall; and the act of Anne made it imperative that single copies of all works entitled to its protection should be delivered to the following libraries: viz. the Royal Library, now transferred to the British Museum; the Libraries of Oxford and Cambridge; the Libraries of the four Scotch Universities; the Library of Sion College, London, and that of the Faculty of Advocates in Edinburgh; — in all, *nine* copies.

The act of Anne did not put to rest the questions as to copyright. The authors contended that it did not affect their natural ownership; and that they or their assignees were entitled to proceed at *common law* against those who pirated their works after the period mentioned in the statute had expired. The publishers of spurious editions resisted these pretensions, and contended that there was either no right of property at common law in the productions of the mind; or that, supposing such right to have existed, it was superseded by the statute of Anne. There was some difference of opinion in the courts as to these points; but Lord Mansfield, Mr. Justice Blackstone, and the most eminent Judges, were favourable to the claims of the authors. However, it was finally decided, upon an appeal to the House of Lords in 1774, that an action could not be maintained for pirating a copyright after the term specified in the statute. — (*Godson on the Law of Patents and Copyrights*, p. 205.)

The act of Queen Anne referred only to Great Britain; but in 1801, its provisions were extended to Ireland; the penalty, exclusive of forfeiture, on printing or importing books without consent of the proprietor, was also increased from 1*d.* to 3*d.* a sheet. In return for this concession, two additional copies of all works entered at Stationers' Hall were to be delivered; one to Trinity College, Dublin, and one to the King's Inns, Dublin.

Every one must be satisfied that 14 years' exclusive possession is far too short a period to indemnify the author of a work, the composition of which has required any considerable amount of labour and research; though 28 years is perhaps, all things considered, not a very improper period. But the grand defect of the statute of Anne consisted in its making the right to the exclusive possession for 28 years contingent on the fact of a person having lived a day more or less than 14 years after the publication of his work. This was making the enjoyment of an important right dependent on a mere accidental circumstance over which man has no control. Could any thing be more oppressive and unjust than to hinder an author from bequeathing that property to his widow and children, that would have belonged to himself had he been alive? Nothing, indeed, as it appears to us, can be more obvious than the justice of extending all copyrights to the same period, whether the authors be dead or not.

But though the extreme hardship, not to say injustice, of the act of Queen Anne had been repeatedly pointed out, its provisions were continued down to 1814, when the copyright act, 54 Geo. 3. c. 156., was passed. This act extended the duration of all copyrights, whether the authors were dead or alive, to 28 years certain; with the further provision, that if the author should be alive at the end of that period, he should enjoy the copyright during the residue of his life.

But though the act of 1814 conferred a most important advantage on authors and publishers, it did not satisfy their pretensions, and repeated attempts were subsequently made to have copyrights declared perpetual, or, at all events, to have their term considerably extended. In consequence, after a great deal of discussion, the existing copyright act, 5 & 6 Vict. cap. 45., was passed in 1842. This statute extends the duration of all copyrights, whether the authors be dead or alive, to *forty-two* years certain; providing, further, that if the author be alive at the expiration of this period of 42 years from the publication of his work, he shall enjoy the copyright to his death, and that his heirs or assignees shall enjoy it for 7 years after that event. We subjoin an abstract of this statute.

Clause 1. repeals former acts, viz. 8 Anne, c. 19., 41 G. 3. 107., and 54 G. 3. c. 156.

Clause 2. refers to the interpretation of this act.

Endurance of Term of Copyright in any Book hereafter to be published. — The copyright in every book which shall hereafter be published in the lifetime of its author shall endure for the natural life of such author, and for the further term of 7 years, from the time of his death, and shall be the property of such author and his assignees: provided always, that if the said term of 7 years shall expire before the end of 42 years from the first publication of such book, the copyright shall in that case endure for such period of 42 years; and that the copyright in every book which shall be published after the death of its author shall endure for the term of 42 years from the first publication thereof, and shall be the property of the proprietor of the author's manuscript from which such book shall be first published, and his assigns.—§ 3.

In Cases of subsisting Copyright the Term to be extended. — The copyright which at the time of passing this act shall subsist in any published book (except as herein-after mentioned) shall be extended and endure for the full term provided by this act in cases of books thereafter published, and shall be the property of the person who at the time of passing of this act shall be the proprietor of such copyright: provided, that in all cases in which such copyright shall belong in whole or in part to a publisher or other person who shall have acquired it for other consideration than that of natural love and affection, such copyright shall not be extended by this act, but shall endure for the term which shall subsist therein at the time of passing this act, and no longer, unless the author of such book, if he be living, or the personal representative of such author, if he be dead, and the proprietor of such copyright shall, before the expiration of such term, consent and agree to accept the benefits of this act in respect of such book, in the form given in the schedule annexed to the act to be entered in the book of registry herein-after directed to be kept, in which case such copyright shall endure for the full term of the books to be published after the passing of this act, and shall be the property of such person or persons as in such minute shall be expressed. — § 4.

Clause 5. gives the judicial committee of the privy council power to license the republication of such books as the proprietor refuses to republish after death of the author.

Clauses 6. and 7. specify the terms within which copies of books published after the passing of this act, and of subsequent editions, shall be delivered at the British Museum.

Clause 8. directs that (besides the copy for the British Museum) a copy of every book be delivered within a month after demand to the officer of the Stationers' Company for the following libraries: viz. the Bodleian at Oxford, the Public Library at Cambridge, the Faculty of Advocates at Edinburgh, and that of Trinity College, Dublin.

Clauses. 9. and 10. authorise publishers to deliver copies to the libraries, instead of at the Stationers' Company, and impose penalties for default in delivering copies for the use of the said libraries.

Book of Registry to be kept at Stationers' Hall. — A book of registry, wherein may be registered the proprietorship in the copyright of books, and assignments thereof, and in dramatic and musical pieces, whether in manuscript or otherwise, and licences affecting such copyright shall be kept at the hall of the Stationers' Company, and shall be open to the inspection of any person, on payment of one shilling for every entry searched for or inspected in the said book; and the officer in charge of such book shall, whenever required, give a copy of an entry in such book, certified under his hand, and impressed with the stamp provided by said company for that purpose, to any person requiring the same, on payment of the sum of five shillings; and such copies so certified and impressed shall be received in evidence in all courts, and in all summary proceedings, and shall be *prima facie* proof of the proprietorship or assignment of copyright or licence as therein expressed, and in the case of dramatic or musical pieces shall be *prima facie* proof of the right of representation or performance. — § 11.

Clause 12. enacts that making a false entry in the book of registry shall be a misdemeanour.

Clause 13. enacts that entries of copyright may be made in the book of registry.

Clause 14. enacts that persons aggrieved by any entry in the book of registry may apply to a court of law in term, or judge in vacation, who may order such entry to be varied or expunged.

Remedy for the Piracy of Books by Action on the Case. — If any person shall, in any part of the British dominions, after the passing of this act, print or cause to be printed, for sale or exportation, any book in which there shall be a subsisting copyright, without the consent in writing of the proprietor, or shall import for sale or hire any such book unlawfully printed from parts beyond the sea, or, knowing such book to have been so unlawfully printed or imported, shall sell, publish, or expose to sale or hire, or shall have in his possession, for sale or hire, any such book without consent as aforesaid, such offender shall be liable to a special action on the case at the suit of the proprietor of such copyright, to be brought in any court of record in that part of the British dominions in which the offence shall be committed: provided always, that in Scotland such offender shall be liable to an action in the court of session in Scotland, to be brought and prosecuted in the same manner as any other action of damages to the like amount may be brought and prosecuted there. — § 15.

Clause 16. enacts that in actions for piracy the defendant shall give notice of the objections to the plaintiff's title on which he means to rely.

Clause 17. enacts that no person, except the proprietor, &c. shall import into the British dominions for sale or hire, any book first composed, &c. within the United Kingdom, wherein there shall be copyright, and reprinted elsewhere, under penalty of forfeiture thereof, and also of 10*l.* and double the value. Books may be seized by officers of customs or excise.

Clause 18. relates to and defines the copyright in encyclopædias, periodicals, and works published in a series, reviews, or magazines.

Clause 19. enacts that proprietors of encyclopædias, periodicals, and works published in series, may enter at once at Stationers' Hall, and thereon have the benefit of the registration of the whole.

Clause 20. enacts that the provisions of 3 & 4 Will. 4. c. 15. shall be extended to musical compositions, and the term of copyright, as provided by this act, applied to the liberty of representing dramatic pieces and musical compositions.

Clause 23. enacts that pirated books shall become the property of the proprietor of the copyright, and may be recovered by action.

Clause 25. makes copyright personal property.

It was farther enacted by the statute 5 & 6 Vict. c. 47. that the importation of all books, of which there is an existing copyright, into the United Kingdom, should be absolutely prohibited from the 1st of April, 1843.

The great practical difficulty in interpreting the copyright acts, is in distinguishing between an original work and a copy made, *animo furandi*, from one already in existence. The following is a summary of Mr. Godson's remarks on this subject: —

"The identity of a literary work consists entirely in the *sentiments* and *language*. The same conceptions, clothed in the same words, must necessarily be the same composition; and whatever method is taken of exhibiting that composition to the ear or the eye, by *recital*, or by *writing*, or by *printing*, in any number of copies, or at any period of time, the property of another person has been violated; for the new book is still the identical work of the real author.

"Thus, therefore, a transcript of nearly all the sentiments and language of a book is a glaring piracy. To copy part of a book, either by taking a few pages *verbatim*, when the sentiments are not new, or by imitation of the principal ideas, although the treatises in other respects are different, is also considered to be illegal.

"Although it was held by Ellenborough C. J. that a variance in *form* and *manner* is a variance in *substance*, and that any material alteration which is a *melioration* cannot be considered as a piracy; yet a piracy is committed, whether the author attempt an original work, or call his book an abridgment, if the principal parts of a book are servilely copied or unfairly varied.

"But if the main design be not copied, the circumstance that part of the composition of one author is found in another is not of itself piracy sufficient to support an action. A man may fairly adopt part of the work of another; he may so make use of another's labours for the promotion of science, and the benefit of the public: but having done so, the question will be, Was the matter so taken used fairly with that view, and without what may be termed the *animus furandi*?

"In judging of a quotation, whether it is fair and candid, or whether the person who quotes has been swayed by the *animus furandi*, the quantity taken, and the *manner* in which it is adopted, of course must be considered.

"If the work complained of be *in substance* a copy, then it is not necessary to show the intention to pirate; for the greater part of the matter of the book having been purloined, the intention is apparent, and other proof is superfluous. A piracy has undoubtedly been committed.

"But if only a *small portion* of the work is quoted, then it becomes necessary to show that it was done *animo furandi*, with the intention of depriving the author of his just reward, by giving his work to the public in a cheaper form. And then the *mode* of doing it becomes a subject of inquiry; for it is not sufficient to constitute a piracy, that part of one author's book is found in that of another, unless it be nearly the whole, or so much as will show (being a question of fact for the jury) that it was done with a bad intent, and that the matter which accompanies it has been *colourably* introduced." — (pp. 215—217.)

"If a work be of such a libellous or mischievous nature as to affect the *public morals*, and that the author cannot maintain an action at law upon it, a court of equity will not interpose with an injunction to protect that which cannot be called property. Even if there be a doubt as to its evil tendency, the Lord Chancellor will not interfere." — (*Godson*, p. 212.)

II. *Expediency of limiting Copyrights to a reasonable Term.* — It is argued by many that copyrights should be made perpetual; that, were this done, men of talent and learning would devote themselves much more readily than at present to the composition of works requiring great labour; inasmuch as the copyright of such works, were it perpetual, would be an adequate provision for a family. But we doubt much whether these anticipations would be realised. Most books or manuscripts are purchased by the booksellers, or published upon the presumption that there will immediately be a considerable demand for them; and we apprehend that when copyrights are secured for 42 years certain, very little more would be given for them were they made perpetual. When an annuity, or the rent or profit arising out of any fixed and tangible property, with respect to which there can be no risk, is sold, if the number of years for which it is to continue be considerable, the price which it is worth, and which it fetches, does not differ materially from what it would bring were it perpetual. But the copyright of an unpublished work is, of all descriptions of property in which to speculate, the most hazardous, and the chances of reaping contingent advantages from it, at the distance of 42 years, would be worth very little indeed.

Those who write books, and those who publish them, calculate on their obtaining a ready and extensive sale, and on their being indemnified in a few years. Very few authors, and still fewer booksellers, are disposed to look forward to so distant a period even as 28 years for remuneration. They are, with very few exceptions, sanguine enough to suppose that a much shorter term will enable them to reap a full harvest of fame and profit from the publication; and we doubt much whether there be one case in a hundred, in which an author would obtain a larger sum for a perpetual copyright, than for one that is to continue for the period stipulated in the late act.

But while the making of copyrights perpetual would not, as it appears to us, be of any material advantage to the authors, there are good grounds for thinking that it would be disadvantageous to the public. Suppose an individual computes a table of logarithms to five or seven places; if his computations be correct, no improvement can be made upon them, to the extent at least to which they go. But is he or his assignees to be entitled, in all time to come, to prevent other individuals from publishing similar tables, on the ground of an invasion of private property? Such a pretension could not be

admitted without leading to the most mischievous consequences; and yet there is no real ground (though the courts have attempted to make one) on which the claim in question and others of the same description could be resisted, were copyrights made perpetual, and placed in all respects on the same footing as other property. We, therefore, are clearly of opinion that good policy suggests the limitation of the exclusive right of printing and publishing literary works to some such reasonable period as may secure to authors the greater part of the profit to be derived from their works; and that this period being expired, they should become public property.

Perhaps the period of 28 years has been advantageously extended to 42; but we are satisfied that more injury than benefit would result to literature by extending it beyond this term. In France, copyrights continue for 20 years after the death of the author. In most of the German states they are perpetual; this, however, until very recently, hardly indemnified the authors for the ease with which spurious copies might be obtained from other states. But by a late resolution of the Diet, a copyright secured in one state is good in all.

III. *International Copyrights.*—The establishment of an international copyright system, that should enable the authors of one country to secure the copyright of their works in other countries, has, of late, excited a good deal of attention. We doubt, however, whether the advantages that would result from such a system, were it established, would be so great as many seem to suppose. No doubt it would be advantageous for the authors of popular works in Great Britain and the United States, for example, to be able to secure a copyright in both countries; but the real question is, would the interests of literature and of the public be promoted by such arrangement? Now we incline to think that this question must be answered in the negative. The single market of either Great Britain or the United States is quite large enough to secure a sale for really good works sufficient to afford ample encouragement to their authors; and such being the case, it is difficult to see on what ground the republication at a cheap rate in the one country of books originally published in the other should be prevented. Indeed, such prevention would appear, by obstructing the circulation of knowledge and of amusement, to be injurious to both. It has, it is true, been alleged, that if we had a copyright system in common with America, English and American books might be published at a less price, inasmuch as the extension of the market would secure them a larger sale. But though this result *might*, we doubt much whether it really *would*, happen. We apprehend that then, as now, authors and publishers would impose such prices on their works as they supposed would realise the largest amount of profit, and that if they thought a high price more likely to do this than a low one, it would be preferred. The extensive reprinting of cheap editions of French works that has for a lengthened period been carried on at Brussels has certainly been disadvantageous to the literati of France. Still, however, the market of that kingdom seems to be sufficiently extensive to insure the unlimited production of works displaying the greatest talent, research, and industry; and it is plain that if the production of valuable works be not checked in France by their being reprinted abroad, the injury done to French men of letters redounds to the advantage of every foreigner who has occasion to look into or consult their works. Every effort should be made to prevent copyrights being invaded by pirates at home, and by the clandestine importation of books printed abroad; but farther than this we should not go. We are well convinced that it is for the advantage of the public and of literature that nations should have full liberty to republish each other's works in such forms and at such times and prices as they may think fit.

The real evil with which our literature has to contend originates in the barefaced piracy carried on at home, and not in the proceedings of foreigners. The latter may, perhaps, interfere a little with the sale of native works, by supplying the public with foreign instead of home editions; but the proceedings of the indigenous pirates are ten times more mischievous. They consist for the most part of knaves and drudges, without talent or learning of any sort, save only that of transmuting and adulterating the labours of others, and disguising their own rascality. Such persons fasten like leeches on any new work of talent, research, and industry; they forthwith announce some system, compilation, or abridgment of the same sort, every idea and statement in which is stolen; and then publish their spurious rubbish at a low price, advertise it as being decidedly the best work on the subject, and find numbers of newspaper writers ready to puff off and eulogise their disinterested and meritorious labours! It is difficult, we admit, to deal with such a nuisance, and it cannot, perhaps, be abated by legislation. But while we regret the fact, there cannot, we believe, be a question that courts and juries have for a lengthened period inclined too much to a lenient interpretation of the law as to piracy; and that literary plunderers, whose robberies are but little disguised, too often escape with impunity.

IV. *Taxes on Literature.*—These taxes, when carried to any considerable extent, are at once impolitic, oppressive, and unjust: impolitic, because they tend to obstruct

the growth and diffusion of knowledge; oppressive, because they very frequently swallow up the entire reward of the labours of the most deserving persons; and unjust, because they are not proportioned to the value of the article on which they are laid, and are, indeed, much oftener paid out of capital than out of profit.

These taxes consist, in Great Britain, of the duty on paper, the 5 copies of all works given to certain public libraries, and the advertisement duty. When the former edition of this work was published, these were exceedingly heavy and most oppressive. In the interval, however, they have been diminished fully a half, and are now comparatively moderate; though the principle on which they are imposed still necessarily renders them productive of hardship and injustice.

The following statements show the mode in which the duties operate: they are also interesting as throwing some light on the expense of publishing books, and the precarious and limited nature of the profit to be derived from them: they refer to an octavo volume of 500 pages, the paper such as this, with the ordinary quantity of matter on the page, and sold by retail at 12*s.* a copy. We subjoin an

Estimate of the cost of such a volume when 500, 750, and 1,000 copies are printed, showing what portion of the cost consists of duty, and the profits of the author and publisher on each edition when the whole is sold off: a similar estimate is subjoined for a pamphlet of 80 pages.

	£ s. d.	£ s. d.	£ s. d.
		Total Cost.	Whereof Duty.
Five Hundred Copies.			
Printing and corrections		88 18 0	0 0 0
Paper		32 0 0	4 16 0
Boarding in cloth		16 0 0	0 15 6
Advertising		40 0 0	10 0 0
		176 18 0	15 11 6
5 copies to public libraries. 20 copies to author, Reviews, &c.			
475 copies for sale at 8*s.* 6*d.* 25 as 24	193 16 0		
Deduct cost	176 18 0		
For profit to author and publisher, commission, and interest on capital, *when all are sold*	16 18 0		
Seven Hundred and Fifty Copies.			
Printing and corrections		95 4 0	0 0 0
Paper		48 0 0	7 4 0
Boarding in cloth		24 0 0	1 3 3
Advertising		50 0 0	12 10 0
		217 4 0	20 17 3
5 copies to public libraries. 20 copies to author, Reviews, &c.			
725 copies for sale at 8*s.* 6*d.* 25 as 24	295 16 0		
Deduct cost	217 4 0		
For profit to author and publisher, commission, and interest on capital, *when all are sold*	78 12 0		
One Thousand Copies.			
Printing and corrections		101 10 0	0 0 0
Paper		64 0 0	9 12 0
Boarding		32 0 0	1 11 0
Advertising		60 0 0	15 0 0
		257 10 0	26 3 0
5 copies to public libraries. 20 copies to author, Reviews, &c.			
975 copies for sale at 8*s.* 6*d.* 25 as 24	397 16 0		
Deduct cost	257 10 0		
For profit to author and publisher, commission, and interest on capital, *when all are sold*	140 6 0		
Pamphlet of 5 sheets, 500 printed.			
Printing		11 14 0	0 0 0
Corrections and alterations		5 5 0	0 0 0
Paper		5 0 0	0 15 6
Stitching		0 12 6	0 0 0
Advertising (say)		10 0 0	2 10 0
		35 11 6	3 5 0
25 copies for author and public libraries.			
475 copies for sale, at 25 for 2*l.* 14*s.*	51 6 0		
Deduct cost	35 11 6		
For profit to author and publisher, interest, &c. *when all are sold*	15 14 6		

These statements show that, notwithstanding their reduction, the duties are yet far from inconsiderable, and form indeed a heavy charge on the publication of works for which the demand is limited. As seen above, they amount, on an edition of 500 copies of an ordinary octavo volume, to nearly as much as the sum remaining after the entire impression has been sold, for profit for author and publisher.

It is essential, however, to bear in mind that the previous statements show only how the duties affect books when the *entire impression is sold off at the full publication price;* but this *seldom happens.* Excluding pamphlets, it may be truly affirmed, that, at an average, the original impression of half the books printed is hardly ever sold off, except at a ruinous reduction of price. Now, if we suppose, in the previous example of an edition of 750 copies, that only 625 instead of 725 were sold, the result would be that only 37*l.* 16*s.* would remain as profit to the author and publisher, and as a compensation for interest, the risk of bad debts, &c. Were only 500 copies sold, a loss of 13*l.* 4*s.*, exclusive of the author's labour, would be incurred; and were only 400 copies sold, government would receive 20*l.* 17*s.* 3*d.* of duty from a speculation by which the author must lose all his labour, and the bookseller 54*l.* of his capital! The mere possibility of such a supposition being realised, is sufficient to show the hardship of the duties; but, in point of fact, such cases, instead of being merely possible or rare, are *of every day occurrence!*

There is a radical difference between the demand for books, or of food for the mind, and food for the body. The latter is always sure, under any circumstances, to command a sale. It cannot be dispensed with, and the demand for it is, therefore, comparatively constant. If a tax be laid on malt, hats, or shoes, it will, perhaps, somewhat lessen the demand for these articles; but the quantities of them brought to market, in future, will sell for such an advanced price as will leave the customary rate of profit to their producers. But with books the case is altogether different. The taste for them is proverbially capricious; so much so, that the most sagacious individuals are every day deceived in their anticipations as to the success of new works, and even as to the sale of new editions. But if a book do not take, it is so very ruinous an affair, that a publisher is glad to dispose of the greater part of an

impression at a fourth or a fifth part of its regular price; and is often, indeed, obliged to sell it as *waste paper* to the trunk-maker or the tobacconist.

On an investigation into the affairs of an extensive publishing concern, a few years since, it was found, that of 130 works published by it in a given time, *fifty had not paid their expenses*. Of the 80 that did pay, 13 only had arrived at a second edition; but, in most instances, these second editions had not been profitable. In general it may be estimated, that of the books published, a *fourth* do not pay their expenses; and that only *one in eight or ten can be reprinted with advantage*. As respects pamphlets, we know we are within the mark, when we affirm that not *one in fifty* pays the expenses of its publication!

Now, when such is the case, it is plain that nothing can be more unfair than to impose the same duty on all works before they are published. In a few cases such duty falls principally on the buyers, and makes only an inconsiderable deduction from the profits of the author and publisher; but in a much larger number of cases it makes a serious inroad upon their profits, and goes, indeed, far to swallow them up; while in very many instances there are no profits to absorb, so that the duty has to be paid out of the capital of the unfortunate author or publishers, who, though they may have done nothing very meritorious, would hardly seem to deserve such harsh treatment.

The reduction of the advertisement duty in 1833 was a most proper measure. But the above statements show that it still presses very severely on literature, and in the majority of cases is more injurious than the paper duties. Formerly 11 copies of all new works had to be given to different public libraries. Happily, however, this tax, which not unfrequently prevented the publication of expensive works that had only a limited demand, has been reduced to 5 copies. We incline to think that it is expedient, to secure the preservation of books and to facilitate their consultation, that copies of all works should be deposited in the British Museum, and in libraries in Edinburgh and Dublin. Perhaps it would be right that the public, for whose advantage they are preserved, should pay for such copies: we should not, however, object to the authors doing this, but they should not be required to do more. To call upon them to provide copies for the libraries of rich foundations, like the Universities of Oxford and Cambridge, is a proceeding at variance with every fair principle.

The law of other countries is, in this respect, preferable to ours. In America, Prussia, Saxony, and Bavaria, only *one* copy of any work is required from the author; in France and Austria *two* copies are required; and in the Netherlands, *three*.

V. *Book Trade of Great Britain.*—London is the great centre of the British book trade; the number of new publications that issue from its presses being far greater than all that appear in the rest of the empire. Within the course of the last forty years, however, many very important works have been published in Edinburgh; but the latter, as well as those that appear in Oxford, Cambridge, Glasgow, &c., are principally disposed of by the London trade. The booksellers of Edinburgh, and of all the provincial towns, have agents in London to whom they consign a certain number of copies of every work they publish; and to whom, also, they address their orders for copies of such new or old works as they have occasion for. The London booksellers, who act as agents for those in the country, are in the habit of regularly despatching parcels to their correspondents on the last day of each month, with the magazines and other monthly publications; but if any new work of interest appears in the interim, or orders be received from the country that cannot be conveniently deferred to the end of the month, a parcel is immediately forwarded by coach. The booksellers of Edinburgh and Dublin act as agents for those of London, and supply the Scotch and Irish country trade with the metropolitan publications.

The price of new works is fixed by the publishers, who grant a deduction to the retail dealers of from 20 to 25 per cent. on the price of *quartos*, and from 25 to 30 per cent. on that of *octavos*, and those of smaller size. The credit given by the publishers to the retailers varies from seven to twelve months; a discount being allowed for prompt payment at the rate of 5 per cent. per annum.

From inquiries we have made with much care and labour, we find that at an average of the 4 years ending with 1842, 2,149 volumes of new works, and 755 volumes of new editions and reprints (exclusive of pamphlets and periodical publications), were annually published in Great Britain; and we have further ascertained that the publication price of the former was 8*s*. 9½*d*., and of the latter 8*s*. 2*d*. a volume. Hence, if we suppose the average impression of each work to have been 750 copies, it will be seen that the total value of the new works annually produced, if they were sold at their publication price, would be 708,498*l*. 8*s*. 9*d*., and that of the new editions and reprints, 231,218*l*. 15*s*. We believe, however, that if we estimate the price at which the entire impressions of both descriptions of works actually sell at 4*s*. a volume, we shall not be far from the mark; and if so, the real value of the books annually produced will be 435,600*l*. a year. Subjoined is a summary of these results.

Years.	New Works.				Reprints and New Editions.			
	No. of Vols.	Value at Publication Price.			No. of Vols.	Value at Publication Price.		
		£	s.	d.		£	s.	d.
1839	2,302	966	11	2	773	296	7	8
1840	2,091	943	3	5	821	327	16	10
1841	2,011	902	5	9	741	314	12	7
1842	2,193	968	2	6	684	295	9	6
Totals - -	8,597	3,780	2	10	3,019	1,234	6	7
Average of the four years -	2,149	945	0	8½	755	308	11	7¾
Average price of each vol. - -		0	8	9¼		0	8	2

	s.	d.			£	s.	d.
750 copies of 2,149 vols. at	8	9½	-	-	708,498	8	9
of 755 —	8	2	-	-	231,218	15	0
of 2,904 —	4	0	-	-	435,600	0	0

We regret that no estimate can be formed of the number or price of the pamphlets that annually make their appearance; but we shall endeavour, in the article PERIODICAL PUBLICATIONS, to give some details as to the number and cost of the latter. It would be, in many points of view, desirable, were the librarians of the British Museum directed to keep and annually publish an account, classified according to the subjects and the size of the works, of all the new British books, pamphlets, and periodical publications that come into their hands, specifying the average publication price of each class. Such a return might be made up without any great difficulty, and would afford curious information not otherwise attainable.

The old book trade carried on in Great Britain is very extensive, and employs many dealers. The price of old books depends very much on their condition; but, independently of this circumstance, it is very fluctuating and capricious; equally good copies of the same works being frequently to be had in some shops for a half or a third part of what they can be bought for in others.

VI. *Regulations as to Importation of Foreign Works.*—For the duties, see TARIFF. To prevent foreign books and maps, the property of individuals, from being charged with duty more than once, the proprietor shall, on each importation subsequent to the original one, declare that the duties were paid

when they were first imported, or that he purchased them in this country in a fair way of trade; that they are the identical books or maps he exported from this kingdom, and that they are now brought back for his private use, and not for sale. — (*Treasury Order*, 3d, and *Customs Order*, 8th of Oct., 1818.)

Individuals coming from foreign parts might, down to the 1st of April 1843, import as baggage single copies of English works of which the copyright had not expired; but, in consequence of the facilities for smuggling that grew out of this indulgence, it has been withdrawn, and the importation of all English works printed in foreign countries, of which there is an existing copyright, is absolutely prohibited. — (5 & 6 Vict. cap. 47. § 24.)

The duty on foreign works produced in 1841, 8,450*l.* 18*s.* 8*d.* nett.

VII. *Book Trade of France.* — The activity of the French press has been very greatly increased since the downfall of Napoleon. Count Daru, in his *Notions Statistiques sur la Librairie*, published in 1827, estimated the number of printed sheets, exclusive of newspapers, produced by the French press in 1816, at 66,852,883; and it appears (art. *Librairie, Dict. du Commerce*) that in 1836 the number of printed sheets (ex. newspapers) had increased to 118,857,000; so that it may now (1843) be fairly estimated at from 120 to 130 millions of sheets! The quality of many of the works that have recently issued from the French press is also very superior; and it may be doubted whether such works as the *Biographie Universelle*, the new and enlarged edition of the *Art de vérifier les Dates*, in 38 vols. octavo, and the two octavo editions of *Bayle's Dictionary*, could have been published in any other country. The greater number of new French works of merit, or which it is supposed will command a considerable sale, are immediately reprinted in the Netherlands or Switzerland, but principally in the former. To such an extent is this practice carried, that a single bookseller in Brussels has reprinted as many as 150,000 volumes of new French works in the course of a single year!

All the French booksellers are *brevetés*, that is, licensed, and sworn to abide by certain prescribed rules. This regulation is justly complained of by the publishers, as being vexatious and oppressive; and as tending to lessen the number of retail booksellers in the country, and to prevent that competition which is so advantageous.

The discount allowed by the French publishers to the retail dealers is not regulated, as in England, by the size of the volumes, but by the subjects. The discount on the sale of books of history, criticism, and general literature, is usually about 25 per cent.; in the case of mathematical and strictly scientific works, it is seldom more than 10 or 15 per cent.; while upon romances, tales, &c. it is often as high as 50 or 60 per cent.

VIII. *German Book Trade.* — This trade is very much facilitated by the book fairs at Leipsic; the Easter fair being frequented by all the booksellers of Germany, and by those of some of the neighbouring countries, as of France, Switzerland, Denmark, Livonia, &c., in order to settle their mutual accounts, and to form new connections. The German publisher sends his publications to the keeper of assortments *à condition*, that is, on commission, for a certain time, after which the latter pays for what have been sold, and may return the remainder. This is not so favourable for the publisher as the custom in the French and English book trades, where the keepers of assortments take the quantity they want at a fixed rate. In the German book trade it is the custom for almost every house, either in the country or abroad, which publishes or sells German books, to have its agent at Leipsic, who receives and distributes its publications. A., of Riga, who publishes a book calculated for the German trade, has his agent B. in Leipsic, to whom he sends, free of expense, a number of copies of his publication, that he may distribute the new work to all the booksellers with whom he is connected, from Vienna to Hamburgh, and from Strasburgh to Königsberg, each of whom has his agent in Leipsic. Instructions are also given as to the number of copies to be sent to each. B. delivers those copies in Leipsic to the agents, who send them every week, or more or less frequently, by the post or by carriers, at the expense of the receiver. C., of Strasburgh, who finds that he has not received copies enough, writes for an additional number of copies to his agent D., of Leipsic: D. gives this order to B., who delivers the number wanted to D., to be transmitted to C. This arrangement is advantageous to the German book trade, as well as to Leipsic. The dealer receives every thing from Leipsic; and as a great number of packets, with books from all parts of Germany, arrive there for him every week, he can have them packed together and sent at once. The carriage is thus much less than if the packets were sent to him separately from the different places, and the whole business is simplified. The booksellers are also enabled to agree with ease on a certain discount per cent. No such intimate connection of the booksellers has yet been formed in any other country. The German booksellers rarely unite, as is the practice in England, in undertaking the publication of extensive works." — (*German Conversations-Lexicon*, American edition.)

The literary deluge which commenced in Germany in 1814 still continues to increase. For the 2,000 works which were then about the annual complement, we have now from 5,000 to 7,500. The catalogue of the Leipsic fair for Easter, 1837, contained 4,738 articles, of which 4,251 were actually published. Magazines and Encyclopædias have increased in the same proportion, and the public has shown as great a desire to read as the learned have to write. Private libraries are diminishing, while the public ones are daily increasing.

BOOTS AND SHOES, the external covering for the legs and feet, too well known to require any description. — For an account of the value of the boots and shoes annually produced in Great Britain, see LEATHER.)

BORAX, OR TINCAL (Arab. *Buruk*; Pers. *Tunkar*), one of the salts of soda. It is white, transparent, rather greasy in its fracture; its taste is styptic, and it converts syrup of violets to a green. It readily dissolves in hot water, and swells and bubbles in the fire. It is of great use as a flux for metals. — (*Thomson's Chemistry.*)

This salt is found in a crystallised state at the bottom of certain lakes in Thibet, and in various localities in Persia, China, South America, and Europe. Formerly, however, the demand of Europe was almost wholly supplied from the East, and especially by importations from Thibet, where the salt is comparatively abundant. When imported, it is called *tincal*; and is in a crude or impure state, being enveloped in a fatty matter, from which it has to be separated by a process that was long known only to the Venetians and Dutch.

The demand for borax is now in great part supplied from the famous lagoons near Monte Cerbole, in Tuscany. These lagoons, which occupy a large extent of surface, consist of an infinite number of low volcanoes, and springs in a furious state of ebullition; the ground, which shakes and burns beneath the feet, is covered with crystallisations of sulphur and other minerals; the whole scene presenting a striking picture of the most tremendous energy and sterility. The vapours that are constantly bursting forth from the boiling lagoons being found to contain boracic acid, it occurred to a most ingenious person, a M. Larderel, to construct pans through which the vapours being made to pass impregnate the water in them with the acid. The pans are kept boiling by the heat of the lagoons; and the water being evaporated, the acid is deposited in crystals. In consequence of this discovery, the lagoons from being altogether worthless have become most valuable. From 10,000 to 12,000 lbs. (12 oz. each) of acid are now daily produced; and this vast supply, and the facility with which borax may be obtained from the acid, has occasioned a great reduction in its price, and enabled it to be much more extensively employed than before. Dr. Bowring, from whose valuable Report on Tuscany we have derived these particulars, gives the following

Account of the Exports of Boracic Acid from Leghorn during the Nine Years ending with 1835.

	Lbs.		Lbs.
1827	66,000	1832	1,103,000
1828	197,000	1833	1,317,000
1829	376,000	1834	1,725,000
1830	602,000	1835	1,841,000
1831	789,000		

And we are informed that the exports have gone on increasing in the interval nearly in the same proportion.

In 1841, 15,205 cwts. boracic acid and 4,124 cwts. tinical were entered for consumption. The former was worth in London, in January 1843, from 45*s.* to 48*s.* a cwt., duty (6*d.*) included; and the latter from 40*s.* to 45*s.* a ton, duty (1*s.*) included.

BORDEAUX, a large and opulent commercial city of France, on the Garonne, about 75 miles from its mouth, lat. 44° 50′ 26″ N., long. 0° 34′ W. Population 107,000. The commerce of Bordeaux is very extensive. The Garonne is a noble river, with depth of water sufficient to enable large ships to come up to the city, laying open, in conjunction with the Dordogne and their tributary streams, a large extent of country. The commerce of Bordeaux is greatly promoted by the famous canal of Languedoc, which communicates with the Mediterranean. By its means Bordeaux is enabled to furnish the south of France with colonial products at nearly as cheap a rate as Marseilles. Wines, brandies, and fruits are the staple articles of export; but the merchants apply themselves more particularly to the wine trade. Most part of their other business is confined to dealing on commission; but this they conduct almost invariably on their own account. The reason they assign for this is, that the difficulties attending the purchase, racking, fining, and proper care of wines, so as to render them fit for exportation, are so very great, as to make it almost impossible to conduct the business on any thing like the ordinary terms so as to satisfy their employers. Colonial products, cotton, dye stuffs, pepper, hides, tobacco, rice, form the principal articles of importation.

Money is the same at Bordeaux as in other parts of France. All accounts are kept in francs, the par of exchange being 25 fr. 20 cent. the pound sterling. — (See EXCHANGE.)

Weights and Measures. — With the exception of wines and brandies, the new or decimal system is of general application in Bordeaux, both in wholesale and retail operations. — (See WEIGHTS AND MEASURES.)

Wine is still sold by the tun of 4 hogsheads. The hogshead contains 50 veltes.

Brandy by the 50 veltes.

Spirits of wine by the velte.

The *velte* is an old measure of which 50 = to 3·98 hectolitres.

Oil is sold by weight (per 50 kilog.) 50 = 81¼ imperial gallons

Entrance to the River. — This lies between Point de la Coubre on the north, and Point de Grave on the south, bearing from each other nearly S.E. and N.W., distant about 4 leagues. There are lights on both these points, but neither of them is elevated to any great height above the level of the sea. The middle part of the entrance to the river is encumbered with extensive sand banks and rocks. On one of the latter, in lat. 45° 35′ 1-3d″ N., long. 1° 10′ W. stands the Tour de Cordouan, one of the most celebrated light-houses in Europe. It was erected in 1610; but has been materially improved since. It is 206 feet high. The light, which is revolving, exhibits in succession a brilliant light, a feeble light, and an eclipse, the changes following each other every half minute. It may be distinguished at the distance of 8 or 9 leagues. The Point de la Coubre is 2½ leagues N. ¼ W., and the Point de Grave 1½ league S. E. by E. ¼ E., from the Tour de Cordouan. There are two main channels for entering the river, — the Passe du Nord, and the Passe de Grave. The former lies between the north side of the river and the banks in the middle, about 1¼ mile south from the Point de la Coubre; the water, where shallowest, being about 4¾ fathoms. The course hence is nearly S. E. ½ E. The other principal passage lies between the Tour de Cordouan and the Point de Grave, nearly in a N.N.E. and S.S.W. direction. In some places it has not more than 13 feet water; and is in all respects very inferior to the other passage, which is always to be preferred, especially with a large ship. The tides, both ebb and flood, set through the channels with great rapidity, so that a good deal of caution is required on making the river; but having once entered, there is no further danger. Spring tides rise from 14 to 15 feet, and neaps from 7 to 8; but they depend a good deal on the direction of the wind. All vessels, except French coasters under 80 tons burden, and small craft from the north of Spain, entering the Garonne, are obliged to take a pilot on board as soon as one offers himself. In summer, pilots are not unfrequently met with 30 or 40 miles west of the Tour de Cordouan; but in winter they seldom venture far beyond the banks, and sometimes cannot proceed even thus far. — (See *Laurie's Plan of the Bay of Biscay*, with the *Sailing Directions*, &c.)

Shipping. — In 1837, the customs duties in Bordeaux produced 9,844,804 fr.; but in 1841 they amounted to 15,000,000 fr. During the same year there belonged to Bordeaux 599 ships, of the burden of 68,566 tons.

Port Charges. — Account of Port Charges, Brokerage, and other public Disbursements payable in Bordeaux on account of a French or English Vessel of 300 Tons Burden, from a Port of England to Bordeaux, or from Bordeaux to a Port of England, or from or to any other British Possession in Europe.

Nature of Charges.	On a Fr. or Brit. Vessel.		On a Foreign Vessel.	
	In French Money.	In Sterling Money.	In French Money.	In Sterling Money.
	Fr. *c.*	£ *s.* *d.*	*Fr.* *c.*	£ *s.* *d.*
Report and pilotage from sea to Bordeaux for a vessel drawing 14 French feet water (15 ft. 3 9 in. British)	218 93	8 15 2	217 50	9 18 0
Lazaretto dues	61 0	2 18 10	61 0	2 18 10
Moving vessel up and mooring her	10 0	0 8 0	10 0	0 8 0
Entering vessel at Custom-house, and brokerage inwards	100 0	4 0 0	100 0	4 0 0
Advertisements for freight and passengers, 6 fr. (4*s.* 10*d.*) to each newspaper.				
Tonnage money and navigation dues on 300 tons	495 0	19 16 0	1,239 0	49 11 2
Visiting officers, clearances, harbour-master, &c.	14 75	0 11 10	14 75	0 11 10
Manifest and freight list	15 0	0 12 0	15 0	0 12 0
Ballast taken in or out, 1 fr. 25 c. per ton (1*s.*)				
Consul's bill. Usual fees (English vessels), 17 fr. 25 c. (15*s.*)				
Pilotage from Bordeaux to sea	220 0	8 16 0	245 34	9 16 3
Broker's commission outwards, care and attendance for expediting the vessel —				
In ballast, 50 c. per ton (5*d.*), say 120 fr. at most (4*l.* 16*s.*)				
Loaded per charter or on owner's account, 1 fr. (10*d.*) per ton	300 0	12 0 0	300 0	12 0 0
Loaded in freight, 1 fr. 50 c. (1*s.* 3*d.*) per ton				
	average	average	average	average
	1,434 66	57 7 10	2,232 59	89 6 1

N.B. — No regard paid to the nature of the cargo, as all goods are imported either for consumption or exportation, which does not expose vessels to pay more or less charges.

British vessels are on a perfect equality with French vessels when they come from British ports in Europe, otherwise they pay pilotage and tonnage dues like all other foreign vessels, as stated in the foreign column.

I.—Account of the Number and Tonnage of the Foreign Ships which arrived at and departed from Bordeaux in 1842, specifying the Countries to which they belonged.

Arrived.				Departed.			
Nation.	Ships.	Tons.	Men.	Nation.	Ships.	Tons.	Men.
British	138	30,089	1,478	British	145	31,092	1,431
Spanish	13	1,577	138	Spanish	11	1,658	142
Portuguese	3	276	33	Portuguese	3	276	33
Dutch	62	6,979	374	Dutch	53	5,960	290
Belgian	6	508	29	Belgian	10	1,002	49
Russian	8	1,826	84	Russian	6	1,563	68
Prussian	54	19,716	575	Prussian	55	19,580	579
Danish	17	2,292	124	Danish	18	2,472	133
Swedish and Norwegian	56	9,390	661	Swedish and Norwegian	48	8,715	633
Hanoverian	26	3,110	151	Hanoverian	19	2,384	113
Hamburg	6	840	45	Hamburg	6	920	43
Bremen	11	1,840	88	Bremen	12	1,970	87
Lubec	29	5,762	266	Lubec	31	5,040	298
Oldenburg	6	800	33	Oldenburg	7	900	38
Mecklenburg	20	3,980	182	Mecklenburg	17	3,190	158
Austrian	8	2,645	105	Austrian	8	2,645	105
Venezuelian	1	255	14	Venezuelian	1	255	14
North Americans	39	11,576	449	North Americans	41	12,097	479
Totals	497	103,461	4,829	Totals	491	101,719	4,691

II. — Account of the Number, Tonnage, and Destination of the British Ships which sailed from Bordeaux in 1842.

Destination.	Ships.	Tons.	Men.	If laden.
Great Britain	40	5,622	342	Laden.
Ditto	36	7,883	329	In ballast.
Ireland	8	918	62	Laden.
French ports	3	507	23	In ballast.
Valparaiso	1	148	11	Laden.
Bombay	1	402	17	—
Calcutta	5	1,319	64	—
Ditto and Madras	1	246	11	—
Mauritius	18	5,122	237	—
Canada	2	535	23	—
Ditto	30	8,360	512	In ballast.
	145	31,092	1431	

III. — Account of the Number and Tonnage of the French Ships that entered at and cleared from Bordeaux in 1842.

Entered.				Cleared.			
Service.	Ships.	Tons.	Men.	Service.	Ships.	Tons.	Men.
Colonial and foreign trade	372	60,908	4,253	Colonial and foreign trade	263	51,796	3,207
Whale fishery	1	501	36	Cod fishery	2	330	54
Cod fishery	49	7,380	900				
Total	422	68,789	5,189	Total	265	52,126	3,261
Coasting trade	2,871	157,905	11,485	Coasting trade	2,773	152,515	11,092
Total	3,293	226,694	16,674	Total	3,038	204,611	14,353

The following are the species of articles exported from Bordeaux to the different parts of the world: —

To Martinique and Guadaloupe. — Provisions, flour, wine, brandy, and a small quantity of manufactured goods.

To Bourbon. — Wines, provisions, cattle, furniture, coarse and fine hardwares, perfumery, silk, cotton and linen stuffs, stationery, fashionable articles, &c.

To the United States. — Wines, brandy, almonds, prunes, verdigris, and a trifling quantity of manufactured goods.

To Spanish America, Cuba, &c. — Wines, brandy, silks, cloths, stationery, fashions, jewellery, perfumery, saddlery, &c.

To the South Seas. — Wines, brandy, liqueurs, and all sorts of manufactured articles.

To the East Indies and China. — Wines, brandy, furniture, silver, &c.

To England. — Wines, brandy, liqueurs, fruits, tartar, cream of tartar, plums, chesnuts, walnuts, loaf-sugar to Guernsey and Jersey, clover seed, annotto, corn, flour, skins raw and dressed, cork wood and corks, vinegar, turpentine, resins, &c.

To the North of Europe. — Wines, brandy, spirits of wine, tartar, cream of tartar, colonial produce, loaf-sugar, molasses, &c.

Wine. — This forms the great article of export from Bordeaux. The estimated produce of the department of the Gironde in wines of all kinds, and one year with another, is from 220,000 to 250,000 tuns; the disposal of which is, approximately, as follows: —

Consumed in the department, about		50,000 tuns.
Expedited to the different parts of		
France	125,000	—
Converted into brandy	25,000	—
Exported to foreign countries	50,000	—
		250,000 tuns.

The principal exports of wine to foreign countries in 1839 were — to England 1,339 tuns, Russia 2,499 ditto, Sweden and Norway 489 ditto, Prussia 2,964 ditto, Denmark 612 ditto, the Hanse Towns 8,188 ditto, and Holland 7,691 ditto. During the year ended the 30th of September, 1841, the United States imported from France 2,528,769 gallons of wine in casks, exclusive of a considerable quantity in bottles. Wine is also shipped from Bordeaux for the East and West Indies, the Levant, &c.

The red wines are divided into three great classes, each of which is subdivided into several sorts.

Class 1. embraces the Medoc wines,
2. — Grave, and St. Emilion,
3. — common, or cargo wines.

The *first class* is composed of the "grands crus," the "crus bourgeois," and the "crus ordinaires."

The "grands crus" are further distinguished as *firsts, seconds,* and *thirds.*

The *firsts* are the wines of Château Margaux, Lafitte, Latour, and Haut-Brion. The latter is properly a *Grave* wine, but it is always classed amongst the first Medocs.

The *seconds* are the wines of Ranzan, Leoville, Larose, Mouton, Gierse, &c.

The *thirds,* wines which are produced by the vineyards touching those above named, and which differ little in quality from them.

The quantity of "grands crus" wine of the above description does not exceed 3,000 tuns, and sells at from 1,600 fr. to 3,500 fr. per tun *on the lees.*

The "crus bourgeois" consists of the superior Margaux, St. Julien, Pauillac, St. Estephe, &c.; quantity estimated about 2,000 tuns, and prices on the lees 800 fr. to 1,800 fr. per tun.

The "crus ordinaires" sell at 300 fr. to 700 fr., according to the year and the quality. Quantity 25,000 to 35,000 tuns.

The whole produce of *Medoc* is therefore about 40,000 tuns.

The "grands crus" and "crus bourgeois" require 4 years' care and preparation, before delivery for use or for exportation, and this augments their price from 30 to 35 per cent.

The *second class* is composed of the red wines of *Grave* and *St. Emilion,* which are in greater quantity, and amongst them some of a very superior quality, that are generally bought for mixing with Medoc. The first quality of these wines sells from 800 fr. to 1,800 fr. per tun. The second qualities — Queyries, Montferrand, Bassans, &c. — 300 fr. to 600 fr.

The *third class* consists of the common or cargo wines, the greater part of which is consumed in the country, or converted into brandy. The portion exported is sent off the year of its growth. Prices from 160 fr. to 250 fr. per tun.

The white wines of the first "crus," such as Haut-Barsac, Preignac, Beaumes, Sauterne, &c. are only fit for use at the end of 4 or 6 years, and for exportation at the end of 1 or 2 years more. Prices on the lees vary from 800 fr. to 1,500 fr. per tun.

The "grand crus" of white *Grave*, St. Briés, Carbonleux, Dulamon, &c. sell, in good years, from 500 fr. to 800 fr.

Inferior white wines 130 fr. to 400 fr. per tun.

The expenses of all kinds to the wine-grower of Medoc, for the cultivation, gathering, and making his wine, and the cask, are estimated to amount, in the most favourable years, to 50 fr. per hogshead, or 200 fr. per tun.

The merchants in general purchase up the finest *crus* as soon as sufficiently advanced to judge of their character; or more frequently they are bought up for a series of years, whether good or bad. They are transported to their cellars or "chays," in Bordeaux, so situated and protected by surrounding houses, as to preserve a tolerably equable temperature throughout the year; and in these they ripen, and undergo all the different processes of fining, racking, mixing, &c. considered necessary to adapt them to the different tastes of the foreign consumers.

It is pretty generally the practice to adapt the wines for the English market by a plentiful dose of the strong, full-bodied, and high-flavoured wines of the Rhone, such as Hermitage, Côte Rotie, and Croze — especially the first, by which means they are hardly cognisable by the Medoc flavour. Perhaps the principal reason for keeping these wines so long before they are used is to give them time to acquire a homogeneous flavour, destroyed by the mixture of several different qualities. The wines shipped under the titles of Château Margaux, Lafitte, and Latour, are also mixed with the wines of the surrounding vineyards, which, from the nature of the soil, and proximity, cannot be greatly different. Other good wines are also said to enter largely into the composition of these celebrated *crus*; and those of a superior year are employed to bring up the quality of one or two bad years, so that it is easy to conceive, that the famous wines of 1811, and of the years 1815, 1819, and 1825, are not speedily exhausted. Some houses pretend to keep their wines pure; but the practice of mixing is, at any rate, very general.

The purchase of the wines, whether from the grower or merchant, is always effected through brokers, some of whom have acquired a reputation for accuracy in dissecting the different flavours, and in tracing the results of the wines by certain measures of training or treatment.

England takes off nearly half the highest priced wines, and very little of any other quality. Except in Bordeaux itself, there is but a very moderate portion of the superior Medoc consumed in France. The capital takes off only second, third, and fourth rate wines.

The Dutch, who are large consumers of Bordeaux wine, go most economically to work. They send vessels to the river in the wine season, with skilful supercargoes, who go amongst the growers, and purchase the wines themselves cheaper even than a broker would do. They live on board the ship, take their own time to select, and wait often for months before the cargo is completed; but they attain their object, getting a supply of good sound wine, and at as low a rate, with all charges of shipping included, as the wine merchants can deliver it into their stores in Bordeaux. They never purchase old wine; they take only that newly made, which, being without the support of stronger bodied wines, must be consumed in the course of 2 or 3 years. They follow the same system at Bayonne, where 2 or 3 ships go annually for the white wines of Jurançon, &c.

The cargo wines are so manufactured that it is hardly possible to know of what they are composed. They are put free on board for 2*l*. per hogshead and upwards, according as they are demanded. They are such as will not bear exposure in a glass when shipping; the tasters have a small flat silver cup expressly for them. These wines are principally shipped to America and India, and some at a higher price to the north of Europe.

The principal wine merchants have agents in London, whose business is more particularly to introduce their wines to family use; and it is to that end they pay them from 300*l*. to 800*l*. for travelling expenses and entertainments, besides allowing 3 per cent. or more on the amount of sales. They generally look out for individuals for their agents of good address, and some connection amongst the upper classes.

Brandies, and Spirits of Wine. — The quantity distilled in the neighbourhood of Bourdeaux is estimated at about 18,000 pieces, of 50 veltes each.

Ditto, in the Armagnac	-	20,000	ditto
Ditto, in the Marmauduis	-	8,000	ditto
		46,000 pieces, ordinary proof.	

Of this quantity, France takes off about 23,000 pieces for consumption; England, 2,500; United States, 10,000; India, 2,500; north of Europe, 5,000; in all, 43,000 pieces.

Languedoc produces annually about 40,000 pieces, of 80 veltes each, the greater part of which comes to Bordeaux to be forwarded to the different ports of the north of France, or to foreign countries.

France consumes about two thirds of the above quantity; the remaining one third goes to the north of Europe.

The prices of brandy are from 130 fr. to 150 fr. per 50 veltes, ordinary proof; spirits of wine, from 4 fr. to 5 fr. per velte.

It is at the port of Formay, on the Charente, that the greatest shipments of brandy take place to England. Cognac, from which the brandy takes its name, and where there are large distilleries, is a few leagues up the river. The quantity exported is far greater than what is made at Cognac; the two leading distillers there (Martel and Henessey) buying great quantities from the small cultivators. The greater part of the wines made about Angoléme, and thence down toward the sea, are of inferior quality, and fit only for making brandy; and so little do the prices vary, that the proprietors look upon it nearly in the same light as gold. When they augment their capital by savings or profits, it is employed in keeping a larger stock of brandy, which has the further advantage of paying the interest of their capital by its improved value from age. England is said to receive upwards of 6,000 pieces annually from Charente.

At Bordeaux, as at Paris and Marseilles, there is a constant gambling business in time bargains of spirits of wine. It is in the form of spirits of wine that nearly all the brandy consumed in France is expedited, as in this form there is a great saving in carriage. — (For an official account of the exports of wine and brandy from France, see WINE.)

The fruits exported consist almost entirely of prunes and almonds. The latter come principally from Languedoc.

The revolution in the Spanish American colonies, and the troubles in Spain, have made many wealthy Spaniards settle in Bordeaux. They are in possession of the greater part of the American Spanish trade of this port, and are viewed with a jealous eye by the old merchants. They have also contributed greatly to beautify the city, by employing their wealth in building, which they have done to a considerable extent. They have also reduced the rate of interest, and contributed to the facilities of discounting bills. The Spanish houses generally discount long bills at 1½ or 2 per cent. lower than the Bank.

Bordeaux possesses some iron founderies, cotton factories, sugar refineries, glass works, &c., but labour and living are too high to admit of its becoming a considerable manufacturing city.

Banking Establishments. — There is only one banking company in Bordeaux — the "Bordeaux Bank." It has a capital of 3,000,000 fr., in shares of 1,000 fr. each. It issues notes for 1,000 and 500 fr. (40*l*. and 20*l*.) payable in specie on demand. Its affairs are managed by a board of directors, named by the 50 principal shareholders. This board fixes the rate of discount, and the number of names that ought to guarantee each bill; it being left to the discount committee to judge of the responsibility of the signatures on the bills presented. At present (1843) the bank discounts bills having more than 40 days to run, and guaranteed by 3 signatures, at 4 per cent.

When bills are presented not having the required number of names, or those deemed suspicious, they

take, on guarantee, public stock bonds, or other effects, advancing to the extent of 9-10ths of their current value.

The bank advances ⅔ths of the value of gold and silver in ingots, or in foreign money deposited with them, at the rate of 5 per cent. per annum. It also accepts in deposit diamonds, plate, and every kind of valuable property, engaging to re-deliver the same in the state received for ¼ per cent. per quarter, or 1 per cent. per annum.

Those who have accounts current with the bank may have all their payments made, and money received, by the bank, without fee. It allows no interest on balances, and never makes advances either on *personal security* or on mortgage.

The affairs of the bank are subject to the inspection of the Prefect, to whom half yearly reports of its situation are made. These are printed entire, and distributed to the 50 principal shareholders; an abstract being, at the same time, published in the Bordeaux journals.

Brokers. — No one is allowed to act as a mercantile broker in France who is not 25 years of age, and who has not served 4 years in a commercial house, or with a broker, or a notary public. They are nominated by the king, after their qualifications have been ascertained by the Chamber of Commerce. All brokers must deposit the sum of 8,000 fr. in the treasury as a guarantee for their conduct, for which they are allowed interest at the rate of 4 per cent. At present there are in Bordeaux 21 ship brokers, 24 merchandise do., 20 wine and spirit do., 7 insurance do., and 20 money and exchange do.: the latter form a separate class.

All foreigners are obliged to employ ship brokers to transact their business at the Custom-house; and although masters and owners of French vessels might sometimes dispense with their services, they never do so, finding it to be, in all cases, most advantageous to use their intervention. All duties outward on vessels and cargoes are paid by the ship brokers, who invariably clear out all vessels, French as well as foreign.

Rates of Commission. — 1. Ship brokers: — Vessel in ballast, 50 cents (5*d.*) per ton; vessel loaded per charter or on owner's account, 1 fr. (10*d.*) per ton. 2. Merchandise brokers: — ½ per cent. on colonial produce, and other goods. 3. Wine and spirit brokers: — 2 per cent. on wine, &c. 4. Insurance brokers: — ½ per cent. 5. Money brokers: — ½ per cent. on Paris and foreign paper; ¼ per cent. on Bordeaux do. 6. Merchants: — 2 per cent. on all sorts of operations between natives; 2½ per cent. on all sorts of operations between strangers; 5 per cent. on litigious affairs; 1 per cent. on goods *in transitu*, when the constituent is present; ¼ per cent. on banking affairs.

Insurance of ships, houses, and lives is effected at Bordeaux. The first is carried on partly by individuals, and partly by companies; the last two by companies only. The partners in these associations are generally liable only to the amount of the shares they respectively hold.

For statements as to the *Warehousing System*, *Smuggling*, &c. the reader is referred to the article HAVRE.

Quarantine is performed at Trompeloup, where a spacious lazaretto has been constructed. Bordeaux is a favourable place for repairing and careening ships, and for obtaining supplies of all sorts of stores.

The *exchange* or *money brokers* of Bordeaux follow a kind of business pretty similar to the London private bankers. They receive, negotiate, and pay bills and orders of such houses as have accounts open with them, charging and allowing an interest on balances, which varies from 3½ to 4½ per cent., according to circumstances. They charge ¼ per cent. for negotiating bills, and ½ per cent. on all the payments they make.

There are, besides, numerous capitalists who employ their spare funds in discounting bills. They prefer bills at long dates, and take from 3 to 6 per cent. discount, according to the confidence they have in the paper presented.

There are not wanting individuals who guarantee, with their names, every sort of paper presented, taking from 5 to 60 per cent. for the risk.

Customary Mode of Payment, and Length of Credit. — Colonial produce, spices, dye stuffs, and metals are usually sold for cash, with 3 per cent. discount. Corn, flour, brandy, and several other articles, are sold for nett cash, without discount.

Wines are generally bought of the cultivators at 12 and 15 months' credit, or 6 per cent. discount. When they change hands amongst the merchants, the practice is to sell for cash, allowing 3 or 5 per cent. discount.

The usage is generally established in Bordeaux, to consider all paper having less than 30 days to run *as cash*; and with such all payments are made, where there is not an express stipulation to be paid in coin.

Tares. — The tares allowed in Bordeaux are as follows: —

At Custom-house.	*In Commerce.*	*At Custom-house.*	*In Commerce.*
Cotton in bales, 6 per cent.	Large square bales, 6 per cent. Smaller do., 8 per cent. Round do., 4 per cent.	Indigo, in chests, real tare.	In chests, real tare. In serons weighing from 45 to 55 kil. (101 to 123 lbs.), 7 kil. Do. 55½ to 65 kil. (102 to 146 lbs.), 8kil. Do. 65½ to 75 kil. (103 to 168lbs.), 9kil. Do. 75½ to 95kil. (169 to 213lbs.), 10 kil. Do. 95½ to 107 kil. (214 to 240 lbs.), 11 kil.
Sugar in hhds., 15 per cent.	In hhds. 17 per cent. Tret per hhd. 1 kil. (2·24 lbs.)		
Do. in cases, Havannah, &c., 15 per cent.	In cases, Havannah, &c. 14 per cent. Tret per case, 1 kil. (2·24 lbs.)		
Do. in bales from Bourbon, Mauritius, Manilla, &c., nett.	In bales from Bourbon, &c., real. Mauritius, Manilla, &c., 8 per cent.	Ashes, pot and pearl, 12 per cent.	Pot and pearl, 12 per cent.
Do. clayed, in hhds., white and brown, 12 per cent.	Clayed, in hhds. white, 12 per cent. Tret per hhd., 1 kil.	Quercitron bark, real tare.	In casks of 200 kil. and above (445 lbs.), 12 per cent.
	Clayed, do., brown, 13 per cent. Tret per hhd. 1 kil.		Do. from 150½ to 200 kil. (337 to 448 lbs.), 15 per cent.
Rice, from all countries, none.	Tare nett, or 12 per cent.		Do. from 120 to 150 kil. (269 to 336 lbs.), 20 per cent.
Coffee in bags, tare nett, or 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil.	Peruvian bark, real tare.	In chests, tare nett.
	Do. from 60½ to 75 kil. (135 to 168 lbs.), 1½ kil.		In serons weighing from 45 to 57½ kil. (101 to 129 lbs.), 8 kil.
	Do. above 75 kil. (168 lbs.), 2 kil.		Do. 60 to 75 kil. (134 to 168 lbs.), 10kil.
Cocoa in bags, tare nett, or 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil.	Cinnamon in chests, 12 per cent.	Ceylon, in serons, or single bales, 3 kil.
	Do. 60½ kil. to 75 kil. (135 to 168 lbs.), 1½ kil.	Do. in bales, 2 per cent.	Do. in double bales, 6 kil.
	Do. above 75 kil. (168 lbs.), 2 kil.	Cloves, real tare.	China, in chests, real tare.
Pepper in bags, 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil.		In casks, real tare.
	Do. from 60½ to 75 kil. (135 to 168 lbs.), 1½ kil.		In bales weighing from 30½ to 50 kil. (68 to 112 lbs.), real tare, or 2 kil.
	In bales, 130 to 150 kil. (291 to 336 lbs.), 2 kil.	Cochineal, real tare.	In bags, single, 1 kil.
	In serons, 50 to 60 kil. (112 to 134 lbs.), 2 kil.	Gum in casks, do.	Real tare.
		Mace and nutmegs, do.	Real tare.
		Annotto, none.	In casks, 4 per cent. for leaves, and 6 per cent. tare.
		Sarsaparilla, real tare, or 2 per cent.	In bales, 5 kil.

*** The instructive details with respect to the trade of Bordeaux given above, so very superior to what are to be found in any other publication, have been principally derived from the private communications of intelligent parties on the spot; but some particulars have been learned from official sources.

Operation of the French Commercial System on the Trade of Bordeaux, &c. — The trade of this great city has suffered severely from the short-sighted, anti-social policy of the

French government. This policy was first broadly laid down, and systematically acted upon, by Napoleon; and we believe it would not be difficult to show that the privations it entailed on the people of the Continent powerfully contributed to accelerate his downfall. But those by whom he has been succeeded have not hitherto seen the expediency of returning to a sounder system; on the contrary, they have carried, in some respects at least, the "continental system" to an extent not contemplated by Napoleon. Notwithstanding the vast importance to a country like France, of supplies of iron and hardware at a cheap rate, that which is produced by foreigners is excluded, though it might be obtained for a third part of the price of that which is manufactured at home. A similar line of policy has been followed as to cotton yarn, earthenware, &c. And in order to force the manufacture of sugar from the beet-root, oppressive duties have been laid, not only on foreign sugar, but even on that imported from the French colonies. The operation of this system on the commerce and industry of the country has been most mischievous. By forcing France to raise, at home, articles for the production of which she has no natural or acquired capabilities, the exportation, and consequently the growth, of those articles in the production of which she is superior to every other country, has been very greatly narrowed. All commerce being bottomed on a fair principle of reciprocity, a country that refuses to import must cease to export. By excluding foreign produce — by refusing to admit the sugar of Brazil, the cottons and hardware of England, the iron of Sweden, the linens of Germany, and the cattle of Switzerland and Wirtemberg — France has done all that was in her power to drive the merchants of those countries from her markets. They are not less anxious than formerly to obtain her wines, brandies, and silks; inasmuch, however, as commerce is merely an exchange of products, and as France will accept very few products belonging to others, they cannot, how anxious soever, maintain that extensive and mutually beneficial intercourse with her they would otherwise carry on: they sell little to her, and their purchases are, of course, proportionally diminished.

This, indeed, is in all cases the necessary and inevitable effect of the prohibitive system. It never fails to lessen exportation to the same extent that it lessens importation; so that, when least injurious, it merely substitutes one sort of industry for another — the production of the article that had been obtained from the foreigner, for the production of that which had been sent to him as an equivalent. — (See COMMERCE.)

France is not only extremely well situated for carrying on an extensive intercourse with foreign countries, but she is largely supplied with several productions, which, were she to adopt a liberal commercial system, would meet with a ready and advantageous sale abroad, and enable her to furnish equivalents for the largest amount of imports. The superiority enjoyed by Amboyna in the production of cloves is not more decided than that enjoyed by France in the production of wine. Her claret, burgundy, champagne, and brandy are unrivalled; and furnish, of themselves, the materials of a vast commerce. Indeed, the production of wine is, next to the ordinary business of agriculture, by far the most extensive and valuable branch of industry in France. It is stated by the landholders and merchants of the department of the Gironde, in the admirable *Pétition et Mémoire à l'Appui*, presented by them to the Chamber of Deputies in 1828, that the quantity of wine annually produced in France amounts, at an average, to about 40,000,000 hectolitres, or 1,060,000,000 gallons; that its value is not less than from 800,000,000 to 1,000,000,000 francs, or from 32,000,000*l.* to 40,000,000*l.* sterling; and that upwards of *three millions* of individuals are employed in its production. In some of the southern departments, it is of paramount importance. The population of the Gironde, exclusive of Bordeaux, amounts to about 450,000 individuals, of whom no fewer than 230,000 are supposed to be directly engaged in the cultivation of the vine.

Here, then, is a branch of industry in which France has no competitor, which even now affords employment for about a tenth part of her population, and which is susceptible of indefinite extension. She has, in this single article, the means of carrying on the most extensive and lucrative commerce. "Le gouvernement Français," says M. Chaptal, in his work *Sur l'Industrie Française*, "doit les plus grands encouragements à la culture des vignes, soit qu'il considére ses produits relativement à la consommation intérieure, soit, qu'il les envisage sous le rapport de notre commerce avec l'étranger, *dont il est en effet la base essentielle.*"

But instead of labouring to extend this great branch of industry, government has consented to sacrifice it to the interests of the iron-founders, the cotton and linen manufacturers, and the planters of Martinique and Guadaloupe! We do not, indeed, imagine that they were at all aware that such would be the effect of their policy. Theirs is only one instance, among myriads that may be specified, to prove that ignorance in a ministry is quite as pernicious as bad intentions. The consideration, apparently not a very recondite one, that, notwithstanding the bounty of nature, wine was not gratuitously produced in France, and could not, therefore, be exported except for an equivalent, would seem never to have occurred to the ministers of Louis XVIII. and Charles X.

But those whose interests were at stake, did not fail to apprise them of the hollowness of their system of policy. In 1822, when the project for raising the duties on sugar, iron, linens, &c. was under discussion, the merchants of Bordeaux, Nantes, Marseilles, and other great commercial cities, the silk manufacturers of Lyons, and the wine-growers of the Gironde, and some other departments, presented petitions to the Chambers, in which they truly stated, that it was a contradiction and an absurdity to attempt selling to the foreigner, without, at the same time, buying from him; and expressed their conviction, that the imposition of the proposed duties would be fatal to the commerce of France, and would consequently inflict a very serious injury on the wine-growers and silk manufacturers. These representations did not, however, meet with a very courteous reception. They were stigmatised as the work of ignorant and interested persons. The Chambers approved the policy of ministers; and in their ardour to extend and perfect it, did not hesitate deeply to injure branches of industry on which several millions of persons are dependent, in order that a few businesses, nowise suited to France, and the support of which costs her several millions a year, might be bolstered up and protected!

It is plain, had there not been some powerful counteracting cause in operation, that the exports of wine from France should have been very greatly augmented since the peace of 1815. The United States, Russia, England, Prussia, and all those countries that have at all times been the great importers of French wines, have made prodigious advances in wealth and population since 1789; and, had the commerce with them not been subjected to injurious restrictions, there is every reason to think that their imports of French wine would have been much greater now than at any former period. So far, however, from this being the case, they have declined in a most extraordinary degree. This is proved beyond all question by the following extract from a report made to the Council General of the Gironde in 1841, and published by its orders and with its sanction.

"Previously to 1790, the wine trade at Bordeaux had an immense development. The books of our most ancient houses, transmitted down religiously from father to son, and the registries of our lands, prove that in the years preceding 1787 our exports had reached more than 100,000 tuns of wine, 10,000 casks of brandy, and 5,000 of vinegar. They also show that from 1,200 to 1,400 vessels from the north took large quantities of wine, in return for their national produce, which they easily disposed of amongst us. It was a most lucrative commerce, for we then sent 15,000 tuns to Prussia, 18,000 to England and Ireland, 6,000 to Dantzic, 40,000 to Hamburg, Lubeck, and Bremen, 15,000 to Holland, 7,000 to Sweden, 5,000 to Denmark and Norway, and 12,000 to Russia. But at that period we had not closed our frontiers to the produce of all these nations — we received at moderate duties their woollens, linens, hemp, iron, wood, cattle, and other articles, the consumption of which was less expensive, and the quality better, than similar articles made at home, and forced on us by customs duties. At present, notwithstanding the rapid increase of commercial affairs, notwithstanding the new nations of America, the advantages of a more expeditious, certain, and economical navigation, the demands of nations increased in number and industry, and consequently more disposed to purchase for consumption, our commerce is declining in a most alarming manner. Authentic documents prove that, in 1839, our exports only reached 1,339 tuns to England, 2,499 to Russia, 147 to Sweden, 342 to Norway, 2,964 to Prussia, 612 to Denmark, 8,188 to the Hans Towns, and 7,621 to the Netherlands. Since then our exports have not increased, so that instead of 100,000 tuns at least taken by the north of Europe from the department of the Gironde previously to 1790, not more than 25,000 tuns are taken at present. Yet, the taste for wine and the necessity to use it, have not been weakened amongst the various nations; but the exaggerated duties with which its introduction has been loaded, only allow it to be consumed by the wealthy classes, who are everywhere the least numerous. These duties are established in retaliation of those which France lays on foreign productions. If the exportation of wine has diminished in so great a proportion, the cause must be sought in the protective system. When the variations in the exports of wine are attentively examined, and their decrease looked to since 1822, when this system attained its height, to 1840, it is impossible not to be struck with the fact that these variations are intimately connected with the system itself. The decrease in the exports of wine has followed the increased development of the protective system, and, therefore, we are forced to draw this conclusion, that *it is this system which destroys our export trade.* Yet foreign consumption is the most certain and most profitable for Bordeaux wines, and it is particularly in the markets of the north of Europe and of England that the wines of the finest quality which our department produces find purchasers. Let us, then, insist on the necessity of re-opening these markets, which have been closed by the enormous amount of duties imposed by foreigners in reprisal of those laid by us on their products."

Besides the injury inflicted on the wine trade by the prohibitive system of commercial

policy adopted in France, and the retaliatory measures it has provoked in other countries, it has suffered severely from the octrois and other duties on internal consumption. But the depression, though felt everywhere, is greatest in the Gironde, which is especially dependent on its export trade. This is strikingly evinced by the large stocks of wine that remain in the hands of the growers and merchants, and by the fall in its price. This has, of course, reacted on the vineyards, many of which have become all but unsaleable; and a stop has been put to every sort of improvement. Nor have matters been in the least amended during the current year: on the contrary, they seem to be gradually getting worse. Such is the poverty of the proprietors, that wine is now frequently seized and sold by the revenue officers in payment of arrears of taxes; and such is at present the extent of the evil, that, in the course of this year, 1843, the committee of wine growers have applied to government for a loan of 2,000,000 francs to be applied to the payment of taxes due by the wine growers.

Such are the effects of the restrictive system of policy on the wine trade of France,—on a branch of industry which, as already seen, employs *three millions* of people. It is satisfactory, however, to observe, that the landowners and merchants are fully aware of the source of the misery in which they have been involved. They know that they are not suffering so much from hostile or vindictive measures on the part of foreigners, as from the blind and senseless policy of their own government; that they are victims of an attempt to counteract the most obvious principles—to make France produce articles directly at home, which she might obtain from the foreigner in exchange for wine, brandy, &c. at a third or a fourth part of the expense they now cost. *They cannot export, because they are not allowed to import.* Hence they do not ask for bounties and prohibitions; on the contrary, they disclaim all such quack nostrums; and demand what can alone be useful to them, and beneficial to the country,—a free commercial system. And notwithstanding the powerful interests involved in the support of the prohibitive policy, we cannot doubt but that, in the end, they will be compelled to give way; and that France, by opening her ports to a freer importation of foreign products, will insure the proportional extension of her exports of wines, brandies, silks, and other products, which she can furnish more cheaply and of a better quality than any other country. It is reasonable to suppose, that the experience that has been afforded of the ruinous effects of the prohibitive system, and the more general diffusion of correct ideas with respect to the real sources of wealth, will at no distant period occasion the adoption of such changes in the commercial legislation of France, as may render it more conducive to her interest, and more in accordance with the spirit of the age. Indeed we incline to think that but for the unfortunate misunderstanding about the Turkish question, and the irritation thence arising, a commercial treaty on a comparatively liberal footing would have been already entered into between France and this country; and it is much to be wished that some such arrangement should speedily be completed. If, indeed, we were hostile to France, we should wish her to continue her present system, for it must effectually prevent her making any considerable progress either in manufactures or commerce; but we disclaim being actuated by any such feelings. We are truly anxious for her prosperity, for her sake and our own; for unless she be surrounded by Bishop Berkeley's wall of brass, whatever contributes to her well-being must, in some degree, redound to the advantage of her neighbours.

"Were such narrow and malignant politics to meet with success," said Mr. Hume, writing in the middle of the last century, and when the prosperity of others was generally regarded with an evil eye, "we should reduce all our neighbouring nations to the same state of sloth and ignorance that prevails in Morocco and the coast of Barbary. But what would be the consequence? They could send us no commodities; they could take none from us: our domestic commerce itself would languish for want of emulation, example, and instruction; and we ourselves should soon fall into the same abject condition to which we had reduced them. I shall, therefore, venture to acknowledge, that not only as a man, but as a British subject, I pray for the flourishing commerce of Germany, Spain, Italy, and even France itself. I am, at least, certain that Great Britain, and all those nations, would flourish more, did their sovereign and ministers adopt such enlarged and benevolent sentiments towards each other."—(*Essay on the Jealousy of Trade.*)

BOSTON, a commercial city of the United States, the capital of Massachusetts, and the largest town of New England, lat. 42° 23′ N., long. 71° 4′ W. Population, in 1840, 83,707. The city is situated on a peninsula near the bottom of a large and deep bay, being surrounded on all sides by water, except on the south, where it is joined to the main land by the narrow isthmus called Boston Neck. But it communicates, by means of extensive wooden bridges, with Charleston on the north side of the bay, and with Dorchester on the south. Boston Bay is of great extent, and is studded with many islands. The plan, on the opposite side, will give a better idea of it than could be derived from any description.


BOSTON
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Nautic Miles

References to Plan. — A, outer light-house, 65 feet high, having a revolving light, alternately brilliant 40 and obscured 20 seconds. B, buoy on the outward edge of the shoal, off Alderton Point. C, D, E, Great, Middle, and Outward Brewster's Islands. F, George's Island. The passage for ships, lying between this island and the rocks on the opposite side of Lovell's Island (G), being very narrow, it is, in effect, the key of the harbour; and large sums have recently been expended on its fortification. To the south of George's Island, and Hospital Island (H), is Nantasket road, where there is good anchorage. The outer harbour lies to the west of Lovell's (G) and George's (F) Islands, being separated from the inner harbour by Castle Island (M), and Governor's Island (N). On the north end of Long Island (I) is a harbour fixed light, 27 feet high. K, Deer Island. L, Spectacle Island. O, Middle Ground, dry at 3 qrtrs. ebb, only 5 feet water. Q, Thomson's Island. R, Dorchester peninsula. S, Noodle Island. T, Charleston. Governor's Island (N), Castle Island (M), and Noodle's Island (S), are all fortified. The course that a ship ought to steer is marked by the dotted line, leading between the light-house and Alderton point, and between George's Island (F) and Lovell's Island (G). The soundings are laid down in fathoms at low water.

Shipping. — According to the official accounts laid before Congress, 21st of July, 1842, the registered, enrolled, and licensed tonnage belonging to Boston in 1841 amounted to 227,608 tons, of which 60,759 tons were employed in the coasting trade, and 7,846 in the fisheries.

Shipping Charges. — For an account of these, see NEW YORK.

How to enter the Port. In coming from the Atlantic, a ship should bring the light-house to bear W. by N. to W.N.W., and run direct for it. The largest ships may pass it at within less than a cable's length. If there be no pilot on board, or the master be unacquainted with the harbour, or the wind be north-westerly, which is the most unfavourable for entering, she had better steer W. by S. for Nantasket roads, where she may anchor, and get a pilot.

Mooring, &c. — Generally speaking, there is sufficient depth of water to enable the largest ships to come up to town at all times of the tide. They usually moor alongside quays or wharfs, where they lie in perfect safety. There are in all about 60 wharfs; which, for the most part, are built on piles, with a superstructure of stone and earth. The two principal are "Long Wharf," 550 yards in length; and "Central Wharf," 413 yards long by 50 in breadth, having a range of lofty brick stores and warehouses along its whole length.

Pilotage. — No particular place is specified at which vessels must heave to for a pilot. But all vessels, with the exception of coasters under 200 tons, and American vessels laden with plaster of Paris from British America, if hailed by a pilot within about ¼ mile of the outer light, must take him on board, under a penalty of 50 dollars. If they have got within this distance before being hailed, the obligation to take a pilot on board ceases. This regulation has obviously been dictated by a wish to have the pilots constantly on the alert; it being supposed that masters not well acquainted with the bay will heave to to take one on board, though they have got within the free limits.

Table of the Rates of Pilotage on Outward and Inward bound Vessels in the Port of Boston.

Outward.								Inward.							
From Nov. 1. to May 1.				From May 1. to Nov. 1.				From Nov. 1. to May 1.				From May 1. to Nov. 1.			
Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.
7 ft.	0·90	17 ft.	1·10	7 ft.	0·75	17 ft.	1·00	7 ft.	1·45	17 ft.	1·87	7 ft.	1·10	17 ft.	1·35
8	0·90	18	1·20	8	0·75	18	1·00	8	1·45	18	2·50	8	1·10	18	1·88
9	0·90	19	1·30	9	0·75	19	1·25	9	1·45	19	2·75	9	1·10	19	1·88
10	0·95	20	1·50	10	0·80	20	1·50	10	1·56	20	3·00	10	1·20	20	1·88
11	1·00	21	2·00	11	0·85	21	1·75	11	1·72	21	4·00	11	1·25	21	2·80
12	1·05	22	2·50	12	0·90	22	2·00	12	1·77	22	4·00	12	1·30	22	3·00
13	1·10	23	2·75	13	0·95	23	2·25	13	1·77	23	4·00	13	1·35	23	3·00
14	1·10	24	2·75	14	0·95	24	2·25	14	1·87	24	4·00	14	1·35	24	3·00
15	1·10	25	2·75	15	0·95	25	2·25	15	1·87	25	4·00	14	1·35	25	3·00
16	1·10			16	0·95			16	1·87			16	1·35		

Careening, Stores, &c. — Boston is a very favourable place for careening and repairing ships. All kinds of supplies may be had of the best quality and at moderate prices.

Immigration.—The number of immigrants arriving at Boston is not great, seldom exceeding 1,600 in a year. A city ordinance directs that the masters of vessels bringing immigrants shall enter into a bond with sureties to the amount of 200 dollars for each immigrant, that he shall *not* become a charge upon the state for 3 years, or pay a commutation of 5 dollars on account of each individual. But this regulation does not apply to immigrants having a reasonable amount of property; the declaration of the foreign consuls as to this point is commonly acted upon.

Trade of Boston, &c. — Boston has a very extensive trade with the southern states and with foreign countries, and is also one of the principal seats of the American fisheries. She is wholly indebted to her southern neighbours, and principally to New York, Maryland, and Pennsylvania, for supplies of flour and wheat, and for large quantities of barley, maize, oatmeal, oats, &c., as well as for cotton, tobacco, staves, rice, &c. Of these, the imports of flour may amount, at an average, to about 600,000 barrels a year; all sorts of grain, to about 2,200,000 bushels; cotton, 110,000 bales; staves, 3,000,000, &c. Her returns are made, partly in native raw produce, as beef, pork, lard, &c.; partly and principally in the produce of her manufacturing industry, in which Massachusetts is decidedly superior to every other state in the Union; and partly in the produce of her fisheries and foreign trade. At an average, Boston annually sends to the southern ports of the Union about 45,000 barrels of beef and pork; 165,000 barrels mackerel, herrings, alewives, &c.: 20,000 quintals of dried and smoked fish; 3,500,000 pairs of boots and shoes; 600,000 bundles of paper; besides a very large amount of cotton and woollen manufactured goods, nails, ice, furniture, cordage, &c.; so as to leave a large balance in her favour. Her exports of native produce to foreign countries consist principally of the same articles she sends to the southern states; but she also exports a large amount of the foreign produce she had previously imported. The imports from abroad consist principally of cotton and woollen goods; linens, canvas, &c.; hardware, silks, sugar, tea, coffee, wines and brandy, spices, hides, indigo, dyewoods, &c. The total imports from foreign countries into the state of Massachusetts in the year ending 30th of September, 1841, amounted to 20,318,003 dollars; while the exports of native produce, during the same year, amounted to only 7,397,692 dollars, and of native and foreign produce together, to 11,487,343 dollars; the balance against Massachusetts being paid off by bills upon the southern states, to which she exports much more than she imports. New York alone is, in fact, supposed to be at all times indebted to Boston about 5,000,000 dollars. We subjoin some statements illustrative of the trade of Boston.

Flour. — The quantity of Flour imported into Boston was —

In 1842	609,460 barls.	In 1838	379,704 barls.
1841	574,233	1837	423,246
1840	619,261	1836	418,597
1839	451,667	1835	408,516

The imports of Flour in 1842 were derived as follow : —

From	New York	140,739 barls
	Albany	90,248
	Western Railroad	100,000
	New Orleans	96,833
	Fredericksburg	36,574
	Georgetown	18,331
	Alexandria	11,509
	Richmond	8,014
	Other ports in Virginia	3,895
	Philadelphia	53,481
	Baltimore	46,744
	Hartford	1,422
	Salem Mass	911
	Portland	484
	Wilmington, Delaware	275
	Total barrels	609,460

Corn. — The quantity of Corn imported into Boston was —

	Corn.	Oats.	Rye.
In 1842 bush.	1,835,163	393,474	38,416
1841	2,045,254	356,502	31,128
1840	1,868,451	437,948	48,026
1839	1,607,492	439,141	48,624
1838	1,574,038	445,657	102,473
1837	1,725,436	405,173	86,391

The imports of Corn in 1841 were derived as follows : —

		Corn.	Oats.	Rye.
From	New Orleans bush.	36,735	—	280
	Charleston	5,000	—	—
	North Carolina	71,594	—	—
	Fredericksburg	162,694	—	—
	Norfolk	160,870	2,420	—
	Rappahannock	50,685	—	—
	Other ports in Virginia	83,114	1,990	—
	Baltimore	537,956	9,791	700
	Delaware	111,956	31,360	—
	Philadelphia	559,511	98,069	2,916
	New Jersey	50,645	29,058	—
	New York	194,404	88,140	28,232
	Albany	12,792	5,091	1,000
	Other ports in New York	7,000	6,700	1,000
	Ports in Connecticut	500	2,000	—
	Rhode Island	500	—	—
	Massachusetts	1,300	600	—
	New Hampshire	—	3,000	—
	Maine	—	68,360	—
	Prince Edward Island	—	7,523	—
	Total	2,045,254	356,502	31,128

The imports of Coal in 1842 were derived as follows : —

		Tons.	Bush.
From	Philadelphia	76,604	—
	Rondout	8,917	—
	Kingston	2,485	—
	Havre de Grace	1,561	—
	Other places	709	121,800
	Total U. S.	90,276	121,800
	Liverpool	2,070	—
	Newcastle	7,518	1,288
	Hull	690	—
	Glasgow	666	—
	London	70	—
	Sidney	—	6,780
	Pictou	—	10,098
	Cumberland	—	156
	Halifax	—	83
	St. John	—	40
	Dorchester	—	15
	Total foreign	11,014	18,460

Ice. — There were no fewer than 16 companies engaged in 1841 in the business of shipping ice in Boston, for the southern parts of the Union, the Havannah, &c. They formerly sold ice in New Orleans at 6 cents a pound, but now sell it at 1 cent, and by the consequent increase of consumption, and the prevention of melting, by the rapidity of the sale, they make 4 dollars for 1 formerly. The ice is sawed into square blocks, not less than 12 inches thick, and is packed into vessels with straw and hay, boxed with thin lumber made air-tight. One of these companies paid 7,000 dollars in 1841, for the straw and hay they used for packing.

Shipping. — In 1839 there arrived in Boston 1553 ships from foreign parts, the customs revenue duty the same year being 3,212,189 dollars. The foreign arrivals in 1838 were as follows : — Ships and Barques 242, Brigs 506, Schooners 560, Galliots 4, Ketch 1.

American	831	Spanish	2
English	461	Bremen	1
Sicilian	7	Portuguese	1
Dutch	3	Danish	1
Swedish	5	Oldenburg	1
French	2		
Total in 1838	1313	Total in 1836	1452
1837	1591	1835	1302

Coastwise arrivals in 1838, &c. — Ships and Barques 106, Brigs 602, Schooners 3,037, Sloops, 273.

Total in 1838	4018	Total in 1836	3944
1837	4000	1834	3879

The above list does not include wood and lumber coasters and fishing vessels, of which some thousands arrive annually. It contains such only as are recorded on the Merchants' Hall News Room Books.

Imports of Tea, Cotton, Coal, Salt, Coffee, and Sugar.

Years.	Tea.	Cotton.	Coal.	Salt.	Coffee.	Sugar.	
	Chests.	*Bales.*	*Bush.*	*Staud. Bush.*	*Lbs.*	*Lbs.*	*Lbs.*
1835	167,906	80,709	525,993	795,247	——	——	——
1836	215,000	82,885	1,036,805	573,681	——	——	——
1837	197,804	82,684	1,739,145	1,052,008	——	——	——
1838	185,220	96,656	1,074,692	1,108,015	——	——	——
1839	118,000	94,350	1,292,517	601,958	——	White.	Brown.
1840	254,000	136,357	1,507,710	1,206,255	— —	9,704,821	29,978,674
1841	113,152	131,860	— —	537,300	12,245,390	11,252,061	31,990,342
1842	— —	119,670	— —	— —	18,608,640	8,695,237	29,541,675

Banks. — An Account of the Names, Capitals, Shares, and other principal Circumstances in the Condition of the Boston Banks in 1841. — (From *Hazard's Register*, vol. v. p. 271. and p. 302.)

Banks.	Capital.	Amount of Shares.	Number of Shares.	Amount of Dividend in 1841.	Rate per cent. of Dividend in 1841.	Average Market Price August 1841.
	Dollars.	*Dollars.*		*Dollars.*		
Atlantic	500,000	100	5,000	30,000	6 per cent.	94 per cent
Atlas	500,000	100	5,000	25,000	5	94½
Boston	600,000	50	12,000	42,000	7	54 per sh.
City	1,000,000	100	10,000	— —	— —	94 per cent.
Columbian	500,000	100	5,000	— —	— —	104¾
Eagle	500,000	100	5,000	32,500	6½	103
Freeman's	150,000	100	1,500	10,500	7	95
Globe	1,000,000	100	10,000	60,000	6	104
Granite	500,000	100	5,000	30,000	6	90
Hamilton	500,000	100	5,000	30,000	6	103
Market	560,000	70	8,000	19,600	3½	62½ per sh.
Massachusetts	800,000	250	3,200	48,000	6	100 per cent.
Mechanics	150,000	100	1,500	— —	—	90
Merchants	2,000,000	100	20,000	140,000	7	104
New England	1,000,000	100	10,000	60,000	6	103
North	750,000	100	7,500	37,500	5	90
Shawmut	500,000	100	5,000	30,000	6	90
Shoe and Leather Dealers	500,000	100	5,000	35,000	7	103¾
South	500,000	100	5,000	20,000	4	80
State	1,500,000	60	30,000	67,500	3½	58½ per sh.
Suffolk	1,000,000	100	10,000	80,000	8	120 per cent.
Traders	500,000	100	5,000	15,000	3	88
Tremont	500,000	100	5,000	30,000	6	99
Union	800,000	100	8,000	48,000	6	104
Washington	500,000	100	5,000	27,500	5½	93
Totals	17,610,000		191,700	918,100	Av. 5·213	

Insurance Companies. — Insurance, both fire and marine, is carried on to a great extent by joint-stock companies, and to some extent also by individuals. The stocks of the different insurance companies amounted in 1839 to 6,450,000 dollars. Only one company is established for insurance upon lives. The dividends paid by the different companies varied, at an average of the previous 5 years, from 3½ to 26¼ per cent.

Credit. — Foreign goods are frequently sold for ready money, but more usually at a credit of from 3 to 6 months: average length of credit, 6 months; but on iron and some other articles 12 months' credit is given. Discount for ready money at the rate of 6 per cent. per annum.

Commission. — The rates of commission are arbitrary, varying from 2 to 5, and sometimes (*del credere* included) to 7½ per cent. On small accounts, and West India goods, 5 per cent. is usually charged. The ordinary rate may be taken at 2½ per

cent.; but competition is so great, that commission merchants may be found who will transact business on almost any terms. Sometimes whole cargoes are sold by brokers on an agreement to receive a specific sum in lieu of commission and brokerage.

Money. — In Massachusetts, and throughout New England, the dollar passes at 6*s.*; so that the pound sterling = 1*l.* 6*s.* 8*d.* Boston currency. — (For further particulars as to *Money, Weights, Measures*, &c. see NEW YORK.)

We have derived these details partly from official and partly from private information; but principally from tables and statements obtained from Boston.

BOTARGO, called in Provence *Bouargues*, a sausage made on the shores of the Mediterranean and the Black Sea, of the roe of the mullet. The best comes from Tunis and Alexandria.

BOTTLES (Fr. *Bouteilles*; Ger. *Bouteillen*; It. *Bottiglie, Fiaschi*; Rus. *Bulülki*; Sp. *Botellas*), glass vessels for holding liquids, too well known to require any description. They are exported in considerable quantities. The duty of 8*s.* a cwt. on bottle glass, like the duties on other descriptions of glass, is both oppressive in amount, and is imposed and collected in the most vexatious manner. The manufacture has declined considerably since 1826. — (For further details, see GLASS.)

BOTTOMRY AND RESPONDENTIA. — Bottomry, in commercial navigation, is a mortgage of the ship. The owner or captain of a ship is, under certain circumstances, authorised to borrow money, either to fit her out so as to enable her to proceed on her voyage, or to purchase a cargo for the voyage, pledging the keel, or bottom of the ship (a part for the whole), in security for payment. In bottomry contracts it is stipulated, that if the ship be lost in the course of the voyage, the lender shall lose his whole money; but if the ship arrive in safety at her destination, the lender is then entitled to get back his principal, and the interest agreed upon, however much that interest may exceed the legal rate. — (*Black. Com.* book ii. c. 30.) The extraordinary hazard run by the lenders of money on bottomry, who, in fact, become adventurers in the voyage, has been held, in all countries, as justifying them in stipulating for the highest rate of interest.

When the loan is not on the ship, but on the goods laden on board, which, from their nature, must be sold or exchanged in the course of the voyage, the borrower's personal responsibility is then the principal security for the performance of the contract, which is therefore called *respondentia*. In this consists the principal difference between bottomry and respondentia. The one is a loan upon the ship, the other upon the goods. The money is to be repaid to the lender, with the *marine interest*, upon the safe arrival of the ship, in the one case, and of the goods in the other. In all other respects, these contracts are nearly the same, and are governed by the same principles. In the former, the ship and tackle, being hypothecated, are liable, as well as the person of the borrower; in the latter, the lender has, in general, only the personal security of the borrower.

This contract, which *must always be in writing*, is sometimes made in the form of a deed poll, called a bill of bottomry, executed by the borrower; sometimes in the form of a bond or obligation, with a penalty. But whatever may be its form, it must contain the names of the lender and the borrower, those of the ship and the master; the sum lent, with the stipulated marine interest; the voyage proposed, with the commencement and duration of the risk which the lender is to run. It must show whether the money is lent upon the ship, or upon goods on board, or on both; and every other stipulation and agreement which the parties may think proper to introduce into the contract. — (See the *Forms* at the end of this article.)

"It is obvious," says Lord Tenterden, "that a loan of money upon bottomry, while it relieves the owner from many of the perils of a maritime adventure, deprives him also of a great part of the profits of a successful voyage; and, therefore, *in the place of the owners' residence*, where they may exercise their own judgment upon the propriety of borrowing money in this manner, the master of the ship is, by the maritime law of all states, precluded from doing it, so as to bind the interest of his owners, without their consent. With regard to a *foreign country*, the rule appears to be, that if the master of a vessel has occasion for money to repair or victual his ship, or for any other purpose necessary to enable him to complete the enterprise in which she is engaged; whether the occasion arises from any extraordinary peril or misfortune, or from the ordinary course of the adventure; he may, if he cannot otherwise obtain it, borrow money on bottomry at marine interest, and pledge the ship, and the freight to be earned in the voyage, for repayment at the termination of the voyage. When this is done, the owners are never personally responsible. The remedy of the lender is against the master of the ship." — (*Law of Shipping*, part ii. c. 3.)

In bottomry and respondentia bonds, the lender receives the whole of his principal and interest, or nothing; *he is not answerable for general or particular average* *; nor will any loss by capture, if subsequently recaptured, affect his claim. In this respect our law differs from that of France (*Code de Commerce*, art. 330.) and most other countries: the lenders on bottomry bonds being there subject to average, as our underwriters upon policies of insurance. No loss can void a bottomry contract, unless a total loss, proceeding from a peril of the sea, during the voyage, and within the time specified by the contract. If the loss happen through any default or act of the owners or master, to which the lender was not privy, he may still recover.

There is no restriction by the law of England as to the persons to whom money may be lent on bottomry or at *respondentia*, except in the single case of loans on the ships of foreigners trading to the East Indies, which are forbidden by the 7 Geo. 1. stat. 1. c. 21. § 2.

It does not, however, appear to be necessary, in order to enable the master of a ship in a foreign port to obtain money for her repair, outfit, &c., that the contract pledging the vessel in security of the debt should be in the nature of a bottomry bond. Provided the person who advances the money do not choose to take upon himself the risk of the ship's return, and *do not stipulate for maritime interest*, "there seems," says Lord Tenterden, "to be no reason why the master should not pledge both the ship and the personal credit of the owner." And in the case of money advanced in this way to refit a ship in distress at Jamaica, which was captured on the voyage home, the lender recovered. — (*Law of Shipping*, part. ii. c. 3.)

Bottomry contracts were well known to the ancients. At Athens, the rate of interest was not fixed by law; but the customary rate seems to have been about 12 per cent. But when money was lent for a voyage, upon the security of the ship and cargo, the interest, on account of the superior risk encountered by the lender, was in most cases much higher. In voyages to the Taurica Chersonesus and Sicily, it was sometimes as high as 30 per cent. — (*Anacharsis's Travels*, vol. iv. p. 369. Eng. trans.) By the

* Mr. Serjeant Marshall doubts this; but it was so decided by the Court of King's Bench in *Joyce* v. *Williamson*, B. R. Mich. 23 Geo. 3.

Rhodian law, the exaction of such high interest as is usual in bottomry was declared to be illegal, unless the principal was really exposed to the dangers of the sea.—(*Boeckh's Public Economy of Athens*, vol. i. p. 177. Eng. trans.) This principle was adopted by the Romans, who gave to bottomry interest the name of *nauticum fœnus*; and has been transferred from the Roman law into all modern codes.

"Formerly," says Mr. Serjeant Marshall, "the practice of borrowing money on bottomry and respondentia was more general in this country than it is at present. The immense capitals now engaged in every branch of commerce render such loans unnecessary; and money is now seldom borrowed in this manner, but by the masters of foreign ships who put into our ports in need of pecuniary assistance to refit, to pay their men, to purchase provisions, &c. Sometimes officers and others belonging to ships engaged in long voyages, who have the liberty of trading to a certain extent, with the prospect of great profit, but without capitals of their own to employ in such trade, take up money on respondentia to make their investments; but even this, as I am informed, is now not very frequently done in this country."

The term bottomry has sometimes been incorrectly applied to designate a contract, by the terms of which the ship is not pledged as a security, but the repayment of money, with a high premium for the risk, is made to depend upon the success of the voyage. This, however, is plainly a loan upon a particular adventure, to be made by a particular ship, and not a loan upon the ship, and, of course, the lender has only the personal security of the borrower for the due performance of the contract. And it seems that loans have sometimes been made in this manner, and probably also with a pledge of the ship itself, to an amount exceeding the value of the borrower's interest in the ship; and such a contract is still legal in this country in all cases, except the case of ships belonging to British subjects bound to or from the East Indies; as to which it is enacted (19 Geo. 2. c. 37. § 5.),

"That all sums of money lent on bottomry or at respondentia upon any ship or ships belonging to his Majesty's subjects, bound to or from the East Indies, shall be lent only on the ship, or on the merchandise or effects laden, or to be laden, on board of such ship, and shall be so expressed in the condition of the bond, and the benefit of salvage shall be allowed to the lender, his agents or assigns, who alone shall have a right to make assurance on the money so lent; and no borrower of money on bottomry or at respondentia as aforesaid, shall recover more on any assurance than the value of his interest on the ship, or in the merchandises and effects laden on board of such ship, exclusive of the money so borrowed; and in case it shall appear that the value of his share in the ship, or in the merchandises and effects laden on board, doth not amount to the full sum or sums he hath borrowed as aforesaid, such borrower shall be responsible to the lender for so much of the money borrowed as he hath not laid out on the ship, or merchandises laden thereon, in the proportion the money not laid out shall bear to the whole money lent, notwithstanding the ship and merchandises be totally lost."

Lord Tenterden says that this statute was introduced for the protection of the trade of the East India Company; and its rules must be complied with in the case of bottomry by the *masters* of ships trading to the East Indies.

For a further discussion of this subject, see *Abbott on the Law of Shipping*, part ii. c. 3.; *Marshall on Insurance*, book ii.; and *Park on Insurance*, c. 21.

I. *Form of a Bottomry Bond.*

KNOW ALL MEN by these presents, That I, *A. B.*, commander and two-thirds owner of the ship *Exeter*, for myself and *C. D.*, remaining third-owner of the said ship, am held and firmly bound unto *E. F.* in the penal sum of *two thousand pounds* sterling, for the payment of which well and truly to be made unto the said *E. F.*, his heirs, executors, administrators, or assigns, I hereby bind myself, my heirs, executors, and administrators, firmly by these presents. *In witness* whereof I have hereunto set my hand and seal, this 14th day of *December*, in the year of our Lord 1796.

WHEREAS the above bound *A. B.* hath taken up and received of the said *E. F.* the full and just sum of *one thousand pounds* sterling, which sum is to run at respondentia on the block and freight of the ship *Exeter*, whereof the said *A. B.* is now master, from the port or road of *Bombay* on a voyage to the port of *London*, having permission to touch, stay at, and proceed to all ports and places within the limits of the voyage, at the rate or premium of *twenty-five per cent.* (25 per cent.) for the voyage. In consideration whereof usual risks of the seas, rivers, enemies, fires, pirates, &c. are to be on account of the said *E. F.* And for the further security of the said *E. F.* the said *A. B.* doth by these presents mortgage and assign over to the said *E. F.*, his heirs, executors, administrators, and assigns, the said ship *Exeter*, and her freight, together with all her tackle, apparel, &c. And it is hereby declared, that the said ship *Exeter* and her freight is thus assigned over for the security of the respondentia taken up by the said *A. B.*, and shall be delivered to no other use or purpose whatever until payment of this bond is first made, with the premium that may become due thereon.

NOW THE CONDITION of this obligation is such, that if the above bound *A. B.*, his heirs, executors, or administrators, shall and do well and truly pay, or cause to be paid, unto the said *E. F.* or his attorneys in *London* legally authorised to receive the same, their executors, administrators, or assigns, the full and just sum of 1,000*l.* sterling, being the principal of this bond, together with the premium which shall become due thereon, at or before the expiration of *ninety* days after the safe arrival of the said ship *Exeter* at her moorings in the river *Thames*, or in case of the loss of the said ship *Exeter*, such an average as by custom shall have become due on the salvage, then this obligation to be void and of no effect, otherwise to remain in full force and virtue. Having signed to three bonds of the same tenor and date the one of which being accomplished, the other two to be void and of no effect.

A. B. for self and *C. D.** } (L. S.)

Signed, sealed, and delivered, where no stamped paper is to be had, in the presence of } *G. H.* *I. K.*

* In this bond the occasion of borrowing the money is not expressed, but the money was in reality borrowed to refit the ship, which, being on a voyage from *Bengal* to *London*, was obliged to put back to *Bombay* to repair. See *The* EXETER, *Whitford*, 1 Rob. A. R. 176. The occasion therefore of borrowing the money gave the lender the security of the entire interest of the ship. But this bond, although expressed to be executed by the master for himself and the other part-owner, would not bind the other part-owner personally, *unless he had by a previous deed authorised the master to execute such a bond for him.*—(*Abbott on the Law of Shipping*, part iii. c. 1. § 2.)

II. *Form of a Bottomry Bill.*

TO ALL MEN TO WHOM THESE PRESENTS SHALL COME. I, *A. B.*, of *Bengal*, mariner, part-owner and master of the ship called the *Exeter*, of the burden of five hundred tons and upwards, now riding at anchor in *Table Bay*, at the *Cape of Good Hope*, send greeting:

WHEREAS I, the said *A. B.*, part-owner and master of the aforesaid ship, called the *Exeter*, now in prosecution of a voyage from *Bengal* to the port of *London*, having put into *Table Bay* for the purpose of procuring provision and other supplies necessary for the continuation and performance of the voyage aforesaid, am at this time necessitated to take up upon the adventure of the said ship, called the *Exeter*, the sum of *one thousand pounds* sterling monies of *Great Britain*, for setting the said ship to sea, and furnishing her with provisions and necessaries for the said voyage, which sum *C. D.* of the *Cape of Good Hope*, master attendant, hath at my request lent unto me, and supplied me with, at the rate of *twelve hundred and twenty pounds* sterling for the said *one thousand pounds*, being at the rate of *one hundred and twenty-two pounds* for every *hundred pounds* advanced as aforesaid, during the voyage of the said ship from *Table Bay* to *London*. NOW KNOW YE, that I, the said *A. B.*, by these presents, do, for me,

my executors and administrators, covenant and grant to and with the said *C. D.* that the said ship shall, with the first convoy which shall offer for *England* after the date of these presents, sail and depart for the port of *London*, there to finish the voyage aforesaid. And I, the said *A. B.*, in consideration of the sum of *one thousand pounds* sterling to me in hand paid by the said *C. D.* at and before the sealing and delivery of these presents, do hereby bind myself, my heirs, executors, and administrators, my goods and chattels, and particularly the said ship, the tackle and apparel of the same, and also the freight of the said ship, which is or shall become due for the aforesaid voyage from *Bengal* to the port of *London*, to pay unto the said *C. D.*, his executors, administrators, or assigns, the sum of *twelve hundred and twenty pounds* of lawful British money, within thirty days next after the safe arrival of the said ship at the port of *London* from the same intended voyage.

And I, the said *A. B.*, do, for me, my executors and administrators, covenant and grant to and with the said *C. D.*, his executors and administrators, by these presents, that I, the said *A. B.*, at the time of sealing and delivering of these presents, am a true and lawful part-owner and master of the said ship, and have power and authority to charge and engage the said ship with her freight as aforesaid, and that the said ship, with her freight, shall, at all times after the said voyage, be liable and chargeable for the payment of the said *twelve hundred and twenty pounds*, according to the true intent and meaning of these presents.

And lastly, it is hereby declared and agreed by and between the said parties to these presents, that in case the said ship shall be lost, miscarry, or be cast away before her arrival at the said port of *London* from the said intended voyage, that then the payment of the said *twelve hundred and twenty pounds* shall not be demanded, or be recoverable by the said *C. D.*, his executors, administrators, or assigns, but shall cease and determine, and the loss thereby be wholly borne and sustained by the said *C. D.*, his executors and administrators, and that then and from thenceforth every act, matter, and thing herein mentioned on the part and behalf of the said *A. B.* shall be void; any thing herein contained to the contrary notwithstanding.

In witness whereof the parties have interchangeably set their hands and seals to four bonds of this tenor and date, one of which being paid, the others to be null and void.

At the *Cape of Good Hope*, this 15th day of *November*, in the year of our Lord one thousand eight hundred and thirty.

Witness, { *E. F.* / *G. H.* / *I. K.* } *A. B.* (L. S.)

BOUNTY, a term used in commerce and the arts, to signify a premium paid by government to the producers, exporters, or importers of certain articles, or to those who employ ships in certain trades.

1. *Bounties on production* are most commonly given in the view of encouraging the establishment of some new branch of industry; or they are intended to foster and extend a branch that is believed to be of paramount importance. In neither case, however, is their utility very obvious. In all old settled and wealthy countries, numbers of individuals are always ready to embark in every new undertaking, if it promise to be really advantageous, without any stimulus from government: and if a branch of industry, already established, be really important and suitable for the country, it will assuredly be prosecuted to the necessary extent, without any encouragement other than the natural demand for its produce.

2. *Bounties on Exportation and Importation.* — It is enacted by the 3 & 4 Will. 4. c. 52., that a merchant or exporter claiming a bounty or drawback on goods exported must make oath that they have been actually exported, and have not been re-landed, and are not intended to be re-landed, in any part of the United Kingdom, or in the Isle of Man (unless entered for the Isle of Man), or in the islands of Faro or Ferro; and it is further enacted, that if any goods cleared to be exported for a bounty or drawback shall not be duly exported to parts beyond the seas, or shall be re-landed in any part of the United Kingdom, or in the islands of Faro or Ferro, or shall be carried to the islands of Guernsey, Jersey, Alderney, Sark, or Man (not having been duly entered, cleared, and shipped for exportation to such islands), such goods shall be forfeited, together with the ship or ships employed in re-landing or carrying them; and any person by whom or by whose orders or means such goods shall have been cleared, re-landed, or carried, shall forfeit a sum equal to treble the value of such goods. — § § 87—95.

3. *Policy of Bounties.* — It was formerly customary to grant bounties on the exportation of various articles; but the impolicy of such practice is now very generally admitted. It is universally allowed that bounties, if they be given at all, should be given only to the exporters of such commodities as could not be exported without them. But it is plain that, by granting a bounty in such cases, we really tax the public, in order to supply the foreigner with commodities at less than they cost. A. has a parcel of goods which he cannot dispose of abroad for less than 110*l.*; but they will fetch only 100*l.* in the foreign market; and he claims and gets a bounty of 10*l.* to enable him to export them. Such is the mode in which bounties on exportation uniformly operate; and to suppose that they can be a means of enriching the *public*, is equivalent to supposing that a shopkeeper may be enriched by selling his goods for less than they cost!

But however injurious to the state, it has been pretty generally supposed that bounties on exportation are advantageous to those who produce and export the articles on which they are paid. But the fact is not so. A trade that cannot be carried on without the aid of a bounty, must be a naturally disadvantageous one. Hence, by granting it, individuals are tempted to engage or continue in businesses which are necessarily very insecure, and are rarely capable of being rendered lucrative; at the same time that they are prevented, by trusting to the bounty, from making those exertions they naturally would have made, had they been obliged to depend entirely on superior skill and industry for the sale of their produce. The history of all businesses carried on in this country by the aid of bounties, proves that they are hardly less disadvantageous to those engaged in them than to the public.

The truth of these remarks has been acknowledged by government. The bounty on the exportation of corn was repealed in 1815; and the bounties on the exportation of linen and several other articles ceased in 1830.

4. *Bounties on Shipping* have principally been paid to the owners of vessels engaged in the fishery, and their influence will be treated of under the articles HERRING FISHERY and WHALE FISHERY.

For an account of the bounties that still exist, see the article TARIFF.

BOX-WOOD (Ger. *Buchsbaum*; Du. *Palmhout*; Fr. *Buis*; It. *Busso, Bosso, Bossolo*), the wood of the box tree (*Buxus sempervirens*), growing wild in several places in Great Britain. This tree was greatly admired by the ancient Romans, and has been much cultivated in modern times, on account of the facility with which it is fashioned into different forms. Box is a very valuable wood. It is of a yellowish colour, close-grained, very hard, and heavy; it cuts better than any other wood, is susceptible of a very fine polish, and is very durable. In consequence, it is much used by turners, and mathematical and musical instrument makers. It is too heavy for furniture. It is the *only* wood used by the engravers of wood-cuts for books; and provided due care be exercised, the number of impressions that may be taken from a box-wood cut is very great. In France, box-wood is extensively used for combs, knife-handles, and button moulds; and sometimes, it has been said, as a substitute for hops in the manufacture of beer. The value of the box-wood sent from Spain to Paris is reported to amount to about 10,000 fr. a year. In 1815, the box trees cut down on Box-hill, near Dorking in Surrey, produced upwards of 10,000*l*. They are now, however, become very scarce in England. Previously to 1837 the duty on box-wood was quite oppressive, being 5*l*. a ton if brought from a foreign country, and 1*l*. a ton if from a British possession; but it was then reduced to 10*s*. a ton without reference to origin. In 1841 this duty produced 554*l*., showing that 1108 tons had been entered for consumption. In 1842 the duty on box-wood from a British possession was reduced to 2*s*. 6*d*. a ton. Turkey box-wood sells in the London market for from 4*l*. 10*s*. to 8*l*. 15*s*. a ton, duty included.

BRAN, the thin skins or husks of corn, particularly wheat, ground, and separated from the corn by a sieve or boulter.

BRANDY (Ger. *Brantewein*; Du. *Brandewyn*; Fr. *Eau de vie, Brandevin*; It. *Aquarzente*; Sp. *Aguardiente*; Port. *Aguardente*; Rus. *Wino*; Lat. *Vinum adustum*), a spirituous and inflammable liquor, obtained by distillation from wine and the husks of grapes. It is prepared in most of the wine countries of Europe; but the superiority of French Brandy is universally admitted. The latter is principally distilled at Bordeaux, Rochelle, Cognac, the Isle de Rhé, Orleans, Nantes, and in Poitou, Touraine, and Anjou. That of Cognac is in the highest estimation.

Wines of all descriptions, but chiefly those that are strong and harsh (*poussés*), are used in the manufacture of brandy. The superior vintages, and those that have most flavour, are said to make the worst brandy. It is naturally clear and colourless. The different shades of colour which it has in commerce, arise partly from the casks in which it is kept, but chiefly from the burnt sugar, saunders wood, and other colouring matter intentionally added to it by the dealers. It is said that the burnt sugar gives mellowness to the flavour of the liquor, and renders it more palatable.

The art of distillation is believed to have been first discovered by the Arabians. From a passage in the *Testamentum Novissimum* of the famous Raymond Lully, who flourished in the thirteenth century, it would appear that the production of brandy and alcohol from wine was familiar to his contemporaries.—(p. 2. edit. *Argent.* 1571.) But the practice does not appear to have been introduced into France till 1313.—(*Le Grand d'Aussi Vie privé de François*, t. iii. p. 64.) When first introduced, brandy or burnt wine (*vinum adustum*) appears to have been used principally as an antiseptic and restorative medicine; and the most extravagant panegyrics were bestowed on its virtues. It was described as a sovereign remedy in almost all the disorders of the human frame; it was commended for its efficacy in comforting the memory, and strengthening the reasoning powers; it was extolled, in short, as the elixir of life, and an infallible preservative of youth and beauty!—(*Henderson's Hist. of Wine*, p. 24.) Dr. Henderson says that the experience of later times has shown how little this eulogy was merited; but in this he is contradicted by Burke, who maintains, with equal eloquence and ingenuity, that "the *alembic* has been a vast benefit and blessing."—(*Thoughts and Details on Scarcity*, p. 41.)

Brandy formed, for a lengthened period, a prominent article in the exports of France; few ships sailing from Bordeaux, Rochelle, or Nantes, without taking a certain quantity of it on board; but of late years there has been an extraordinary falling off in the exports of brandy as well as of wine. We subjoin—

Account of the Quantities and Values of the Brandy exported from France during each of the 10 Years ending with 1839, to the United Kingdom and to all Countries.

Years.	To the United Kingdom.		To all Countries.	
	Quantity.	Value.	Quantity.	Value.
	Litres.	*Francs.*	*Litres.*	*Francs.*
1830 - - - - -	9,098,140	8,164,071	17,913,536	15,337,280
1831 - - - - -	6,936,719	5,480,000	14,132,788	11,960,000
1832 - - - - -	13,569,345	12,208,900	23,787,732	20,732,624
1833 - - - - -	10,857,676	9,230,760	22,089,926	18,705,180
1834 - - - - -	7,829,366	6,654,956	16,146,280	13,712,700
1835 - - - - -	6,512,650	5,226,120	18,458,224	14,937,883
1836 - - - - -	7,179,544	5,939,125	19,291,396	16,262,194
1837 - - - - -	5,808,236	4,785,241	18,838,909	14,928,811
1838 - - - - -	7,410,510	6,002,613	20,609,714	16,668,437
1839 - - - - -	5,234,289	4,187,431	15,418,655	12,393,509
Totals - -	80,463,575	67,877,215	187,386,960	155,636,618
Average of 10 years - -	8,046,357½	6,787,721½	18,738,696	15,563,661 $\frac{8}{10}$
Average of the 10 years in imp. gallons -	1,771,155		4,124,740	

Duties on Brandy in Great Britain and Ireland. Quantities consumed. — In nothing, perhaps, has the injurious operation of oppressive duties been so strikingly exemplified as in the case of brandy. At the latter end of the seventeenth century, when the duty on brandy did not exceed 9*l.* a tun, the imports into England amounted to about 6,000 tuns, or 1,512,000 gallons — (*Historical and Political Remarks on the Tariff of the late Treaty*, 1786, p. 113.); whereas at present, notwithstanding our vast increase in wealth and population since the period referred to, we do not import so much brandy as we did then! Nor is this extraordinary circumstance to be ascribed to any preference on the part of the public to other beverages, but is wholly owing to the exorbitant duties with which brandy is loaded. The price of brandy in bond varies, at this moment, according to quality, from 3*s.* to 5*s.* a gallon (Imperial measure), while the duty is no less than 22*s.* 10*d.* Had the imposition of such a duty taken away the taste for brandy, it would have been comparatively innocuous. But it has done no such thing. Its only effect has been to convert a trade, that might otherwise have been productive of the most advantageous results, into a most prolific source of crime and demoralisation. The temptation to smuggle, occasioned by the exorbitancy of the duty, is too overpowering to be counteracted by the utmost penalties of the law. All along the coasts of Kent and Sussex, and the districts most favourably situated for *running spirits*, almost the whole of the labouring population are every now and then withdrawn from their ordinary employments, to engage in smuggling adventures. The efforts of the revenue officers to seize foreign brandy and geneva have in innumerable instances been repelled by force. Bloody and desperate contests have, in consequence, taken place. Many individuals who, but for this fiscal scourge, would have been industrious and virtuous, have become idle, predatory, and ferocious; they have learned to despise the law, to execute summary vengeance on its officers; and are influenced by a spirit that has been, and may be, turned to the most dangerous purposes.

Neither can it be truly said that this miserable system is upheld for the sake of revenue. On the contrary, it is easy to show that, besides the other mischievous effects it entails on the public, it occasions the loss of at least 1,000,000*l.* a year. In 1786, Mr. Pitt, by a wise and politic measure, took 50 per cent. from the duty on brandy and geneva; (the duty on the latter has been for a lengthened period the same as that on brandy;) and instead of being diminished, the revenue was increased. In 1790, when the duty on brandy and geneva was 5*s.* the wine gallon, the quantity retained for home consumption was 2,225,590 gallons. During the 3 years ending with 1803, when the duty was 9*s.* 2*d.*, the quantities of brandy and geneva retained for home consumption amounted, at an average, to about 2,700,000 gallons; but during the 3 years ending with 1818, when the duty had been increased to 18*s.* 10*d.* the wine gallon, the quantities retained did not exceed 850,000 gallons, while the quantities actually entered for home consumption were considerably less! The consumption increased considerably between 1818 and 1822; but since the latter epoch it has remained nearly stationary; and, notwithstanding the great increase of wealth and population in the interval, is not nearly so great now (1843) as it was half a century ago! Nothing, therefore, can be more palpably erroneous than to contend that the revenue is improved by the present system. Have we not seen the revenue derived from coffee trebled, by reducing the duty from 1*s.* 7*d.* to 6*d.*? Have we not seen the revenue derived from British spirits greatly increased, by reducing the duty from 5*s.* 6*d.* to 2*s.* the wine gallon? And where is the ground for supposing that the result would be different, were the duties on brandy equally reduced? But the experience afforded by Mr. Pitt's measure, in 1786, is decisive as to this point. He quadrupled the consumption and increased the revenue, by taking a half from the duty when it was a good deal less oppressive than now? Were a similar reduction made at present, does any one doubt that a similar result would follow?

Smuggling and adulteration would immediately cease; our trade with France would be very greatly extended; and the revenue would gain, not merely by a direct increase of duty, but indirectly by a very great diminution of the expense of collection.

But the effect of the increase of the duties on brandy in Ireland has been still more extraordinary. At an average of the 3 years ending with 1802, when the duty was 7*s.* 3½*d.* the wine gallon, the average annual consumption of brandy in Ireland amounted to 208,064 gallons, producing a nett revenue of 77,714*l.* Now, mark the consequence of *trebling* the duties. The consumption during the 3 years ending with 1842, notwithstanding the population is more than doubled, only amounted, at an average, to 15,399 gallons, producing about 17,560*l.* a year revenue! Dr. Swift has shrewdly remarked, that in the arithmetic of the customs two and two do not always make four, but sometimes only one. But here we have threefold duties, with less than a fourth part of the revenue, and less than a fourteenth part of the consumption!

It is surely impossible that a system like this, evincing in every part a degree of ignorant rapacity, to be paralleled only by that of the savages, who to get at the fruit cut down the tree, should be permitted for a much longer period to disgrace our fiscal code. Those only who are anxious for the continuance of smuggling, with all its consequent crime and misery, can be hostile to a reduction of the duty on brandy. By fixing it at 10*s.* a gallon, neither the consumption of British spirits nor that of rum would be sensibly affected. The middle classes would, however, be able to use brandy on occasions when, perhaps, at present, they use nothing; its clandestine importation would be prevented; those engaged in smuggling would be obliged to have recourse to industrious pursuits; and the manufacture of the abominable compounds, that are now so frequently substituted in its stead, would be put an end to. It is not easy, indeed, to suggest any measure that would be productive of so much advantage, and be attended with fewer inconveniences.

Regulations as to Importation, &c. — Brandy, geneva, and other foreign spirits, must be imported, if in casks, in casks containing not less than 40 gallons, under penalty of forfeiture. — (3 & 4 *Will.* 4. c. 52.) They must also be imported in ships of 70 tons burden or upwards, and are not to be exported from a bonded warehouse except in a vessel of like tonnage, under pain of forfeiture. — (*Ibid.*)

Brandy is not to be imported except in British ships, or in ships of the country or place of which it is the product, or from which it is imported, on pain of forfeiture thereof, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

Brandy may be exported to Mexico, Chili, or Peru, in casks containing not less than 15 gallons each. — (*Treas. Ord.* 17th of December, 1827.)

Brandy and geneva may be bottled in bonded warehouses for exportation to British possessions in the East Indies, under the same conditions as wine and rum. — (See SPIRITS.)

In most of the public accounts the imports of brandy and geneva are blended together. It would appear, too, from the note to the following account, that there are no means of accurately distinguishing them, except since 1814. The reader will find, in the article SPIRITS, an account of the quantities of brandy and geneva entered for home consumption, and the rates of duty upon them, in each year since 1789. The following account shows the consumption of brandy, and rates of duty on it, since 1814: —

An Account of the Number of Gallons (Imperial Measure) of Foreign Brandy entered for Home Consumption in Great Britain and Ireland, the Rates of Duty affecting the same, and the entire nett Produce of the Duty, each Year since 1814 (obtained from the Custom-house).

Yrs.	Quantities entered for Home Consumption.			Nett Produce of Duty (Customs and Excise).									Rates of Duty per Imperial Gallon (Customs and Excise).					
	Gt. Britain.	Ireland.	United Kingdom.	Great Britain.			Ireland.			United Kingdom.			Gt. Britain.			Ireland.		
	Imp. gal.	*Imp. gal.*	*Imp. gal.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1814	500,592	7,169	507,761	581,056	1	1	6,618	12	4	587,674	13	5	1	2	6½	0	17	3½
1815	656,555	5,160	661,715	740,747	12	1	4,702	6	1	745,449	18	2		—			—	
1816	657,062	5,275	662,337	742,304	8	0	4,124	19	5	746,129	7	5		—			—	
1817	634,017	3,875	637,892	716,734	0	6	3,248	4	4	719,982	4	10		—			—	
1818	531,583	6,232	537,815	599,586	0	4	5,287	10	1	604,873	10	5		—			—	
1819	787,422	7,080	794,502	890,068	19	8	6,090	17	10	896,159	17	6	1	2	7½		—	
1820	842,864	6,025	848,889	956,275	16	9	5,219	8	6	961,195	5	3		—			—	
1821	914,630	6,001	920,631	1,034,327	17	0	5,173	19	2	1,039,501	16	2		—			—	
1822	1,001,607	7,308	1,008,915	1,132,416	3	5	6,414	1	10	1,138,830	5	3		—			—	
1823	1,083,104	17,118	1,100,222	1,225,481	19	7	14,330	1	8	1,239,812	1	3		—		1	2	8
1824	1,226,715	984	1,227,699	1,387,204	2	8	1,207	9	8	1,388,411	12	4		—			—	
1825	1,321,327	3,550	1,324,877	1,489,768	11	4	4,177	3	9	1,493,945	15	1		—			—	
1826	1,473,243	7,371	1,480,614	1,636,499	6	7	8,397	15	3	1,464,897	1	10	1	2	6	1	2	6
1827	1,313,217	7,271	1,320,488	1,471,501	12	4	8,232	5	0	1,479,733	17	4		—			—	
1828	1,327,929	7,556	1,335,485	1,490,793	4	2	8,629	19	10	1,499,423	4	0		—			—	
1829	1,301,450	8,529	1,309,979	1,460,761	17	6	9,686	17	8	1,470,451	15	2		—			—	
1830	(See Note below.)		1,285,967	-			-			1,443,018	5	8		—			—	
1831	1,226,280	8,821	1,235,101	1,378,244	0	0	9,923	0	0	1,388,167	0	0		—			—	
1832	1,570,075	31,577	1,601,652	1,765,889	0	0	35,511	0	0	1,801,400	0	0		—			—	
1833	1,337,544	19,667	1,357,211	1,501,418	0	0	22,127	0	0	1,526,545	0	0		—			—	
1834	1,363,479	25,360	1,388,639	1,532,910	0	0	28,517	0	0	1,561,427	0	0		—			—	
1835	1,295,180	19,763	1,314,943	1,454,280	0	0	22,231	0	0	1,476,511	0	0		—			—	
1836	1,239,819	18,034	1,257,853	1,393,487	0	0	20,287	0	0	1,413,774	0	0		—			—	
1837	1,191,769	16,877	1,208,646	1,340,628	0	0	18,987	0	0	1,359,615	0	0		—			—	
1838	1,186,582	16,853	1,203,435	1,334,654	0	0	18,960	0	0	1,353,614	0	0		—			—	
1839	1,192,177	15,579	1,167,756	1,291,574	0	0	17,526	0	0	1,309,100	0	0		—			—	
1840	1,095,503	13,075	1,108,578	1,244,662	0	0	14,865	0	0	1,259,527	0	0	before 16th May 1	2	6	after 16th May 1	2	10
1841	1,148,011	16,495	1,164,506	1,310,949	0	0	18,834	0	0	1,329,083	0	0		—			—	
1842	1,067,477	16,629	1,083,106	1,216,783	0	0	18,981	0	0	1,235,764	0	0	1	2	10	1	2	10

Note. — In consequence of the destruction of the official records by fire, no separate account can be rendered of the consumption of brandy and geneva, or the revenue derived therefrom, for the years prior to 1814.

The trade accounts of Great Britain and Ireland having been incorporated during 1830, the particulars for that year are stated for the United Kingdom only.

BRASS (Ger. *Messing*; Du. *Messing, Missing, Geelkoper*; Fr. *Cuivre jaune, Laiton*; It. *Ottone*; Sp. *Laton, Azofar*; Rus. *Selenoi mjed*; Lat. *Orichalcum, Aurichalcum*) is a factitious metal, made of copper and zinc in certain proportions. It is of a beautiful yellow colour, more fusible than copper, and not so apt to tarnish. It is malleable, so ductile that it may be drawn out into wire, and is much tougher than copper. Its density is greater than the mean density of the two metals. By calculation it ought to be 7·63 nearly, whereas it is actually 8·39; so that its density is increased by about one tenth. The ancients do not seem to have known accurately the difference between copper, brass, and bronze. They considered brass as only a more valuable kind of copper, and therefore used the word *æs* to denote either. They called copper *æs cyprium*, afterwards *cyprium*; and this in process of time was converted into *cuprum*. Dr. Watson has proved that it was to brass they gave the name of *orichalcum*. Brass is malleable when cold, unless the proportion of zinc be excessive; but when heated it becomes brittle. It may be readily turned upon the lathe; and, indeed, works more kindly than any other metal.

There is a vast variety in the proportions of the different species of brass used in commerce; nor is it easy to determine whether the perfection of this alloy depends on any certain proportions of the two metals. In general, the extremes of the highest and lowest proportions of zinc are from 12 to 25 parts in the 100. In some of the British manufactories, the brass made contains one third its weight of zinc. In Germany and Sweden the proportion of zinc varies from one fifth to one fourth of the copper. The ductility of brass is not injured when the proportion of zinc is highest. This metal is much used in the escapement wheels and other nicer parts of watch-making: and bars of brass, very carefully made, fetch for this purpose a high price.

The use of brass is of very considerable antiquity. Most of the ancient genuine relics are composed of various mixtures of brass with tin and other metals, and are rather to be denominated bronzes. The best proportion for brass guns is said to be 1,000 lbs. of copper, 990 lbs. of tin, and 600 lbs. of brass, in 11 or 12 cwt. of metal. The best brass guns are made of malleable metal, not of pure copper and zinc alone; but worse metals are used to make it run closer and sounder, as lead and pot-metal. — (*Thomson's Chemistry, Encyc. Britannica, &c.*)

BRAZILETTO, an inferior species of Brazil wood brought from Jamaica. It is one of the cheapest and least esteemed of the red dyewoods.

BRAZIL NUTS, or *Chesnuts of Brazil*, the fruit of the Juvia (*Bertholletia excelsa*), a majestic tree growing to the height of 100 or 120 feet, abounding on the banks of the Orinoco, and in the northern parts of Brazil. The nuts are triangular, having a cuneiform appearance, with sutures at each of the angles; the shell is rough and hard, and of a brownish ash colour. The kernel resembles that of an almond, but is larger, and tastes more like a common hazel nut; it contains a great deal of oil, that may be obtained by expression or otherwise. These nuts do not grow separately, or in clusters, but are contained, to the number of from 15 to 50 or more*, in great ligneous pericarps or outer shells, generally of the size of a child's head. This outer shell is very hard and strong, so that it is rather difficult to get at the nuts, which are closely packed in cells inside. The natives are particularly fond of this fruit, and celebrate the harvest of the juvia with rejoicings; it is also very much esteemed in Europe. The nuts brought to this country and the Continent are chiefly exported from Para, and form an article of considerable commercial importance. — (*Humboldt's Pers. Nar.* vol. v. p. 538. Eng. trans.)

BRAZIL WOOD (Fr. *Bois de Brésil*; Ger. *Brasilienholz*; Du. *Brasilienhout*; It. *Legno del Brasile, Verzino*; Sp. *Madera del Bresil*; Port. *Pao Brasil*). It has been commonly supposed that this wood derived its name from the country in which it is principally produced. But Dr. Bancroft has conclusively shown that woods yielding a *red dye* were called Brazil woods long previously to the discovery of America; and that the early voyagers gave the name of Brazil to that part of that continent to which it is still applied, from their having ascertained that it abounded in such woods. — (See the learned and excellent work, *Philosophy of Colours*, vol. ii. pp. 316—321.)

It is found in the greatest abundance, and is of the best quality, in the province of Pernambuco, where it is called *Pao da rainha*, or Queen's wood; but it is also found in many other parts of the Western Hemisphere. The tree is large, crooked, and knotty; the leaves are of a beautiful red, and exhale an agreeable odour. Its botanical name is *Cæsalpinia Brasiletto*, but it is called by the natives *ibiripitanga*. Notwithstanding its apparent bulk, the bark is so thick, that a tree as large as a man's body with the bark will not be so thick as the leg when peeled. When cut into chips, it loses the pale colour it before had, and becomes red, and when chewed has a sweet taste. It is used for various purposes by cabinet-makers, and admits of a beautiful varnish, but its principal use is in dyeing red; and though the colour is liable to decay, yet, by mixing with it alum and tartar, it is easily made permanent. There is also made of it, by means of acids, a sort of liquid lake or carmine for painting in miniature.

Brazil wood has been for many years past a royal monopoly; its exportation, except on account of

* Humboldt says he had most frequently found from 15 to 22 nuts in each pericarp; but De Laet, who gave the first and most accurate description of this fruit, says that the pericarp is divided into six compartments, each of which incloses from 8 to 12 nuts. — (See *Humboldt in loc. cit.*)

government, being prohibited under the severest penalties. Owing to the improvident manner in which it has been cut down by the government agents, it is now rarely found within several leagues of the coast. Indeed, we are assured that many of the planters have privately cut down the trees on their estates, and used the timber as fire-wood, that they might not expose themselve to annoyance from the arbitrary and vexatious proceedings of these functionaries. The quantity of Brazil wood imported into this country is but inconsiderable. Its price in the London market, exclusive of the duty (2*s.* per ton), varies for the first quality from 60*l.* to 80*l.* per ton. — (*Dr. Bancroft in loc. cit. Encyc. Metrop. Modern Traveller*, vol. xxix. p. 87.; *Malte Brun*, vol. v. p. 525. Eng. ed. &c.)

BREAD, the principal article in the food of most civilised nations, consists of a paste or dough formed of the flour or meal of different sorts of grain mixed with water, and baked. When stale dough or yeast is added to the fresh dough, to make it swell, it is said to be *leavened*; when nothing of this sort is added, it is said to *unleavened*.

1. *Historical Sketch of Bread.* — The President de Goguet has endeavoured, with his usual sagacity and learning, to trace the successive steps by which it is probable men were led to discover the art of making bread — (*Origin of Laws, &c.* vol. i. pp. 95—105. Eng. trans.); but nothing positive is known on the subject. It is certain, however, from the statements in the sacred writings, that the use of unleavened bread was common in the days of Abraham — (*Gen.* xviii. 8.); and that leavened bread was used in the time of Moses, for he prohibits eating the Paschal lamb with such bread. — (*Exod.* xii. 15.) The Greeks affirmed that Pan had instructed them in the art of making bread; but they, no doubt, were indebted for this art, as well as for their knowledge of agriculture, to the Egyptians and Phœnicians, who had early settled in their country. The method of grinding corn by hand mills was practised in Egypt and Greece from a very remote epoch; but for a lengthened period the Romans had no other method of making flour, than by beating roasted corn in mortars. The Macedonian war helped to make the Romans acquainted with the arts and refinements of Greece; and Pliny mentions, that public bakers were then, for the first time, established in Rome — (*Hist. Nat.* lib. xviii. c. 11.) The conquests of the Romans diffused, amongst many other useful discoveries, a knowledge of the art of preparing bread, as practised in Rome, through the whole south of Europe.

The use of yeast in the raising of bread seems, however, from a passage of Pliny (lib. xviii. c. 7.), to have been practised by the Germans and Gauls before it was practised by the Romans; the latter, like the Greeks, having leavened their bread by intermixing the fresh dough with that which had become stale. The Roman practice seems to have superseded that which was previously in use in France and Spain; for the art of raising bread by an admixture of yeast was not practised in France in modern times, till towards the end of the seventeenth century. It deserves to be mentioned, that though the bread made in this way was decidedly superior to that previously in use, it was declared, by the faculty of medicine in Paris, to be prejudicial to health; and the use of yeast was prohibited under the severest penalties! Luckily, however, the taste of the public concurring with the interest of the bakers, proved too powerful for these absurd regulations, which fell gradually into disuse; and yeast has long been, almost every where, used in preference to anything else in the manufacture of bread, to the wholesomeness and excellence of which it has not a little contributed.

The species of bread in common use in a country depends partly on the taste of the inhabitants, but more on the sort of grain suitable for its soil. But the superiority of wheat to all other farinaceous plants in the manufacture of bread is so very great, that wherever it is easily and successfully cultivated, wheaten bread is used, to the nearly total exclusion of most others. Where, however, the soil or climate is less favourable to its growth, rye, oats, &c. are used in its stead. A very great change for the better has, in this respect, taken place in Great Britain within the last century. It is mentioned by Harrison, in his description of England (p. 168.), that in the reign of Henry VIII. the gentry had wheat sufficient for their own tables, but that their *household* and poor neighbours were usually obliged to content themselves with rye, barley, and oats. It appears from the household book of Sir Edward Coke, that, in 1596, rye bread and oatmeal formed a considerable part of the diet of servants, even in great families, in the southern counties. Barley bread is stated in the grant of a monopoly by Charles I., in 1626, to be the usual food of the ordinary sort of people. — (*Sir F. M. Eden on the Poor*, vol. i. p. 561.) At the Revolution, the wheat produced in England and Wales was estimated by Mr. King and Dr. Davenant to amount to 1,750,000 quarters. — (*Davenant's Works*, vol. ii. p. 217.) Mr. Charles Smith, the very well informed author of the Tracts on the Corn Trade, originally published in 1758, states, that in his time wheat had become much more generally the food of the common people than it had been in 1689; but he adds (2d ed. p. 182. Lond. 1766), that notwithstanding this increase, some very intelligent inquirers were of opinion that even then not more that *half* the people of England fed on wheat. Mr. Smith's own estimate, which is very carefully drawn up, is a little higher; for, taking the population of England and Wales, in 1760, at 6,000,000, he supposed that 3,750,000 were consumers of wheat; 739,000, of barley; 888,000, of rye; and 623,000, of oats. Mr. Smith further supposed that they individually con-

sumed, the first class, 1 quarter of wheat; the second, 1 quarter and 3 bushels of barley; the third, 1 quarter and 1 bushel of rye; and the fourth, 2 quarters and 7 bushels of oats.

About the middle of last century, hardly any wheat was used in the northern counties of England. In Cumberland, the principal families used only a small quantity about Christmas. The crust of the goose pie, with which almost every table in the county is then supplied, was, at the period referred to, almost uniformly made of barley meal. — (*Eden on the Poor*, vol. i. p. 564.)

Every one knows how inapplicable these statements are to the condition of the people of England at the present time. Wheaten bread is now universally made use of in towns and villages, and almost every where in the country. Barley is no longer used, except in the distilleries, and in brewing; oats are employed only in the feeding of horses; and the consumption of rye bread is comparatively inconsiderable. The produce of the wheat crops has been, at the very least, *quadrupled* since 1760. And if to this immense increase in the supply of wheat, we add the still more extraordinary increase in the supply of butcher's meat—(see art. CATTLE), the fact of a very signal improvement having taken place in the condition of the population, in respect of food, will be obvious.

But great as has been the improvement in the condition of the people of England since 1760, it is but trifling compared to the improvement that has taken place, since the same period, in the condition of the people of Scotland. At the middle of last century, Scotch agriculture was in the most depressed state; the tenants were destitute alike of capital and skill; green crops were almost wholly unknown; and the quantity of wheat that was raised was quite inconsiderable. A field of 8 acres sown with this grain, in the vicinity of Edinburgh, in 1727, was reckoned so great a curiosity that it excited the attention of the whole neighbourhood! — (*Robertson's Rural Recollections*, p. 267.) But even so late as the American war, the wheat raised in the Lothians and Berwickshire did not exceed a third part of what is now grown in them; and taking the whole country at an average, it will be a moderate estimate, to say that the cultivation of wheat has increased in a *tenfold* proportion since 1780. At that period no wheaten bread was to be met with in the country places and villages of Scotland; *oat cakes* and *barley bannocks* being universally made use of. But at present the case is widely different. The upper and also the middle and lower classes in towns and villages use only wheaten bread, and even in farmhouses it is very extensively consumed. There is, at this moment, hardly a village to be met with, however limited its extent, that has not a public baker.

In many parts of England it is the custom for private families to bake their own bread. This is particularly the case in Kent, and in some parts of Lancashire. In 1804, there was not a single public baker in Manchester; and their number is still very limited.

2. *Regulations as to the Manufacture of Bread.* — Owing to the vast importance of bread, its manufacture has been subjected in most countries to various regulations, some of which have had a beneficial and others an injurious operation.

a. Assize of Bread. — From the year 1266, in the reign of Henry III., down to our own days, it has been customary to regulate the price at which bread should be sold according to the price of wheat or flour at the time. An interference of this sort was supposed to be necessary, to prevent that monopoly on the part of the bakers which it was feared might otherwise take place. But it is needless, perhaps, to say that this apprehension was of the most futile description. The trade of a baker is one that may be easily learned, and it requires no considerable capital to carry it on; so that were those engaged in the business in any particular town to attempt to force up prices to an artificial elevation, the combination would be immediately defeated by the competition of others; and even though this were not the case, the facility with which bread may be baked at home would of itself serve to nullify the efforts of any combination. But the assize regulations were not merely useless; they were in many respects exceedingly injurious: they rendered the price of flour a matter of comparative indifference to the baker; and they obliged the baker who used the finest flour, and made the best bread, to sell at the same rate as those who used inferior flour, and whose bread was decidedly of a worse quality. But these considerations, how obvious soever they may now appear, were for a long time entirely overlooked. According, however, as the use of wheaten bread was extended, it was found to be impracticable to set assizes in small towns and villages; and, notwithstanding the fewness of the bakers in such places gave them greater facilities for combining together, the price of bread was almost uniformly lower in them than in places where assizes were set. In consequence, partly of this circumstance, but still more of the increase of intelligence as to such matters, the practice of setting an assize was gradually relinquished in most places; and in 1815 it was expressly abolished, by an act of the legislature (55 Geo. 3. c. 99.), in London and its environs. In other places, though the power to set an assize still subsists, it is seldom acted upon, and has fallen into comparative disuse.

b. Regulations as to the Weight, and Ingredients to be used in making Bread. — Accord-

ing to the assize acts, a sack of flour weighing 280 lbs. is supposed capable of being baked into 80 quartern loaves; one fifth of the loaf being supposed to consist of water and salt, and four fifths of flour. But the number of loaves that may be made from a sack of flour depends entirely on its goodness. Good flour requires more water than bad flour, and old flour than new flour. Sometimes 82, 83, and even 86 loaves have been made from a sack of flour, and sometimes hardly 80.

Under the assize acts, bakers are restricted to bake only three kinds of bread, viz. wheaten, standard wheaten, and household; the first being made of the finest flour, the second of the whole flour mixed, and the third of the coarser flour. The loaves are divided into peck, half-peck, and quartern loaves; the legal weight of each, when baked, being, the peck loaf 17 lbs. 6 oz., the half-peck 8 lbs. 11 oz., and the quartern 4 lbs. 5⅞ oz. avoirdupois.

Now, however, it is enacted, that within the city of London, and in those places in the country where an assize is not set, it shall be lawful for the bakers to make and sell bread made of wheat, barley, rye, oats, buckwheat, Indian corn, peas, beans, rice, or potatoes, or any of them, along with common salt, pure water, eggs, milk, barm, leaven, potato, or other yeast, and *mixed in such proportions as they shall think fit.* — (3 *Geo.* 4. c. 106. § 2., and 1 & 2 *Geo.* 4. c. 50. § 2.)

It is also enacted by the same statutes, that bakers in London, and in the country, that is, in all places 10 miles from the Royal Exchange where an assize is not set, *may make and sell bread of such weight and size as they think fit*, any law or assize to the contrary notwithstanding. But it is at the same time enacted, that such bread shall always be sold by avoirdupois weight of 16 ounces to the pound, and in no other manner, under a penalty for every offence of not more than 40*s.*, except, however, French or fancy bread, or rolls, which may be sold without previously weighing the same.

Bakers or sellers of bread are bound to have fixed, in some conspicuous part of their shop, a beam and scales, with proper weights for weighing bread; and a person purchasing bread may require it to be weighed in his presence. Bakers, and others sending out bread in carts, are to supply them with beams, scales, &c., and to weigh the bread if required, under a penalty of not more than 5*l.* — (3 *Geo.* 4. c. 106. § 8.

Bakers, either journeymen or masters, using alum or any other unwholesome ingredient, and convicted on their own confession, or on the oath of one or more witnesses, to forfeit not exceeding 20*l.* and not less than 5*l.* if beyond the environs of London, and not exceeding 10*l.* nor less than 5*l.* if within London or its environs. Justices are allowed to publish the names of offenders. The adulteration of meal or flour is punishable by a like penalty. Loaves made of any other grain than wheat without the city and its liberties, or beyond 10 miles of the Royal Exchange, to be marked with a large Roman M.; and every person exposing such loaves without such mark shall forfeit not more than 40*s.* nor less than 10*s.* for every loaf so exposed. — (1 & 2 *Geo.* 4. c. 50. § 6.)

Any ingredient or mixture found within the house, mill, stall, shop, &c. of any miller, mealman, or baker, which, after due examination, shall be adjudged to have been placed there for the purpose of adulteration, shall be forfeited, and the person within whose premises it is found punished, if within the city of London and its environs, by a penalty not exceeding 10*l.* nor less than 40*s.* for the first offence, 5*l.* for the second offence, and 10*l.* for every subsequent offence. — (3 *Geo.* 4. c. 106. § 14.) And if without London and its environs, the party in whose house or premises ingredients for adulteration shall be found shall forfeit for every such offence not less than 5*l.* and not more than 20*l.* — (1 & 2 *Geo.* 4. c. 5. § 8.)

Bakers in London and its environs are not to sell, or expose to sale, any bread, rolls, or cakes, nor bake or deliver any meat, pudding, pie, tart, or victuals of any sort, on Sundays, except between the hours of *nine* in the morning and *one* in the afternoon, under penalty of 10*s.* for the first offence, 20*s.* for the second offence, and 40*s.* for every subsequent offence. — (3 *Geo.* 4. c. 106. § 16.)

Bakers in the country are prohibited from selling, &c. any bread, &c., or baking or delivering any meat, &c. on Sundays, any time after half past 1 o'clock of the afternoon of that day, or during the time of divine service, under penalty of 5*s.* for the first offence, 10*s.* for the second, and 20*s.* for the third and every subsequent offence. — (59 *Geo.* 3. c. 36. § 12.)

There are several regulations in the acts now in force with respect to the sale, &c. of bread where an assize is set; but as the practice of setting an assize is nearly relinquished, it seems unnecessary to recapitulate them. The weight of the assize bread has already been mentioned, and the principle on which its price is fixed.

Notwithstanding the prohibition against the use of alum, it is believed to be very generally employed, particularly by the bakers of London. "In the metropolis," says Dr. Thomson (*Suppl. to Encyc. Brit.*, art. *Baking*), "where the goodness of bread is estimated entirely by its whiteness, it is usual with those bakers who employ flour of an inferior quality to add as much alum as common salt to the dough; or, in other words, the quantity of salt added is diminished a half, and the deficiency supplied by an equal weight of alum. This improves the look of the bread, rendering it much whiter and firmer."

There are believed to be about 1,700 bakers in London, Westminster, &c. The trade which they carry on is in general but limited, and it is not reckoned a very advantageous line of business.

BREMEN, one of the free Hanseatic cities, on the river Weser, about 50 miles from its mouth, lat. 53° 4¾′ N., long. 8° 48′ 3″ E. Population 42,000. Its situation on the Weser renders Bremen the principal emporium of Hanover, Brunswick, Hesse, and other countries traversed by that river. The charges on the buying, selling, and shipping of goods, are very moderate. The principal exports are linens, grain, oak bark, glass, smalts, hams, hides, rapeseed, beef and pork, rags, wool and woollen goods, wine, &c. The wheat and barley shipped here are mostly very inferior; but the oats are useful common feed; beans are good. The linens are mostly the same as those from Hamburgh. The imports consist of coffee, sugar, and other colonial products; tobacco, whale oil, iron, rice, hides, wines, raw cotton, cotton stuffs and yarn, earthenware, brandy, butter, tar, tea, dyewoods, timber, hemp, &c.

Entrance to Bremen. — The entrance to the Weser lies between the Mellum and other sands on the south-western, and the Tegler Plaat, &c. on the north-eastern side. Its course from Bremerlehe to its mouth is nearly S.E. and N.W. It is buoyed throughout. The buoys on the right or starboard side when entering being black and marked with letters, while those on the left or larboard are white and numbered. The first or outer black buoy has a gilt ball upon it, and is, therefore, called the *schnaut* or key buoy; it lies in 10½ fathoms, bearing N.E. 5 miles from Wrangeroog light. This is an intermitting light, having replaced, in 1830, the old coal-fire beacon on the island of Wrangeroog, opposite to the northern extremity of East Friesland. It is, according to the most authentic statements, in lat. 53° 47½′ N., long. 7° 51′ 55″ E.; is elevated 65¼ feet above high water mark, being alternately visible and invisible for the space of a minute. A light vessel is moored in the fair way of the Weser, between the black buoys E and F, and the white buoys 2 and 3. She has two masts: during day, a red flag, with a white cross upon it, is kept flying at the main-mast; and at night she exhibits 7 lantern lights, 28 feet above deck. This vessel is on no account to leave her station, unless compelled by the ice. Large vessels do not now generally ascend further than Bremerlehe, on the east side of the river, about 38 miles below Bremen, where a new and spacious harbour, called "Bremer Haven," has been constructed. But vessels not drawing more than 7 feet water come up to town; and those drawing from 13 to 14 feet may come up to Vegesack, about 13 miles from Bremen. (See the *Sailing Directions for the North Sea*, published by Mr. Norrie.)

Statement of the principal Articles imported into and partly re-exported from Bremen in 1838, 1839, and 1840.

Articles.		1838.	1839.	1840.
Ashes, pot and pearl	lbs.	1,177,970	1,082,682	1,258,982
Cotton wool	-	1,981,117	737,069	1,649,718
Lead - -	-	3,141,363	1,249,510	2,255,484
Cocoa - -	fil.	136,632	68,213	18,182
Coffee - -	-	10,806,365	12,259,680	11,657,199
Chicory, dry and green	-	355,125	225,060	266,753
Drugs, raw and prepared	-	384,094	399,123	395,654
Iron, raw and manufac.	lbs.	5,830,292	4,329,702	7,836,093
Dyewoods - -	-	1,602,279	2,275,766	2,304,003
Quills for writing	no.	13,318,800	13,401,475	12,301,300
Meat, salted or dried	lbs.	410,686	181,917	38,191
Hides, dried -	-	1,147,532	661,000	1,169,568
——, salted -	-	210,750	338,988	331,477
Cattle bones -	-	3,181,742	1,213,082	4,601,925

Articles.		1838.	1839.	1840.
Linen - -	pack.	62,426	19,497	17,959
Oak bark - -	lbs.	1,761,542	2,373,829	1,814,712
Rags - -	-	1,826,556	1,937,123	2,461,840
Wheat flour -	-	389,041	311,023	533,349
Oilcake - -	-	4,621,741	3,081,230	4,776,376
Pepper - -	-	340,749	437,859	416,400
Hams and bacon -	-	1,678,768	1,524,507	1,298,325
Tobacco - -	-	19,710,961	14,741,473	22,327,386
Cigars - -	-	4,967,451	4,179,162	6,811,181
Ditto - -	boxes	604,236	708,550	829,442
Fish oil - -	tons	37,755	26,695	34,751
Tin, refined -	lbs.	2,213,430	1,746,329	2,282,116
——, raw -	-	8,532,241	9,140,241	10,255,688

Exports. — Linens are one of the most important articles of export from Bremen. They are mostly sold by the piece. The dimensions of the pieces, and their prices, are similar to those of Hamburgh, which see. The Westphalia hams are mostly shipped from this port.

Duties. — An export duty of ½ per cent., *ad-valorem*, is charged on all merchandise shipped from Bremen.

The import duty is ½ per cent., *ad valorem*, on all articles; having been increased a third per cent. by the ordinance of 1830.

The value of the *imports* is calculated according to the invoice price, adding thereto the freight and the rate of insurance current in Bremen; the value of the *exports* is estimated from the invoice price only. Should there be no invoice of imports, it is the duty of the importer to make a correct estimate of the value upon his oath as a citizen; but the Custom-house has power to institute a stricter examination, if the estimate appears too low.

Emigration. — Bremen has become the most considerable port on the Continent for the shipment of emigrants to the United States, and other parts in America; the number sailing thence usually amounting to from 9,000 to 10,000. Their conveyance has become an object of much importance, particularly to the American ship-owners. A large proportion of the emigrants are from Hesse.

Ship-brokers are licensed officers, and give security, to the amount of 2,000 rix-dollars, for the faithful discharge of their duties. These are, to engage freights, to sell vessels by auction, to enter vessels, and collect freights. They are not permitted to have partners, to transact any commercial business on their own account, to accept commissions or consignments, to sell or purchase bills of exchange, or to engage in any mercantile concerns.

None but appointed brokers of this class can undertake any of the duties assigned to them. Any person employing a non-appointed broker, is deprived of legal redress against the unauthorised agent by whose conduct he may sustain injury.

Ship-brokers are obliged to keep a register of all vessels coming in or going out, of the names of the captains who employed them, to procure manifests of cargoes, and to attend to the payment of duties and other dues chargeable on vessel or cargo.

The fees allowed to them are, for chartering a vessel in bulk, 18 grotes per grain last; of this the owner pays 12 grotes, and the freighter 6 grotes.

For outward-bound vessels, taking merchandise as it may be offered, 2 per cent. on the freight.

For entering a vessel from sea measuring 50 lasts, 5 rix-dollars; measuring 100 ditto, 7½ rix-dollars; and if she measure above 100 lasts, 10 rix-dollars.

Entry dues are to be paid by the consignees of foreign vessels out of the commission they may charge.

For the collection of freight money, the broker is entitled to receive 1 per cent., but the consignee of a *foreign* vessel is to pay this sum.

Regulations of the Harbour of Bremer Haven. — All vessels entering the harbour are subject to the superintendence of the harbour-masters, whose directions are to be obeyed by the captains and crews.

No ballast or rubbish is to be thrown overboard, under a penalty of 10 rix-dollars for the first offence, which is increased in case of repetition; the offender, too, is obliged to remove the articles he may have so cast into the harbour.

It is not permitted to keep gunpowder on board, and any which may be in the vessel must be delivered up within 2 hours after she has reached her berth: non-compliance with this subjects the party to a fine of from 10 to 50 rix-dollars; nor is it permitted to discharge any fire-arms in port.

The use of all fire on board, from sunset to sunrise, is prohibited; the captain, however, may have a light, in a closed lantern, in his cabin.

The crews are not allowed to carry on shore any fire-arms, dirks, or other weapons.

The total value of all the articles imported by sea into Bremen in 1838, was estimated at 15,900,000 rix-dollars, or (at 3*s.* 2*d.* per rix-dollar) 2,517,500*l.*; the value of the exports by sea during the same year was estimated at 11,500,000 rix-doll. or 1,820,833*l.* In 1839 there belonged to Bremen 151 sea-going ships, some of them of large size, and 86 river ships. The Bremen merchants carry on an extensive direct trade with the United States, Cuba, Brazil, and other foreign countries.

The Harbour Dues for the Port of Bremen (Bremerhaven) are as follow: —

Vessels.	Burden.				In Jan. March, Sept. Nov.				Feb. April, Oct. Dec.				In May, July,				June, Aug.			
	Lasts.	*Tons.*		*Lasts.*	*Tons.*	*Rix-dol.*	*£*	*s.*	*d.*	*Rix-dol.*	*£*	*s.*	*d.*	*Rix-dol.*	*£*	*s.*	*d.*	*Rix-dol.*	*£*	*s.*	*d.*
Vessels of - -	300	450	and	upwards		48	=	8	0	0	40	=	6	13	4	40	=	6	13	4
	250	375	to	300	450	45	=	7	10	0	35	=	5	16	8	35	=	5	16	8
	200	300	—	250	375	36	=	6	0	0	30	=	5	0	0	30	=	5	0	0
	150	225	—	200	300	30	=	5	0	0	25	=	4	3	4	25	=	4	3	4
	120	180	—	150	225	24	=	4	0	0	20	=	3	6	8	20	=	3	6	8
Square rigged - - - -	100	150	—	120	180	21	=	3	10	0	17½	=	2	18	4	17½	=	2	18	4
Galliots - - - -	—	—	—	—	—	18	=	3	0	0	15	=	2	10	0	15	=	2	10	0
Square rigged - - - -	80	120	—	100	150	18	=	3	0	0	15	=	2	10	0	15	=	2	10	0
Galliots - - - -	—	—	—	—	—	15	=	2	10	0	12½	=	2	1	8	12½	=	2	1	8
Square rigged - - - -	60	90	—	80	120	15	=	2	10	0	12½	=	2	1	8	12½	=	2	1	8
	—	—	—	—	—	12	=	2	0	0	10	=	1	13	4	10	=	1	13	4
Galliots - - - -	40	60	—	60	90	9	=	1	10	0	7½	=	1	5	0	7½	=	1	5	0
	30	45	—	40	60	6	=	1	0	0	5	=	0	16	8	5	=	0	16	8

The above rates are for 2 months; should the vessel remain longer in harbour, then there is an increased charge of 1 to 6 rix-dollars, value 3*s.* 4*d.* to 1*l.*, for each additional month, in proportion to the season and to the above measurement.

3 British or American tons is taken as equal to 2 lasts.

In addition to the above, the vessels are subject to another due of 5 groschen, or about 2½*d.* per ton of the goods on board; that is,

Vessels arriving with goods on board, pay at this rate for the quantity of goods on board, but nothing more on departure whether laden or in ballast.

Vessels arriving in ballast pay this rate on the quantity of goods laden for the outward voyage; this rate is therefore only paid once.

Pilotage and Light-house Dues, on Bremen ships and those having reciprocity treaties with Bremen, ½ groschen per 300 lbs. cargo per voyage. Ships in ballast are exempted from this duty.

Arrivals. — During the year 1841, 1,090 ships entered the port of Bremen. Of these 337 belonged to Bremen itself; 178 to Hanover; 34 to Great Britain; 32 to the United States; 254 to Oldenburg; 90 to Denmark; 79 to Holland; and the remainder to Russia, Spain, Sweden, Norway, &c.

Money. — Accounts are kept in thalers, or rix-dollars, of 72 grootes or grotes; the grote being divided into 5 swares. The Bremen rix-dollar current is worth 3*s.* 2*d.* sterling; and the par of exchange is 1*l.* sterling = 7 rix-dollars 22 grotes 4 swares.

Weights and Measures. — The commercial pound = 2 marks = 16 ounces = 32 loths = 7,690 English grains. Hence, 100 lbs. of Bremen = 109·8 avoirdupois, or 49·825 kilog. A load of pfundschwer = 300 lbs., but carriers reckon it at 308 lbs. A centner = 116 lbs.; a shippound = 2½ centners, or 290 lbs.; a waage of iron = 120 lbs.; a stone of flax = 20 lbs.; a stone of wool = 10 lbs. A ton of butter great measure = 500 lbs.; and a ton of do. small measure = 220 lbs.

The dry measures are, 4 spints = 1 viertel; 4 viertels = 1 scheffel; 10 scheffels = 1 quart; 4 quarts = 1 last; the last = 80·70 bushels Winchester measure, or 10·087 quarters; that is, 10 quarters and 0·7 bushel. A barrel of salt = 3½ scheffels. A last of coals = 2 chaldrons Newcastle measure.

The liquid measures are, 8·8 quarts = 1 viertel; 5 viertels = 1 anker; 4 ankers = 1 tierce; 1½ tierce = oxhoft; the oxhoft = 58 English wine gallons. Wine is sometimes sold by the ahm of 4 ankers = 37½ Eng. wine gallons. A barrel of whale oil = 6 stechan, or 216 lbs. nett = 31½ Eng. wine gallons. A ship last of herrings, salt, and coals = 12 barrels.

The Bremen foot = 11·38 Eng. inches: hence, 100 Bremen feet = 94·8 Eng. ditto. The Bremen ell is 2 feet; and 100 ells of Bremen = 63·2 Eng. yards.

Tares. — The usual tares are, on sugar in casks and Brazil chests, 17 per cent.; on Havannah boxes, 70 lbs.; Maryland tobacco, 90 lbs. per hogshead; ditto Virginia and Kentucky, 110 lbs. per hogshead; cotton, round bales, 4 per cent.; square ditto, 6 per cent.; tea ([illegible]m), 20 lbs. per quarter chest; ditto (black), 22 lbs. per quarter chest. Most other articles, such as East India indigo, rice, coffee, spices, &c., real tare. — (Drawn up principally from the communications of Bremen merchants; the Digest of Customs' Laws printed by order of the American Congress, vol. i. p. 434.; and Macgregor's Tariff (Germany, p. 264.), &c.)

BRIBE. Any person giving or offering a bribe, recompence, or reward, to any officer of the customs, to induce him to neglect his duty, to forfeit 200*l.*—(3 & 4 *Will.* 4. c. 53. § 38.)

BRICKS AND TILES, well known articles used in the building and covering of houses. They are made of baked clay and sand. Until 1833 an excise duty was charged both on bricks and tiles (the latter being then exempted from the duty), so that their manufacture was, in consequence, placed under surveillance. It is ordered by 17 Geo. 3. c. 42. that bricks made for sale shall be 8½ inches long, 2½ inches thick, and 4 wide; on pain of forfeiting, for bricks of less dimensions when burnt, 20*s.* for every 1,000, and proportionally for a greater or less number. It is also provided, that the size of the sieves or screens for sifting or screening sea-coal ashes to be mixed with brick earth in making bricks, shall not exceed ¼ of an inch between the meshes. Makers of bricks must give notice, under a penalty of 100*l.*, to the excise, of their intention to begin the manufacture.

Bricks being the principal material used in London and in most parts of England in the building of houses, immense quantities are annually produced in that part of the United Kingdom. And notwithstanding the influence of the duty, their consumption in England nearly doubled during the 20 years ending with 1840; the number that paid duty in 1821 having been 899,178,510, whereas in 1840 it amounted to 1,677,811,134. In Scotland, where stone is mostly employed in building, their manufacture is comparatively unimportant. Tiles are now very extensively used in drainage. It were much to be wished that the state of the revenue were such as to admit of the repeal of the duty on bricks. We subjoin

An Account of the Number of Bricks produced in England and Scotland, the Amount of Duties paid thereon, and the Rates of Duty in 1840, 1841, and 1842.

	1840.		1841.		1842.		Rates of Duty.
	Number.	Amount of Duty.	Number.	Amount of Duty.	Number.	Amount of Duty.	
		£ s. d.		£ s. d.		£ s. d.	
England	1,677,806,781	509,794 14 7	1,423,794,267	436,854 16 1	1,271,872,112	390,210 9 1	Common - 5*s.* 10*d.* } 1000
Scotland	47,821,599	14,625 19 3	39,463,308	12,206 2 3	31,942,619	9,875 14 4	Large - 10*s.* 0*d.* do.
							Polished - 12*s.* 10*d.* do.
Total -	1,725,628,383	524,420 13 10	1,463,257,575	449,060 18 4	1,303,814,731	400,086 3 5	Large do. 2*s.* 5*d.* 100

The entire duties on bricks are drawn back upon exportation. Sufficient security must be given before their shipment that they shall be shipped and exported, and not re-landed in Great Britain. — (24 *Geo.* 3. sess. 2. c. 24. § 16.)

If bricks shipped for drawback be re-landed, those so re-landed shall, over and above the penalty in the bond, be forfeited. — (§ 17.)

Note. — Bricks made in Ireland are not subject to excise duty.

BRIMSTONE. See SULPHUR.

BRISTLES (Fr. *Soies*; Ger. *Borsten*; Du. *Borstels*; It. *Setole*; Sp. *Cerdas, Setas*; Pol. *Szczeciny*; Rus. *Schtschetina*; Lat. *Setæ*), the strong glossy hairs growing on the back of the hog and the wild boar. These are very extensively used by brushmakers, shoemakers, saddlers, &c., and form a considerable article of import. Russia is the great mart for bristles, those of the Ukraine being held in the highest estimation. Of the total quantity imported in 1841, amounting to 1,735,502 lbs., Russia furnished 1,419,514 lbs., Prussia (Königsberg) 132,136 lbs., and Germany 130,899 do. At an average of the 3 years ending with 1842, the entries for home consumption amounted to 1,772,196 lbs. a year. The duty, which varies from 2*s.* 6*d.* on rough to 3*s.* per cwt. on sorted bristles, produced, in 1842, 24,100*l.* 17*s.* 11*s.* nett.

BROKERS, persons employed as middlemen to transact business or negotiate bargains between different merchants or individuals. They are sometimes licensed by public authority, and sometimes not.

Brokers are divided into different classes; as bill or exchange brokers, stockbrokers, ship and insurance brokers, pawnbrokers, and brokers simply so called, or those who sell or appraise household furniture distrained for rent. Exclusive, too, of the classes now mentioned, the brokers who negotiate sales of produce between different merchants usually confine themselves to some one department or line of business; and by attending to it exclusively, they acquire a more intimate knowledge of its various details, and of the credit of those engaged in it, than could be looked for on the part of a general merchant; and are consequently able, for the most part, to buy on cheaper and to sell on dearer terms than those less familiar with the business. It is to these circumstances — to a sense of the advantages to be derived from using their intervention in the transacting of business — that the extensive employment of brokers in London and all other large commercial cities is wholly to be ascribed.

The number of brokers in London is unlimited; but by the statute 8 & 9 Will. 3. c. 20. they are to be licensed by the lord mayor and aldermen, under such restrictions and limitations as they may think fit to enact. By the 57 Geo. 3. c. 60., brokers acting without being duly admitted are made liable in a penalty of 100*l.* The fee on admission is fixed by the same act at 5*l.*; and there is, besides, an annual payment also of 5*l.*

The following are some of the regulations established by the mayor and aldermen pursuant to the act of Will. 3.:— That every person shall, upon his admission, take an oath truly and faithfully to execute and perform the office of broker between party and party, in all things pertaining to the duty of the said office, without fraud or collusion, to the best and utmost of his skill and knowledge; that he shall in all cases reveal the name of his principal; and neither deal in goods on his own account, nor barter and sell again, nor make any gain in goods beyond the usual brokerage; and that he shall regularly register all the contracts, &c. into which he enters.

Brokers grant a bond under a penalty of 500*l.* for the faithful performance of the duties sworn to in the oath of admission.

A medal is delivered to the broker, with his name engraved thereon, which he may produce, if required, as evidence of his qualification.

Twelve persons professing the Jewish religion are permitted to act as brokers within the city, under the same regulations, and receive the silver medal accordingly. This medal is transferable; and is sold generally at from 800*l.* to 1,500*l.*, exclusive of the expense of transfer, which is uncertain. Upon the decease of any of the holders of the medal without its having been transferred, the appointment falls to the lord mayor for the time being; and for it the sum of 1,500*l.* has not unfrequently been given.—(*Montefiore's Com. Dict.* art. *Brokers.*)

If goods in the city of London be sold by a broker, to be paid for by a bill of exchange, the vendor has a right, *within a reasonable time*, if he be not satisfied with the sufficiency of the purchaser, to annul the contract, provided he intimate his dissent as soon as he has an opportunity of inquiring into the solvency of the purchaser. In a case of this sort (*Hodgson* v. *Davies*, 2 Camp. N. P. C. 536.), Lord Ellenborough was, at first, rather inclined to think that the contract concluded by a broker must be absolute, unless his authority were limited by writing, of which the purchaser had notice. But the special jury said, that "unless the name of the purchaser has been previously communicated to the seller, if the payment is to be by bill, the seller is always understood to reserve to himself the power of disapproving of the sufficiency of the purchaser, and annulling the contract." Lord Ellenborough allowed that this usage was reasonable and valid. But he clearly thought that the rejection must be intimated as soon as the seller has had time to inquire into the solvency of the purchaser. The jury found, in the case in question, that *five* days was not too long a period for making the necessary inquiries.

Brokers, Bill,—propose and conclude bargains between merchants and others in matters of bills and exchange. They make it their business to know the state of the exchange, and the circumstances likely to elevate or depress it. They sell bills for those *drawing* on foreign countries, and buy bills for those *remitting* to them: and, from their knowledge of the mutual wants of the one class as compared with those of the other, a few of the principal brokers are able to fix the rate of exchange at a fair average, which it would not be possible to do if the merchants directly transacted with each other. Their charge as brokerage is 2*s.* per cent.

"Those," says Mr. Windham Beawes, "who exercise the function of bill brokers, ought to be men of honour and capable of their business; and the more so, as both the credit and fortune of those who employ them may, in some measure, be said to be in their hands; and, therefore, they should avoid babbling, and be prudent in their office, which consists in one sole point, that is, *to hear all and say nothing*; so that they ought never to speak of the negotiations transacted by means of their intervention, or relate any ill report which they may have heard against a drawer, nor offer his bills to those who have spread it."

Brokers, Stock,—are employed to buy and sell stock in the public funds, or in the funds of joint stock companies. Their business is regulated by certain acts of parliament, by which, among other things, it is enacted, that contracts in the nature of wagers, or contracts apparently framed for the sale or purchase of stock, but really intended only to enable the parties to speculate on contingent fluctuations of the market, without any stock being actually sold, shall be void, and those engaging in them subjected to a penalty of 500*l.*—(7 *Geo.* 2. c. 8., made perpetual by 10 *Geo.* 2. c. 8.) And by the same act, any one contracting to sell stock of which he is not actually possessed, or to which he is not entitled, forfeits 500*l.* Brokers not keeping a book in which all contracts are regularly inserted, are liable in a penalty of 50*l.* for each omission; half to the king, and half to those who sue for it. The charge for brokerage on all public funds, except Exchequer bills and India bonds, is 2*s.* 6*d.* per cent.; on these it is 1*s.* per cent. No transaction with respect to the purchase and sale of stock in the public funds can be concluded except by the intervention of a licensed broker, unless by the parties themselves.

Brokers, Ship and Insurance.—The chief employment of this class of brokers is in the buying and selling of ships, in procuring cargoes on freight, and adjusting the terms of charterparties, settling with the master for his salary and disbursements, &c. Their charge as ship brokers is about 2 per cent. on the gross receipts. When they act as insurance brokers, they charge 5 per cent. on the premium, exclusive of a discount allowed them on settling with the underwriter. The merchant looks to the broker for the regularity of the contract, and a proper selection of underwriters. To him also the underwriters look for a fair and candid disclosure of all material circumstances affecting the risk, and for payment of their premiums. From the importance of their employment, ship and insurance brokers ought to be, and indeed generally are, persons of respectability and honour, in whom full confidence may be reposed. A ship broker is not within the various acts for the regulation and admission of brokers.—(*Gibbons* v. *Rule*, C. P. 27th of June, 1827.)

Brokers, Custom-house.—It is enacted by the 3 & 4 Will. 4. c. 52., that no person shall be authorised to act as an agent for transacting business at the Custom-house in the port of London, relative to the entrance or clearance of any ship, &c., unless authorised by licence of the commissioners of customs, who are to require bond with one surety for 1,000*l.*, for the faithful conduct of such person and his clerks. This regulation does not, however, apply to the clerk or servant of any person or persons transacting business at the Custom-house on his or their account. The commissioners may extend this regulation to other ports.—§§ 144. & 148.

Brokers, Pawn. See PAWNBROKERS.

Brokers, simply so called, in their character of appraisers and sellers of goods distrained for rent, are regulated by 57 Geo. 3. c. 93., which enacts, that no *such person* making any distress for rent, where the sum due does not exceed 20*l.*, shall take more than the following sums; viz.

	£	s.	d.
For levying	0	3	0
For men keeping possession, per day	0	2	0
Advertisements, if any	0	10	0
Catalogues, sale, commission, &c. in the pound on the nett produce	0	1	0
Stamp duty, lawful amount.			

Appraisements, whether by one broker or more, 6*d.* per pound on the value of the goods, under a penalty of treble the amount of the money unlawfully taken, with costs, to be recovered summarily before a justice of the peace.

In France, the brokers who deal in money, exchange, merchandise, insurance, and stock, are called *agents de change*, and their number, at Paris, is limited to *sixty*. The company of *agents de change* is directed by a chamber of syndics (*chambre syndicale*) chosen annually by the company. They are severally obliged to give bonds to the amount of 125,000 fr. for the prevention of abuses. They are also obliged to keep books; are restricted to a charge of from ⅛ to ¼ per cent.; and are interdicted from carrying on, or having any interest in, any commercial or banking operations.—(See *Code de Commerce*, § 74, &c.; and art. BORDEAUX in this Dictionary.)

In the United States, brokers are not licensed, nor do they give bonds.

BROKERAGE, the commission, or percentage, paid to brokers on the sale or purchase of bills, funds, goods, &c.—(See FACTORAGE.)

BRONZE (Ger. *Stückgut, Stückmetall*; Du. *Stückgoed*; It. *Bronzo*; Sp. *Metal de Canones*; Lat. *Metallum tormentorum*), "a mixed metal, consisting chiefly of copper, with a small proportion of tin, and sometimes other metals. It is used for casting statues, cannon, bells, and other articles, in all of which the proportions of the ingredients vary."—(*Ure.*)

BROOMS (Ger. *Besen*; Fr. *Balais*; It. *Scope, Granite*; Sp. *Escobas*; Rus. *Metlü*) are principally made of birch or heath.* Vast quantities are manufactured in Southwark, for the supply of the London market.

BRUSHES (Ger. *Bürsten*; Fr. *Brosses*; It. *Setole, Spazzole*; Sp. *Brozas, Cepillos, Escobillas*; Rus. *Schtschetki*), well-known implements, made of bristles, and manufactured of various forms.

BUBBLES, a familiar name applied generally to fraudulent or unsubstantial commercial projects, which hold out hopes of rapid gain, for the purpose of enriching the projectors at the expense of sanguine and ignorant adventurers; and particularly used to designate those projects, the funds for which are raised by the sale of shares or subscription to a transferable stock. In consequence of the mischief produced by the gambling in transferable shares of bubble companies at the time of the South Sea project, 1719 and 1720, the stat. 6 Geo. 1. c. 18., reciting that several undertakings or projects had been contrived and practised, which "manifestly tended to the common grievance, prejudice, and inconvenience of great numbers of his Majesty's subjects in their trade and commerce," and describing, among other practices of the time, the ordinary mode of raising money by shares and subscriptions to a pretended transferable stock, enacted, that the undertakings and attempts so described, and public subscriptions, assignments, and transfers for furthering them, and particularly the raising or pretending to raise transferable stocks without authority of charter or act of parliament, should be deemed illegal and void, and prohibited them under severe penalties. Some decisions limited the operation of, and finally the stat. 6 Geo. 4. c. 91. altogether repealed, these enactments and prohibitions. The projectors of bubbles, therefore, are now punishable only when they can be deemed guilty of frauds or conspiracies at common law; and there is no other check on the adventurers than the loss and troublesome liabilities under the law of partnership, in which participation in these projects often involves them.

BUCKWHEAT (Fr. *Blé Sarrasin, Blé noir*; Ger. *Buchweizen, Heidekorn*; It. *Grano Saraceno, Faggina, Fraina*; Sp. *Trigo Saraceno, Trigo negro*; Pol. *Tatarca, Gryka, Pohanca*; Rus. *Gretscha*; Lat. *Fagopyrum*) is principally cultivated, in order that it may be cut when young and green, and employed as fodder for cattle; when allowed to ripen, the grain is usually employed to feed pigeons and poultry. When ripe it is of a deep yellow colour, the seeds bearing a great resemblance to beech-mast: it will grow on the poorest soils. Buckwheat has been cultivated in this country from the latter part of the sixteenth century. Its native country is unknown, but supposed to be Asia. Beckmann has a very learned dissertation on its introduction and early culture in Europe. — (See *Hist. of Invent.* vol. i. art. *Buckwheat.*) The imports of buckwheat are comparatively inconsiderable. The duty is the same as on barley. — (See CORN LAWS.)

BUENOS AYRES, a city of South America, on the south side of the La Plata, about 200 miles from its junction with the sea, lat. 34° 36′ 29″ S., long. 58° 23′ 34″ W. Population very differently estimated; but said by Sir W. Parish to amount to about 100,000, of whom from 15,000 to 20,000 are foreigners, principally English and French. The Plata is one of the largest rivers of the world, traversing a vast extent of country, of which it is the great outlet. Unluckily, however, its æstuary, though broad, is in most parts shallow, being, also, encumbered with sand banks, and infested with sudden gusts of wind called *pamperos*. Its navigation is consequently attended with a good deal of difficulty, and ships bound for Buenos Ayres generally take pilots on board. There is no harbour, and vessels drawing 16 or 17 ft. water anchor in the outer roads, called the *Amarradero*, 7 or 8 miles from shore, loading and unloading by means of lighters. This, too, is an operation by no means free from danger, boats being sometimes swamped in crossing the bar between the outer and inner roads. From the want of a pier, and the shallowness of the water on the beach, even the boats are not able to come close to the shore, but are met at a little distance from it by a rude sort of ox-carts, into which they deposit their goods, at no little risk, and sometimes much loss. These unfavourable circumstances, which might, however, be materially improved by a little exertion and outlay on the part of the government, operate as a heavy drawback on the trade of the city, and tend proportionally to augment that of Montevideo, which is more easily accessible. But notwithstanding the competition of the latter, Buenos Ayres is still the principal outlet for the produce of the vast countries traversed by the La Plata, and especially for the provinces situated on its right bank. The principal articles of export are specified in the subjoined table. (See next page.)

Within the last few years the trade in wool, in consequence of the great improvement effected in the breed of sheep, has become of considerable and rapidly increasing importance. In 1827 the export of this article to Great Britain amounted to only 19,444 lbs.; whereas in 1837 it amounted to 2,207,951 lbs.; but it has not since been so great. Corn, which for a considerable period was not produced in sufficient quantity for home consumption, has latterly become an article of export: it is sent chiefly to Brazil. Most of the jerked beef, and numbers of mules, are exported to the Havannah. The total value of the imports, in 1837, amounted to about 7,000,000 dollars, or 1,487,000*l.*; of which those furnished by Great Britain amounted to near a half, or to 696.104*l.* The imports hence chiefly consist of cotton (by far the

most important article), linen, woollen and silk manufactures, hardware, cutlery, earthenware of all sorts, glass, leather, hats, &c., with about 40,000*l.* or 50,000*l.* worth of foreign and colonial produce. France supplies Buenos Ayres with jewellery, perfumery, and other articles of luxury, to the value, in 1836, of 231,373*l.*: the imports from the United States in the same year amounted to 76,986*l.*, consisting chiefly of unbleached cloths, spirits, soap, sperm candles, dried and salted provisions, tobacco, furniture, and deals. Germany sends woollen and linen cloths, and Rhenish cottons; the Netherlands, firearms, swords, &c.; Holland, butter, cheese, Westphalia hams, &c., chiefly by way of Antwerp, the principal mart for Buenos Ayres hides on the Continent. The Baltic furnishes iron, cordage, canvas, pitch, deals, &c. The Mediterranean trade is principally in Sicilian and Spanish produce, particularly cheap wines, brandies, olive oil, maccaroni, dried fruits, and pepper. Spanish goods are in little demand, though some serges, velvets, sewing silk, and snuff are imported. The annual importation of Spanish and Sicilian wines is from 10,000 to 12,000 pipes, besides about 1,000 pipes of brandy. The *yerba maté*, or Paraguay tea, formerly an import article of some consequence, has been nearly superseded, even in Buenos Ayres, by tea: the other Chinese imports are silks, crapes, nankeens, porcelain, and numerous minor articles. The trade with Chili and Peru is insignificant. The markets of this city are well supplied with butcher's meat and fish. Poultry is dear, a couple of fowls selling for as much as an ox. Vegetables and fruit generally are also dear; milk in quality and price is much the same as in London, and all the butter used is imported. (We have derived these details principally from the valuable work of Sir Woodbine Parish on Buenos Ayres.) In our customs accounts the trade with Montevideo and other ports on the La Plata is mixed up with that of Buenos Ayres. In 1841, the declared value of the exports of British produce and manufactures to the states on the La Plata amounted to 989,362*l.*, of which cottons made no less than 538,137*l.*! Probably about two thirds of the whole might be destined for Buenos Ayres.

Monies, Weights, Measures, &c. same as those of Spain; for which, see CADIZ.

Quantities and Value of the Principal Articles exported in 1837

Articles.	Quantity.	Price.	Value.
		Dollars.	*Dollars.*
Spanish dollars	258,743 no.	- -	258,743
Marks of silver	4,881 —	at 8	39,048
Gold - -	21,999 oz.	17	373,983
Ditto, uncoined	362 —	- -	6,154
Ox-hides	823,635 no.	4	3,294,540
Horse-hides	25,367 —	1½	38,050
Jerked beef	178,877 quintals.	2½	447,192
Horns	434,156 no.	60 per mil.	26,070
Horse-hair	70,572 arrobas of 25 lb.	3	211,116
Sheep's wool	164,706 —	2	329,412
Chinchilla skins	5,317 dozens.	4	13,268
Nutria skins	51,853 —	2½	129,632
Tallow	100,219 arrobas.	1½	150,373
Cotton	160 —	3	480
Sheep-skins	56,188 dozens.	2½	140,470
Flour -	14,069 fanegas.	4	56,276
Corn -	4,150 —	3½	14,525
Sundries	- - -	- -	108,818
Total	- - -	- -	5,638,150*

BUFF (Ger. *Büffel, Büffelhäute*; Fr. *Buffle, Peau de buffles, et Peaux passées en buffles*; It. *Bufalo, Cuojo di bufalo*), a sort of leather prepared from the skin of the buffalo, dressed with oil, after the manner of chamois. The skin of elks, oxen, and other like animals, when prepared after the same manner as that of the buffalo, is likewise called *buff*. It is used in making sword-belts and other articles, where great thickness and firmness are required.

BUGLES, small glass beads of different colours. They are in considerable demand in Africa, to which they are mostly exported.

BULLION, uncoined gold and silver in the mass. See GOLD and SILVER.

BUOYS, pieces of wood, cork, or some light substance, moored and floating on the water. Those of wood are sometimes solid, and sometimes hollow, like a cask, and strongly hooped; they are made of various shapes and sizes; and are either private or public.

Private Buoys are so called from their belonging to private individuals. They are principally employed to mark the place of the ship's anchor, being fastened to it by a rope or chain, so that the men who go in the boat to weigh it may readily find out where it is.

By the 1 & 2 Geo. 4. c. 75. § 11. it is enacted, that if any person or persons shall wilfully cut away, cast adrift, remove, alter, deface, sink, or destroy, or in any way injure or conceal, any buoy, buoy-rope, or mark, belonging to any ship or vessel, or which may be attached to any anchor or cable belonging to any ship or vessel, whether in distress or otherwise, such person or persons so offending shall upon conviction be adjudged guilty of felony, and shall be liable to be transported for any term not exceeding 7 years, or to be imprisoned for any number of years, at the discretion of the court.

Public Buoys, being intended for the public service, cannot be placed, altered, or removed, except by competent authority. They are generally of a pretty large size; and are firmly moored by chains or cables to rocks, large stones, anchors, &c. By floating on the surface of the water, they serve at once to mark the channels through which it is safe to steer, and to point out dangers to be avoided, such as sunken rocks, shoals, wrecks of vessels, &c. The places in, and the purposes for, which buoys are exhibited, are always specified in good charts: and as the leading buoys are generally of a peculiar figure or colour, which is also indicated in the chart, the navigator, as soon as he recognises them, shapes his course accordingly. Hence the great importance of having buoys properly placed, and of their being carefully marked in charts.

* To this amount may be added, as allowance for short manifests, &c., about 20 per cent. additional.

The 6 Geo. 4. c. 125. § 91. enacts, that every person who shall ride by, make fast to, remove, or wilfully run down or run foul of any vessel placed to exhibit lights, or any buoy or beacon belonging to the corporation of the Trinity House of Deptford Strond, or to any other corporation having authority to place such vessel, buoy, or beacon, shall, besides making good all damage occasioned thereby, forfeit, for every such offence, any sum not exceeding 50*l.* nor less than 10*l*

Subjoined is an

Account specifying the Buoys and Beacons under the Control of the Trinity House, Deptford Strond, with the Rates of Charge on account of the same on British and Foreign Ships, and the Produce of the Rates, in each of the Three Years ending with 1842.—(Furnished by Mr. Herbert, Secretary to the Trinity House.

	Rates of Charges.			Amounts collected.		
	Coasters	British and Foreign privileged Vessels Oversea, per Ton.	Foreign Vessels not privileged Oversea, per Ton.	1840.	1841.	1842.
				£ s. d.	£ s. d.	£ s. d.
For the buoys and beacons in the channels leading to the river Thames and port of London, including loadsmanage and primage, also including the dues formerly returned under the head of Trinity House duties from strangers' ships.	In the port of London the following rates are payable for the inward passage only; viz.—The rates vary from 1 penny to 1 farthing per ton, according to the description of the vessels' cargoes, and the places from whence they arrive.	1 penny -	2 pence -	10,572 4 8	10,672 0 3¼	10,835 10 4
	These dues are also received at the ports of Gravesend, Sheerness, Rochester, Faversham, Leigh, Maldon, Colchester, Ipswich, Woodbridge, Harwich, and Aldborough, at which they are payable for the inward passage only. The rate on foreign vessels not privileged, is 2 pence per ton, but in other respects the rates are determined by the ancient usage of the respective places, and are generally one half the amount of those in the port of London.					
Buoys off Yarmouth -	¼ farthing per ton	½ farthing	½ farthing.	2,403 7 5½	2,491 19 4	2,455 12 1¼
Buoys and beacons in the river Tees:—						
Coasters, British and foreign, privileged	4*d.* per vessel under 40 tons. 6*d.* — on all others.			704 15 10	747 14 2	718 19 2
Foreign vessels, not privileged - -	1*s.* per vessel.					
Exeter buoys:—						
Coasters (not stone boats) - -	¼*d.* per ton per voyage.					
Stone boats - - - -	5*s.* per vessel per annum.			194 9 11½	177 4 4	198 15 11½
British and foreign, privileged - -	½*d.* per ton per voyage.					
Foreign, not privileged - - -	1*d.* — —					
Conway buoys - -	3 farthings per ton, each and every time of passing.			42 18 2½	38 3 11½	35 6 7½
Carmarthen buoys - -	3 farthings per ton, each time of passing.			85 10 7	74 18 10	75 7 7½
Aberdovey buoys - -	1 halfpenny per ton.	1 penny	1 penny	30 19 11	31 19 11	25 19 10
Woodbridge beacon, &c.:—						
On all vessels entering the port of Woodbridge						
Under 50 tons - - - -	1*s.* per vessel.					
50 and under 100 tons - -	2*s.* —			37 7 0	38 3 0	37 16 0
100 tons and upwards - -	3*s.* —					
			Total £	14,071 13 7½	14,275 3 10¼	14,383 7 7¾

BURDEN of a ship. See TONNAGE.

BURGUNDY. See WINE.

BURGUNDY PITCH, a resin, the produce of the Pinus Abies, or spruce fir. It is obtained by making incisions in the bark down to the wood, whence it flows thickly and languidly, immediately concreting into flakes that adhere firmly to the tree. These being taken off are melted in boiling water, and strained through coarse cloths. It is of a close consistence, rather soft, has a reddish brown colour, and a not unpleasant smell; it is very adhesive. The greatest quantity is collected in the neighbourhood of Neufchatel, whence it is brought to us packed in casks. A fictitious sort is made in England, and found in the shops under the title of *common* Burgundy pitch; it may be distinguished by its friability, want of viscidity and of the odour which characterises the genuine sort.

A species of Burgundy pitch exudes spontaneously from the Norway spruce fir. This, which undergoes no preparation, is the *resin* or *thus* of the old London Pharmacopœias. It is imported in the form of tears or small masses, packed in casks, each containing from 1 to 2 cwt. It fetches about half the price of that which is strained.—(*Gray's Supplement to the Pharmacopœias, Thomson's Dispensatory.*)

BUSHEL, a measure of capacity for dry goods, as grain, fruit, dry pulse, &c., containing 4 pecks, or 8 gallons, or ⅛ of a quarter.

The Winchester bushel contains 2150·42 cubic inches, while the Imperial bushel contains 2218·192. Hence, to convert Winchester bushels into Imperial, multiply by the fraction $\frac{2150{\cdot}42}{2218{\cdot}192}$ or ·969447, or approximately deduct $\frac{1}{30}$th, and $\frac{1}{200}$th; and if great accuracy be required, $\frac{1}{2000}$, and $\frac{1}{20000}$ more. To convert prices per Winchester bushel into prices per Imperial bushel, multiply by the fraction $\frac{2218{\cdot}192}{2150{\cdot}42}$, or 1·031515 7.

By the 5 Geo. 4. c. 74. § 7. the bushel shall be the standard measure of capacity for *coals, culm, lime, fish, potatoes*, or *fruit*, and all other goods and things commonly sold by heaped measure. The bushel shall contain 80 lbs. avoirdupois of distilled water, being made round, with a plain and even bottom, and being 19½ inches from outside to outside. Sections 7. and 8. direct the mode in which the bushel shall be used for heaped measure.—(See WEIGHTS AND MEASURES.)

The standard measure of capacity, by this act, as well for liquids as for dry goods not measured by heaped measure, shall be the *gallon*, containing 10 lbs. avoirdupois weight of distilled water weighed in air at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches; and such measure shall be the Imperial standard gallon (containing 277·274 cubic inches); and all measures shall be taken in parts or multiples, or certain proportions, of the said Imperial standard gallon; and the quart shall be the fourth part, and the pint shall be an eighth of such standard gallon; and 2 such gallons shall be a peck, and 8 such gallons shall be a bushel, and 8 such bushels a quarter of corn or other dry goods not measured by heaped measure.

BUSHIRE, OR ABUSHIRE, a sea-port town of Persia, in the province of Fars, on the north-east coast of the Persian Gulph, lat. 29° N., long. 50° 50′ E. Population uncertain, but estimated by Major Wilson at from 15,000 to 20,000. Bushire is situated at the northern extremity of a sandy peninsula, to the north and east of which is the bay. There is a convenient anchorage for large ships due west from the town, 3 or 4 miles distant, in from 25 to 28 feet water; but ships of 300 tons burden or thereby lie in the inner roads, to the north, about 6 miles from shore; the anchorage is pretty good; but during violent north-westerly gales, they are sometimes obliged to cut their cables, and bear up for Karak, a small island about 15 leagues W. N. W. of Bushire. The water immediately to the east of the town is deep, but the passage to it is obstructed by a bar, which cannot be passed by vessels drawing more than 8 or 9 feet water, except at spring tides, when there is a rise of from 8 to 10 feet. The variation in 1811 was 4° 43′ W.—(*Chart of the Persian Gulph*, by *Captain Ritchie*, &c.) The climate here, as in all the other ports of the Persian Gulph, is extremely hot, particularly June, July, and August. The unhealthy season is in the fall of the year.

Trade, &c.—Bushire has a good deal of trade, particularly with Calcutta, Bombay, and Madras. Its merchants supply almost all Persia with Indian commodities; as, also, with a good many of those brought from Europe. Of the imports from India, indigo, sugar, sugar candy, and spices are the most important; the steel of India is preferred in Persia to every other, and is made into excellent sabres: tin is brought from Banca; and coffee is principally supplied by Mocha and other ports on the Arabian Gulph. English cotton goods, notwithstanding the admitted inferiority of our red dyes,—a colour in great esteem in Persia,—have already gone far to supersede those that were formerly brought from Hindostan; and the demand for them is rapidly extending, and is susceptible of an almost indefinite increase. Besides those imported at Bushire, a good many are introduced through Bussorah, and some through Turkey and Russia; the latter by way of the Black Sea, the former of Smyrna and Constantinople. Hitherto, indeed, a considerable part of the cottons imported through the last mentioned channels have been supplied by Switzerland and Germany,—their fabrics having been, in some respects, better fitted than ours for the Turkish and Persian markets; but they seem to have lost this advantage, as our exports of cottons to Turkey are now rapidly increasing. Woollen goods, cutlery, watches, &c., sent to India from England, are thence exported to Bushire. Imitation shawls, of the proper size and pattern, are said to meet with a fair sale. The exports principally consist of raw silk, Kerman wool, Kerman and Cashmere shawls, carpets, horses, silk goods, dried fruits, wine, grain, copper, turquoises, asafœtida, gall-nuts, pearls, and other articles of minor importance. Turkey annually supplies Persia with a very considerable amount of bullion, most part of which is sent to India.

Of the Persian exports, raw silk is the most important. It is produced to some extent in every province; but Gheelan and Mazunderan are those which are most celebrated for its growth. In the former, about 900,000 lbs. are annually raised. Russia is a large customer of this article. Dried fruits and dates are sent in considerable quantities to India. Horses are largely exported to India both by sea and land; they serve for mounting our Indian cavalry, and for supplying the large private demand that always obtains in Hindostan for this noble animal. Though neither so swift nor so beautiful as those of Arabia, the Persian horses are large, more powerful, and, all things considered, better for cavalry. They are capable of supporting an extraordinary degree of fatigue. Wine of Shiraz enjoys a degree of celebrity to which, judging from the few samples we have seen, it seems but ill entitled. Mr. Fraser says that it is made in so careless a manner, that, in choosing it, not more than 1 bottle in 4 or 5 can be made use of. Persian tobacco and yellow dye berries are highly esteemed: the former enters to a considerable extent into the trade to Turkey as well as to India; the berries bring a very high price in our markets, but the imports hitherto have been inconsiderable. Turquoises, asafœtida, and various sorts of drugs, rose water, with other minor articles, form part of the exports. Sheep's and goats' wool is also exported. The best is that of Kerman. The down furnished by the goats of this province is almost as fine as that of the Thibet or shawl goats. Cotton is extensively produced in Persia; the Russians carry away some, but the greater part is used in the country. Grain is sent to Muscat, but not in large quantities. The pearl trade is now principally centred at Muscat. The copper exported from Bushire is principally the produce of the Persian mines, mixed, however, with some Russian copper from Georgia. Of manufactured articles, the principal are carpets of the most beautiful fabric; shawls, partly native, and partly brought from Cashmere; velvets, silk goods, gold and silver brocades, and a few other articles. The trade between Persia and Russia by the Caspian Sea is not very considerable. Most part of the paper used in the former is supplied by the latter. The furs of Russia find a ready market in Persia. The Russian provinces on the Caspian derive their supplies of indigo from Persia by way of Bushire.

The entire trade between British India and the Persian Gulph, amounts to about 1,500,000*l.* a year. This, however, includes the trade to Muscat and Bussorah, as well as to Bushire, and we have no means of discriminating the separate amount of each.

Water at Bushire is excessively bad and dear; but excellent water, and in great abundance, may be had at Karak. The anchorage at this island is safe at all times; and ships may lie close to the beach. Sir John Malcolm suggested, that the permanent possession of Karak would be an object of considerable importance; and we are rather inclined to agree with him. It is of no value to the Persians, and there seems little doubt that they would be glad to cede it for a trifling consideration. Its possession would not only enable us to command the navigation of the Persian Gulph; but it would form a depôt where goods destined for Bushire, Bussorah, &c. might be kept in perfect safety, and in a situation the most convenient, being readily accessible to all sorts of Arabian vessels. A taste for British cottons and woollens is now forming in all the vast countries watered by the Euphrates and the Tigris, or which derive their supplies from the emporia erected on their banks; and it is of the greatest consequence that nothing be omitted that may serve to facilitate the diffusion of this taste, and the means of gratifying it.

Money.—Accounts are kept in tomans of 50 abasses, or 100 mamoodis. The toman is a Persian gold coin, containing, according to the report of the Bombay mint, from 71·5 to 67 gr. pure metal, being consequently equal to from 12*s.* 7½*d.* to 11*s.* 11*d.* sterling. The toman of Bussorah is worth about 36*s.*; and that of Gombroon about 24*s.* These, with Persian and foreign silver coins of all denominations, are found at Bushire, but the rates of the foreign coins are perpetually varying, and the weight of the native coins is also subject to frequent changes.

Weights and Measures.—Gold and silver are weighed by the miscal of 2 dwt. 23 7-12 gr. or 3 dwt. very nearly.

The commercial weights vary according to the commodities sold, and the places where they are used. The maund tabree weighs 6½ lbs. avoirdupois at the Custom-house, but only 6¼ lbs. at the bazaar. This weight is used by dealers in sugar, coffee, copper, and all sorts of drugs. The maund copra is 7½ lbs. at the Custom-house, and from 7½ to 7¾ lbs. at the bazaar. Dealers in rice and other articles of provision use this weight. The maund shaw is double the maund tabree, or 13½ lbs.

Pearls are weighed by the abbas = 2·25 gr. Troy.

There are various sorts of guz's or cubits. One called the royal guz = 37½ Eng. inches; the common guz is two thirds of the former, or 25 inches.

The Persian league or parasang is 1-20th of a degree of the equator, and should, therefore, be equal to 3 miles 3 furlongs and 25 poles English.

The artaba, or principal corn measure, is equivalent to about 2 Winch. quarters.

For further particulars, see *Niebuhr, Voyage en Arabie*, tome ii. p. 75.; *Kinneir's Memoir of the Persian Empire*, p. 70.; *Fraser's Travels on the Shores of the Caspian, Appen.* pp. 25?—384.; *Parl. Paper* No. 735. 2d Sess. 1832, pp. 632—638.; *Kelly's Oriental Metrology*; *Thornton's E. Indian Calculator*, &c.

BUSS, a small sea-vessel, used by us and the Dutch in the herring fishery, commonly from 50 to 60 tons burden, and sometimes more. A buss has two small sheds or cabins; one at the prow, and the other at the stern: that at the prow serves for a kitchen.—(See FISHERY.)

BUSSORAH, OR BASRAH, a city of Arabia, on the western bank of the Shat-el-Arab (the name given to the river formed by the junction of the Tigris and the Euphrates), above 70 miles from its mouth, lat 30° 30′ N., long. 47° 32′ E. Population about 60,000, consisting of Arabs, Turks, Persians, Armenians, Jews, &c. The houses and streets are mean and filthy. There is a vast area within the walls, occupied principally by gardens and plantations of date trees, and intersected by canals, on which are numerous small craft.

The bar at the mouth of the Shat-el-Arab has only about 12 feet water, but the channel within is deep, so that ships of 500 tons burden, provided they cross the bar at the springs, may without difficulty ascend the river as far as the city; and both its grand branches may be navigated to a great distance by smaller vessels. Bussorah is the principal inlet on the east, through which Indian and other Eastern products find their way into the Turkish Empire. Its commerce is, therefore, even at present, pretty considerable; and were the rich and extensive countries traversed by the Tigris and the Euphrates occupied by a civilised and industrious people, it would be very great. Its imports from India and Europe are similar to those at BUSHIRE—(which see); from Persia it imports shawls, pearls from Bahrein, &c., and coffee from Mocha. At an average, 6 or 8 British ships arrive in the course of the year from India; but the principal part of the trade is carried on in Arabian bottoms, the merchants of Muscat being the owners of some of the finest ships that are to be met with in the Indian seas. Its exports are principally bullion, pearls, dates, copper, raw silk, horses, gall nuts, and drugs. Captain Hamilton mentions, that in the early part of last century, the exports of dates from Bussorah exceeded 10,000 tons a year.—(*New Account of the East Indies*, vol. i. p. 78.) The commerce with the interior is conducted by means of caravans to Aleppo and Bagdad; but it might be carried on to much more advantage by means of steam-boats. It was at one time proposed to forward mails from India by steam by the Shat-el-Arab and the Euphrates to Bir, thence by land to Scanderoon, and again by steam to Gibraltar and England; but this project was very wisely given up in favour of the route by the Red Sea.

Money.—All sorts of coins circulate here, but their values are constantly fluctuating. Accounts are kept in *mamoodis* of 10 *danims*, or 100 *floose*; 100 *mamoodis* make a *toman*, which may be valued at about 15 sicca rupees, or 36*s.* sterling.

Weights and Measures.—Gold and silver are weighed by the *checki* of 100 *miscals*, or 7,200 Eng. grains.

The commercial weights are the *maund attere*, the *maund sofy or seere*, and the *oke of Bagdad*. 1 *vakia* = 19 oz. avoirdupois; 2½ vakias = 1 oke of Bagdad = 47½ oz. avoir.; 1 maund atteree = 28 lbs. 8 oz. avoir.; 1 maund sofy = 90 lbs. 4 oz. avoir.; 1 *cutra* of indigo = 138 lbs. 15 oz. avoir.

These are the weights used by the Europeans settled at Bussorah; those used by the Arabians differ a little from the above, and frequently also among themselves—a circumstance to which the merchant must pay particular attention.

The long measures are the Aleppo yard for silks and woollens = 2 feet 2·4 inches; the Hadded do. for cottons and linens = 2 feet 10·2 inches; the Bagdad do. for all purposes = 2 feet 7·6 inches.

For further details as to the commerce of Bussorah, see *Kinneir's Memoir on the Persian Empire*, p. 283.; the art. BUSHIRE in this Dictionary; *Kelly's Oriental Metrology*; *Thornton's East Indian Calculator*, p. 424. Niebuhr has given a plan of Bussorah, *Voyage en Arabie*, tome ii. p. 170.

BUTLERAGE. See PRISAGE.

BUTT, a vessel or measure for wine, containing 2 hogsheads, or 126 wine gallons.

BUTTER (Da. *Smör*; Du. *Boter*; Fr. *Beurre*; Ger. *Butter*; It. *Burro*, *Butiro*; Lat. *Butyrum*; Pol. *Maslo*; Port. *Manteiga*; Rus. *Masslo Korowe*; Sp. *Manteca*; Sw. *Smör*), as every one knows, is a fat, unctuous, and, in temperate climates, a pretty firm substance, obtained from milk, or rather from cream, by the process of churning.

The various circumstances attending the introduction and use of butter in antiquity have been investigated by Beckmann with great learning and industry. The conclusion at which he arrives is, "that butter was not used either by the Greeks or Romans in cooking or the preparation of food, nor was it brought upon their tables by way of dessert, as is every where customary at present. We never find it mentioned by Galen and others as a food, though they have spoken of it as applicable to other purposes. No notice is taken of it by Apicus; nor is there any thing said of it in that respect by the authors who treat of agriculture, though they have given us very particular information with respect to milk, cheese, and oil. This, as has been remarked by others, may be easily accounted for, by the ancients having accustomed themselves to the use of good

oil; and in the like manner butter is very little employed at present in Italy, Spain, Portugal, and the southern parts of France." — (*History of Inventions*, vol. ii. p. 413. Eng. ed.)

Butter is very extensively used in this and most other northern countries; that of England and Holland is reckoned the best. In London, the butter of Epping and Cambridge is in the highest repute; the cows which produce the former, feed during summer in the shrubby pastures of Epping Forest; and the leaves of the trees, and numerous wild plants which there abound, are supposed to improve the flavour of the butter. It is brought to market in rolls from one to two feet long, weighing a pound each. The Cambridgeshire butter is produced from cows that feed one part of the year on chalky uplands, and the other on rich meadows or fens: it is made up into long rolls like the Epping butter, and generally salted or cured before being brought to market; the London dealers, having washed it, and wrought the salt out of it, frequently sell it for Epping butter.

The butter of Suffolk and Yorkshire is often sold for that of Cambridgeshire, to which it is little inferior. The butter of Somersetshire is thought to equal that of Epping: it is brought to market in dishes containing half a pound each; out of which it is taken, washed, and put into different forms, by the dealers of Bath and Bristol. The butter of Gloucestershire and Oxfordshire is very good; it is made up in half-pound packs or prints, packed up in square baskets, and sent to the London market by wagon. The butter of the mountains of Wales and Scotland, and the moors, commons, and heaths of England, is of excellent quality when it is properly managed; and, though not equal in quantity, it often is confessedly superior, to that produced by the richest meadows. — (*Loudon's Encyc. of Agriculture.*)

Considerable quantities of butter are made in Ireland, and it forms a prominent article in the exports of that country: generally, it is very inferior to that of Britain; but this is a consequence rather of the want of cleanliness and attention, than of any inferiority in the milk. Some of the best Irish butter brought to London, after being washed and repacked, is sold as Dorsetshire and Cambridge butter.

The salt butter of Holland is superior to that of every other country; large quantities of it are annually exported. It forms about three fourths of all the foreign butter we import.

The production and consumption of butter in Great Britain is very great. The consumption in the Metropolis may, it is believed, be averaged at about 5 oz. per week for each individual, being at the rate of about 16 lbs. a year; and supposing the population to amount to 1,870,000, the total annual consumption would, on this hypothesis, be 29,920,000 lbs., or 13,357 tons: but to this may be added 2,000 tons, for the butter required for the victualling of ships and other purposes; making the total consumption, in round numbers, 15,357 tons, or 34,400,000 lbs., which at 10*d.* per lb. would be worth 1,433,333*l.* 6*s.* 8*d.*

The average produce per cow of the butter dairies is estimated by Mr. Marshall at 168 lbs. a year; so that, supposing we are nearly right in the above estimates, about 204,762 cows will be required to produce an adequate supply of butter for the London market.

The consumption of butter in London has sometimes been estimated at 50,000 tons; which, according to Mr. Marshall's statement, would require for its supply upwards of 666,000 cows! Further commentary on such a statement would be superfluous. The imports of foreign butter have fully doubled since 1830. We subjoin an

Account showing the Total Quantities of Butter imported into the United Kingdom during each of the Five Years ending with 1841, specifying the Quantities brought from each Country.

Countries.	1837.	1838.	1839.	1840.	1841.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Denmark - - - -	15,914	14,446	15,104	14,080	16,196
Germany - - - -	78,985	74,917	55,576	75,709	78,475
Holland - - - -	187,323	164,315	139,239	157,802	164,652
All other countries - - -	2,725	2,515	3,785	7,470	18,305
Total	282,947	256,193	213,504	252,661	277,428

The entries of foreign butter for home consumption with the duties received thereon in 1840, 1841, and 1842, were —

	Cwt.	qrs.	lbs.	£.	s.	d.
In 1840 - -	249,506	2	9	257,942	19	10
1841 - -	250,434	1	0	202,967	2	7
1842 - -	180,474	0	15	188,019	6	10

The duties on foreign butter during the whole of this period were (including the 5 per cent. imposed in 1840) 21*s.* a cwt. In 1842 the duty on butter from a British possession was reduced to 5*s.* a cwt. (*Decennial Returns by Board of Trade*; *Parl. Paper* No. 45. Sess. 1843.)

The average contract prices of the butter furnished to Greenwich Hospital from 1730 to 1842, have been as follows: —

Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.
	s. *d.*		*s.* *d.*		*s.* *d.*		*s.* *d.*		*s.* *d.*
1730	0 5	1770	0 6½	1800	0 11½	1820	0 9½	1835	0 7½
1740	0 5	1780	0 6½	1810	1 1½	1825	0 10½	1840	0 10
1750	0 5½	1790	0 6½	1815	1 2	1830	0 6½	1842	0 8½
1760	0 5½								

In order to obviate the practice of fraud in the weighing and packing of butter, different statutes have been passed, particularly the 56 Geo. 3. c. 86., and 58 Geo. 3. c. 73., the principal regulations of which are subjoined. It is very doubtful, however, whether they have been productive of any good effect. It might be proper, perhaps, to order the weight of the butter, exclusive of the vessel, and the dairyman's or seller's name, to be branded on the inside and outside of each vessel; but most of the other regulations, especially those as to the thickness of the staves, and the weight of the vessels, seem to be at once vexatious and useless.

Every cooper or other person who shall make any vessel for the packing of butter, shall make the same of good well-seasoned timber, tight and not leaky, and shall groove in the heads and bottoms thereof; and every vessel made for the packing of butter shall be a tub, firkin, or half-firkin, and no other.

Every tub shall weigh of itself, including the top and bottom,

not less than 11 lbs. nor more than 15 lbs. avoirdupois; and neither the top nor the bottom of any such tub shall exceed in any part five eighths of an inch in thickness.

Every firkin shall weigh at least 7 lbs. including the top and the bottom, which shall not exceed four eighths of an inch thick in any part.

Half-firkins to weigh not less than 4 lbs. nor more than 6 lbs. including the top and the bottom, which shall not exceed four eighths of an inch thick in any part; upon pain that the cooper or every other person making any such vessel, in any respect contrary to the preceding directions, shall forfeit every such vessel and 10*s.*

Every cooper, &c. shall brand every cask or vessel before going out of his possession, on the outside, with his name, in legible and permanent letters, under penalty of 10*s.*, together with the exact weight or tare thereof.

Every dairyman, farmer, or seller of butter, or other person packing the same for sale, shall pack it in vessels made and marked as aforesaid, and in no other, and shall properly soak and season every such vessel; and on the inside, and on the top on the outside, shall brand his name at length, in permanent and legible letters; and shall also, with an iron, brand on the top on the outside, and on the bouge or body of every such cask, the true weight or tare of every such vessel, when it shall have been soaked and seasoned; and also shall brand his name at length, on the bouge or body of every such vessel, across two different staves at least, and shall distinctly, and at length, imprint his Christian and surname upon the top of the butter in such vessel when filled, on pain of forfeiting 5*l.* for every default thereof.

Every tub of butter shall contain, exclusive of the tare of good and merchantable butter, 84 lbs.; every firkin 56 lbs.; every half-firkin 28 lbs.; and no old or corrupt butter shall be mixed, or packed in any vessel whatever, with any butter that is new and sound; nor shall any butter made of whey be packed or mixed with butter made of cream, but the respective sorts shall be packed separately, and the whole vessel shall, throughout, be of one sort and goodness; and no butter shall be salted with any great salt, but all butter shall be salted with small salt; nor shall more salt be intermixed with the butter than is needful for its preservation, under penalty of 5*l.* for offending against any of these regulations.

No change, alteration, fraud, or deceit shall be practised by any dealers or packers of butter, either with respect to the vessel or the butter so packed, whether in respect to quantity or otherwise, under a penalty of 30*l.* to be imposed on every person engaged in the offence.

Every cheesemonger, dealer in butter, or other person, who shall sell any tubs, firkins, or half-firkins of butter, shall deliver, in every such cask or vessel respectively, the full quantity appointed by this act, or, in default thereof, shall be liable to make satisfaction to the person who shall buy the same for what shall be wanting, according to the price for which it was sold, and shall be liable to an action for recovery of the same, with full costs of suit.

No cheesemonger, dealer in butter, &c. shall repack for sale any butter, under penalty of 5*l.* for every tub, firkin, or half-firkin, so repacked.

Nothing in this act shall extend to make any cheesemonger, dealer in butter, or other person, liable to any penalties for using any of the tubs, firkins, or half-firkins, after the British butter used in such vessels shall have been taken thereout, for the repacking for sale of any foreign butter, who shall, before he so repack such foreign butter, entirely cut or efface the several names of the original dairyman, farmer, or seller of butter, from every such vessel, leaving the name and tare of the cooper, and the tare of the original dairyman, farmer, or seller thereon; and, after the names are so effaced, shall, with an iron, brand his Christian and surname, and the words *foreign butter*, upon the bouge of every such vessel, across two staves at least, to denote that such butter is foreign butter.

Persons counterfeiting or forging any such names or marks, shall for every such offence forfeit 40*l.*

Penalties not exceeding 5*l.* to be determined by one justice, upon the evidence of one witness, and the whole shall go to the informer.

Penalties above 5*l.* to be recovered by action of debt, or information, in the courts at Westminster, and the whole to the informer.

Nothing to extend to the packing of butter in any pot or vessel which shall not be capable of containing more than 14 lbs.

Previously to 1826, no butter could be sold in any public market in Ireland, or exported from it, without being previously examined and branded by a public inspector; but compliance with this regulation is no longer compulsory, but is left to the discretion of the parties.

It is enacted by statute 4 Will. 3. c. 7., that every warehouse-keeper, weigher, searcher, or shipper of butter and cheese, shall receive all butter and cheese that shall be brought to him for the London cheesemongers, and ship the same without undue preference; and shall have for his pains 2*s.* 6*d.* for every load; and if he shall make default, he shall, on conviction before one justice, on oath of one witness, or confession, forfeit for every firkin of butter 10*s.*, and for every weigh of cheese 5*s.*; half for the use of the poor, and half to the informer.

And every such person shall keep a book of entry of receiving and shipping the goods, on pain of 2*s.* 6*d.* for every firkin of butter and weigh of cheese.

The master of a ship refusing to take in butter or cheese before he is full laden (except it be a cheesemonger's own ship sent for his own goods) shall forfeit for every firkin of butter refused 5*s.*, and for every weigh of cheese 2*s.* 6*d.*

This act does not extend to any warehouse in Cheshire or Lancashire.

Butter made in hot countries is generally liquid. In India it is denominated *ghee*, and is mostly prepared from the milk of buffaloes; it is usually conveyed in duppers, or bottles made of hide, each of which contains from 10 to 40 gallons. Ghee is an article of considerable commercial importance in many parts of India.

The Arabs are the greatest consumers of butter in the world. Burckhardt tells us, that it is a common practice among all classes to drink every morning a coffee cup full of melted butter or ghee! and they use it in an infinite variety of other ways. The taste for it is universal; and the poorest individuals will expend half their daily income that they may have butter for dinner, and butter in the morning. Large quantities are annually shipped from Cosseir, Souakin, and Massouah, on the west coast of the Red Sea, for Djidda and other Arabian ports.—(*Burckhardt's Travels in Nubia*, p. 440.; *Travels in Arabia*, vol. i. p. 52.)

BUTTONS (Du. *Knoopen*; Fr. *Bouton*; Ger. *Knöpfe*; It. *Bottoni*; Rus. *Pogowizii*; Sp. *Botones*) are well known articles, serving to fasten clothes, &c. They are manufactured of an endless variety of materials and forms.

It might have been supposed, that the manufacture of such an article as this would have been left to be carried on according to the views and interests of those concerned, individuals being allowed to select any sort of button they pleased. Such, however, has not been the case; and various statutes have been passed, pointing out the kind of buttons to be worn, and the way in which they are to be made! Most of these regulations have luckily fallen into disuse, but they still occupy a place in the statute book, and may be enforced. The following are amongst the more prominent of these regulations:—

No person shall make, sell, or set upon any clothes, or wearing garments whatsoever, any buttons made of cloth, serge, drugget, frieze, camblet, or any other stuff of which clothes or wearing garments are made, or any buttons made of wood only, and turned in imitation of other buttons, on pain of forfeiting 40*s.* per dozen for all such buttons.—(4 *Geo.* 1. c. 7.)

No tailor shall set on any buttons, or button-holes, of serge, drugget, &c., under penalty of 40*s.* for every dozen of buttons or button-holes so made or set on.

No person shall use or wear, on any clothes, garments, or apparel whatsoever, except velvet, any buttons or button-holes made of or bound with cloth, serge, drugget, frieze, camblet, or other stuffs whereof clothes or woollen garments are usually made, on penalty of forfeiting 40*s.* per dozen, under a similar penalty.—(7 *Geo.* 1. c. 22.)

To prevent the frauds which it is alleged had taken place in the manufacture of gilt and plated buttons, an act, 36 Geo. 3. c. 6., was passed, which regulates what shall be deemed gilt and what plated buttons; and imposes penalties on those who order as well as on those who may make any buttons with the words "gilt" or "plated" marked upon them, except they be gilt and plated as the act directs. Inasmuch as this statute goes to obviate a fraud, it is, perhaps, expedient; but no apology can be made for the regulations previously alluded to, which are at once vexatious and absurd.

The importation of buttons from abroad was prohibited in the reign of Charles II. But the 6 Geo. 4. c. 107. § 52. repealed this prohibition, and they may now be imported, for home consumption, on paying an *ad valorem* duty.

C.

CABBAGE, a biennial plant (*Brassica* Lin.), of which there are many varieties. It is too well known to require any particular description; it is extensively cultivated in the vicinity of London. Sour crout, or properly *sauer kraut*, is a very favourite dish in Germany; it consists of a fermented mass of salted cabbage.

CABLES are strong ropes or chains, principally used in the anchoring or mooring of ships.

1. *Rope Cables* are, in Europe, principally manufactured of hemp; but in the East they are very frequently made of *coir*, or the fibrous part of the cocoa nut, and in some places, particularly on the Red Sea, of the coating of the branches of the date tree.

Hemp cables are formed of three principal strands, every strand of three ropes, and every rope of three twists. The twists have more or fewer threads according to the greater or less thickness of the cable. All vessels have ready for service three cables, which are usually designated the *sheet* cable, the *best bower* cable, and the *small bower* cable; but besides these, most ships have some spare cables. The ordinary length of a cable is from 100 to 120 fathoms. The following are the existing regulations as to the manufacture of hemp cables and cordage: —

No person shall make or sell any cordage for shipping in which any hemp is used, called short chucking, half clean, whale line, or other toppings, codilla, or any damaged hemp, on pain of forfeiting the same, and also treble the value thereof.

Cables, hawsers, or ropes, made of materials not prohibited by this act, and whose quality shall be inferior to clean Petersburgh hemp, shall be deemed inferior cordage, and the same shall be distinguished by marking on the tally, *staple* or *inferior*. Manufacturers making default herein forfeit for every hundred weight of cordage, 10*s*.

Manufacturers are to affix their names and manufactory to new cordage before sold, under the like forfeiture; and putting a false name is a forfeiture of 20*l*.

Persons making cables of old and overworn stuff, containing above 7 inches in compass, shall forfeit four times the value.

Vessels belonging to British subjects, having on board foreign-made cordage, are to make entry thereof, on entering into any British port, on penalty of 20*s*. for every hundred weight. But this is not to extend to cordage brought from the East Indies, nor to materials at present used by any vessels built abroad before this act. — (25 *Geo.* 3. c. 56.)

2. *Iron Cables.* — The application of strong iron chains or cables to the purposes of navigation is a late and an important discovery, for which we are indebted to Captain Samuel Brown, R.N. It is singular, indeed, that this application should not have been made at a much earlier period. On rocky bottoms, or where coral is abundant, a hempen cable speedily chafes, and is often quite destroyed in a few months, or perhaps days. A striking instance of this occurred in the voyage of discovery under the orders of M. Bougainville, who lost *six* anchors in the space of nine days, and narrowly escaped shipwreck; a result, says that able seaman, which would not have happened, "*si nous eussions été munis des quelques chaines de fer. C'est une précaution que ne doivent jamais oublier tous les navigateurs destinés à de pareils voyages.*" — (*Voyage autour du Monde*, p. 207. 4to. ed.) The work from which this extract is taken was published in 1771; and yet it was not till nearly *forty* years after, that any attempt was made practically to profit by so judicious a suggestion. The difficulties in the way of importing hemp from 1808 to 1814, and its consequent high price, gave the first great stimulus to the manufacture of iron cables.

Iron cables are constructed in different ways — (see *Encyc. Metrop.*); but they are uniformly tried by a machine, which strains them by a force greater than the absolute strength of the hempen cable they are intended to replace. By this means the risk of accident from defective links is effectually obviated; and there are exceedingly few instances in which an iron cable has broken at sea. Their great weight also contributes to their strength, inasmuch as the impulse of the ship is checked before the cable is brought nearly to a straight line, or that the strain approaches to a maximum. Bolts and shackles are provided at every fathom or two fathoms, by striking out which the ship may, if necessary, be detached from her anchors with less difficulty than a hempen cable can be cut.

Even in their most defective form, iron cables are a great deal stronger than those of hemp; and as to durability, no sort of comparison can be made. No wonder, therefore, that they should be rapidly superseding the latter; which are now almost wholly laid aside in the navy, and, to a great extent, also, in the merchant service.

CADIZ, the principal commercial city and sea-port of Spain, on its south-western coast, on the rocky and elevated extremity of a narrow, low peninsula, or tongue of land, projecting from the Isla de Leon, N.N.W. about 4½ nautical miles. It is surrounded on all sides, except the south, where it joins the land, by the sea, and is very strongly fortified. Population, in 1837, 58,525. It is well built, and has, at a distance, a very striking appearance. The tower or lighthouse of St. Sebastian stands on the western side of the city, being, according to Tofiño, in lat. 36° 31′ 7″ N., long. 6° 18′ 52″ W. It is a most conspicuous object to vessels approaching from the Atlantic. The light, which is 172 feet high, is of great brilliancy, revolves once a minute, and in fair weather may be seen more than 6 leagues off.

Bay of Cadiz.—The entrance to this noble basin lies between the city and the town and promontory of Rota, bearing N.W. by N., distant about 1¾ league. The bay is of very great extent, affording, in most places, good anchorage. The port is on the eastern side of the city, where a mole of considerable dimensions has been constructed; but the water is not sufficiently deep to allow large vessels to approach nearer than within about ½ of a mile, where they anchor in from 5 to 7 fathoms. The rocks called the Cochinos, the Puercas, and the Diamante, lie to the north of the city in the entrance to the bay; the first two at about 3-5ths of a mile distant, and the Diamante at rather more than 1½ mile from the city. Vessels may enter between the Puercas and the Diamante; but none, except those not drawing more than 15 feet water, and well acquainted with the channel, ought to attempt entering between the Cochinos and Puercas and the city. The town of St. Mary's, on the opposite side of the bay, is famous for being the depôt of the wines of Xeres. The outer bay, or that of Cadiz properly so called, is separated from the inner bay by the promontory having at its extremity the castle of Matagorda, which approaches within about ½ of a mile of the Puntales castle on the Isla de Leon. Within the inner bay is the famous arsenal of the Caraccas, the town of San Carlos, the canal of Trocadero, &c. At spring tides the water in the bay rises 10 or 11 feet, but at neaps the rise does not exceed 6 feet. — (For further particulars see the excellent *Chart of the Bay of Cadiz, by Tofiño*; *Mulham's Naval Gazetteer*; and *Purdy's Sailing Directions for the Bay of Biscay, &c.*)

History, Trade, &c. — Cadiz is a very ancient city, having been founded by the Phœnicians about 1,200 years before the Christian æra. The temple which they

erected in it in honour of Hercules was one of the most celebrated in antiquity. — (*Sainte Croix, Des Anciennes Colonies*, p. 14.; *Pomp. Mela*, lib. iii. cap. 6.) Its excellent port, and its situation, favourable alike for commerce and security, have made it, whether possessed by Carthaginians, Romans, Moors, or Christians, and under every vicissitude, a place of considerable commercial and political importance. It has long been one of the principal stations of the Spanish naval force. In 1720, the commerce with Spanish America, which had previously been exclusively carried on from Seville, was transferred to Cadiz. It enjoyed this valuable monopoly till 1765, when it was partially relaxed by the trade to Cuba, St. Domingo, Porto Rico, and the other islands being opened to all the greater ports of Spain. The benefits resulting from this relaxation were so very great, that in 1778 the trade to all parts of America was opened to ships from every considerable Spanish port, except those of Biscay, which, not being subject to the general laws of the kingdom, were not allowed to participate in this privilege. In consequence, however, of her situation, the great capital of her merchants, and their established connections, Cadiz continued, notwithstanding the abolition of the monopoly, to preserve by far the largest share of the American trade. But since the colonies achieved their independence, her commerce has been contracted within comparatively narrow limits; nor is there much prospect of its being materially improved, without a total change of policy on the part of the Spanish government. — (*Robertson's America*, b. viii. passim; *Townsend's Travels in Spain*, vol. ii. pp. 395—401. 2d edit.)

The white wines of Xeres in its vicinity form by far the principal article of export from Cadiz. The quantity exported may amount to about 28,000 pipes a year. The prices vary from 12*l.* to 65*l.* per pipe; but, as the lower qualities predominate, the price may be taken, at a medium, at about 25*l.*, making the total value of the exports 700,000*l.* More than ⅔ths of the whole comes to England. The other articles of export are quicksilver, brandy, oranges and other fruits, oil, provisions, salt, wool, &c. The imports consist principally of sugar and coffee from the Havannah and Porto Rico, cocoa, hemp, flax, linens, dried fish, hides, cotton wool and cotton manufactures, rice, spices, indigo, staves and timber, &c.

The imports of colonial produce, exclusive of cocoa, from Cuba and Porto Rico into Cadiz, in 1837, were —

Sugar	lbs.	150,534,774
Coffee	—	36,654,514
Cigars	no.	143,701,500
Tobacco	lbs.	1,196,185
Treacle	—	2,250,446
Honey	—	71,708
Wax	—	920,764
Rum	gall.	311,622

Account of the wines exported from Xeres and Port St. Mary, in 1835, 1836, and 1837.

1835	butts.	28,557⅓
1836	—	31,954⅓
1837	—	25,368

Annual average 28,627 butts; and as each butt contains 600 bottles of wine, the annual export is 17,176,200 bottles, or 1,431,350 dozens. — (Sykes on the statistics of Cadiz, in the *Statistical Journal* for October, 1838.)

It appears from the subjoined statements, furnished by the English consul, that, while the estimated value of the exports from Cadiz amounts to nearly a million sterling a year, the estimated value of the imports hardly exceeds 30,000*l.*! But it is needless to say that there cannot possibly be any such discrepancy; and, in fact, the apparently trifling amount of the imports is entirely owing to their being almost wholly smuggled into the country, and, consequently, not appearing in the printed returns.

Account of the number and tonnage of the vessels entering and sailing from Cadiz during each of the 6 years ending with 1842, specifying the value of their cargoes.

Imports.

	Vessels arrived.	Tons.	Val. of Cargoes.
1837	327	51,899	£60,948
1838	290	44,503	33,031
1839	287	39,433	18,588
1840	322	49,160	39,528
1841	292	45,801	36,880
1842	295	46,028	29,351

Exports.

	Vessels sailed.	Tons.	Val. of Cargoes.
1837	315	50,542	£834,133
1838	289	44,443	1,010,981
1839	284	39,094	1,154,051
1840	319	48,451	1,088,768
1841	288	45,394	878,645
1842	300	46,901	710,514

Port and other Charges at Cadiz. — British vessels pay a tonnage duty of one real de Vellon, or 2½*d.* sterling, and for light duty 24 maravedis, or 1¾*d.* sterling, exchange 37½*d.* per dollar of exchange; but Spanish vessels are exempt from the tonnage duty, and pay for light duty 12 maravedis, or 3½ farthings sterling, at the same exchange.

Notwithstanding the powerful influence of her anti-commercial policy, we carry on a very considerable intercourse with Spain. This is evident from the following table, which exhibits the quantities of the principal articles we import from her; but no reliance can be placed on the statements as to the exports, the articles intended for Spain being principally shipped for Portugal, Gibraltar, Malta, &c., whence they are smuggled into her markets.

Account of the Quantities of the Principal Articles imported into the United Kingdom from Spain and the Balearic Islands in 1839, 1840, and 1841, and of the Quantities and Declared Value of the Principal Articles of British Produce and Manufacture exported from the United Kingdom to Spain and the Balearic Islands in 1839, 1840, and 1841.

Imports from Spain and the Balearic Islands.

Articles.		1839. Quantities.	1840. Quantities.	1841. Quantities.
Barilla	cwts.	29,744	36,585	20,341
Corn Wheat	qrs.	17,741	46,939	35,298
Corn Barley	—	600	677	
Figs	cwts.	5,963	3,885	3,919
Lemons and Oranges, in packages not exceeding 5,000 cubic inches	pckgs.	1,494	1,231	1,021
Lemons and Oranges, above 5,000 and under 7,300 cubic inches	—	11,063	11,003	12,015
Lemons and Oranges, 7,300 — 14,000 cubic inches	—	18,470	17,937	16,491
Oil, olive	galls.	136,167	1,505,384	382,982
Quicksilver	lbs.	2,252,002	2,157,823	1,823,096
Raisins	cwts.	180,009	166,505	161,005
Skins, lamb, undressed	no.	—	24,105	
Spirits, brandy	pr. gal.	220,527	223,968	95,781
Wool, sheep's	lbs.	2,409,634	1,266,905	1,088,200
Wine, Spanish	gal.	4,052,707	3,945,091	3,137,044

Exports to Spain and the Balearic Islands.

Articles.		1839.		1840.		1841.	
		Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
			£		£		£
Brass and copper manufactures	- cwts.	349	1,860	721	3,802	1,109	6,060
Coals, culm, and cinders	- tons	18,200	7,583	13,835	5,718	37,320	18,245
Cotton manufactures entered by the yard	- yds.	444,735	10,624	355,040	7,987	153,982	4,524
Hardware and cutlery	- cwts.	2,129	10,316	3,748	19,189	2,399	13,178
Iron and steel, wrought and unwrought	- tons	961	11,283	1,818	17,787	7,204	39,324
Linen manufactures entered by the yard	- yds.	3,735,319	127,755	5,034,629	166,738	5,934,226	185,928
Machinery and mill-work	- —	- -	4,950	- -	20,755	- -	13,511
Sugar refined	- cwts.	2,913	5,175	11,910	22,273	14,309	25,703
Woollen manufactures entered by piece	- pieces	10,471	21,786	38,291	74,617	28,114	49,969
Ditto by the yard	- yds.	7,368	714	22,066	2,330	21,751	2,888
Silk, ditto	- —	- -	1,185	- -	6,627	- -	8,890
Tin and pewter wares and tin plates	- —	- -	3,414	- -	5,007	- -	4,953
Earthenware of all sorts	- pieces	345,925	3,381	1,027,537	8,862	772,280	6,462
All other articles	- -	- -	51,875	- -	42,560	- -	31,223
Total declared value			262,231		404,252		413,849

Money.—The monies, weights, and measures, used at Cadiz, are those of Castile. Accounts are kept by the *real* (of old plate), of which there are 10½ in the *peso duro*, or hard dollar: and as the dollar =4*s.* 5½*d.* the real =1½*d.* A real is divided into 16 *quartos*, or 34 *maravedis*. The *ducado de plata*, or ducat of plate, is worth 11 reals.

Weights and Measures.—The ordinary quintal is divided into 4 *arrobas*, or 100 lbs. of 2 marcs each: 100 lbs. Castile =101½ lbs. avoirdupois. The yard, or *vara* =·927 English yard, or 100 varas =92½ English yards. The *cahiz*, or measure for corn, is divided into 12 *fanegas*, or 144 *celeminas*, or 576 *quartillas*: 100 cahiz's =19·7 Winch. quarters, and 5 fanegas =1 quarter. The *cantaro*, or *arroba*, the measure for liquids, is divided into 8 *azumbres*, and 32 *quartillos*. There are two sorts of arrobas, the greater and the lesser: they are to each other as 32 to 25; the former being equal to 4¼ English wine gallons, the latter to 3⅓ do. A *moyo* of wine =16 arrobas. The *botta* =30 arrobas of wine, or 38½ of oil. A *pipe* =27 arrobas of wine, or 34½ of oil. Hence the botta =127½ English wine gallons, and the pipe 114¾ do.

In 1829 Cadiz was made a free port, that is, a port where goods may be consumed and bonded without paying duty. This boon would have been of comparatively little consequence but for the opportunity of smuggling afforded by the oppressively high duties laid on most foreign articles imported into Spain. These, as such duties wherever imposed never fail to do, have given birth to a very extensive contraband trade; and under the free regime Cadiz became the grand focus of this traffic. The government having seen this effect of the franchise, it was withdrawn on the 22d of December, 1832. This, however, is but a very trifling inconvenience to the smuggler; for nothing, fortunately, but the repeal of prohibitions, and the reduction of oppressive duties to a reasonable amount, can ever materially diminish the field of his exertions.

Spanish Commercial Policy.—It is the peculiar misfortune of Spain that every part of her political system has been alike vicious and objectionable. Had her commercial policy been liberal, it would, in some degree, have compensated for the defects in the distribution of property and political power, and would, no doubt, have given a powerful stimulus to industry. But, unluckily, it has been in perfect harmony with her other institutions, and is, in all respects, worthy of the favourite seat and stronghold of the Inquisition. From the reign of Ferdinand and Isabella down to the present time, the grand object of the Spanish government, next to the extirpation of heresy, has been to exclude foreign manufactures from the Peninsula, and to preserve a monopoly of its markets, as well as of those in the colonies, to the home manufacturers. It is, however, almost needless to say, that their efforts to bring about this result have been signally unsuccessful. The oppressive system of taxation, the multiplication of fasts and holydays, the government monopolies, the badness of the roads and other means of communication, made it impossible for the Spanish manufacturers, even if they had evinced greater enterprise and industry than they have done, to produce manufactured articles as cheap as the English, French, and others less unfavourably situated; and such being the case, it is plain that the prohibition of certain descriptions of commodities, and the oppressive duties laid on others, could have no effect except to suppress the legitimate commerce of the country, and to throw it wholly, or almost wholly, into the hands of smugglers. Any one who takes up a map of Spain must be satisfied at a glance that it would be impossible for an army of customs officers to prevent her being deluged with smuggled products, provided they were materially cheaper than her native products; for, besides her extensive sea frontier, they may be introduced by way of France and Portugal, and also through the Basque Provinces, which have distinct laws, and enjoy an exemption from the commercial code inflicted on the rest of the kingdom. We need not, therefore, be surprised that every effort to prevent the clandestine introduction of foreign products has completely failed. The severities occasionally inflicted on the smugglers, instead of abating, seem really to have increased, the evil. The contraband trade has long been a favourite occupation, and has been eagerly followed by the adventurous, the necessitous, and the desperate. For a lengthened period from 100,000 to 150,000 individuals have been pretty constantly engaged in this occupation; that is, they have been engaged in trampling on the laws, obstructing their officers, and committing acts of violence and blood.

And, strange to say, notwithstanding the ruinous influence of this wretched system was long since exposed by Ulloa, Campomanes, and other distinguished Spaniards, and by Mr. Townsend and other foreigners, who had visited the country, and notwithstanding all the vicissitudes Spain has undergone during the last half century, her old anti-commercial policy still continues to maintain its ascendancy. The existing tariff is divided into classes; and in addition to numerous prohibitions, and oppressive duties on many

articles of the first importance, the numerous forms to be observed at the custom-house, and the delays in entering any article, constitute of themselves a considerable premium on smuggling. It is stated that at present about 3,000 actions are annually instituted against *contrabandistas* and others engaged in illicit trade, which terminate in the ruin of a vast number of families; at the same time that the courts of law are filled with perjury, and the country with bloody conflicts. And yet these atrocities secure no one object government has in view.

Notwithstanding their being absolutely prohibited, English and French cotton goods may, at this moment, be bought in every shop in Madrid, and generally throughout Spain; the former at from 20 to 30 per cent. above their price in Gibraltar, where they are about as cheap as in Manchester; and the latter at from 20 to 30 per cent. above their price in Bayonne, which is nearly identical with their price in Rouen! While Cadiz was a free port, about 6,000 persons are said to have been employed in it twisting cigars, which, as soon as finished, were forthwith smuggled into the interior. Three fourths, in fact, of the foreign trade of Spain is in the hands of the *contrabandistas*, and is carried on in defiance of the law. And where such is the case, need we wonder at the low state of industry, or at the prevalence of those predatory and ferocious habits that uniformly mark the character of the smuggler?

In the valuable work of Mr. Inglis, entitled *Spain in* 1830, we find the following statement under the head Cadiz. Though written more than 40 years after the travels of Mr. Townsend, it shows that not one of the flagrant abuses denounced by the latter (*Travels*, ii. 394.) had been eradicated; but that, on the contrary, they all continue to flourish in still ranker luxuriance.

"The whole commercial system of Spain is most erroneously conceived. The prohibitory system is carried to a length absolutely ruinous to the fair trader, and highly injurious to the revenue. The immense duties upon admissible articles, and the total prohibition of others, has occasioned a most extensive contraband trade, both externally with the various ports along the coast of Spain, and internally, throughout the whole of the kingdom; and by this trade admissible articles are introduced into the interior, at from 100 to 300 per cent. below the duties imposed. Government could not fail to be benefitted by permitting the importation of articles of general use, upon a payment of such a duty as would allow the sale of the article at a lower price than is now paid by the consumer to the smuggler. As one example of the impolicy of the system, I may cite a fact respecting the trade in salted fish, the returns of which I have before me. The import of this article into Cadiz in one year, before that city was made a free port, amounted to 4 vessels, whose cargoes reached 4,092 cwt.; while at the free port of Gibraltar, in the same year, 41 vessels entered with 89,106 cwt., *the whole of which was intended for the illicit trade*, and passed into Spain through the hands of the smugglers. The duty upon this article is more than 100 per cent.; the smuggler considers himself remunerated by a gain of 25 per cent.; so that the article which finds its way into the market through the contraband trade is sold 75 per cent. cheaper than that which is admitted upon payment of the regular duties.

"The duties upon British manufactured goods amount almost to a prohibition; they often reach 100 per cent., and this trade is therefore also in the hands of the smugglers, who obtain the profit, which, under a more wholesome system, might go into the treasury of the kingdom. The fraudulent dealer is also greatly assisted by the custom of granting a royal licence to individuals to import a certain limited quantity of prohibited goods; an expedient resorted to in order to meet the exigencies of the state: and under the licence to enter 100 tons of merchandise the merchant enters perhaps 1,000 tons; a deception easily practised in a country where, among the public officers, a scale of bribery is perfectly understood and acted upon."—(Vol. ii. pp. 132—136.) And the returns as to the trade of Cadiz, given above, show that in 1842 smuggling was even more prosperous than in 1830.

It is needless to say that under this miserable system the home manufactures are in the lowest state of degradation; that industry of all kinds is paralysed; and that the customs' revenue does not exceed a fourth part, certainly, of what it would amount to under a liberal commercial code! The truth is, that a thorough reform in her commercial policy is absolutely indispensable to give Spain a chance of being regenerated. So long as the present tariff is maintained, so long will she be a theatre of sanguinary contests, without industry, without civilisation,—a reproach and a disgrace to Europe.

As a specimen of the way in which the tariff is framed, we may mention that, notwithstanding the vast importance of a cheap and abundant supply of iron to agriculture and manufactures, wrought-iron articles are wholly excluded, at the same time that a very heavy duty is imposed on iron in bars (*en bruto*)! This, of course, is done to protect the iron-masters and founders of the Basque Provinces—in other words, a trifling advantage is conferred on one individual in 100, at the expense and to the serious injury of the other 99!

Inasmuch as the returns published by the Spanish authorities of the value of the import and export trade of the country include only the commodities that pass through the custom-house, it is obvious, from the previous statements, that they are really good for nothing. According to the *Balanza Mercantil* for 1838, the aggregate value of the goods imported at 11 of the principal ports, during the course of that year, amounted to 1,615,000*l.*; whereas the value of the exports from the same ports, during the same year, is said to amount to 2,113,888*l.* It is, however, abundantly certain that the value of the imports must have exceeded that of the exports; and the reason why they are apparently so much below the latter is to be found in the fact that, being more generally subject to prohibitions and heavy duties, the trade in them is thrown to a greater extent into the hands of the smugglers. In illustration of what has now been

stated, we may mention that the value of the exports to Great Britain, in 1838, is estimated, in the *Balanza Mercantil*, at 1,327,470*l.*; while that of the imports from Great Britain is set down at only 149,405*l.*! In point of fact, however, we send about 400,000*l.* worth of produce direct to Spain, exclusive of the farther and (as already stated) far more considerable amount smuggled through Portugal, Gibraltar, France, &c. We incline to think that, allowing for smuggling, the import and export trade of Spain may each be estimated at about 4,000,000*l.* sterling, or, perhaps, a little more. And we have no doubt that, under a liberal commercial system, her commerce would speedily be trebled, and that, at no very distant period, it would be increased in a tenfold proportion.

There can, in fact, be no reasonable doubt that, but for the system of misrule to which Spain has been subjected, her commerce would have been about the most extensive of any European state. Her natural advantages, superior to most, and not inferior to those enjoyed by any other kingdom; her wines, brandies, fruits, &c.; her wheat, of which she might produce the largest supplies; her wool; her iron, which is of the best quality; her lead and quicksilver mines, respectively the most productive in the world; the number and excellence of her harbours; the enterprising and adventurous character of her inhabitants, and her favourable situation; would, were she permitted to avail herself of them, raise her to a very high rank among commercial nations. Let the government cease to counteract the intentions of nature; let moderate duties take the place of prohibitions, and freedom of regulation, and all sorts of industrious pursuits will speedily revive from the deadly lethargy in which they have been so long sunk.

CAGLIARI, the capital of Sardinia, on the north-east shore of a spacious bay on the south coast of the island, lat. 39° 12′ 13″ N., long. 9° 6′ 44″ E. Population, in 1838, 27,989. The city stands on a rising ground, and has an imposing effect from the sea. The public buildings and churches are numerous, and some of them splendid; but the streets are, for the most part, narrow, steep, and filthy.

The Gulph of Cagliari extends from Pula on the west to Cape Carbonara on the east, a distance of about 24 miles across, and about 12 in depth, with good anchorage every where after getting into soundings. A mole projects from the Pratique office, and ships usually lie about 1 mile S.W. by S. from it, in 6 or 8 fathoms water, on an excellent bottom of mud. There is a very convenient pier harbour at the south angle of the tower wall, capable of containing 14 or 16 vessels of a tolerable size, besides small craft. Altogether, Cagliari is one of the best and safest ports in the Mediterranean.

Imports and Exports.—Almost all the trade of Sardinia is carried on by strangers; and even the fish on its coast and in its harbours is caught by Sicilians, Neapolitans, Tuscans, and Genoese. Corn is the principal article of export. In good years, the exports from the whole island may amount to 400,000 starelli, or about 500,000 bushels, of wheat, 200,000 starelli of barley, 6,000 ditto of maize, 100,000 ditto of beans, 200,000 of peas, and 1,000 ditto of lentils. The culture of vines is gradually becoming of more importance; and about 3,500 Catalan pipes are exported, principally from Alghero and Ogliastro. Cheese is an important object in the rural economy of Sardinia, and considerable quantities are exported. Salt is a royal monopoly, and affords a considerable revenue. Until recently, Sweden drew almost all her supplies of this important necessary from Sardinia, and it continues to be exported in considerable quantities. Flax, linseed, hides, oil, saffron, rags, alquifoux, &c. are among the articles of export. The tunny and coral fisheries employ a good many hands; but, as already observed, they are almost wholly managed by foreigners.

Almost every article of dress, whether for the gentry or the peasantry, is imported. Soap, stationery, glass, earthenware, and furniture, as well as sugar, coffee, drugs, spices, &c., are also supplied by foreigners; and notwithstanding the Sards possess many rich mines, several of which were successfully wrought in antiquity, they import all their iron and steel. The only manufactures carried on in the island are those of gunpowder, salt, tobacco, and woollen caps.

Account of the Value of the Goods imported into and exported from Cagliari in 1839, with the Amount of the Duties on each.

Articles.	Imports.		Exports.	
	Value of Goods.	Amount of Duties.	Value of Goods.	Amount of Duties.
	Lire C.	*Lire C.*	*Lire C.*	*Lire C.*
Waters, drinks, essences, liquors, oils, spirits, and wines	27,276 93	2,966 59	34,300 39	1,934 70
Arms	3,434 0	321 24	30 0	0 60
Cattle	50 0	3 0	27,744 0	2,281 56
Caps, stockings, gloves, and knit or net work	42,263 10	7,496 88		
Hemp, flax, thread, ropes	67,829 80	6,616 74	2,072 0	9 95
Hats	18,547 67	2,862 20	20 67	1 55
Paper, books, and rags	126,195 34	11,891 15	49,062 70	20,913 0
Quilts, blankets, &c.	21,680 20	6,068 40		
Cotton, cotton stuffs, and cloths, or of cotton and linen thread	2,011,143 46	259,823 58	6,395 26	3 26
Sweets, dry, green, and conserved fruits	9,056 59	715 59	13,080 70	382 93
Drugs, spices, medicines, and dyestuffs	1,001,054 39	277,818 75	156,384 90	1,415 90
Grain, legumes, flour, and paste	34,315 37	2,114 57	3,952,969 50	159,046 12
Lard, &c., game, fowls, greens, cheese, forage, and seeds	6,721 23	427 11	1,017,565 10	17,301 58
Wood, skins, cloths, and stuffs, &c. of wool or hair	948,921 24	54,911 29	12,850 70	782 71
Wood, and work in wood	282,928 22	12,679 8	9,620 16	265 51
Mercery, hardware, &c.	97,794 46	12,864 24	2,161 80	5 42
Miscellaneous, not being inserted in any particular category	342,171 84	34,190 43	100,600 84	5,771 84
Metals, and works in the same	362,674 71	29,490 97	19,909 50	201 16
Gold and silver, pure and imitation, and works in the same Jewellery, tapestry, gilded works, diamonds and precious stones	15,218 20	1,342 54		
Lace, ribbons, trimmings, &c.	25,338 24	2,163 77		
Skins, furs, works in fur, &c.				
Chamois skins, &c. for gloves, &c., leather for coaches, &c., works in leather, and tanned skins in general	246,607 90	24,676 39	454,971 30	28,779 33
Fish, fresh, salted, dried, or pickled	36,196 0	2,186 85		
Thread lace, &c.	228,590 0	2,437 39		
Silk, works in silk, or silk mixed with substances	660,427 51	23,078 72	555 0	22 76
Tobacco			6 40	0 1
Linen cloth, &c.	268,320 58	20,896 64	13 50	0 54
Total	6,914,786 98	800,012 11	5,860,511 42	239,123 46

Account of the Number of Vessels which arrived at and departed from Cagliari in 1837.

Nations.	Arrived.			Departed.		
	Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.
British - -	5	670	46	5	670	46
Sardinian - -	387	42,708	3,487	387	42,708	3,487
Other nations -	77	15,118	680	77	15,118	680
Total -	469	58,496	4,213	469	58,496	4,213

Money, Weights, and Measures. — Accounts are kept in lire, reali, and soldi. 5 soldi = 1 reale = 4½*d.*; 4 reali = 1 lira = 1*s.* 6*d.*; 10 reali = 1 scudo = 3*s.* 9*d.* The paper money consists of notes for 5, 10, and 20 scudi.

Farm produce and the coarser metals are weighed by the *pesi di ferro:* 12 Sard. oz. = 1 lb. = 14 oz. 5 dr. avoirdupois; 26 lbs. = 1 rubbo; 4 rubbi = 1 cantaro = 93 lbs. 0 oz. 8 dr. avoirdupois.

The starello, or corn measure, is equivalent to 1 bush. 1¼ peck Eng. The palm = 10⅛ Eng. inches.

Causes of the depressed State of Sardinia. — The above statements sufficiently show that the commerce of Sardinia is very far from being what might naturally be expected from her extent, fertility, admirable situation, and the excellence of her many harbours. She contains an area of about 9,500 square miles, being, in point of size, but little inferior to Sicily; and in antiquity was reckoned, along with the latter, a principal granary of Rome. "*Siciliam et Sardiniam benignissimas urbis nostræ nutrices.*"—(*Val. Max.* lib. vi. cap. 6.)

> Utraque frugiferis est insula nobilis arvis:
> Nec plus Hesperiam longinquis messibus ullæ,
> Nec Romana magis complerunt horrea terræ.—*Lucan*, iii. lin. 65.

But the establishment of the feudal system in its worst form, and the unfavourable political and municipal regulations under which the island has latterly been placed, have gone far to neutralise the advantages it owes to nature. The agriculturists of Sardinia principally consist of two great classes—those who cultivate small farms on the *métayer* principle, and those who work on the estates of others, getting, in most instances, a patch of land for their support, and cultivating it at such times as they are not employed on the lord's lands. Both classes are excessively poor. The agreements under which the former class hold are seldom for more than a year; the landlord furnishing the seed as well as the land, and receiving half the produce. Those who occupy land for which they are obliged to pay a rent in corvees, or other feudal services, are, if possible, still worse off; having usually to borrow the seed either from the landlord or from the *Monti Frumentarii* established for that purpose, and having also to defray the tithe and a host of other burdens. Another disadvantage under which all classes labour, is the want of houses on their farms: the peasants live together in villages, and have frequently to perform a journey of several miles in going to and coming from their farms.

Lands belonging to a canton or commune are frequently cultivated on a kind of partnership system, being divided into three portions: one of these, called *vidazzone*, comprises all the lands that are in cultivation, and which are distributed by lot among certain individuals, while the other two portions are occupied in common as pasture. But, as a new distribution takes place every year, it is plain that no individual can take any interest in the improvement of the soil; and this sort of tenure becomes, in fact, the most effectual that can be devised for the extinction of industry. Latterly, however, the government has been making efforts to promote the formation of inclosures and the division of the lands; which, though opposed by the prejudices of the people, have made some progress. — (*Marmora, Voyage en Sardaigne*, lib. v. cap. 1.)

Even these, however, are not perhaps the greatest discouragements to agriculture. As if to annihilate the possibility of the peasantry emerging from their depressed condition, and to oblige them to confine their industry to the supply of their indispensable wants, it has been enacted that no corn shall be exported if its price exceed 30 reals the *starello;* and a heavy duty is laid on all that is exported, as a substitute for a general land-tax. Most other articles of export have been loaded with similar duties; and it would really seem that every device that ignorance and short-sighted rapacity could suggest had been practised to reduce this "benignant nurse" of imperial Rome to a state of poverty and destitution.

Happily, however, as already seen, the bounty of nature has proved an overmatch for the perverse ingenuity of man; and such is the fertility of this fine island, that, notwithstanding the influence of the duty now referred to, and the wretched system of agriculture, it exports in good years considerable quantities of corn. The culture of the vine is gradually increasing in importance, and about 3,500 Catalan pipes are exported, chiefly from Alghero and Ogliastro. Olive oil, owing to the little care taken in its preparation, and its consequent bad quality, has hitherto been but little exported; but it is susceptible of an indefinite increase, and might be made an important article. Tobacco is a royal monopoly, and brings about 7 million livres a year into the public treasury. Flax, linseed, saffron, hemp, and barilla are grown to some extent; silk is

produced only in limited quantities, but its produce might, no doubt, be vastly increased; some cotton is produced, and also small quantities of madder, which last grows wild in the island. The mountains are clothed with forests of oak, beech, chesnut, and other timber; but, from the want of roads, these are nearly useless. The agricultural implements and processes are excessively rude. The Sardinian plough, the counterpart of that described by Virgil, does little more than scratch the ground. It is without a coulter, and is very frequently wholly constructed of wood. Oxen only are used in ploughing and other field labour. The corn is left in the fields till it be thrashed, an operation effected by the primitive practice of treading with horses and oxen.

We are glad, however, to have to state, that within the last few years some very important changes for the better have been introduced into the island, and that some of the worst of the abuses previously noticed have been obviated. In 1836, in pursuance of inquiries previously commenced, feudal jurisdictions were completely abolished; and since then the feudal system has been wholly subverted. And if, as is to be hoped, government follow up the enlightened course of policy on which it has entered, by giving freedom to commerce, the probability is, that the island will, at no very remote period, recover a large share of its ancient prosperity. According to a law passed in 1839, all lands were declared to be the property of individuals, communes, or the crown; the latter becoming the possessor of all waste lands, or those to which neither private parties nor communes could show any title. Lands which had been cultivated or applied to use, whether inclosed or not, were assigned in perpetuity to the occupiers, undisturbed possession being held to confer a sufficient right to the property in the absence of any other title: those whose interests were at all affected by the new changes received compensation in money or lands, or by an assignment of public funded property. The king substituted himself in the place of the barons: he took all the feudal rents into his own hands: and their value being estimated at 20 years' purchase, public securities to the amount, bearing five per cent. interest, were made over to the nobles in exchange for the privileges of which they had been deprived. All kinds of vassalage were, at the same time, made redeemable; and courts of law placed under the direct control of the state were substituted in the place of the feudal jurisdictions where the barons were at once suitors and judges! It is impossible to overrate the importance of these changes; and there cannot be a doubt that they will have the greatest and most beneficial influence.—(*Von Raumer, Italy, &c.* i. 295—301.) We may, also, mention, in proof of the recent improvement of the island, that the population, which, in 1816, amounted to only 352,000, had increased, in 1838, to 524,633. A good road has been constructed, uniting Cagliari and Sassari, and cross roads have been carried from it to some of the more considerable places in the island. Stringent measures have recently, also, been adopted for the suppression of the banditti, with which the island has long been infested. And should these measures of improvement be properly carried out, the administration of justice simplified and freed from the abuses and venality by which it has long been disgraced, and all restraints on exportation abolished, it may be confidently predicted that Sardinia will gradually become more and more prosperous; that the revenues of the crown will be increased in a tenfold proportion; and that the population will cease to be conspicuous only for ferocity, idleness, and contempt of innovation.—(See *Geographical Dictionary*, art. SARDINIA, and the authorities therein referred to.)

CAJEPUT OIL, the volatile oil obtained from the leaves of the cajeput tree. (*Melaleuca Leucadendron* Lin.) The name is a corruption of the native term *cayu-puti*, that is, white-wood oil; because the bark of the tree which yields it has a whitish appearance, like our birch. This tree is common in Amboyna and other Eastern islands. The oil is obtained by distillation from the dried leaves of the smaller of two varieties. It is prepared in great quantities in Banda, and sent to Holland in copper flasks. As it comes to us it is of a green colour, very limpid, lighter than water, of a strong smell resembling camphor, and a strong pungent taste. It burns entirely away without leaving any residuum. It is often adulterated with other essential oils, coloured with resin of milfoil. In the genuine oil, the green colour depends on the presence of copper; for, when rectified, it is colourless.—(*Thomson's Dispensatory.*)

Cajeput oil not being used except in the *materia medica*, only small quantities are imported. In July, 1831, it sold in bond at about 7*d.* an ounce; but an idea having then got abroad that it was one of the most efficient remedies in cases of cholera, its price rose in November, 1831, to no less than 11*s.* an ounce! But it soon after fell into discredit with the faculty, and additional supplies having been obtained from Holland, its price declined almost as fast as it had risen. It is not at present (1843) worth more, in bond, than from 4*d.* to 9*d.* an ounce.

CALABAR SKIN (Fr. *Petit-gris*; Ger. *Grauwerk*; It. *Vaor, Vajo*; Rus. *Bjelka*; Sp. *Gris pequeno*), the Siberian squirrel skin, of various colours, used in making muffs, tippets, and trimmings for clothes.

CALAMANDER WOOD, a beautiful species of timber brought from Ceylon.

It is so hard that common edge-tools cannot work it, so that it must be rasped and almost ground into

shape. It is singularly remarkable for the variety and admixture of colours. The most prevailing is a fine chocolate, now deepening almost into absolute black, now fading into a medium between fawn and cream colours. It arrests the eye from the rich beauty of the intermingled tints, not from any undue showiness. It takes a very high polish; and is wrought into chairs, and particularly into tables. Sir Robert Brownrigg, late governor of Ceylon, had the doors of the dining-room of his seat in Monmouthshire made of calamander. It is scarce in Ceylon, and is not regularly imported; all that is in Great Britain has been imported by private gentlemen, returning from the colony, for their own use. It is by far the most beautiful of all the fancy woods. The nearer it is taken from the root of the tree, the finer it is.—(*Milburn's Orient. Com.; Lib. of Entertaining Knowledge*, Vegetable Substances, p. 179.)

CALCUTTA, the principal city of the province of Bengal, the capital of the British dominions in India, and, with the exception perhaps of Canton, the greatest emporium to the eastward of the Cape of Good Hope. Its citadel is in lat. 22° 34′ 49″ N., long. 88° 27′ 16″ E. It is about 100 miles from the sea, being situated on the eastern bank of the western branch of the Ganges, denominated by Europeans the Hooghly River, which is the only arm of the Ganges navigable to any considerable distance by large ships. At high water the river opposite to the town is about a mile in breadth; but during the ebb the side opposite to Calcutta exposes a long range of dry sand banks. Owing to the length and intricacy of the navigation from the sea, it cannot be undertaken without a pilot; so that, even if it did not exceed our limits, it would be useless to attempt any description of it in this place.—(See the reduced *Plan of the Mouths of the Hooghly River*, in the *Mercator's Chart* in this work.)

In 1717 Calcutta was only a petty village; but it subsequently increased very rapidly, and was supposed towards the close of last century to have 600,000 or 700,000 inhabitants. This, however, was a gross exaggeration; and it appears, from a census taken in 1837, that the population of what is properly called the town amounted to only 229,700, composed as follows:—

	Males.	Females.
English	1,953	1,185
Eurasians	2,950	1,796
Portuguese	1,715	1,475
French	101	59
Armenians	365	171
Jews	185	122
Moguls	311	195
Parsees	32	8
Arabs	272	79
Thugs	450	253
Chinese	243	119
Madrassies	30	25
Native Christians	30	19
Hindoos	85,145	52,506
Mohammedans	38,934	19,810
Low Castes	14,074	7,010
Totals	144,893	84,812
General Total		229,705

A great part, however, of what may be fairly considered the population of Calcutta, consisting of labourers, mechanics, and persons engaged in trade, reside at night in the suburbs, or neighbouring villages; coming into town early in the morning to their respective employments. These were estimated, in 1837, on tolerably good data, at 177,000. The small number of English resident in Calcutta (where, however, they are far more numerous than in any other part of India,) may well excite surprise. It was supposed that the cessation of the Company's monopoly, and of the prohibition of European resort to India, would occasion an influx of British settlers and capital. But this anticipation has not been realised. Scarcely a single English agriculturist, with capital sufficient to cultivate 100 acres of land, has established himself in India, and there has been no immigration of artisans. And this, after all, is only what might have been expected; the country being too fully occupied, the burdens on the land too heavy, and the wages of labour far too low, to admit of anything like an extensive immigration. The Eurasians, the progeny of white fathers and native mothers, are mostly employed as clerks in the government offices and mercantile establishments; and are said to be an industrious and useful class.—(*Bengal and Agra Gazetteer*, vol. i. part iii. p. 10, &c.) The town, excluding suburbs, extends about 4½ miles along the bank of the river, with an average breadth inland of about 1½ mile. Fort William, the citadel, lies on the same side of the river, a little lower down. It is a strong regular fortification; but so extensive that it would require a garrison of 10,000 men for its effectual defence. Calcutta possesses great natural advantages for inland navigation; all sorts of foreign produce being transported with great facility on the Ganges and its subsidiary streams to the north-western quarters of Hindostan, over a distance of at least 1,000 miles, while the productions of the interior are received by the same easy channels.

The principal merchants and traders consist of British and other Europeans, Portuguese born in India, Armenians, Jews, Persians from the coast of the Persian Gulph, commonly called Parsees, Moguls, Mohammedans of Hindostan, and Hindoos; the latter usually either of the Brahminical or mercantile castes, and natives of Bengal. The native-Portuguese and Armenian merchants have of late greatly declined in wealth and importance. On the other hand, the Persian merchants have increased in numbers and wealth, several of them being worth 250,000*l.* sterling. The large fortunes of the Hindoo merchants have been much broken down of late years by litigation in the courts, and naturally through the law of equal coparcenary among brothers. To counterbalance this, there has been, since the opening of the free trade in 1814, a vast augmentation of the number of inferior merchants, worth from 20,000*l.* to 50,000*l.* sterling. There are but few Hindoo merchants at present whose wealth exceeds 200,000*l.* sterling.

The principal foreign business is conducted by English merchants; but other parties also, either in partnership with the English, or on their own account, speculate largely to Europe, America, and especially to China. The brokers known under the name of Sircars and Baboos are all Hindoos. The general rates of agency commission are as follow:—

Rates of commission and mercantile agency, revised by a general meeting of the Bengal Chamber of Commerce, 3d December, 1839.

	Per cent.
1. On the sale, purchase, or shipment of bullion, gold dust, coin, jewellery, pearls, and precious stones	1
2. On the purchase (when in funds) or sale of indigo, silk, and opium	2½
3. On purchasing do. when funds are provided by the agent.	.5
4. On all sales or purchases of other goods	.5
5. On the sale or purchase of ships, factories, houses, lands, and all property of a like description	2½
6. On returns for consignments, if made in produce	2½
7. On do. if in bills, bullion, or treasure	1
8. On goods and treasure consigned, and all other property of any description referred to agency for sale, which shall be afterwards withdrawn; and on goods consigned for conditional delivery to others, and so delivered; on invoice amount at the exchange of 2*s.* per rupee	half com.
9. On making advances, or procuring loans of money for commercial purposes, when the aggregate commission does not exceed 5 per cent.	2½
10. On ordering goods or superintending the fulfilment of contracts, or on the shipment of goods where no commission except that of account is derived	2½
11. On guaranteeing bills, bonds, or other engagements, and on becoming security for administration of estates, for contracts and agreements, &c.; and to government, for the disbursements of public money, where the funds of the individuals are insufficient to cover risk	2½
12. On del credere, or guaranteeing the due realization of sales	2½
13. On executorship, or administration to estates of deceased persons	5
14. On the management of estates for executors or administrators	2½
15. On chartering ships or engaging tonnage	2½
16. On advertising as the agents of owners or comman-	

	Per cent.
ders of ships for passengers, on the amount of passage money, whether the same shall pass through the agents hands or not - - - -	2½
17. On procuring freight, or advertising as the agent of the owners or commanders; the commission to be calculated on the gross amount of the entire freight -	5
18. On effecting insurances, or writing orders for the same, whether on lives or property - - - -	½
19. On settling insurance losses and averages, and on procuring returns of premium - - - -	2
20. On purchasing, selling, or negotiating bills of exchange - - - - - - -	1
21. On debts or other claims when a process at law or arbitration is incurred in claiming them -	2½
If recovered by such means - - -	5
22. On bills of exchange returned dishonoured - -	1
23. On collecting house rent - - - -	2½
24. On ships, disbursements - - - -	2½
25. On negotiating loans on respondentia - - -	2
26. On granting letters of credit - - - -	1
27. On sale or purchase of government securities and bank shares, and on every exchange or transfer, not by purchase from one class to another - - -	½
28. On delivering up government securities and bank shares, or depositing them in the treasury - -	½
29. On the amount debited or credited (at the option of the agent) within the year, less the balance brought forward, and all items on which a commission of 5 per cent. has been charged - - - -	1
30. On all advances not punctually liquidated, a second commission may be charged, as on a new advance, provided it do not occur within the same year.	

*** Brokerage, when actually paid, is considered a separate charge.

Revised table of rent (per month) of goods lodged in the bonded warehouse, chargeable from 1st November 1841.

	Co.'s rs.	as.	ps.
Whole pipe, butt, or puncheon - -	0	8	0
Half pipe or hogshead - - - -	0	4	0
Quarter pipe - - - - -	0	2	0
Large cask, containing glass or earthenware	0	6	0
Tierce, containing glass or earthenware or provisions	0	5	0
Large crate, containing 12 doz. bott es -	0	6	0
Smaller, containing crate 8 or 6 doz. or more or less	0	4	0
Chest above 12 doz. size - - - -	0	8	0
Chest of 12 doz. size, or above 6 doz. - -	0	6	0
Chest of 6 doz. size, or above 3 doz. - - -	0	5	0
Quarter chest, or 3 doz. - - - -	0	2	0
All boxes under 3 doz. and above 1 doz. size, each -	0	1	0
One doz. box - - - - - -	0	0	9
Spirits - - - - - per pipe	0	12	0
Ditto - - - - - per hhd.	0	6	0
British piece goods, per case above 12 doz. size -	0	8	0
Do. per case of 12 doz. size, or above 6 doz. -	0	6	0
Do. per case of 6 doz. size, or above 3 doz. -	0	3	0
Do. per case of 3 doz. size, or less - -	0	2	0
Do. per bale of size of large bale of twist -	0	6	0
Do. per bale of smaller size - -	0	4	0
Mule twist, per bale of 400 or 500 lbs. - -	0	6	0
Do. per bale of smaller size, but above 200 lbs. -	0	4	0
Do. per bale of 200 lbs. or less - - -	0	3	0
Turkey red twist - - - per bale	0	6	0
Canvas - - - - - per bale	0	5	0
Silk - - - - - per bale	0	6	0
Indigo - - - - - per chest	0	6	0
Opium - - - - - per chest	0	6	0
Cotton - - - - per screwed bale	0	4	0
Sugar, rice, linseed, and mustard seed, - - - per 100 Ind. mds.	2	8	0
Cutch - - - - per 100 Ind. mds.	2	0	0
Shell lac and lac dye - - - per chest	0	3	0
Vermilion - - - - per box	0	2	0
Arsenic - - - - - per box	0	3	0
Brass leaf - - - - - per box	0	2	0
China paper - - - - - per box	0	3	0
China cases of nankin, cassia, camphor, silk, anniseed, &c. - - - - per case	0	3	0
Saffower - - - - per Ind. md.	0	0	6
Ginger and turmeric - - per 100 Ind. mds.	3	0	0
Betel nut - - - - per Ind. md.	0	0	6
Cloves - - - - - per Ind. md.	0	1	0
Coffee, pepper, cardamum, cummin seed, anniseed, in bags or bales - - per Ind. md.	0	1	0
All other articles in bags or bales - per Ind. md.	0	0	6
Sugar, spices, and any other similar articles in hogsheads - - - - - per hhd.	0	4	0
Ditto in tierces - - - - per tierce	0	2	0
Tea - - - - - per whole chest	0	1	0
Ditto - - - - - per smaller box	0	0	6
Sugar candy - - - - - per tub	0	0	6
Paint - - - - - per keg 56 lbs.	0	0	6
Salmon, herrings, or other fish - per keg	0	0	6
Turpentine, linseed, and other vegetable oils, per jar	0	0	0
All cordage - - - - per cwt.	0	1	0
Resin and dammer - - - - per Ind. md.	0	1	0
Rattans - - - - per 100 bundles	0	2	0
Gunnies - - - - per large bale	0	6	0
Ditto - - - - per smaller bale	0	4	0
Cow hides - - - - per large bale	0	12	0
Ditto - - - - per smaller bale	0	8	0
Goat skins - - - - per bale	0	8	0
Tobacco, manufactured - - - per Ind. md.	0	0	6
Quicksilver - - - - per Ind. md.	0	2	0
Steel - - - - - per tub	0	0	6
Iron - - - - - per Ind. md.	0	0	2½
All other unwrought metals - - per Ind. md.	0	0	4
All wrought metals - - - per cwt.	0	2	0
All goods in packages not enumerated nor comprehended in the above list - - per cubic foot	0	0	4

Rent will not be charged for a shorter period than half of a month, and after half of a month, the shortest broken period for which it will be charged is a quarter of a month.

When goods have been in store for certain periods, abatements from the preceding rates are made as follows:

After 6 months — 12 months	10 per cent. 20 —	After 18 months — 24 months	25 per cent. 30 —

Money. — Accounts are kept here in rupees, with their subdivisions, annas and pice: 12 pice make 1 anna; 16 annas 1 rupee; and 15 rupees 1 gold mohur. To this currency must all the real specie be converted, before any sum can be regularly entered in a merchant's books. The coins current are gold mohurs, with their subdivisions — halves and quarters; rupees, halves and quarters; annas, pice, and half pice. The two last are of copper. There are two mints under the Bengal presidency: that at Calcutta; and that of Ferruckabad, in the north-western provinces. The first is probably the most splendid establishment of the kind in the world; the original cost of the machinery, supplied by Messrs. Bolton and Watt of Birmingham, having exceeded 300,000*l*. Gold money is coined at Calcutta only; but silver, which is now, and has always been, the standard of India, equally at both mints. The following statement shows the weight, fineness, and sterling value of the coins formerly coined, reckoning the value of gold at 3*l*. 17*s*. 10½*d*. per standard ounce, and silver at 5*s*. 2*d*.

Coins.	Grains pure.	Grains Alloy.	Grains Gross Weight.	Value. £	s.	d.
Gold mohur -	187·651	17·059	204·710	1	15	2¼ 2·25
Sicca rupee -	175·923	15·993	191·916	0	2	0 6·25
Ferruckabad rupee	165·215	15·019	180·234	0	1	11¼ 8·25

The charge for coining silver at the Calcutta mint is 2 per cent. if the bullion be the standard fineness; but where it differs, a proportional charge of from ½ to ½ per cent. is made for refining.

Company's Rupee. — The variety of rupees of different weights and values, circulating in different parts of India, was long found to be productive of considerable inconvenience. But this is now nearly obviated, it having been enacted that, from the 1st of September, 1835, the coinage of former rupees should cease at all the mints throughout India, and that in future there should be coined a rupee (with doubles, halves, and quarters), to be called "The Company's rupee," which contains 165 grains (11-12ths) pure silver, and 15 grains (1-12th) alloy. This new rupee, which is made legal tender in all payments, is nearly equal to the former Bombay, Madras, and Ferruckabad standard rupees, and is receivable as an equivalent for them and for the Sonat rupee, and for 15-16ths of the Calcutta sicca rupee. It is worth, reckoning silver at 5*s*. 2*d*. and 5*s*. 6*d*. an ounce, 1*s*. 11*d*. and 2*s*. 0½*d*. sterling, its current value being 2*s*. The new, or Company's rupee, bears on the one side the head of the reigning sovereign of Great Britain, and on the obverse the words "East India Company," and the designation of the coin in English and Persian.

Mohur. — It has also been enacted, that from the 1st of September, 1835, no gold coins shall be coined at any mint in India, except gold mohurs or 15 rupee pieces (with the subdivisions), containing each 165 grains (11-12ths) pure gold, and 15 grains (1-12th) alloy. Such mohurs are consequently worth 29*s*. 2*d*. each. These coins are marked in the same way as the new rupees, but they are not legal tender.

Other sorts of rupees are met with in Bengal, differing in fineness and weight, though their denominations be the same. From this, and from the natives frequently punching holes in the rupees, and filling them up with base metal, and their fraudulently diminishing the weight of the coin after coming from the mint, the currencies of the different provinces are of different values. This defect has introduced the custom of employing *shroffs*, or money-changers, whose business is to set a value upon the different currencies, according to every circumstance, either in their favour or their prejudice. When a sum of rupees is brought to one of these shroffs, he examines them piece by piece, and arranges them according to their fineness; then, by their weight; he then allows for the different legal battas (premiums) upon siccas and sonnats; and this done, he values in gross, by the Company's rupee, what the whole are worth.

A lac, means 100,000 rupees; and a crore 100 lacs, or 10,000,000. The following are the monies of account, premising that the lowest denomination is represented by a small smooth shell, a species of cypræa, chiefly imported as an article of trade from the Laccadive and Maldive islands, and current as long as they continue entire:—

4 Cowries	= 1 Gunda.
20 Gundas	= 1 Punn.
5 Punns, or 12 pice	= 1 Anna.
15 Company's rupees	= 1 Gold mohur

Weights. — The unit of British Indian weights is the *tola* of 180 grains English Troy weight; and from it are derived the greater weights of chittacks, seers, and muns or maunds; and also the smaller weights of massas, rutties, and dhans. Thus,

5 Tolas	= 1 Chittack.
16 Chittacks	= 1 Seer.
40 Seers	= { 1 Mun or Maund = 100 lbs. Troy = 82 2-7ths lbs. av.

This maund corresponds very closely with, and is legally equivalent to, the bazaar maund of 82 lbs. 2 oz. 2·133 drs. avoirdupois. The factory maund is 10 per cent. less, being 74 lbs. 10 oz. 10·666 drs. avoirdupois.

80 Tolas	= a Calcutta bazaar seer.
60 Ditto	= a Serampore seer.
82 Ditto	= a Hooghly seer.
84 Ditto	= a Benares Mirzapore seer.
96 Ditto	= { an Allahabad and Lucknow seer.

A Calcutta factory seer is equal to 72 tolas, 11 annas, 2 punns, 10 gundas, 3·63 cowries.

Gold and Silver.

4 Punkhos	= 1 Dhan, or grain.
4 Dhans	= 1 Rutty.
6¼ Rutties	= 1 Anna.
8 Rutties	= 1 Massa.
96 Rutties	= 1 Tola.
12 Massas	= 1 Tola.

Liquid Measure.

5 Tolas = 1 Chittack.
4 Chittacks = 1 Pouah, or pice.
4 Pouahs = 1 Seer.
40 Seers = 1 Maund.
5 Seers = 1 Passaree, or measure.
8 Measures = 1 Bazaar maund.

Grain Measure.

4 Khanoks = 1 Raik.
4 Raiks = 1 Pallie = 9·08 lbs. avoird.
20 Pallies = 1 Soallie.
16 Soallies = 1 Khahoon = 30 bz. mds.

Square Measure.

5 Cubits, orhauts, in length × 4 in breadth = 1 Chittack, or 45 feet (Eng. square).
16 Chittacks = 1 Cottah.
20 Cottahs = 1 Biggah = 11,440 sq. ft.
3⅓ Biggahs = 1 English statute acre.

Long Measure.

3 Barleycorns, or Jows (barley) = 1 Finger.
4 Fingers = 1 Hand.
3 Hands = 1 Span.
2 Spans = 1 Cubit, or arm = 18 inches.
4 Cubits = 1 Fathom.
1,000 Fathoms = 1 Coss = 1 mile 1 furlong 3 poles 3½ yards.

Cloth Measure.

3 Jorbes = 1 Angulla.
3 Angullas = 1 Gheriah.
8 Gheriahs = 1 Haut or cubit = 18 inches.
2 Hauts = 1 guz = 1 yard.

For Goods reckoned by Tale.

5 Particulars = 1 Gunda.
4 Gundas, or 20 particulars = 1 Koorje, or 1 corge.

Commercial Weights and Measures of India, with their Equivalents in English Avoirdupois, Bengal Factory, Madras, and Bombay Weights.

Commercial Measures, &c.	Avoirdupois.			Bengal Factory.			Madras.			Bombay.		
	Lbs.	*oz.*	*dr.*	*Mds.*	*S.*	*Ch.*	*Mds.*	*Vis.*	*Pol.*	*Mds.*	*S.*	*Pice.*
Acheen bahar of 200 catties	423	6	15	5	26	13	16	2	19	15	4	27
——— guncha of 10 nelly	220	0	0	2	37	15·7	8	6	16	7	34	8·6
Anjengo candy of 20 maunds	560	0	0	7	20	0	22	3	8	20	0	0
Balavia pecul of 100 catties	135	10	0	1	32	10	5	3	16	4	33	22·4
Bencoolen bahar - -	560	0	0	7	20	0	22	3	8	20	0	0
Bengal factory maund -	74	10	10·7	1	0	0	2	7	35·7	2	26	20
——— bazaar maund -	82	2	2·1	1	4	0	3	2	11·3	2	37	10
Bombay candy of 20 maunds	560	0	0	7	20	0	22	3	8	20	0	0
Bussorah maund of 7½ vakias	90	4	0	1	8	5·6	3	4	35·2	3	8	27·9
——— 24 ditto	28	8	0	0	15	4·3	1	1	4·8	1	0	21·4
Calicut maund of 100 pools	30	0	0	0	16	1·1	1	1	24	1	2	25·7
China pecul of 100 catties	133	5	5·3	1	31	6	5	2	26	4	30	14·3
Cochin candy of 20 maunds	545	8	0	7	11	2·6	21	5	36·8	19	16	12·9
Goombroon bazaar candy	7	8	0	0	4	0	0	2	16	0	10	21·4
Goa candy of 20 maunds	495	0	0	6	25	2·9	19	6	16	17	27	4·3
Jonkceylon bahar of 8 capins	485	5	5·3	6	20	0	19	3	12	17	13	10
Madras candy of 20 maunds	500	0	0	6	28	0	20	0	0	17	34	8·6
Malacca bahar of 3 peculs	405	0	0	5	16	15	16	1	24	14	18	17·1
Mocha bahar of 15 frazils	450	0	0	6	0	1	18	0	0	16	2	25·7
Muscat Custom-house maund	8	12	0	0	4	11	0	2	32	0	12	15
Mysore candy of 7 morahs	560	0	0	7	20	0	22	3	8	20	0	0
Pegu candy of 150 viss	500	0	0	6	28	0	20	0	0	17	34	8·6
Penang pecul of 100 catties	133	5	5·3	1	31	6	5	2	26	4	30	14·3
Surat maund of 40 seers	37	5	5·3	0	20	0	1	5	37·9	1	13	10
——— Pucca maund -	74	10	10·7	1	0	0	2	7	35·7	2	26	20
Tellicherry candy of 20 maunds	600	0	0	8	0	2	24	0	0	21	17	4·3

Banks, Banking. — The paper currency of Calcutta is supplied by the following banks: —

The Bank of Bengal was founded in 1806, and was chartered in 1809. Its capital has been increased to 1,070,000*l.* sterling, divided into shares of 4,000 rupees each, and quarter shares, of which the East India Company hold a considerable number. The shares are now (1843) at a high premium. It is managed by nine directors; three appointed by government, and six elected by the proprietors: time of service, for the latter, three years. The secretary to government in the financial department, the accountant-general, and the sub-treasurer, are the *ex officio* government directors. The bank secretary and treasurer is also a civil servant. This bank possesses peculiar advantages, its notes being received at all the public offices, in payment of revenue, by the collectors in all the districts below Benares; and, consequently, its circulation extends over a very large and the wealthiest portion of our Indian territory. The government being such considerable shareholders, too, it is generally supposed by the natives that the Bengal Bank is part and parcel thereof; and it enjoys, therefore, the same credit. The charter of 1809 limits the responsibility of the shareholders to the amount of their shares.

The act of 1839 establishing the Bank of Bengal on its present footing, and the resolutions of the directors, provide —

1. That the bank shall discount no negotiable security that has a longer period than 3 months to run, or lend any money for a longer period than 3 months.
2. That the directors shall make no loan or advance unless the cash in possession of the Bank, and immediately available, be equal to one fourth part of all the outstanding claims against the bank payable on demand.
3. That the bank shall not be at any time in advance to government more than 7½ lacs rupees.
4. No account can be overdrawn.
5. The bank may issue promissory notes payable on demand or at 30 days after sight, provided the total amount of such notes does not exceed 2 crores rupees, and that none of them be for a less sum than 10 rupees.
6. The bank makes advances on goods not of a perishable nature; and it makes no charge for transacting the business of its customers, and allows no interest for the money in its hands.

The Union Bank. — This establishment was founded in 1829. It is the only private bank at present (1843) existing in Bengal: the Bank of Hindostan, the Commercial Bank, and the Calcutta Bank, noticed in the first edition of this work, having all been discontinued. The capital of the Union Bank is 1,000,000*l.* sterling, divided into shares of 100*l.* or 1000 rupees each, held by all classes of the community. Its notes circulate only in Calcutta and its immediate neighbourhood; no private notes being received at the collectors' treasuries in the provinces. The main object of this establishment was to fill up the space in the money market, occasioned by the restrictions imposed on the Bank of Bengal by its charter; but it has not yet been able to effect its intentions to their full extent, from its notes not being generally circulated.

The rates of discount &c. vary, from time to time, with the state of the money market. In March, 1843, they were as follows: —

Bank Shares. — Bank of Bengal (Company's rupees 4,000), premium 2,600 to 2,650.
Union Bank (Company's rupees 1,000), premium 1010 to 1045.

Rates of Interest and Discount. — *Bank of Bengal.* — *Discount.* — On private bills and notes, at or within three months, 8½ per cent.
On Government acceptances, at or within three months, 6½ per cent.

Interest charged. — On loans and accounts of credit not exceeding 3 months, and on deposit of Company's paper, 7 per cent.
On deposit of opium and salt, 8½ per cent.
On deposit of metals and indigo, 8½ per cent.
On deposit of other goods, 9 per cent.

Union Bank. — *Discount.* — Government acceptances, 6 per cent.
Private bills, adjusted policies of insurance, account sales, &c., not having more than 3 months to run, 10 per cent.

Loans and Cash Credit. — On deposit of securities in bonded warehouse 10 per cent.

Fixed Deposit. — Interest at 5 per cent. is allowed on money not withdrawable without 30 days' notice, and deposited for not less than three months.

The Agra Bank, established in 1833, has also a branch in Calcutta.

Pilotage.—The navigation of the river Hooghly from the Sand Heads to Calcutta, a distance of about 150 miles, is naturally dangerous and intricate; but rendered comparatively safe by a skilful and excellent, though costly pilot establishment.

Table of Rates of full and broken Pilotage, chargeable to Ships and Vessels, inward and outward of the River Hooghly.

Draught of Water.	Full Pilotage inward.	Additional Pilotage outward.
Feet.	£	£
9 to 10	10	
10 11	12	1
11 12	14	
12 13	16	
13 14	18	
14 15	21	2
15 16	25	
16 17	30	
17 18	35	4
18 19	40	
19 20	45	
20 21	50	6
21 22	55	
22 23	60	

Inward Proportion.	
From Sea.	
To Saugor -	4 12ths
To Kedgeree -	6 12ths
To Culpee -	8 12ths
To Culpee harbour -	9 12ths
To Fulta, or Moyapore -	10 12ths
To Calcutta, full pilotage.	

Outward Proportion.	
From Calcutta.	
To Moyapore or Fulta -	2 12ths
To Fulta harbour -	3 12ths
To Culpee -	4 12ths
To Kedgeree -	6 12ths
To Saugor -	8 12ths
To Sea, full pilotage.	

Note.—All foreign vessels pay the same pilotage as those under British colours. By broken pilotage is meant the proportion of full pilotage between the different stages or places of anchorage. All ships, the property of foreigners, as well Asiatic as European, are subject to the charge termed "lead money;" it being indispensably necessary that the pilot should have with him a leadsman in whom he can confide.

Detention money, at the rate of 1*l.* per diem, from British and foreign vessels, is charged by persons of the pilot service kept on board ships at anchor by desire of the commander or owner.

In the river before Calcutta, and in other parts, there are chain moorings, of which the charges are as follow:—

Burden of Ships.	April to October, 7 months.			November to March, 5 months.		
	£	*s.*	*d.*		£	*s.*
500 tons and upwards - -	Per diem -	0	16 0	Per diem -	0	12
Under 500 tons - - -	Ditto - -	0	14 0	Ditto - -	0	10

Hire of the chain moorings at Diamond Harbour, 1*l.* per diem. The lowest charge to a ship requiring the accommodation of the chain moorings, at either of the places above mentioned, is for 10 days; and using them longer a further charge is made at the established rate per diem for every day exceeding 10. The charge for transporting a ship from her moorings into any of the docks at Kidderpore, Howrah, or Sulkea, or from any of the docks to her moorings, is fixed at 50 rupees; and no higher charge for such service is authorized. Besides pilotage, every ship is chargeable with the hire of a row-boat to accompany her; viz. for a boat of the first class, 24*s.*; of the second class, 18*s.*; and of the third class, 14*s.* Of late years a light-house has been erected at Kedgeree, for which the charge on British or American flags is at the rate of 5*d.* per ton per annum. Ships proceeding to Calcutta must land their gunpowder at the powder magazine at Moyapore; the charge is at the rate of 1*l.* per ton for each voyage. The whole pilot establishment and the care of the navigation of the Hooghly is under the management of government, and is directed by a marine board, with a master attendant and harbour master.

The Marine Board at Calcutta have issued the following regulations with respect to pilotage, &c.

1. Commanders are requested, prior to quitting their vessels, on arrival off Calcutta, to fill up and certify, or cause to be filled up and certified, a form of certificate, showing the actual registered tonnage, the draught of water, and whether the vessel has or has not been towed by a steamer any part of the way, or has or has not had the use of a row-boat; which form will be furnished to the pilot, in order to the bills of the vessels being correctly made out.

2. Commanders are further requested, as early after their arrival as possible, to notify in writing, to the master attendant, the name and residence of the reference for the payment of his vessel's bills.

3. On the receipt by the master attendant of the above certificate, and written reference for payment, a single bill will be prepared, including inward pilotage, light-house duty, Moyapore magazine duty, and row-boat hire (if any), which, together with the certificate, will be forwarded to the marine paymaster, for collection within 15 days of the arrival of the vessel, and having on it the name and residence of the party referred to for payment, which commanders are requested to furnish to the master attendant, in writing, as early after their arrival as practicable, that officer will more readily be enabled to present it. By this arrangement, all the charges connected with the vessel, up to her arrival off Calcutta, will be embodied in one bill, instead of, as hitherto, being made up in separate bills.

4. In the event of vessels docking, or being transported at the desire of the commander, it is requested that a certificate may be given by the commanding officer of the operation having been performed, in order to its accompanying the bill when presented for payment to the referee.

5. The practice of charging for hauling to the chain-moorings, for their monthly hire, and for hauling from the moorings, in separate bills, is discontinued, and henceforward one bill will be prepared, including the charge for hauling to the moorings, that for occupying them, and that for hauling from them; and commanders are requested to give, or cause their commanding officers to give, to the master attendant, or the harbour-master, certificate of the date of hauling to and from the moorings, which certificate, as before, will accompany the bill when presented for payment. The hire of the moorings will be charged for the day on which the vessel is hauled thereto, without reference to the period of the day; and, in like manner, no charge will be made for the day on which she hauls from her moorings, however late in the day she may quit them. The charges connected with the chain-moorings will thus be embodied in one bill, and be discharged in one payment, instead of three or more, according to the number of months the vessel occupied the moorings.

6. The system of charging outward pilotage on an estimated draught of water, with an addition of 10 per cent., subject to adjustment after the vessel has sailed, and of charging a certain number of days for a row-boat, subject to a like adjustment, is abolished; and in future the outward pilotage and charge for row-boat hire on outward-bound vessels will be as follows:—

When the vessel is finally laden, the commander is to give notice thereof to the master attendant, when the draft of water is to be ascertained and certified by the commander or commanding officer on the part of the vessel, and by the harbour-master on the part of government; subject, in case of dispute, to the decision of the master attendant. On receipt of the certificate, the master attendant will cause a bill to be made out for the regular amount of pilotage, and for the row-boat hire, according to an average rate, with reference to the size of the vessels and the season of the year, fixed by a marine committee which lately sat at the Bank-hall, the majority of which was composed of members of house of agency and commanders of ships. The bill and certificate will be presented in due course for payment.

7. As, however, it frequently happens that vessels are taking in cargo or filling their water up to the last day of their departure, or that from other causes the bills for the chain-moorings and outward pilotage cannot be made out till the eve of departure, owners, agents, and commanders are in such cases particularly requested, with a view to despatch, to cause an individual to attend at the Bank-hall, and expedite the transmission of the bill and certificate to the board for registry, and to the Pay officer for collection, at each of which offices they may in such cases depend upon the most ready and special attention.

8. In the event of a vessel being tugged any part of the way down by steam, or not having the use of a row-boat, commanders are to obtain from the pilot of Kedgeree a certificate to that effect, which they should forward by Dâk to Calcutta. On receipt thereof, agents are requested to make out a bill against the honourable Company for the quarter deduction from the pilotage allowed if tugged by steam, or for the row-boat hire paid, as the case may be; and to forward it, together with the certificate, to the marine board for audit and payment.

9. In cases where a vessel leaves Calcutta avowedly destined to fill up cargo at some place below, the pilotage will be charged at the draught at which she leaves Calcutta, in like manner, though at the reduced amount, as if she had proceeded to sea; and, with respect to the subsequent pilotage charge, from the place at which the vessel takes in the additional cargo to sea, owners or agents of vessels will be required to furnish a special guarantee to pay the amount chargeable according to a certificate of the draught of water, to be signed by the commander, or commanding officer and pilot.

10. Six sets of moorings at Diamond Harbour having been fitted specially to enable vessels arriving in distress from loss of anchors and cables to be readily moored, the charge will be Co.'s Rs. 50 for mooring and unmooring, and the daily hire the same as for the moorings at Calcutta. The moorings will, of course, be available to vessels not in distress from loss of anchors and cables; but the harbour-master will be instructed at all times to keep two sets vacant during the S.W. monsoon, to meet casualties.

There are several dry docks at Calcutta, in which vessels of any size may be built or repaired. Ships built at Calcutta are of inferior durability to those constructed at Bombay, in consequence of the framework being always of the inferior woods of the country; and the planks, sheathing, upper works, and decks, alone, of teak; which last is furnished almost entirely from Pegu.

In 1854, the number of registered ships belonging to the port of Calcutta was 130, of the burden of 44,366 tons; being at an average of about 370 tons for each. The largest class of vessels carry nearly 800 tons; but ships drawing so much water are unfit for the navigation of the Hooghly. Not being able to load at Calcutta, they are obliged to receive part of their cargo at Diamond Harbour, about 34 miles farther down the river. The most convenient-sized ship for trade between Calcutta, and Europe and America, is from 400 to 500 tons.

Duties, &c.—At Calcutta there are two distinct Custom-

houses; the one for the sea, and the other for the inland duties. Our business is with the first only. The export and import duties and drawbacks are regulated by an ordinance of the year 1836, and are the same for every port under the government of Bengal; or, as it is technically called, the Presidency of Fort William.

The present customs' law, enacted in May 1836, and the duties charged under it, are subjoined.

ACT No. XIV. of 1836.

I. It is hereby enacted, that, from the 1st June next, such parts of Regulations IX. and X. 1810, Regulation XV. 1825, and of any other regulations of the Bengal Presidency as prescribe the levy of transit or inland customs' duties, or of town duties; and likewise the schedules of duties and provisions of any kind contained in these or any other regulations for fixing the amount of duty to be levied upon goods imported into or exported from the said presidency by sea, shall be repealed.

II. And it is hereby enacted, that duties of customs shall be levied on goods imported by sea into Calcutta, or into any other place within the provinces of Bengal and Orissa, according to the rates specified in schedule A annexed to this act, with the exceptions specified therein, and the said schedule, with the notes attached thereto, shall be taken to be a part of this act.

III. And it is hereby further enacted, that duties of customs shall be levied upon country goods exported by sea from any port of Bengal or Orissa, according to the rates specified in schedule B annexed to this act, with the exceptions therein specified; and the said schedule, with the notes attached thereto, shall also be taken to be a part of this act.

N.B. — These duties are to be collected under the same regulations as former duties; and baggage is to be passed by the collector of customs as heretofore.

The remainder of the act relates to regulations respecting ships' manifests, &c.

SCHEDULE A.

Rates of Duty to be charged on Goods imported by Sea into any Port of the Presidency of Fort William in Bengal.

Enumeration of Goods.	When imported on British Bottoms.	When imported on Foreign Bottoms.
Bullion and coin	Free	Free.
Precious stones and pearls	Ditto	Ditto.
Grain and pulse	Ditto	Ditto.
Horses & other living animals	Ditto	Ditto.
Ice	Ditto	Ditto.
Coal, coke, bricks, chalk, and stones	Ditto	Ditto.
Books printed in the United Kingdom, or in any British possession	Ditto	3 per cent.
Foreign books	3 per cent.	6 per cent.
Marine stores, the produce or manufacture of the United Kingdom, or of any British possession	3 per cent.	6 per cent.
Do., the produce or manufacture of any other place or country	6 per cent.	12 per cent.
Metals, wrought or unwrought, the produce or manufacture of the United Kingdom, or any British possession	3 per cent.	6 per cent.
Metals, do., excepting tin, the produce or manufacture of any other place	6 per cent.	12 per cent.
Tin, the produce of any other place than the United Kingdom, or any British possession	10 per cent.	20 per cent.
Woollens, the produce or manufacture of the United Kingdom, or any British possession	2 per cent.	4 per cent.
Do., the produce of any other place or country	4 per cent.	8 per cent.
Cotton and silk piece goods, cotton-twist and yarn, the produce of the United Kingdom, or of any British possession.	3½ per cent.	7 per cent.
Do., the produce of any other place	7 per cent.	14 per cent.
Opium	24 rs. per seer of 80 tolas	24 rs. per seer of 80 tolas.
Salt	Rs. 3-4 per md. of 80 tolas per seer	Rs. 3-4 per md. of 80 tolas per seer.
Alum	10 per cent.	20 per cent.
Camphor	10 per cent.	20 per cent.
Cassia	10 per cent.	20 per cent.
Cloves	10 per cent.	20 per cent.
Coffee	7½ per cent.	15 per cent.
Coral	10 per cent.	20 per cent.
Nutmegs and mace	10 per cent.	20 per cent.
Pepper	10 per cent.	20 per cent.
Ratans	7½ per cent.	15 per cent.
Tea	10 per cent.	20 per cent.
Vermilion	10 per cent.	20 per cent.
Wines and liquors	10 per cent.	20 per cent.
Spirits, consolidated duty, including that levied heretofore through the police of Calcutta	9. as. p. imp. gal.	16 as. p. im. gal.

SCHEDULE A — *continued.*

Enumeration of Goods.	When imported on British Bottoms.	When imported on Foreign Bottoms.
And the duty on spirits shall be rateably increased as the strength exceeds of London proof, and when imported in bottles, five quart bottles shall be deemed equal to the imperial gallon.		
All articles not included in the above enumeration	3½ per cent.	7 per cent.

And when the duty is declared to be *ad valorem*, it shall be levied on the market value without deduction; and if the collector of customs shall see reason to doubt whether the goods come from the country from which they are declared to come by the importer, it shall be lawful for the collector of customs to call on the importer to furnish evidence as to the place of manufacture or production; and, if such evidence shall not satisfy the said collector of the truth of the declaration, the goods shall be charged with the highest rates of duty, subject always to an appeal to the Board of Customs, salt and opium.

And upon the re export by sea of goods imported, excepting opium and salt, provided the re-export be made within two years of the date of import as per custom-house register, and the goods be identified to the satisfaction of the collector of customs, there shall be retained one eighth of the amount of duty levied, and the remainder shall be repaid as drawback. And if goods be re-exported in the same ship without being landed, (always excepting opium and salt, in regard to which the special rules in force shall continue to apply,) there shall be no import duty levied thereon.

SCHEDULE B.

Rates of Duty to be charged upon Goods exported by Sea from any Port or Place in the Presidency of Fort William in Bengal.

Enumeration of Goods.	Exported on British Bottoms.	Exported on Foreign Bottoms.
Bullion and coin	Free	Free.
Precious stones and pearls	Ditto	Ditto.
Books printed in India	Ditto	Ditto.
Horses and living animals	Ditto	Ditto.
Opium purchased at government sales in Calcutta	Ditto	Ditto.
Cotton wool exported to Europe, the United States of America, or any British possession in America	Ditto	8 as. per md. of 80 tolas to the seer.
Do. exported to places other than above	As. 8. per md. of 80 tolas—seer.	As. 16. per md. of 80 tolas to the seer.
Sugar and rum exported to the United Kingdom, or to any British possession	Free	6 per cent.
Do. exported to any other place	3 per cent.	6 per cent.
Grain and pulse of all sorts	1 anna per bag, not exceeding 2 mds. of 80 tolas to the seer, or if exported otherwise than in bags ½ an anna per maund	2 as. per bag not exceeding 2 mds. of 80 tolas to the seer, or if exported otherwise than in bags, 1 anna per md.
Indigo	Rs. 3 per md. of 80 tolas to the seer	Rs. 6 per md. of 80 tolas to the seer.
Lac dye and shell lac	1 per cent.	8 per cent.
Silk raw, filature	3½ as. per seer of 80 tolas	7 as. per seer of 80 tolas.
Silk, Bengal wound	5 as. per seer of 80 tolas	6 as. per seer of 80 tolas.
Tobacco	4 as. per maund	8 as. per md.
All country articles not enumerated or named above	5 per cent.	6 per cent.

And when the duty is declared to be *ad valorem*, the same shall be levied on the market value of the article at the place of export, without deduction.

And in settling for the duties on exports by sea, credit shall be given for payment of inland customs' duty, and drawback shall be allowed of any excess of duty paid upon production of ruwanas under the following conditions, until the 1st April, 1837: —

First, That the goods shall be identified, and destination to the port of export proved in the usual manner.

Second, That the ruwanas shall bear date before the 1st April, 1836, and the goods shall not have been protected thereby, or by the original thereof, more than two years.

And after the said 1st April, 1837, credit shall not be given, nor shall drawback be allowed, of any inland customs or land-frontier duty paid at any custom-house or chokee of the Jumna frontier line, or of Benares, except only upon the article of cotton wool, covered by ruwanas taken out at the custom-houses of the western provinces, and proved to have been destined for export by sea, when passed out of those provinces.

W. H. MACNAGHTEN,
Secy. to the Govt. of India.

Remarks on the above Duties. — The policy of charging duties on exported articles, and of making so great a distinction between the duties on articles imported and exported in British and in foreign ships, seems very questionable. The great difficulty under which India labours, in a commercial point of view, consists principally in her inability to furnish equivalents for foreign imported goods, and to make the necessary payments abroad; and, when such is the case, it is certainly not a little contradictory to lay duties on exports. The most obvious considerations of expediency and common sense would suggest that they should be allowed to be exported duty-free. There can be no doubt that the stimulus this

would give to their production would, by increasing the public wealth, infinitely more than compensate the government for the loss of the inconsiderable sum produced by the duties with which they are charged.

The duties on most articles of importation do not appear to be at all excessive, provided they were equally distributed. But it seems quite inconsistent, seeing that we have admitted the reciprocity principle into the trade of Britain, that we should exclude it from that of India. The best informed parties concur in opinion that the effect of the discriminating duties is to diminish trade, without promoting, in any material degree, the employment of British shipping, and to provoke retaliatory measures on the part of the foreigner. The sooner, consequently, that this distinction is abolished, the better will it be for all parties. Regulations of this sort are never productive of any real advantage.

Trade of Calcutta. Exports.—During the last 30 years the trade of Calcutta has experienced some very striking vicissitudes. Previously to the opening of the trade in 1814-15, cotton piece goods formed the principal article of export from India; the value of those exported from Calcutta, at an average of the 5 years from 1814-15 to 1818-19, being (at 2*s.* per sicca rupee) 1,260,736*l.* a year. The extreme cheapness of labour in India, and the excellence to which the natives had long attained in several departments of the manufacture, would, it might have been supposed, have sufficed to place this important department beyond the reach of foreign competition. But the wonderful genius of our mechanists, the admirable skill of our workmen, and our immense capital, have far more than countervailed the apparently insuperable drawback of high wages, and the expense of bringing the raw material of the manufacture from America, and even India itself; and have enabled our manufacturers to bear down all opposition, and to triumph over the cheaper labour, contiguous material, and traditional art of the Hindoos. The imports of British cottons and twist into India have increased since 1814-15, with a rapidity unexampled in the annals of commerce; and the native manufacture has sustained a shock from which it is not very likely it will ever recover. The influence of these circumstances on the trade in piece goods has been very striking. During the year 1841-42, the value of those exported from Bengal was no more than 17,629*l.*, being only about one seventieth part of what it amounted to 26 or 28 years previously!

It will be seen, from the subjoined account, that the importation of bullion at Calcutta has fluctuated in an extreme degree since the opening of the trade in 1814. Bullion had from the earliest period been one of the most advantageous articles of export to the East; and it continued to be largely imported into Calcutta down to 1827-28. But from that period the imports rapidly declined, and were comparatively inconsiderable down to 1837-38; indeed, in 1831-32, and 1832-33, the exports of bullion exceeded the imports; but since 1837-38 its importation has again become very considerable, principally, it is believed, in consequence of the glut and low price of British products in the market.

It does not, however, appear to be very difficult to account for these variations. Formerly the export of bullion to India, though influenced by other causes, was mainly occasioned by the difficulty under which we were then placed of providing articles of merchandise suitable for the Indian markets sufficient to balance our imports. The astonishing increase of our exports of cotton goods and yarn to India has, however, gone far to obviate this difficulty; in truth, the fair presumption seems to be, that in future the circumstances of the case will be reversed, and that the difficulty of procuring return cargoes of produce suitable for our markets will, in ordinary years, be found to be the principal obstacle to the extension of our trade with Hindostan as well as with China. There seems to be no limit, other than the necessity of furnishing equivalents in their stead, to the indefinite sale of our products in the East. And, in so far, at least, as India is concerned, the facilities for furnishing such equivalents will, most likely, be gradually increased. The soil and climate of Bengal seem to be peculiarly well suited to the production of grain, sugar, indigo, opium, silk, cotton, saltpetre, and a host of other articles. And as the inhabitants are not deficient in industry, nor in a desire to improve their condition, it would seem that there wants only a reduction of the land-tax, which is so heavy as to paralyse all their energies, to enable them to increase their articles of export to an indefinite extent, and to render the country comparatively flourishing and prosperous.

Statement, showing the Imports and Exports of Treasure to and from the Presidency of Bengal, and to and from British India generally, in each Year from 1814-15 to 1839-40. (See Account No. 2. in Appendix 42. to Lords' Report on the Petition of the East India Company.)

Years.	BENGAL.				INDIA.			
	Imports.	Exports.	Ex. Imports.	Ex. Exports.	Total Imports.	Total Exports.	Ex. Imports.	Ex. Exports.
	Rupees.	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*
1814-15	1,06,86,444	1,64,625	1,05,51,819	- -	1,46,67,114	9,06,954	1,37,60,160	
1815-16	1,90,34,071	15,750	1,80,18,321	- -	2,51,98,969	2,00,739	2,49,98,230	
1816-17	3,18,41,985	1,69,000	3,16,82,985	- -	4,16,07,000	4,55,332	4,11,51,668	
1817-18	3,20,27,029	3,17,250	3,17,09,779	- -	4,51,22,303	6,27,196	4,47,95,107	
1818-19	4,71,92,494	2,79,558	4,69,12,936	- -	6,78,86,252	3,56,260	6,75,30,992	
1819-20	4,06,46,025	30,98,921	3,75,47,104	- -	4,95,11,010	39,04,602	4,56,06,108	
1820-21	2,36,17,241	11,39,363	2,24,77,878	- -	3,27,12,022	16,19,857	3,10,92,165	
1821-22	2,14,51,536	1,25,96,395	90,58,141	- -	2,91,02,291	1,30,34,290	1,61,68,001	
1822-23	1,70,68,452	15,945	1,70,52,507	- -	2,57,96,122	5,58,953	2,52,37,169	
1823-24	1,29,95,420	75,65,828	54,29,592	- -	2,12,14,711	98,34,653	1,13,80,058	
1824-25	94,02,249	16,09,497	77,92,752	- -	2,08,60,836	44,38,668	1,64,22,168	
1825-26	1,04,09,972	1,38,704	1,02,71,268	- -	2,59,86,111	54,21,689	1,85,61,422	
1826-27	1,22,88,328	11,15,032	1,11,73,296	- -	2,47,65,897	20,83,454	2,26,82,443	
1827-28	1,41,39,582	41,80,987	96,58,595	- -	2,91,60,175	90,98,075	2,00,62,100	
1828-29	65,58,526	17,63,193	47,95,333	- -	2,07,42,311	48,67,216	1,58,75,125	
1829-30	98,10,254	16,40,322	81,69,932	- -	2,19,25,311	93,39,022	1,25,86,289	
1830-31	60,12,147	33,05,035	27,07,112	- -	1,73,02,832	60,52,182	1,12,50,650	
1831-32	35,41,838	1,14,45,476	- -	79,00,638	1,18,22,560	1,75,80,483	- -	55,57,925
1832-33	51,71,083	78,33,535	- -	26,62,452	1,14,67,071	1,27,06,494	- -	12,39,423
1833-34	56,84,766	24,75,527	32,09,239	- -	1,87,64,428	56,42,862	1,31,21,566	
1834-35	61,62,218	6,65,549	57,96,699	- -	1,97,65,705	20,54,926	1,77,10,779	
1835-36	68,71,687	5,65,994	63,05,693	- -	2,20,18,906	12,82,453	2,07,36,453	
1836-37	61,25,274	16,13,164	45,12,110	- -	2,03,61,672	26,39,340	1,77,22,332	
1837-38	1,01,88,830	14,01,337	90,81,493	- -	2,64,01,013	34,06,563	2,29,94,450	
1838-39	1,21,90,314	16,27,600	1,05,62,714	- -	3,01,09,195	34,79,058	2,66,30,137	
1839-40	1,22,67,867	20,00,171	1,02,67,693	- -	1,91,52,612	47,05,231	1,47,47,411	
	39,30,01,662	6,88,36,741	33,47,28,011	1,05,63,090	69,21,14,489	12,60,78,552	57,28,33,283	67,97,546

At present (1843) the great articles of export from Calcutta are indigo, opium, sugar, raw silk and silk piece goods, saltpetre, rice, hides, cotton and cotton piece goods, gunny bags and gunny cloth, rum, &c.

We subjoin

An Account of the Quantities and Value of the Native Produce and Treasure exported from Calcutta during the Official Years 1840-41 and 1841-42.

Merchandise.		1840-41.		1841-42.	
		Quantity.	Value.	Quantity.	Value.
			Rupees.		*Rupees.*
Opium	chests	17,356	1,13,90,313	19,172	1,40,01,281
Indigo	Ind. mds.	1,15,263	2,27,11,602	1,21,611	2,39,51,248
Sugar	bz. mds.	17,81,791	1,64,68,898	15,22,092	1,39,16,426
Saltpetre	—	4,86,015	25,47,261	6,11,572	32,10,734
Rice	—	21,87,386	33,11,493	25,30,892	36,21,510
Paddy	—	1,075	811	5,511	3,817
Wheat	—	4,09,867	5,99,301	1,67,712	2,24,010
Grain	—	1,13,897	1,43,153	1,10,021	1,30,200
Dholl and peas	—	41,441	55,530	45,274	53,391
Oats	—	14,243	16,989	8,783	9,522
Barley	—	1,072	1,202	—	—
Flour	—	61,930	1,55,826	77,385	1,93,466
Bran	—	1,770	1,430	1,237	994
Raw cotton	—	1,84,817	19,26,237	1,10,342	12,05,347
Raw silk	—	13,552	71,17,502	20,375	85,15,404
Cotton piece goods (country)	{ pieces { dozens	3,40,561 1,909	4,64,645	1,09,999 1,136	1,76,294
Silk piece goods	pieces	5,89,184	35,11,552	4,67,973	28,02,179
Mixed ditto	—	76,846	2,16,597	1,19,351	3,71,805
Country woollens	—	39,598	1,62,575	26,983	74,687
Arrowroot	Ind. mds.	101	3,480	34	419
Borax and tincal	—	8,255	1,19,618	6,821	87,503
Castor oil	—	12,106	1,31,085	7,906	79,060
Cacutchone	—	611	4,891	269	2,152
Canvas	bolts	3,878	31,343	3,973	37,235
Elephants' teeth	Ind. mds.	70	7,616	68	8,762
Ebony	—	—	—	546	1,092
Ghee	—	3,810	59,081	2,238	35,771
Ginger	—	22,093	1,08,551	21,268	89,633
Gunny bags	No.	62,66,599	5,99,047	53,30,899	4,99,426
Gunny cloth	pieces	66,178	2,68,755	95,412	4,33,321
Hemp twine	Ind. mds.	5,674	48,850	5,201	52,166
Hemp	—	8,718	31,127	18,054	65,095
Hides of all sorts	pieces	25,41,480	18,03,974	24,06,723	21,38,622
Horn tips	Ind. mds.	6,136	39,686	5,741	45,929
Jute	—	86,779	1,[illegible]285	1,59,403	2,53,329
Lac dye	—	21,500	5[illegible]501	18,589	4,13,606
Lac { shell	—	55,010	8,64,000	32,492	4,51,011
Lac { seed	—	252	2,933	—	—
Lac { stick	—	5,385	38,157	4,971	30,436
Lin-seed	—	1,65,370	2,15,944	1,01,169	1,77,656
Molasses	—	7,595	23,333	8,821	10,939
Munjeet	—	338	1,014	2,328	6,261
Mustard seed	—	43,557	65,356	17,117	30,461
Mustard oil	—	1,725	10,377	334	1,683
Putchuck	—	19,660	1,96,605	12,847	1,43,038
Provisions and lard	—	—	1,13,318	—	1,15,137
Rum (Bengal)	gallons	13,06,537	9,79,661	8,54,154	5,31,291
Safflower	Ind. mds.	8,506	1,59,020	8,355	1,61,002
Sal ammoniac	—	1,102	17,656	1,300	20,820
Soap	—	7,779	46,408	2,227	13,918
Segars	—	—	1,09,524	—	1,29,829
Teal seed	—	—	—	487	730
Teal seed oil	—	556	3,780	—	—
Tobacco leaf	—	3,111	28,445	2,853	30,429
Turmeric	—	10,931	44,116	28,137	1,26,693
All other exports	—	—	5,97,356	—	4,85,982
Total exports Company's rupees	—	—	7,83,55,905	—	7,91,50,782
Foreign goods re-exported	—	—	44,75,332	—	43,67,956
Treasure exported	—	—	* 8,62,061	—	* 4,21,853
Grand total private exports	—	—	8,36,93,298	—	8,39,40,592
Honourable Company's exports	—	—	36,06,668		
			8,72,99,966		

* In addition.

	1840-41.	1841-42.
Specie exported by the Hon. Company,	37,57,632 Co.'s rupees.	23,00,000 Co.'s rupees.

Remarks on Exports.—The reader will elsewhere find (articles CANTON and OPIUM) pretty ample information in relation to the trade in opium. It is sufficient here to state that it has rapidly grown in magnitude and importance. At an average of the years 1830-31 and 1831-32 the exports from Calcutta were 7,273 chests, worth 1,121,560*l.*; whereas during the years 1840-41 and 1841-42 the exports had increased to 18,269 chests, though, owing to the unusual difficulties that were then thrown in the way of its importation into China, the exports in the last biennial period were only worth 148,019*l.* a year more than in the former. China is not the principal merely, but almost the only market for opium; so that the trade between Calcutta and her is now second only to that between the former and England. It is true that large quantities of opium are shipped for Singapore and other intermediate ports, but China is its ultimate destination. Subjoined is a

Statement of the Quantity and Value of the Opium shipped from Calcutta in 1830-31, 1840-41, and 1841-42.

		1830-31.		1840-41.		1841-42.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
To China	chests	5,672	85,91,747	5,852	39,47,745	11,378	84,05,784
Singapore	—	1,226	18,37,809	10,822	70,05,633	7,032	50,50,407
Penang	—			546	3,54,340	533	3,85,445
Batavia	—	163	2,72,735	55	32,075	55	42,525
Pegu	—	3	4,860	79	49,130	168	1,13,070
Elsewhere	—	5	7,900	2	1,590	6	4,250
		7,069	1,07,15,051	17,356	1,13,90,313	19,172	1,40,01,281

Previously to the close of the American war, the exports of indigo from Calcutta were comparatively trifling. But about that period Europeans began to engage in the business; and the culture of the

plant was, in consequence, so much extended, and the preparation of the drug so much improved, that it has long for a lengthened period an article of primary commercial importance. Of late years, however, the growth of indigo appears to have been nearly stationary; the shipments in 1830-31 and 1831-32 being about equal to those in 1840-41 and 1841-42. This stationary state of the trade has been ascribed, partly to the influence of the importations from Java, where indigo is now very extensively raised, and partly to the alleged decrease in the use of blue cloth. France is, next to England, the great market for indigo.

Statement of the Quantity and Value of the Indigo shipped from Calcutta in 1830-31, 1840-41, and 1841-42.

	1830—31.		1840—41.		1841—42.	
	Quantity.	Value	Quantity.	Value.	Quantity.	Value
Great Britain - - Ind. mds.	85,741	85,74,100	84,205	1,65,31,074	84,813½	1,66,35,889
France - - - —	23,151	23,15,100	20,270½	40,86,276	26,691	52,91,251
North America - - - —	5,899	5,89,900	4,842½	9,45,368	3,715½	7,36,063
Arabian and Persian Gulphs —	10,939	10,93,900	5,053½	9,64,414	5,863½	11,72,774
Bombay - - - - —	550	55,000	637	1,27,499	122	24,383
Sweden - - - - —	213	21,300	-	-	-	-
Bremen - - - - —	-	-	206½	41,256	209½	50,868
Elsewhere - - - —	33	3,300	78½	15,775	139½	27,540
Total mds.	1,26,556	1,26,55,600	1,15,263½	2,27,11,602	1,21,611½	2,79 51,248
Being in lbs	9,444,241½		8,601,557½		9,077,51 14/32	
	cwt lbs		cwt lbs		cwt lbs	
— tons	4,216 3 6½		3 839 19 19½		4,052 9 27½	
Quantity shipped for Great Britain only - - - tons	2,856 8 86½		2,805 5 38½		2 825 10 68½	

We had occasion to remark, in the former edition of this work, that of the various articles brought from India, sugar seemed to be the one in which an increase of importation would most likely take place. We have not been disappointed in this expectation. In 1836, the duty on East India sugar, which had previously been comparatively high, was reduced to the same amount as that on West India sugar; and that circumstance, and the continued high price of sugar in this country, could not fail to give a powerful stimulus to its culture in and exportation from India. On the whole, however, great as the increase in the exports of sugar has been we are rather surprised that it has not been decidedly greater: and we doubt, were the sugar trade placed on a proper footing, by the reduction of the oppressive duties on foreign sugars, whether the importations from India would not be reduced.

Subjoined is a

Statement of the Quantity and Value of the Sugar shipped from Calcutta in 1830-31, 1840-41, and 1841-42

	1830—31		1840—41		1841—42	
	Quantity	Value	Quantity	Value	Quantity	Value
Great Britain - - Baz mds.	217,371	17,36 375	17,17,290	1,59,90,863	4,52,502½	1 33,65,951
Sweden - - - - —	8 076	64,905	-	-	-	-
Bombay - - - - —	13 478	1,08,276	48,131	3,40,565	40,476½	3,79,981
Arabian and Persian Gulphs —	23,118	1,79 438	6,671½	57 170	9,694	90,881
Madras - - - - —	1,877	15,018	251	2 063	308	3,474
Ceylon - - - - —	526	4,205	1,251½	9,589	1,246½	12 110
Pegu - - - - —	284	2,264	240½	1,864	1,001½	7,698
Maldives - - - —	263	2,090	-	-	141	1,199
New Holland - - - —	175	3,577	8,930½	55,978	6,810½	32,576
Cape and St. Helena - - —	862	6,890	2,030½	10,837	3,941½	23,026
Elsewhere - - - —	340	2,709				
Total mds.	2,67,173	21,25,027	17,81,7 01½	1,64,68,898	15,22 092½	1,39,16,496
Being in lbs	21,911,582⅜		146,575 981 13/32		125,001,726 1/32	
	cwt lbs		cwt lbs		cwt lbs.	
— tons	9,795 6 110⅜		65,435 11 13 13/32		55,804 6 94 1/32	
Quantity shipped for Great Britain only - - - tons	7,969 9 25⅜		62,960 18 25½		53,253 0 27 9/32	

The exports of cotton from Calcutta continue stationary; and the expectations that it would be improved in its quality by greater attention being given to its culture and preparation, have not been realised.

The exports of saltpetre from India have not, as many anticipated, been affected by the competition of nitrate of soda from South America. In 1830-31 the exports from Calcutta were 424,729 fact maunds; whereas, in 1841-42, they amounted to 611 572 maunds.

The exports of rice from Bengal fluctuate very greatly. This is not caused so much by variations in the crops of the country, as by variations in those of other countries; for, when a scarcity occurs in most parts of continental Asia, or in any of its islands, recourse is almost invariably had to Bengal to supply the deficiency; and the demands thence arising have been sometimes enormous. In 1831-32, for example, the exports of rice from Calcutta to the coast of Coromandel amounted to only 16,515 maunds, whereas in 1833-34, they amounted to 1,252,056 maunds.—(*Bell's Comparative View of* 1832 33, and 1833-34, p. 41.) It is worthy of remark, that while Bengal is shipping immense supplies of rice and other grain to distant parts, a large part of her own population is frequently in a state of great want and suffering. Ireland is not, therefore, the only country in which the most abject poverty and wretchedness on the part of the inhabitants, are found combined with great fertility of soil, and a large exportation of food.

Besides the articles of native Indian produce exported from Calcutta, she re-exports pretty considerable quantities of various articles brought from other parts. The value of the British cotton goods re-exported amounts to about 200,000*l.* a year. They are principally bartered with the Burmese for silver. The conveyance of the latter out of the Burmese dominions is strictly prohibited; but in Burma, as in England and elsewhere, the ingenuity of the smuggler is too much for the vigilance of the government, and the trade is carried on without much difficulty.

Imports.—The great articles of import into Calcutta are, British cotton manufactures and cotton twist; bullion; copper with spelter, tin, lead, iron, and other metals; woollens; wines and spirits; ale and beer; haberdashery, millinery, &c.; coffee; hardware and cutlery; spices; coal; coral, glass, and bottles; plate, jewellery, watches, &c.; books and stationery; tea, &c.

Statement of the Quantity and Value of the principal Articles of Merchandise imported into Calcutta during the Years 1840-41 and 1841-42.

Principal Articles of Merchandise.		1840-41.		1841-42.	
		Quantity.	Value.	Quantity.	Value.
Alum	Ind. mds.	7,843	23,622	28,529½	91,363
Betel nut	—	40,934	1,43,271	53,633	1,72,608
Books and pamphlets	—	- -	3,04,075	- -	2,78,497
Cloves	—	1,805½	47,013	2,891	92,171
Coffee	—	17,383½	4,15,782	13,585½	3,17,800
Coals	—	1,65,691½	90,267	7,09,969½	3,58,372
Haberdashery, millinery, and apparel	—	- -	13,09,397	- -	12,49,190
Hardware and cutlery	—	- -	5,07,941	- -	4,49,034
Copper: Slab and tile	—	33,900½	11,99,993	38,502½	14,19,353
Copper: Sheet and nail	—	31,393½	11,51,840	18,393½	6,94,884
Copper: Old	—	4,600½	1,54,677	5,336½	1,91,999
Piece goods: White cotton	pieces	25,06,552		22,16,947	
	yards	1,91,75,554½	1,09,08,361	1,82,83,145½	1,02,40,816
	dozens	18,920½		8,95½	
Piece goods: Coloured cotton	pieces	3,89,347		3,40,965	
	yards	45,32,171½	39,00,160	21,32,785½	29,12,550
	dozens	1,25,157½		1,92,510½	
Piece goods: Silk and mixed	pieces	17,910		36,502	
	yards	3,66,023	7,68,846	88,501½	6,75,003
	metres	- -		2,30,012½	
Salt (duty paid)	Ind. mds.	5,71,310	7,29,244	6,11,591½	6,14,591
Twist and yarn	lbs.	1,18,25,270½	79,90,932	90,64,102	55,27,997
Wines: Sherry	Ind. mds.	- -	7,18,762	- -	7,28,530
Wines: Claret, Burgundy, Sherbet	—	- -	2,12,681	- -	3,89,414
Wines: Champagne	—	- -	2,18,613	- -	2,26,508
Woollens	—	- -	18,09,216	- -	14,89,099
All other articles	—	- -	1,62,94,756	- -	1,63,49,977
Total merchandise by private traders		- -	4,88,97,449	- -	4,43,69,440
Treasure by ditto		- -	97,80,222	- -	99,27,282
Private trade, grand total		- -	5,86,77,671	- -	5,42,96,722
Honourable Company's trade, grand total		- -	48,81,898		

Abstract Statement of the external Commerce of Calcutta in 1840-41 and 1841-42, exhibiting the Amount of the Imports from and of the Exports to each Country.—*N. B.* The Company's trade is excluded from this account.

IMPORTS.

From and to what Countries and States.	1840-41.			1841-42.		
	Merchandise	Treasure.	Total.	Merchandise.	Treasure.	Total.
Great Britain	3,77,57,049	8,15,866	3,85,72,915	3,30,69,120	- -	3,30,69,120
France	16,06,340	2,24,186	18,30,526	22,28,894	13,970	22,42,864
Demerara and Berbice	2,25,806	- -	2,25,806	- -	- -	- -
North America	5,89,153	9,51,347	15,20,500	9,94,548	8,57,656	18,52,204
Madras Coast	13,67,887	2,56,143	16,14,030	17,08,346	16,107	17,24,453
Ceylon	1,66,939	- -	1,66,939	73,019	- -	73,049
Maldives and Laccadives	1,47,062	- -	1,47,062	1,48,740	- -	1,48,740
Malabar Coast	16,49,498	3,36,002	19,85,500	14,34,739	- -	14,34,739
Arabian and Persian Gulphs	7,89,510	1,27,500	9,16,840	7,24,781	72,600	7,95,381
Singapore	14,35,088	18,81,028	33,16,117	14,82,738	19,65,113	34,47,851
Penang and Malacca	5,56,220	39,370	15,95,590	8,53,463	10,080	8,63,543
China	12,09,550	38,72,873	50,82,423	7,72,732	53,69,686	61,02,118
New Holland	29,531	- -	29,531	44,898	- -	44,898
Java and Sumatra	1,29,608	- -	1,29,608	66,406	20,171	86,577
Pegu	6,82,238	8,79,760	15,61,998	5,75,086	12,71,379	18,44,465
Mauritius	1,11,960	1,50,907	2,65,857	56,769	58,077	94,846
Bourbon	52,391	2,56,860	2,89,251	90,122	2,61,710	3,51,832
Cape and St. Helena	32,510	- -	32,510	63,669	10,733	74,402
Manilla	18,816	8,580	27,426	3,634	- -	3,634
Hamburg	1,58,534	- -	1,58,534	- -	- -	- -
Bremen	17,333	- -	17,333	29,343	- -	29,343
Genoa	1,79,307	- -	1,79,307	686	- -	686
Chittagong	4,748	- -	4,748	- -	- -	- -
New Zealand	7,320	- -	7,320	11,677	- -	11,677
Total Company's rupees	4,88,97,449	97,80,222	5,86,77,671	4,43,69,440	99,27,282	5,42,66,722

EXPORTS.

Great Britain	5,07,52,434	- -	5,07,52,434	4,74,69,337	- -	4,74,69,337
France	44,86,823	- -	44,86,823	64,41,180	60,000	65,01,180
Demerara and Berbice	49,668	- -	49,668	40,537	- -	40,537
North America	24,89,008	- -	24,89,008	29,88,582	- -	29,88,582
Madras Coast	8,58,135	- -	8,58,135	6,98,355	1,23,800	8,22,155
Ceylon	1,29,456	40,000	1,69,456	1,49,590	99,500	2,49,090
Maldives and Laccadives	67,670	- -	67,670	58,030	- -	58,030
Malabar Coast	20,41,700	- -	20,41,700	30,53,826	3,500	30,57,326
Arabian and Persian Gulphs	15,25,921	- -	15,25,921	18,68,396	- -	18,68,396
Singapore	79,93,326	1,01,000	80,94,326	57,54,189	- -	57,54,189
Penang and Malacca	5,23,639	20,251	5,43,890	4,90,880	140	4,91,020
China	59,98,879	1,13,960	61,12,839	99,21,286	- -	99,21,286
New Holland	4,89,898	- -	4,89,898	1,11,175	13,600	1,24,775
Java and Sumatra	2,05,718	- -	2,05,718	1,19,884	- -	1,19,8244
Pegu	23,72,901	- -	23,72,901	18,30,501	31,000	18,61,501
Mauritius	20,02,554	5,83,490	25,86,044	17,44,514	73,015	18,17,529
Bourbon	4,78,484	3,360	4,81,844	5,20,270	17,300	5,37,570
Cape and St. Helena	2,23,460	- -	2,23,460	1,57,649	- -	1,57,649
Hambro	2,818	- -	2,818	2,800	- -	2,800
Bremen	79,061	- -	79,061	98,016	- -	98,016
Genoa	61,684	- -	61,684			
Total Company's rupees	8,28,81,237	8,62,061	8,36,93,298	8,35,18,737	4,21,855	8,39,40,592

Statement exhibiting the Proportion of the external Commerce of Bengal enjoyed by each Country and State during the Years 1840-41 and 1841-42.

Countries.	Import Trade.				Export Trade.			
	1840-41.		1841-42.		1840-41.		1841-42	
	Value.	Per Centage.	Value.	Per Centage.	Value.	Per Centage.	Value.	Per Centage.
EUROPE.								
United Kingdom	3,85,72,915	65·7	3,30,69,120	60·8	5,07,52,434	60·6	4,74,69,337	56·5
France	18,30,526	3·2	22,42,864	4·2	44,86,823	5·4	65,01,180	7·8
Hambro	1,58,534	0·3	-	-	2,818	-	2,800	
Bremen	17,333	0·03	29,343	0·1	79,061	0·1	98,016	0·1
Genoa	1,79,307	0·3	686	-	61,684	0·1		
	4,07,58,615	69·5	3,53,42,013	65·1	5,53,82,820	66·2	5,40,71,333	64·4
ASIA.								
Coromandel coast	16,14,030	2·7	17,24,153	3·2	8,58,135	1·0	8,22,153	1·0
Ceylon	1,66,939	0·3	73,049	0·2	1,69,456	0·2	2,49,090	0·3
Malabar coast	19,85,500	3·4	14,31,739	2·7	20,41,700	2·4	30,57,326	3·6
Maldives and Laccadives	1,47,062	0·3	1,48,740	0·3	67,670	0·1	58,030	0·1
Arabian and Persian Gulphs	9,16,840	1·6	7,95,381	1·5	15,25,921	1·7	18,68,396	2·2
China	50,82,423	8·6	61,02,418	11·2	61,12,839	7·1	99,21,286	11·8
Singapore	33,16,117	5·6	31,17,851	6·2	80,91,526	9·6	57,51,189	6·8
Penang and Malacca	5,95,599	1·01	8,63,543	1·6	5,43,890	0·7	4,91,020	0·6
Chittagong	4,748	0·01						
Java and Sumatra	1,29,608	0·2	86,577	0·2	2,03,718	0·3	1,19,824	0·1
Manilla	27,426	0·05	3,634					
New Zealand	7,320	0·01	11,677					
New Holland	29,531	0·01	41,898	0·1	4,89,898	0·7	1,24,775	0·2
Pegu	15,61,998	2·7	18,44,465	3·4	23,72,901	2·7	18,61,501	2·2
	1,55,85,132	26·5	1,65,81,425	30·6	2,21,80,454	26 8	2,43,27,592	28·9
AFRICA.								
Mauritius	2,65,857	0·5	94,846	0·2	25,86,044	3·1	18,17,589	2·2
Bourbon	2,89,251	0·6	3,51,832	0·6	4,81,814	0·6	5,57,570	0·6
Cape of Good Hope	32,510	0·05	74,102	0·1	2,23,490	0·3	1,57,649	0·2
	5,87,618	1·1	5,21,080	0·9	32,91,348	4·0	25,12,748	3 0
AMERICA.								
North America	15,20,500	2·5	18,52,204	3·4	24,89,008	2·9	29,88,582	3·6
Demerara and Berbice	2,25,806	0·4	-	-	49,668	0 1	40,337	0·1
	17,46,306	2·9	18,52,204	3·4	25,38,676	3·0	30,28,919	3·7
	5,86,77,671	100	5,42,96,722	100	8,36,93,298	100	8,39,40,592	100

Statement of Import and Export Tonnage for the Years 1840-41 and 1841-42.

Import Vessels.	1841-42.		1840-41.		Export Vessels.	1841-42.		1840-41.	
	No.	Tonn.	No.	Tonn.		No.	Tonn.	No.	Tonn.
British Imports.					British Exports.				
From United Kingdom direct, and via Cape and Madras	250	1,11,148	198	91,403	Cleared out for U. K. direct via Cape and Madras	236	1,03,050	221	1,04,697
Foreign Europe	14	4,147	5	1,776	Trieste	1	213		
North America	2	407			Pondicherry	1	205		
South America	1	233			Halifax in Nova Scotia	-	-	1	155
Cape of Good Hope	5	1,837	8	2,059	West Indies (Demerara)	2	503	2	403
Mauritius and Bourbon	71	25,949	63	21,042	Cape of Good Hope	5	1,335	6	1,416
Arabian and Persian Gulphs	11	5,206	12	5,114	Mauritius	80	29,700	97	34,143
Bombay and the Malabar coast	33	14,897	42	19,752	Arabian and Persian Gulphs	20	9,105	7	2,960
Ceylon	7	1,921	3	518	Bombay and Malabar coast	30	13,333	22	11,299
Madras and Coromandel coast	22	6,899	21	5,467	Ceylon	7	1,912	5	1,531
Sandaway, Khyook Phyoo, and Chittagong	2	1,116	3	608	Madras and Coromandel coast	16	5,526	20	5,211
Mergui and Rangoon (junks)	3	136	3	171	Pegu, Moulmein, and Rangoon	48	15,296	34	6,539
Pegu, Moulmein, and Rangoon	56	16,162	49	8,227	Arracan and Mergui (junks)	4	206	2	115
Penang, Malacca, and Singapore	54	14,448	62	14,288	Khyook Phyoo	6	2,539	1	368
Sumatra and Batavia	3	1,102	1	209	Penang, Malacca, and Singapore	35	7,311	48	9,511
China and Singapore	53	21,393	30	8,472	China and Singapore	105	42,499	58	20,118
Australia	50	21,467	45	20,315	Australia	4	1,440	12	3,492
the Coromandel coast (dhonies, called choolias and tellinjas)	164	13,659	41	4,023	the Coromandel coast (dhonies, called choolias and tellinjas)	162	13,469	48	4,929
Laccadives and Ceylon	12	892	8	550	Laccadive Islands	12	819	-	550
Ballasore and Cuttack	74	3,409	5	203	Balasore and Cuttack	5	153	-	164
Total import British vessels	887	2,67,638	599	2,04,227	Total British export vessels	788	2,48,711	697	2,07,434
Foreign Imports.					Foreign Exports.				
From Foreign Europe (France, &c.)	26	8,144	14	4,049	Cleared out for foreign Europe (France, &c.)	18	5,418	10	2,981
North America (U. S.)	27	12,368	20	7,282	Bremen	1	180	1	180
Bremen	1	180	1	180	Genoa (Sardinian)	-	-	1	323
Genoa (Sardinian)	-	-	1	277	North America (U. S.)	25	10,434	18	6,440
Mauritius and Bourbon	26	7,332	23	6,856	Bourbon	31	8,927	32	9,997
Arabian and Persian Gulphs	12	5,445	12	5,908	Arabian and Persian Gulphs	1	440	5	2,439
Rangoon (French)	2	617	1	279	Muscat (French)	1	331	1	351
Tavoy and Mergui	1	70			Tavoy and Mergui	1	-	1	400
Java and Sumatra	5	1,592	9	2,416	Java and Sumatra	4	1,359	8	2,176
Manilla (Spanish)	-	-	1	280	China	2	512	2	957
Macao (American)	-	-	2	1,219	the Maldive Islands (dhonies)	14	1,501	14	1,424
the Maldive Islands (dhonies)	14	1,561	14	1,343					
Total foreign import vessels	114	37,339	98	30,089	Total foreign export vessels	97	29,102	93	27,668
Total import vessels under British and foreign bottoms	1,001	3,04,977	697	2,34,316	Total export vessels under British and foreign bottoms	885	2,77,816	690	2,35,092

Account of the Receipts at the Calcutta Sea Custom-House in 1840-41.

	Government Duty.	Godown Rent.	Fees and Fines.	Miscellaneous.	Charges refunded.	Confiscations.	Total.
On imports - -	37,89,960	34,155	801	1,034	17,154	490	38,43,595
On exports - -	11,65,195	- -	- -	- -	- -	- -	11,65,195
	49,55,155	34,155	801	1,034	17,154	490	50,08,790
Add revenue derived from Chittagong and Cuttack custom-houses -							11,727
Total Company's rupees - - - - - - -							50,20,517
Deduct charges - - - - - - -							5,63,231
Net revenue from customs in Bengal in 1840-41 Company's rupees -							44,57,286

Failures at Calcutta. — During the 3 years ending with 1833, some of the principal mercantile establishments in this city failed for immense sums. To examine minutely into the origin of these disasters would lead us into inquiries foreign to the object of this work, and with respect to which it is difficult to acquire accurate information. We believe, however, that the main source of the evil was the combination, by most of the principal houses, of the business of merchants with that of bankers. Their credit being high, at the end of the war large sums were deposited in their hands, for which they engaged to pay a high rate of interest. But instead of employing these deposits, as bankers in England would have done, in the discount of bills at short dates, or in the purchase of government securities readily convertible into money, they employed them, probably because they could with difficulty dispose of them otherwise, in all manner of mercantile speculations, — advancing very large sums to the indigo planters, exporting goods to Europe, either directly on their own account, or indirectly by lending to those who did, — becoming owners of Indian shipping, &c. Most of those speculations turned out exceedingly ill. The production of indigo was so much increased, partly in consequence of the large capitals turned to the business, and partly of the high prices in England, that "fine blue violet," which had brought, in the London market, at an average of the 3 years ending with 1827, from 12*s.* 10*d.* to 13*s.* 4*d.* per lb., fell, at an average of the 3 years ending with 1832, to from 5*s.* 8*d.* to 6*s.* 4*d.* per lb., and other sorts in proportion. At these prices the production would not pay; and very heavy losses were sustained, and much capital sunk, by the planters and those who had supplied them with funds to extend their undertakings. The investments in Indian shipping turned out even worse than those in the indigo plantations, the shipping of England having nearly driven that of India out of the field. The embarrassment occasioned by this locking up of their capital, and by the ruinous nature of the adventures in which they were embarked, began to manifest itself simultaneously with the scarcity of money occasioned by the drains on account of the Burmese war. The great mercantile houses began then to find that they were entangled in difficulties from which they were wholly unable to extricate themselves. After struggling on, some for a longer and some for a shorter period, most of them subsequently failed, the greater number for very large sums.

But, however distressing in the mean time, the embarrassment and want of confidence arising from the failures alluded to were not of long continuance; and have, in the end, been advantageous. It is of the utmost consequence that the vicious combination of the business of a merchant with that of a banker should be put an end to. It is singular, indeed, that individuals should be found willing to intrust large sums in the hands of those who, they are aware, are employing them in the most hazardous adventures. The higher the interest promised by such persons, the greater ought to be the caution of the public in dealing with them.

Internal Transit Duties. — A very great improvement has been effected, since the publication of the first edition of this work, in the domestic economy of our Indian empire, by the abolition of the duties on the transit of goods from one part of the country to another.* These duties had existed in India from a very remote period; and, by obstructing the intercourse between its different districts, were singularly pernicious. After the East India Company began to acquire a footing in India, they availed themselves of a favourable opportunity to procure an exemption from the transit-duties in favour of their own trade; "the goods which they imported being allowed to pass into the interior, and those which they purchased for exportation in the interior being allowed to pass to the sea, without either stoppage or duties." — (*Mill's India*, 8vo. ed., vol. iii. p. 289.) They were not, however, long permitted to monopolise this privilege. Immediately after the victories of Clive had raised the company to the situation of a great territorial power, their servants engaged largely in the inland trade, and endeavoured, partly by fraud and partly by force, to extend to their own goods the exemption from transit duties established in favour of those belonging to the company. Every reader of Indian history is aware of the multiplied abuses and disturbances that grew out of this attempt of the company's servants to release themselves from duties and charges that pressed with grinding severity on the natives, and, by consequence, to engross (for such was their object) the whole internal trade of the country. The company endeavoured to obviate the evil by strictly forbidding its servants from engaging in internal traffic. But its orders to this effect were long either totally disregarded, or but very imperfectly obeyed. At length, in 1788, Lord Cornwallis adopted the decisive and judicious measure of abolishing the duties. They were, however, again renewed in 1801. The exclusion of Englishmen from all participation in the interior traffic of the country having been gradually carried into complete effect for a lengthened period, they were less alive than they would otherwise have been to the injurious influence of the duties, so that their re-establishment met with comparatively little opposition. In 1810 a new tariff was introduced, by which the duties "were frightfully augmented;" and they continued from that epoch down to their recent abolition seriously to obstruct all sorts of internal traffic, and to oppose the most formidable obstacle to the improvement of the country.

Had the inland transit duties been productive of a large amount of revenue, that would have been some set-off against the enormous evils of which they have been productive. But such has not been the case. The expenses of collection and the interruption of communication, were so very great, that the nett produce of the inland transit duties was quite insignificant; so much so that, according to Mr. Trevelyan, it did not exceed, in the extensive province of Bengal, the miserable pittance of 27,500*l.* a year. — (*Report*, p. 143.) We see no reason to doubt the accuracy of this statement; and, assuming it to be correct, we are warranted in affirming that there is not another instance to be found, in the history of taxation, of a tax so fruitful of mischievous results, and so barren of revenue.

Town Duties. — These were charged on the principal articles of consumption in 23 of the chief towns of Bengal. They were in many respects similar to the *octrois* in France; and, though not nearly so injurious as the internal transit duties, were productive of much inconvenience. We are glad, however, to have to state that they, as well as the transit duties, have recently been abolished; and that the internal trade of Bengal is now as free, in so far, at least, as statutory regulations can make it, as the internal trade of England.

This article has been compiled from various authorities, including — *Milburn's Oriental Commerce*;

* This important measure was preceded, and, we believe, principally brought about, by the publication of an elaborate and very valuable report on the inland customs of Bengal, by Mr. Trevelyan, then one of the Secretaries to the Indian Government, and now Secretary to the Treasury.

Bell's Comparative View of the external Commerce of Bengal, with the Continuation by Wilkinson for the years from 1828-29 to 1841-42; *The Bengal and Agra Guide and Gazetteer*, for 1841 and 1842; *Parliamentary Papers relating to the Finances of India and the Trade of India and China*, 1830—1843; and *private communications*.

CALICO (Ger. *Kattun*; Du. *Katoen*; Dan. *Kattun*; Sw. *Cattun*; Fr. *Coton, Toile de Coton*; It. *Tela Bambagina, Tela dipinta*; Sp. *Tela de Algodon*; Port. *Pano de Algodao*; Rus. *Wüboika*; Pol. *Bawelnika*), cloth made of cotton; so called from Calicut, on the Malabar coast, whence it was first imported. In England, all white or unprinted cotton cloths are denominated calicoes; but in the United States this term is applied to those only that are printed.

Historical Notice of the Art of Calico Printing. — This art, though apparently one of the most difficult, has been practised from a very remote æra. Herodotus mentions (lib 1. § 202.), that a nation on the shores of the Caspian were in the habit of painting the figures of animals on their clothes, with a colour formed from the leaves of trees bruised and soaked in water; and he adds, that this colour was not effaceable, and was as durable as the clothes themselves. It is difficult to imagine that the colours could have been so permanent, had not those using them been acquainted with the use of mordants. There is, however, a passage in Pliny (*Hist. Nat.* lib. xxxv. § 11.), which, though in some respects obscure, shows that the ancient Egyptians were fully acquainted with the principle of calico printing. "They paint," says he, "the clothes, not with colours, but with drugs (*sorbentibus medicamentis*) that have no colour. This being done, they immerse them in a vat full of boiling dye, and leave them there for a little: when they take them out, they are painted of various colours. It is extraordinary, seeing that there is only one colour in the vat (*unus in cortina color*), that a variety of colours should be produced by the operation of the drugs." Pliny further states, that the colours were so adhesive they could not be washed out; and that clothes were the stronger for being dyed. A similar process is known to have been followed in India from the earliest times. The chemical and mechanical inventions of modern ages have been the cause of vast improvements in this ingenious and beautiful art; but the passage now quoted shows distinctly that we have, in this instance, been only perfecting and improving processes practised in the remotest antiquity.

Calico Printing in this Country. Duties on Calicoes. — In Great Britain the printing of cottons has formed, for a considerable period, a very important and valuable business, which may be truly said to have grown up amongst us in despite of repeated efforts for its suppression. To prevent the use of calicoes from interfering with the demand for linen and woollen stuffs, a statute was passed in 1721, imposing a penalty of 5*l.* upon the weaver, and of 20*l.* upon the seller, of a piece of calico! Fifteen years after this extraordinary statute was so far modified, that calicoes manufactured in Great Britain were allowed to be worn, "provided the warp thereof was entirely of linen yarn." This was the law with respect to calicoes till after the invention of Sir Richard Arkwright introduced a new æra into the history of the cotton manufacture, when its impolicy became obvious to every one. In 1774, a statute was passed, allowing printed goods, wholly made of cotton, to be used, after paying a duty of 3*d.* a yard (raised to 3½*d.* in 1806); and enacting some regulations as to the marks to be affixed to the ends of the pieces, the stripes, &c.

This act continued in force down to 1831; but, though an improvement upon the old law, it was much, and justly, complained of. Its injustice and injurious operation were very forcibly pointed out by Mr. Poulett Thompson (afterwards Lord Sydenham), in his excellent speech on taxation, on the 26th March, 1830. "It is a matter of surprise to me," said the Right Hon. gent., "that this most impolitic impost should have been allowed to continue, especially when it was declared by the committee of 1818 to be '*partial and oppressive*, and that its repeal was most desirable:' who, indeed, can examine it, and not feel the truth of this observation? Is it credible, that, in order to raise a nett revenue of 599,669*l.*, a gross tax should be imposed of 2,019,737*l.*? and yet this was the return, according to the paper on your table, for 1828. And these figures are still far from showing the real cost of the collection of this tax;—that must be taken upon the gross produce; and supposing the rate of the collection for the excise to be 5 per cent., which is less than it really is, you have a cost of 20 per cent. on the nett produce of this tax, for charges. In addition to this, from all the inquiry I have been able to make, the increased cost to the manufacturer is fully 5 per cent. upon the whole quantity made; so that you have thus two sums, each of 100,000*l.*, levied on the public, for the sake of exacting a duty of 600,000*l.* But the revenue is again, in this case, far from being the measure of the injury you inflict. The inequality of the tax constitutes its chief objection. The duty is levied upon the square yard, at 3½*d.* per yard. Thus, the piece of calico which sells for 6*d.*, duty paid, contributes equally with that which is worth 5*s.* a yard. You levy an onerous and oppressive tax of 100 or 150 per cent. upon the poor, who are the purchasers of inferior cottons; whilst the rich, who buy only the finest kinds, pay but 10 or 15 per cent."

It is due to Mr. Thompson to state, that, not satisfied with giving this forcible exposition of the inequality and injurious operation of the duty on printed goods, one of his first measures, on coming into office, was to propose its repeal.

In consequence, partly of the abolition of the tax, but principally, no doubt, of the extraordinary increase of the cotton manufacture, the business of calico printing, has increased prodigiously since 1830. In proof of this we may mention, that in 1829, about twelve months previously to the abolition of the duty, 89,862,433 yards of all descriptions of printed goods were exported to foreign parts; whereas, in 1841, there were exported, of printed cottons only, the enormous quantity of 329,240,892 yards, of the declared value of 7,772,735*l.*! (See *Board of Trade Papers* for 1841, p. 123.)

By the 34 Geo. 3. c. 23. it is enacted, that the inventor, designer, or printer of any new and original pattern for printing linens, cottons, calicoes, or muslins, shall have the sole right of printing and reprinting the same for 3 months, to commence from the day of first publishing.

CAMBRIC, or CAMBRICK (Ger. *Kammertuch*; Du. *Kameryksdoek*; Fr. *Cambray Batiste*; It. *Cambraja*; Sp. *Cambrai*; Port. *Cambraia*; Rus. *Kamertug*), a species of very fine white linen, first made at Cambray, in French Flanders, whence it derives its appellation. It is now produced, of an equally good quality, in Great Britain.

CAMEL (Fr. *Chameau*; It. and Sp. *Camelo*; Ger. *Kameel*; Arab. *Djimel*; Lat. *Camelus*; Greek, Καμηλος) is indigenous to Arabia, and we only mention it in this place on account of its extreme importance in the commerce of the East.

The camel is one of the most useful of the animals over which the inhabitants of Asia and Africa have acquired dominion. These continents are intersected by vast tracts of burning sand, the seats of desolation and drought, so as, apparently, to exclude the possibility of any intercourse taking place between the countries that they separate. "But as the ocean, which appears at first view to be placed as an insuperable barrier between different regions of the earth, has been rendered, by navigation, subservient to their mutual intercourse; so, by means of the camel, which the Arabians emphatically call *the Ship of the Desert*, the most dreary wastes are traversed, and the nations which they disjoin are enabled to trade with one another. Those painful journeys, impracticable by any other animal, the camel performs with astonishing despatch. Under heavy burdens of 600, 700, and 800 lbs. weight, they can continue their march during a long period of time, with little food or rest, and sometimes without tasting water for 8 or 9 days. By the wise economy of Providence, the camel seems formed of purpose to be the beast of burden in those regions where he is placed, and where his service is most wanted. In all the districts of Asia and Africa, where deserts are most frequent and extensive, the camel abounds. This is his proper station, and beyond this the sphere of his activity does not extend far. He dreads alike the excesses of heat and cold, and does not agree even with the mild climate of our temperate zone." — (*Robertson's Disquisition on Ancient India*, Note 53.)

The first trade in Indian commodities of which we have any account (Genesis xxxvii. 25.) was carried on by camels; and they still continue to be the instruments employed in the conveyance of merchants and merchandise throughout Turkey, Persia, Arabia, Egypt, Barbary, and many contiguous countries. The merchants assemble in considerable numbers, forming themselves into an association or *caravan* — (see CARAVAN), for their mutual protection against the attacks of robbers, and the dangers incident to a journey through such rude and inhospitable countries. These caravans are often very large, and usually consist of more camels than men. The capacity of the camel to endure fatigue, and the small supply of provisions that he requires, is almost incredible. "His ordinary burden," says Volney, "is 750 lbs.; his food, whatever is given him — straw, thistles, the stones of dates, beans, barley, &c. With a pound of food a day, and as much water, he will travel for weeks. In the journey from Cairo to Suez, which is 40 or 46 hours, they neither eat nor drink; but these long fasts, if often repeated, wear them out. Their usual rate of travelling is very slow, hardly above 2 miles an hour: it is in vain to push them; they will not quicken their pace; but, if allowed some short rest, they will travel 15 or 18 hours a day." — (*Voyage en Syrie*, tom. ii. p. 383.)

The Arabians regard the camel as a sacred animal, the gift of Heaven, without whose aid they could neither subsist, nor trade, nor travel. Its milk is their ordinary food; they also eat its flesh, especially that of the young camel, which they reckon excellent; its hair, which is renewed every year, is partly manufactured into stuffs for their clothes and furniture, and partly sent abroad as a valuable article of merchandise; and even its fæces serve them for fuel. Blest with their camels, the Arabs want nothing, and fear nothing. In a single day they can traverse 40 or 50 miles of the desert, and interpose its trackless sands as an impenetrable rampart between them and their foes. — (See the admirable description of the camel, in Buffon.)

But, however useful to the inhabitants of parched, sandy deserts, it may be worth while, perhaps, to observe, that the camel is of very little service elsewhere. He cannot walk 100 yards on wet or slippery ground without stumbling. He is totally unknown in all hilly or woody countries; and, with few exceptions, may be said to be as great a stranger in the Eastern Islands, Japan, the southern parts of China, the whole country lying between China and India, and all the southern parts of the latter, including Bengal, as he is in Europe. In all those vast countries the ox is the most useful of the lower animals. It is used for draught (for which the camel is totally unfit), in the cart and plough, in the carrying of burdens, in treading corn, in the oil-press, &c., and finally as food.

CAMEL'S HAIR (Ger. *Kameelhaar*; Fr. *Poil de chameau*, *Laine de chevron*; It. *Pelo di camello*; Sp. *Pelo ó lana de cámello*). The hair of the camel imported into this country is principally used in the manufacture of fine pencils for drawing and painting. In the East, however, it is an important article of commerce, and is exten-

sively used in the arts. It serves for the fabrication of the tents and carpets of the Arabs, and for their wearing apparel. Cloth is also manufactured of it in Persia and other places. The most esteemed hair comes from Persia. It is divided into three qualities; black, red, and grey. The black is the dearest, and the grey is only worth half the red. Considerable quantities of camels' hair are exported from Smyrna, Constantinople, and Alexandria. It is used in the manufacture of hats, particularly by the French. — (*Rees's Cyclopædia*, art. *Camelus.*)

CAMLET, OR CAMBLET (Ger. and Du. *Kamelot*; Fr. *Camelot*; It. *Ciambellotto*; Sp. *Camelote*; Rus. *Kamlot*), a plain stuff, manufactured on a loom, with 2 treadles, as linens are. There are camlets of various colours and sorts; some wholly of goats' hair; others, in which the warp is of hair, and the woof half hair and half silk; others, again, in which both the warp and the woof are of wool; and, lastly, some, of which the warp is of wool and the woof of thread: some are striped, some watered, and some figured.

CAMOMILE (Fr. *Camomille*; It. *Camomilla*; Sp. *Manzanilla*; Lat. *Chamomilla*), a well-known plant, whose flowers are used for medicinal purposes. Most of what is brought to the London market is grown about Mitcham, in Surrey. The imports, however, are not inconsiderable; as many as 26,120 lbs. of foreign camomile-flowers having been annually entered for consumption, at an average of the 3 years ending with 1841. The duty is 1*d.* per lb.

CAMPHOR, OR CAMPHIRE (Ger. *Kampfer*; Du. *Kamfer*; Fr. *Camphre*; It. *Canfora*; Sp. *Alcanfor*; Rus. *Kamfora*; Lat. *Camphora*; Arab. and Pers. *Kāfóor*; Mal. *Kaafur*). There are two descriptions of this valuable article, which must not be confounded.

1. *Camphor of Commerce*, or that met with in Europe, is obtained by boiling the timber of a species of laurel (*Laurus Camphora*), a tree found in the forests of Fokien, in China, near the city of Chinchew, and in certain localities in Japan. Most of the camphor imported into Europe comes from China; but a small quantity, considered of superior quality, comes from Japan by way of Batavia. The exports from Canton may be estimated at about 3,000 piculs, or 400,000 lbs.; and if to this we add the exports from Batavia of Japan camphor, amounting to about 500 piculs, the total annual exports will be about 466,000 lbs. It is brought to this country in chests, drums, and casks; and is in small, granular, friable masses, of a dirty white or greyish colour, very much resembling half-refined sugar. When pure, the camphor of commerce has a strong, peculiar, fragrant, penetrating odour, and a bitter, pungent, aromatic taste. It is in reality a concrete essential oil. Camphor, when refined, is in thin hollow cakes of a beautiful virgin whiteness, and, if exposed to the air, totally evaporates. Great care is therefore requisite in packing camphor, to prevent serious loss.

2. *Camphor, Malay*, commonly called, to distinguish it from the last, camphor of Barus, from the port of Sumatra, where it is mostly shipped. It is a product of the *Dryobalanops Camphora*, a forest tree confined to Sumatra, Borneo, and the Malay peninsula. It is found in concrete masses in the fissures of the wood: there are, however, but very few trees that afford it; and those that do, only in small quantities. This species of camphor is more fragrant and less biting and pungent than that yielded by the laurel, and is in high repute among the Chinese, by whom it is almost wholly consumed. There is an immense disparity in the prices of the two species in China; the finest Chinese camphor being sometimes quoted at 30 dollars per picul, while the Malay camphor is quoted at 30 dollars per catty, making the price of the latter 100 times greater than that of the former! Malay camphor is wholly unknown in Europe as an article of trade. — (*Private information.*)

CAMPHOR OIL (Malay, *Minyak*), a fragrant essential oil, obtained in large quantities by heating the wood of the *Dryobalanops Camphora*. It is nearly as cheap as spirits of turpentine, but is not held in any esteem by the Chinese. It might, perhaps, be profitably imported into England as a substitute for spirits of turpentine in the arts, and for medicinal purposes. We may add, that the timber of the *Dryobalanops Camphora* is not inferior to any produced in the countries where it grows, for the purposes of house and ship building. — (*Private information*, and *Crawfurd's Indian Archipelago*, vol. i. p. 516.)

CAMWOOD, a red dyewood, first brought to Europe from Africa by the Portuguese. It is principally obtained from the vicinity of Sierra Leone. The colouring matter which it affords differs but little from that of ordinary Nicaragua wood, either in quality or quantity; and it may be employed with similar mordants. — (*Bancroft on Colours.* See also *Dampier*, vol. ii. part ii. p. 58.) Camwood was worth, in the London market, in January 1843, from 17*l.* to 20*l.* a ton, duty (2*s.* a ton) included. The imports in 1840 and 1841 amounted respectively to 787 and 956 tons. — (*Parl. Paper* No. 551, p. 496. Sess. 1842.)

CANAL, CANALS. A canal is an artificial channel, filled with water kept at the desired level by means of locks or sluices, forming a communication between two or more places.

(1.) *Historical Sketch of Canals. Ancient Canals.* — The comparative cheapness and facility with which goods may be conveyed by sea, or by means of navigable rivers, seem to have suggested, at a very early period, the formation of canals. The best authenticated accounts of ancient Egypt represent that country as intersected by canals conveying the waters of the Nile to the more distant parts of the country, partly for the purpose of irrigation, and partly for that of internal navigation. The efforts made by the old Egyptian monarchs, and by the Ptolemies, to construct a canal between the

Red Sea and the Nile, are well known; and evince the high sense which they entertained of the importance of this species of communication. — (*Ameilhon, Commerce des Egyptiens*, p. 76.)

Greece was too small a territory, too much intersected by arms of the sea, and subdivided into too many independent states, to afford much scope for inland navigation. Attempts were, however, made to cut a canal across the Isthmus of Corinth; but they did not succeed.

The Romans did not distinguish themselves in canal navigation. Their aqueducts, the stupendous ruins of which attest the wealth and power of their founders, were intended to furnish supplies of water to some adjoining city, and not for the conveyance of vessels or produce.

(2.) *Chinese Canals.*—In China, canals, partly for irrigation and partly for navigation, have existed from a very early period. The most celebrated amongst them is the Imperial or Grand Canal, commencing at Hang-tchou, near the mouth of the Tching-tang-chiang river in about lat. 30° 22′ N., long. 119° 45′ E.; it then stretches north, and crossing the great rivers Yang-tse-Kiang and Hoang-ho, terminates at Lin-ting, on the Eu-ho river, in about lat. 37° N., long. 116° E. The direct distance between the extreme limits of the canal is about 512 miles, but, including its bounds, it is above 650 miles in length; and as the Eu-ho, which is a navigable river, unites with the Pei-ho, also navigable, an internal water-communication is thus established between Hang-tchou and Pekin across 10° of lat. But apart from its magnitude and utility, the Grand Canal does not rank high as a work of art. A vast amount of labour has, however, been expended upon it; for though it mostly passes through a flat country, and winds about to preserve its level, its bed is in parts cut down to a great depth, while in other parts it is carried over extensive hollows, and even lakes and morasses, on vast mounds of earth and stone. The sluices, which preserve its waters at the necessary level, are all of very simple construction, being merely intended to elevate or depress the height of the water by a few inches; as, excepting these, there is not a single lock or interruption to the navigation throughout the whole length of the canal. It is seldom more than 5 or 6 feet in depth, and in dry seasons is sometimes considerably less. The vessels by which it is navigated are sometimes rowed, and sometimes dragged by men, so that the navigation is for the most part slow. The canal is frequently faced with stone. The construction of this great work is usually ascribed to the Tartars, but the Chinese allege that it was merely repaired and renovated by the latter, and that it had been completed in the remotest period of their history. — (*Barrow's China*, p. 335, &c.; *La Lande, Canaux de Navigation*, p. 529, &c.)

(3.) *Italian Canals.* — The Italians were the first people in modern Europe that attempted to plan and execute canals. They were principally, however, undertaken for the purpose of irrigation; and the works of this sort executed in the Milanese and other parts of Lombardy, in the eleventh, twelfth, and thirteenth centuries, are still regarded as models, and excite the warm admiration of every one capable of appreciating them. In 1271, the Navilio Grande, or canal leading from Milan to Abbiate Grasso and the Tesino, was rendered navigable. — (*Young's Travels in France, &c.* vol. ii. p. 170.)

(4.) *Dutch Canals.* — No country in Europe contains, in proportion to its size, so many navigable canals as the kingdom of the Netherlands, and particularly the province of Holland. The construction of these canals commenced as early as the twelfth century, when, owing to its central and convenient situation, Flanders began to be the *entrepôt* of the commerce between the north and south of Europe. Their number has since been astonishingly increased. "Holland," says Mr. Phillips, in his *History of Inland Navigation*, "is intersected with innumerable canals. They may be compared in number and size to our public roads and highways; and as the latter with us are continually full of coaches, chaises, waggons, carts, and horsemen going from and to the different cities, towns, and villages; so, on the former, the Hollanders in their boats and pleasure barges, their treckschuyts, and vessels of burden, are continually journeying and conveying commodities for consumption or exportation from the interior of the country to the great cities and rivers. An inhabitant of Rotterdam may, by means of these canals, breakfast at Delft or the Hague, dine at Leyden, and sup at Amsterdam, or return home again before night. By them, also, a most prodigious inland trade is carried on between Holland and every part of France, Flanders, and Germany. When the canals are frozen over, they travel on them with skaits, and perform long journeys in a very short time; while heavy burdens are conveyed in carts and sledges, which are then as much used on the canals as on our streets.

"The yearly profits produced by these canals are almost beyond belief; but it is certain, and has been proved, that they amount to more than 250,000*l.* for about 400 miles of inland navigation, which is 625*l.* per mile, the square surface of which mile does not exceed two acres of ground; a profit so amazing, that it is no wonder other nations should imitate what has been found so advantageous.

"The canals of Holland are generally 60 feet wide and 6 deep, and are carefully kept clean; the mud, as manure, is very profitable. The canals are generally levels; of course, locks are not wanted. From Rotterdam to Delft, the Hague, and Leyden, the canal is quite level, but is sometimes affected by strong winds. For the most part, the canals are elevated above the fields or the country, to enable them to carry off the water, which in winter inundates the land. To drain the water from Delftland, a province not more than 60 miles long, they employ 200 windmills in spring-time to raise it into the canals. All the canals of Holland are bordered with dams or banks of immense thickness, and on these depends the security of the country from inundation; of course it is of great moment to keep them in the best repair; to effect which there is a kind of militia, and in every village is a magazine of proper stores and men, whose business it is to convey stones and rubbish in carts to any damaged place. When a certain bell rings, or the waters are at a fixed height, every man repairs to his post. To every house or family there is assigned a certain part of the bank, in the repair of which they are to assist. When a breach is apprehended, they cover the banks all over with cloth and stones."

(5.) *Canal from Amsterdam to Niewdiep, near the Helder.* — The object of this canal, which is the greatest work of its kind in Holland, and probably in the world, is to afford a safe and easy passage for large vessels from Amsterdam to the German Ocean. This city has 40 feet of water in the road in front of its port, but the pampus or bar at the junction of the Y with the Zuyder Zee, 7 miles below, has only a depth of 10 feet; and hence all ships of any considerable burden entering or leaving the port must unload and load part of their cargoes without the bar. As the Zuyder Zee is everywhere full of shallows, all ordinary means of improving the access to Amsterdam were necessarily ineffectual; and the resolution was, therefore, at length adopted, of cutting a canal from the city to the Helder, the most northern point of the province of Holland. The distance between these extreme points is 41 English miles, but the length of the canal is about 50½. The breadth at the surface of the water is 124⅓ English feet (120 Rhinland feet); the breadth at bottom 36; the depth 20 feet 9 inches. Like the Dutch canals generally, its level is that of the highest tides, and it receives its supply of water from the sea. The only locks it requires are, of course, two tide-locks at the extremities; but there are, besides, two sluices, with floodgates in the intermediate space. It is crossed by about 18 drawbridges. The locks and sluices are double, — that is, there are two in the breadth of the canal; and their construction and workmanship are said to be excellent. They are built of brick, for economy; but bands of limestone are interposed at intervals, and these project about an inch beyond the brick, to protect it from abrasion by the sides of vessels. There is a broad towing-path on each side, and the canal is wide enough to admit of two frigates passing. — (For the expense of towing, see AMSTERDAM.)

The line which the canal follows may be easily traced on a map of Holland. From the Y at Amsterdam it proceeds north to Purmerend; thence west to Alkmaar Lake; again north by Alkmaar to a point within 2 miles of the coast, near Petten; whence it runs nearly parallel to the coast till it joins the sea a little to the east of the Helder, at the fine harbour of Niewdiep, formed within the least 30 years. At the latter place there is a powerful steam-engine for supplying the canal with water during neap-tides, and other purposes. The time spent in towing vessels from Niewdiep to Amsterdam is 18 hours. The Helder is the only spot on the shores of Holland that has deep water; and it owes this advantage to its being opposite to the Texel, which, by contracting the communication between the German Ocean and the Zuyder Zee to a breadth of about a mile, produces a current which scours and deepens the channel. Immediately opposite the Helder there are 100 feet water at high tides, and at the shallowest part of the bar to the westward there are 27 feet. In the same way, the artificial mound which runs into the Y opposite Amsterdam, by contracting the water-way to about 1000 feet, keeps a depth of 40 feet in the port (at high water), while above and below there is only 10 or 12.

The canal was begun in 1819, and finished in 1825. The cost was estimated at 10,000,000 or 12,000,000 florins, or about 1,000,000*l.* sterling. If we compute the magnitude of this canal by the cubic contents of its bed, it is the greatest, we believe, in the world, unless some of the Chinese canals be exceptions. The volume of water which it contains, or the *prisme de remplissage*, is twice as great as that of the New York Canal, or the Canal of Languedoc, and two and a half times as great as that of the artificial part of the Caledonian canal. In consequence, however, of the facility with which the Dutch canal was dug, and of the evenness of the ground through which it passes, the difficulties with which the engineer had to contend in making it were trifling compared to those which had to be overcome in constructing the canals now mentioned. We have not learned what returns this canal yields; most probably it is not, at least in a direct point of view, a profitable concern. Even in Holland, notwithstanding the

lowness of interest, it would require tolls to the amount of 40,000*l.* a year to cover interest and expenses; and so large a sum can hardly, we should think, be raised by the very moderate tolls laid on the ships passing through it. — (See AMSTERDAM.) This, however, is not the only consideration to be attended to in estimating the value of a work of this sort. Its influence in promoting the trade of Amsterdam, and, indeed, of Holland, may far more than compensate for its cost. It is evident, too, that the imposition of oppressive tolls would have effectually counteracted this advantage; that is, they would have defeated the very object for which the canal was constructed. — (We have derived these details, partly from an able article in the *Scotsman*, and partly from *private information.*)

(6.) *Danish Canals.* — The Holstein Canal, in Denmark, is of very considerable importance. It joins the river Eyder with Kiel Bay on the north-east coast of Holstein, forming a navigable communication between the North Sea, a little to the north of Heligoland, and the Baltic; enabling vessels to pass from the one to the other by a short cut of about 100 miles, instead of the lengthened and difficult voyage round Jutland, and through the Cattegat and the Sound. The Eyder is navigable for vessels not drawing more than 9 feet water, from Tonningen, near its mouth, to Rendsburg, where it is joined by the canal, which communicates with the Baltic at Holtenau, about 3 miles north of Kiel. The canal is about 26 English miles in length, including about 6 miles of what is principally river navigation. The excavated portion is 95 feet wide at top, 51 feet 6 inches at bottom, and 9 feet 6 inches deep (Eng. measure). Its highest elevation above the level of the sea is 24 feet 4 inches; to which height vessels are raised and let down by 6 locks or sluices. It is navigable by vessels of 120 tons burden, or more, provided they are constructed in that view. The total cost of the canal was about 500,000*l.* It was opened in 1785, and has so far realised the views of its projectors, as to enable coasting vessels from the Danish islands in the Baltic and the east coast of Holstein, Jutland, &c., to proceed to Hamburgh, Holland, England, &c. in less time, and with much less risk, than, in the ordinary course of navigation, they could have cleared the point of the Skaw; and conversely with ships from the west. The smaller class of foreign vessels, particularly those under the Dutch and Hanseatic flags, navigating the Baltic and North Seas, have largely availed themselves of the facilities afforded by this canal. About 3000 vessels pass annually through the canal. This is a sufficient evidence of its utility. It would, however, be much more frequented, were it not for the difficult navigation of the Eyder from the sea to Rendsburg. The dues are moderate. — (*Coxe's Travels in the North of Europe*, 5th ed. vol. v. p. 239., where there is a plan of the canal; *Catteau, Tableau des E'tats Danois*, tom. ii. pp. 300 —304.; and *private information.*)

(7.) *Swedish Canals.* — The formation of an internal navigation connecting the Cattegat and the Baltic has long engaged the attention, and occupied the efforts, of the people and government of Sweden. Various motives conspired to make them embark in this arduous undertaking. The Sound and other channels to the Baltic being commanded by the Danes, they were able, when at war with the Swedes, greatly to annoy the latter, by cutting off all communication by sea between the eastern and western provinces of the kingdom. And hence, in the view, partly of obviating this annoyance and partly of facilitating the conveyance of iron, timber, and other bulky products, from the interior to the coast, it was determined to attempt forming an internal navigation, by means of the river Gotha, and the lakes Wener, Wetter, &c., from Gottenburgh to Soderkœping on the Baltic. The first and most difficult part of this enterprise was the perfecting of the communication from Gottenburgh to the lake Wener. The Gotha, which flows from the latter to the former, is navigable, through by far the greater part of its course, for vessels of considerable burden; but, besides others less difficult to overcome, the navigation at the point called Tröllhætta is interrupted by a series of cataracts about 112 feet in height. Owing to the rapidity of the river, and the stubborn red granite rocks over which it flows, and by perpendicular banks of which it is bounded, the attempt to cut a lateral canal, and still more to render it directly navigable, presented the most formidable obstacles. But, undismayed by these, on which it is, indeed, most probable he had not sufficiently reflected, Polhem, a native engineer, undertook, about the middle of last century, the Herculean task of constructing locks in the channel of the river, and rendering it navigable! Whether, however, it were owing to the all but insuperable obstacles opposed to such a plan, to the defective execution, or deficient strength of the works, they were wholly swept away, after being considerably advanced, and after vast sums had been expended upon them. From this period, down to 1793, the undertaking was abandoned; but in that year the plan was proposed, which should have been adopted at first, of cutting a lateral canal through the solid rock, about 1¼ mile from the river. This new enterprise was begun under the auspices of a company incorporated for the purpose in 1794, and was successfully completed in 1800. The

canal is about 9 miles in length, and has about 6½ feet water.* It has 8 sluices, and admits vessels of above 100 tons. In one part it is cut through the solid rock to the depth of 72 feet. The expense was a good deal less than might have been expected, being only about 80,000*l.* The Lake Wener, the navigation of which was thus opened with Gottenburgh, is very large, deep, and encircled by some of the richest of the Swedish provinces, which now possess the inestimable advantage of a convenient and ready outlet for their products.

As soon as the Tröllhætta canal had been completed, there could be no room for doubt as to the practicability of extending the navigation to Soderkœping. In furtherance of this object, the lake Wener was joined to the lake Wetter by the Gotha Canal, which admits vessels of the same size as that of Tröllhætta; and the prolongation of the navigation to the Baltic from the Wetter, partly by 2 canals of equal magnitude with the above, and partly by lakes, has since been completed. The entire undertaking is called the Gotha Navigation, and deservedly ranks among the very first of the kind in Europe.

Besides the above, the canal of Arboga unites the lake Hielmar to the lake Maelar; and, since 1819, a canal has been constructed from the latter to the Baltic at Södertelge. The canal of Strœmsholm, so called from its passing near the castle of that name, has effected a navigable communication between the province of Dalecarlia and the lake Maelar, &c.—(For further details, see, besides the authorities already referred to, *Coxe's Travels in the North of Europe*, 5th ed. vol. iv. pp. 253—266., and vol. v. pp. 58—66.; *Thomson's Travels in Sweden*, p. 35, &c.)

(8.) *French Canals.*—The first canal executed in France was that of Briare, 34½ English miles in length, intended to form a communication between the Seine and Loire. It was commenced in 1605, in the reign of Henry IV., and was completed in 1642, under his successor, Louis XIII. The canal of Orleans, which joins the above, was commenced in 1675. But the most stupendous undertaking of this sort that has been executed in France, or indeed on the Continent, is the canal of Languedoc. It was projected under Francis I.; but was begun and completed in the reign of Louis XIV. It reaches from Narbonne to Toulouse; and was intended to form a safe and speedy means of communication between the Atlantic Ocean and the Mediterranean. It is 64 French leagues in length, and 6 feet deep; and has, in all, 114 locks and sluices. In its highest part it is 600 feet above the level of the sea. In some places it is conveyed, by bridges of great length and strength, over large rivers. It cost upwards of 1,300,000*l.*; and reflects infinite credit on the engineer, Riquet, by whom it was planned and executed.

Besides this great work, France possesses several magnificent canals, such as that of The Centre, connecting the Loire with the Saone; of St. Quentin, joining the Scheldt and the Somme; of Besançon, joining the Saone, and consequently the Rhone, to the Rhine; of Burgundy, joining the Rhone to the Seine, &c. Some of these are of very considerable magnitude. The canal of the Centre is about 72 English miles in length. It was completed in 1791, at an expense of about 11,000,000 francs. Its summit level is about 240 feet above the level of the Loire at Digoin; the breadth at the water's edge is about 48 feet, and at bottom 30 feet; depth of water 5¼ feet; number of locks 81. The canal of St. Quentin, 28 English miles in length, was completed in 1810. The canal joining the Rhone to the Rhine is the most extensive of any. It stretches from the Saone, a little above St. Jean de Losne, by Dole, Besançon, and Mulhouse, to Strasburg, where it joins the Rhine,—a distance of about 200 English miles. From Dole to Vogeaucourt, near Montbéliard, the canal is principally excavated in the bed of the Doubs. It is not quite finished. The canal of Burgundy will, when completed, be about 242 kilom., or 150 English miles, in length; but at present it is only navigable to the distance of about 95 kilom. In addition to these, a great many other canals have been finished, while several are in progress, and others projected. There is an excellent account of the French canals, in the *Histoire de la Navigation Intérieure de la France*, by M. Dutens, in 2 vols. 4to, and to it we beg to refer the reader for further details. He will find, at the end of the second volume, a very beautiful map of the rivers and canals of France.

The railroads now in the course of being constructed in France have, however, checked the progress of canals. We may observe, too, that the state of the law in France is very unfavourable to the undertaking and success of all great public works; and we are inclined to attribute the comparative fewness of canals in France, and the recent period at which most of them have been constructed, to its influence. In that country, canals, docks, and such like works, are mostly carried on at the expense and for behoof of government, under the control of its agents. No scope has been given to the enterprise of individuals or associations. Before either a road or a canal

* This is the statement of Catteau, *Tableau de la Mer Baltique*, tome ii. p. 77.; Oddy, in his *European Commerce*, p. 306., and Balbi, *Abrégé de la Géographie*, p. 385., say that the depth of water is 10 feet.

can be constructed, plans and estimates must be made out and laid before the minister of the Interior, by whom they are referred to the prefect of the department, and then to the *Bureau des Ponts et des Chaussés;* and supposing the project to be approved by these, and the other functionaries consulted with respect to it, the work must after all be carried on under the superintendence of some public officer. In consequence of this preposterous system, very few works of this description have been undertaken as private speculations. And while not a few of those begun by government remain unfinished and comparatively useless, those that are completed have, as was to be expected, rarely proved profitable. There are some good remarks on this subject in the useful work of M. Dupin, on the *Forces Commerciales* of Great Britain.

(9.) *Prussian Canals.* — The Prussian states are traversed by the great navigable rivers the Elbe, the Oder, and the Vistula; the first having its embouchure in the North Sea, and the others in the Baltic. The formation of an internal navigation, that should join these great *water-ways*, excited the attention of government at a distant period; and this object has been successfully accomplished, partly by the aid of the secondary rivers falling into the above, and partly by canals. In 1662, the canal of Muhlrose was undertaken, uniting the Oder and the Spree; the latter being a navigable river falling into the Havel, also a navigable river joining the Elbe near Havelburg. But the navigation from the Oder to the Elbe by this channel was difficult and liable to frequent interruption; and to obviate these defects, Frederick the Great constructed, towards the middle of last century, the Finnow Canal, stretching from the Oder at Oderburg, to the Hâvel, near Liebenwalde; the communication is thence continued by the latter and a chain of lakes to Plauen; from which point a canal has been opened, joining the Elbe near Magdeburg. The Elbe being in this way connected with the Oder by a comparatively easy navigation, the latter has been united to the Vistula, partly by the river Netze, and partly by a canal joining that river to the Brahe, which falls into the Vistula near Bromberg. A vast inland navigation has thus been completed, barks passing freely through the whole extent of country from Hamburgh to Dantzic; affording the means of shipping the products of the interior, and of importing those of foreign countries, either by the North Sea or the Baltic, as may be found most advantageous. — (*Catteau, Tableau de la Mer Baltique*, tome ii. p. 11—18.)

(10.) *Russian Canals.* — The inland navigation of Russia is of vast extent, and very considerable importance. The reader will find some details with respect to it under the article PETERSBURG.

(11.) *Bavarian Canals.* — A grand canal has been for a lengthened period in progress in Bavaria, and is, we presume, now nearly completed, which promises to be of great public utility. It is to extend from Dietfurth on the Altmühl, a navigable affluent of the Danube, to Bamberg on the Mayn, a distance of 23½ German, or about 112 English miles. It is on a large scale, and will, it is supposed, cost from 800,000*l.* to 1,000,000*l.* This magnificent undertaking, which will carry an inland navigation through the centre of Europe, and realise the project of Charlemagne for uniting the Black Sea with the German Ocean, is conducted by a joint-stock company, with the assistance of the Bavarian government. — (*Geographical Dictionary*, i. 308.)

(12.) *Austrian Canals.* — The Austrian Empire is traversed in its whole extent by the Danube; but the advantages that might result to the foreign trade of the empire from so great a command of river navigation, have been materially abridged by the jealousy of the Turks, who command the embouchure of the river, and by the difficulties that are in some places incident to its navigation. Two pretty extensive canals have been constructed in Hungary. That called the Bega Canal is 73 English miles in length: it stretches from Fascet through the Bannat by Temeswar to Becskerek, whence vessels pass by the Bega into the Theiss, a little above its junction with the Danube. The other Hungarian canal is called after the Emperor Francis. It stretches from the Danube by Zambor to the Theiss, which it joins near Foldvar, being 62 English miles in length; its elevation, where highest, does not exceed 27 feet. Besides the above, the canal of Vienna establishes a communication between that city and Neustadt. It is said to be the intention to continue this canal to Trieste; but however desirable, we doubt much whether this be practicable. A railroad has been made from Munchausen on the Danube to Budweiss on the Moldau, a navigable river that falls into the Elbe, which promises to be a highly useful communication. — (*Bright's Travels in Hungary*, p. 246.; *Balbi, Abrégé de la Géographie*, p. 216.)

(13.) *Spanish Canals.* — Nowhere are canals more necessary, both for the purposes of navigation and irrigation, than in Spain; but the nature of the soil, and the poverty and ignorance of the government as well as of the people, oppose formidable obstacles to their construction. During the reign of Charles II., a company of Dutch contractors offered to render the Mançanares navigable from Madrid to where it falls into the Tagus, and the latter from that point to Lisbon, provided they were allowed to levy a duty for a certain number of years on the goods conveyed by this channel. The

Council of Castile took this proposal into their serious consideration, and after maturely weighing it pronounced the singular decision — "That if it had pleased God that these two rivers should have been navigable, he would not have wanted human assistance to have made them such; but that, as he has not done it, it is plain he did not think it proper that it should be done. To attempt it, therefore, would be to violate the decrees of his providence, and to mend the imperfections which he designedly left in his works!" — (*Clarke's Letters on the Spanish Nation*, p. 284.) But such undertakings are no longer looked upon as sinful; and many have been projected since the accession of the Bourbon dynasty, though few have been perfected. The canal of the Ebro, begun under the Emperor Charles V., is the most important of the Spanish canals; but it is only partially completed, and during dry seasons it suffers from want of water. It runs parallel to the right bank of the Ebro, from Tudela in Navarre to below Saragossa; the intention being to carry it to Sastago, where it is to unite with the Ebro. The canal of Castile is intended to lay open the country between the Douro and Reynosa, and to facilitate the conveyance of grain from the interior to Santander and Bilbao. It passes by Valladolid, Palencia, and Aguilar del Campos; a small part has been executed, and is now in operation. A company has also undertaken, what the Dutch contractors formerly offered, to render the Tagus navigable from Aranjuez to Lisbon; the free navigation of the river having been stipulated at the Congress of Vienna. A project for deepening the Guadalquivir, and some others, are also on foot. — (*Geographical Dictionary*, ii. 710.)

(14.) *British Canals.* — Owing partly to the late rise of extensive manufactures and commerce in Great Britain, but more, perhaps, to the insular situation of the country, no part of which is very distant from the sea, or from a navigable river, no attempt was made, in England, to construct canals till a comparatively recent period. The efforts of those who first began to improve the means of internal navigation, were limited to attempts to deepen the beds of rivers, and to render them better fitted for the conveyance of vessels. So early as 1635, a Mr. Sandys, of Flatbury, Worcestershire, formed a project for rendering the Avon navigable from the Severn, near Tewkesbury, through the counties of Warwick, Worcester, and Gloucester, "that the towns and country might be better supplied with wood, iron, pit-coal, and other commodities." This scheme was approved by the principal nobility and landowners in the adjoining counties: but the civil war having broken out soon after, the project was abandoned, and does not seem to have been revived. After the Restoration, and during the earlier part of last century, various acts were at different times obtained for cheapening and improving river navigation. For the most part, however, these attempts were not very successful. The current of the rivers gradually changed the form of their channels; the dykes and other artificial constructions were apt to be destroyed by inundations; alluvial sand banks were formed below the weirs; in summer, the channels were frequently too dry to admit of being navigated, while at other periods the current was so strong as to render it quite impossible to ascend the river, which at all times, indeed, was a laborious and expensive undertaking. These difficulties in the way of river navigation seem to have suggested the expediency of abandoning the channels of most rivers, and of digging parallel to them artificial channels, in which the water might be kept at the proper level by means of locks. The act passed by the legislature in 1755, for improving the navigation of Sankey Brook on the Mersey, gave rise to a lateral canal of this description, about 11¼ miles in length, which deserves to be mentioned as the earliest effort of the sort in England.

But before this canal had been completed, the celebrated Duke of Bridgewater*, and his equally celebrated engineer, the self-instructed James Brindley, had conceived a plan of canalisation independent altogether of natural channels, and intended to afford the greatest facilities to commerce, by carrying canals across rivers and through mountains, wherever it was practicable to construct them.†

The Duke was proprietor of a large estate at Worsley, 7 miles from Manchester, in which were some very rich coal-mines, that had hitherto been in a great measure useless, owing to the cost of carrying coal to market. Being desirous of turning his mines to some account, it occurred to his Grace that his purpose would be best accomplished by cutting a canal from Worsley to Manchester. Mr. Brindley, having been consulted, declared that the scheme was practicable; and an act having been obtained, the work was immediately commenced. "The principle," says Mr. Phillips, "laid down at the commencement of this business, reflects as much honour on the noble undertaker as

* This truly noble person expended a princely fortune in the prosecution of his great designs; and, to increase his resources, is said to have restricted his own personal expenses to 400*l.* a year! But his projects were productive of great wealth to himself and his successors; and have promoted, in no ordinary degree, the wealth and prosperity of his country. He died in 1823.

† There is a good account of Brindley in *Aikin's Biographical Dictionary*. His intense application, and the anxiety of mind inseparable from the great enterprises in which he was engaged, terminated his valuable life at the early age of 56.

it does upon his engineer. It was resolved that the canal should be perfect in its kind; and that, in order to preserve the level of the water, it should be free from the usual construction of locks. But in accomplishing this end many difficulties were deemed insurmountable. It was necessary that the canal should be carried over rivers, and many large and deep valleys, where it was evident that such stupendous mounds of earth must be raised, as would scarcely, it was thought by numbers, be completed by the labour of ages; and, above all, it was not known from what source so large a supply of water could be drawn, even on this improved plan, as would supply the navigation. But Mr. Brindley, with a strength of mind peculiar to himself, and being possessed of the confidence of his great patron, contrived such admirable machines, and took such methods to facilitate the progress of the work, that the world soon began to wonder how it could be thought so difficult.

"When the canal was completed as far as Barton, where the Irwell is navigable for large vessels, Mr. Brindley proposed to carry it over that river by an aqueduct 39 feet above the surface of the water in the river. This, however, being considered as a wild and extravagant project, he desired, in order to justify his conduct towards his noble employer, that the opinion of another engineer might be taken, believing that he could easily convince an intelligent person of the practicability of the design. A gentleman of eminence was accordingly called, who, being conducted to the place where it was intended that the aqueduct should be made, ridiculed the attempt; and, when the height and dimensions were communicated to him, he exclaimed — 'I have often heard of castles in the air, but never was shown before where any of them were to be erected.' This unfavourable verdict did not deter the Duke from following the opinion of his own engineer. The aqueduct was immediately begun; and it was carried on with such rapidity and success as astonished those who, but a little before, thought it impossible."

Before the canal from Worsley to Manchester had been completed, it occurred to the Duke and his engineer that it might be practicable to extend it by a branch, which, running through Chester parallel to the river Mersey, should at length terminate in that river, below the limits of its artificial navigation; and thus afford a new, safer, and cheaper means of communication between Manchester and its vicinity and Liverpool. The execution of this plan was authorised by an act passed in 1761. This canal, which is above 29 miles in length, was finished in about 5 years. It was constructed in the best manner, and has proved equally advantageous to its noble proprietor and the public.

"When the Duke of Bridgewater," says Dr. Aikin, "undertook this great design, the price of carriage on the river navigation was 12*s.* the ton from Manchester to Liverpool, while that of land carriage was 40*s.* the ton. The Duke's charge on his canal was limited by statute to 6 shillings; and together with this vast superiority in cheapness, it had all the speed and regularity of land carriage. The articles conveyed by it were, likewise, much more numerous than those by the river navigation; besides manufactured goods and their raw materials, coals from the Duke's own pits were deposited in yards at various parts of the canal, for the supply of Cheshire; lime, manure, and building materials were carried from place to place; and the markets of Manchester obtained a supply of provisions from districts too remote for the ordinary land conveyances. A branch of useful and profitable carriage, hitherto scarcely known in England, was also undertaken, which was that of passengers. Boats, on the model of the Dutch treckschuyts, but more agreeable and capacious, were set up, which, at very reasonable rates and with great convenience, carried numbers of persons daily to and from Manchester along the line of the canal." — (*Aikin's Description of the Country round Manchester*, p. 116.)

The success that attended the Duke of Bridgewater's canals stimulated public-spirited individuals in other districts to undertake similar works. Mr. Brindley had early formed the magnificent scheme of joining the great ports of London, Liverpool, Bristol, and Hull, by a system of internal navigation: and though he died in 1772, at the early age of 56, he had the satisfaction to see his grand project in a fair way of being realised. The Trent and Mersey, or as it has been more commonly termed, the Grand Trunk Canal, 96 miles in length, was begun in 1766 and completed in 1777. It stretches from near Runcorn on the Mersey, where it communicates with the Duke of Bridgewater's Canal, to Newcastle-under-Line; thence southwards to near Titchfield; and then north-westerly, till it joins the Trent at Wilden Ferry, at the north-western extremity of Leicestershire. A water communication between Hull and Liverpool was thus completed; and by means of the Staffordshire and Worcestershire Canal, which joins the Grand Trunk near Haywood in the former, and the Severn near Stourport in the latter, the same means of communication was extended to Bristol. During the time that the Grand Trunk Canal was being made, a canal was undertaken from Liverpool to Leeds, 130 miles in length; another from Birmingham to the Staffordshire and Worcestershire

Canal, joining it near Wolverhampton ; and one from Birmingham to Fazeley and thence to Coventry. By canals subsequently undertaken, a communication was formed between the Grand Trunk Canal and Oxford, and consequently with London, completing Brindley's magnificent scheme. In 1792, the Grand Junction Canal was begun, which runs in a pretty straight line from Brentford, on the Thames, a little above the metropolis, to Braunston in Northamptonshire, where it unites with the Oxford and other central canals. It is about 90 miles in length. There is also a direct water communication, by means of the river Lea navigation, the Cambridge Junction Canal, &c., between London and the Wash. In addition to these, an immense number of other canals, some of them of very great magnitude and importance, have been constructed in different parts of the country ; so that a command of internal navigation has been obtained, unparalleled in any European country, with the exception of Holland.

In Scotland, the great canal to join the Forth and Clyde was begun in 1768, but it was suspended in 1777, and was not resumed till after the close of the American war. It was finally completed in 1790. Its total length, including the collateral cuts to Glasgow and the Monkland Canal, is 38¾ miles. Where highest it is 150 feet above the level of the sea. It is on a larger scale than any of the English canals. Its medium width at the surface is 56, and at the bottom 27 feet. Originally it was about 8 feet 6 inches deep ; but recently its banks have been raised, so that the depth of water is now about 10 feet. It has, in all, 39 locks. In completing this canal, many serious difficulties had to be encountered. These, however, were all successfully overcome ; and though unprofitable for a while, it has for many years past yielded a handsome return to its proprietors, the dividend having latterly been about 28 per cent. on the original stock. Swift boats on the plan of those subsequently described were established on this canal in 1832. — (See *Cleland's Statistics of Glasgow*, p. 170, &c.)

The Union Canal joins the Forth and Clyde Canal near Falkirk, and stretches thence to Edinburgh, being 31½ miles in length. It is 40 feet wide at the top, 20 at bottom, and 5 deep. It was completed in 1822 ; but has been, in all respects, a most unprofitable undertaking. Hitherto the proprietors have not received any dividend ; and their prospects, we understand, are little, if anything, improved.

A canal intended to form a communication between Glasgow, Paisley, and Ardrossan, was commenced in 1807 ; but only that portion connecting Glasgow with Paisley and the village of Johnstoun has hitherto been finished. This part is about 12 miles long ; the canal being 30 feet broad at top, 18 at bottom, and 4½ deep. It was here that the important experiments were originally made on quick travelling by canals, which demonstrated that it was practicable to impel a properly constructed boat, carrying passengers and goods, along a canal at the rate of 9 or 10 miles an hour, without injury to the banks ! — (See *post.*)

The Crinan Canal, across the peninsula of Kintyre, is 9 miles in length, and 12 feet in depth, admitting vessels of 160 tons burden.

The Caledonian Canal is the greatest undertaking of the sort attempted in the empire. It stretches S. W. and N. E. across the island from a point near Inverness to another near Fort William. It is chiefly formed by Loch Ness, Loch Oich, and Loch Lochy. The total length of the canal, including the lakes, is 60½ miles ; but the excavated part is only about 23 miles. At the summit it is 96½ feet above the level of the Western Ocean. It is mostly constructed upon a very grand scale, being intended to be 20 feet deep, 50 feet wide at bottom, and 122 at top ; the locks are 20 feet deep, 172 long, and 40 broad ; and had it been wholly executed as was originally intended, frigates of 32 guns and merchant ships of 1,000 tons burden might have passed through it. It was opened in 1822, being executed entirely at the expense of government, from the designs and under the superintendence of Thomas Telford, Esq. The entire cost amounted, exclusive of interest, on the 1st of May, 1841, to 1,035,460*l.* 10*s.* 0¾*d.* It would appear, however, to have been projected without due consideration, and promises to be a most unprofitable speculation. The revenue of the canal amounted in 1841-42 to only 2,723*l.* 7*s.*, being considerably under the ordinary expenditure incurred in keeping it open ! But this is not all. Owing to a wish to lessen the expense and to hasten the opening of the canal, parts of it were not excavated to their proper depth, while others were executed in a hurried and insufficient manner. Hence the canal does not really admit vessels of above 250 or 300 tons burden ; and owing to the want of steam tugs on the lakes, these are frequently delayed in making their passage across for a lengthened period. During 1837 and 1838, the works sustained considerable damage ; and it has been gravely debated whether it would not be better entirely to break up and abandon the canal !

There is naturally, however, an extreme disinclination to destroy a work, which, how inexpedient soever originally, has been executed at an enormous expense ; and various schemes have been suggested for relieving the public from the expense of keeping it up without involving its destruction. Among others it has been proposed

to assign it to a joint stock company, on their agreeing to complete the works and keep them in repair; and an act authorising such transfer was passed in 1840. But hitherto it has not been found possible to dispose of the canal in this way; and parliament has since voted 75,000*l.* for the partial repair of the works; but it is believed that it will require fully three or four times that sum to complete the canal according to the original plan, and to furnish it with the necessary steam tugs.

Some other canals have been projected and completed in different parts of Scotland. Of these the Monkland Canal, for the supply of Glasgow with coal, has been the most successful.

The following extract from the Trade List for the 27th of June, 1843, gives an account of the number of shares in the principal British canals, the cost or sum actually expended upon each share, the dividend payable upon it, with its selling price at the above-mentioned date, and the periods when the dividends are payable.

Canals.	Number of Shares.	Amount of Shares.	Average Cost per Share.	Dividend per Share per Annum.	Price per Share.	Dividend payable.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Ashby-de-la-Zouch	1,482	100 0 0	113 0 0	4 0 0	71 10 0	April, Oct.
Ashton and Oldham	1,766	100 0 0	113 0 0	6 0 0	75 10 0	April, Oct.
Barnsley	720	160 0 0	- -	13 0 0	259 0 0	Feb., August.
Basingstoke	1,260	100 0 0	- -	- -	5 10 0	
Ditto bonds	-	ditto	- -	- -	- -	April.
Birmingham, 1-16th shares	8,000	8 15 0	71 0 0	9 0 0	190 0 0	April, Oct.
Birmingham and Liverpool Junction	4,000	100 0 0	100*l.* pd.	- -	20 0 0	
Bolton and Bury	477	250 0 0	- -	6 0 0	105 0 0	January.
Brecknock and Abergavenny	1,005	150 0 0	- -	5 10 0	83 0 0	Jan., July.
Bridgewater and Taunton	600	100 0 0	100*l.* pd.	- -	60 0 0	
Calder and Hebble	-	- -	- -	18 0 0	250 0 0	Jan., July.
Chelmer and Blackwater	400	100 0 0	- -	5 0 0	105 0 0	January.
Chesterfield	1,500	ditto	- -	8 0 0	170 0 0	
Coventry	500	ditto	- -	22 0 0	320 0 0	May, Nov.
Crinan	1,851	50 0 0	- -	- -	2 0 0	
Cromford	460	100 0 0	- -	24 0 0	325 0 0	Jan., July.
Danube and Mayn	20,000	41 13 4	41 13 4	4 per cent.	30 1 0	
Derby	600*l.*	100 0 0	110 0 0	8 0 0	119 0 0	Jan., July.
Dudley	2,060	ditto	- -	5 0 0	93 0 0	March, Sept.
Edinburgh and Glasgow	-	ditto	- -	- -	97 0 0	
Ellesmere and Chester	3,575½	33 0 0	133 0 0	4 per cent.	63 10 0	September.
Erewash	231	100 0 0	- -	40 0 0	675 0 0	May, Nov.
Forth and Clyde	1,297	ditto	400 10 0	25 0 0	610 0 0	June, Dec.
Glamorganshire	600	ditto	172 13 4	13 12 8	210 0 0	{ March, June / Sept., Dec.
Gloucester and Berkley (old shares)	11,87	ditto	- -	- -	8 17 6	
Ditto (new) of 10 per cent.	899	- -	- -	- -	45 0 0	
Grand Junction	11,455	100 0 0	224 10 0	7 0 0	141 0 0	Jan., July.
Grand Surrey	24,000	ditto	- -	- -	18 10 0	April, Oct.
Ditto Loan	140,000*l.*	- -	- -	4 0 0	69 10 0	Jan., July.
Grand Union	2,849¼	160 0 0	- -	1 10 0	26 0 0	1st October.
Grand Western	3,096	ditto	100*l.* pd.	- -	10 0 0	
Grantham	749	150 0 0	150 0 0	12 0 0	215 0 0	May.
Hereford and Gloucester	-	100 0 0	- -	- -	14 10 0	
Huddersfield	6,238	ditto	57 6 6	- -	11 10 0	
Ivel and Ouse Beds	148	ditto	100 0 0	- -	- -	Jan., July.
Kennet and Avon	25,328	ditto	39 18 10	0 15 0	12 0 0	March, Sept.
Kensington	150	ditto	100*l.* pd.	- -	0 0 0	
Lancaster	11,699½	ditto	47 6 8	1 10 0	26 0 0	April.
Leeds and Liverpool	2,879¾	ditto	- -	34 0 0	650 0 0	May, Nov.
Leicester	540	- -	140 0 0	11 0 0	144 0 0	Jan., July.
Ditto and Northampton	1,897	100 0 0	83 10 0	5 10 0	72 0 0	Jan., July.
Loughborough	70	- -	142 17 0	80 0 0	1400 0 0	Jan., July.
Macclesfield	1,665	100 0 0	100*l.* pd.	1 10 0	17 0 0	
Melton Mowbray	250	ditto	- -	10 0 0	- -	July.
Mersey and Irwell	500	ditto	- -	20 0 0	385 0 0	November.
Monkland	101	ditto	- -	- -	90 0 0	
Monmouthshire	2,409	ditto	100 0 0	10 0 0	185 0 0	Jan., July.
Montgomeryshire	711	ditto	- -	5 0 0	110 0 0	March, Aug.
North Walsham and Dillon	600	50 0 0	50*l.* pd.	- -	2 0 0	January.
Neath	247	- -	107 10 0	17 0 0	325 0 0	August, Feb.
Nottingham	500	150 0 0	- -	12 0 0	262 0 0	April, Oct.
Oakham	522	130 0 0	- -	- -	38 0 0	May.
Oxford	1,786	100 0 0	- -	30 0 0	538 0 0	March, Sept.
Peak Forest	2,400	ditto	48 0 0	1 0 0	42 0 0	June, Dec.
Portsmouth and Arundel	2,520	50 0 0	50 0 0	- -	5 0 0	
Regent's	21,418	100 0 0	33 16 8	- -	19 15 0	July.
Rochdale	5,669	ditto	85 0 0	- -	53 10 0	May.
Shrewsbury	500	125 0 0	- -	9 0 0	280 0 0	May, Nov.
Shropshire	500	ditto	- -	8 0 0	120 0 0	June, Dec.
Somerset Coal	800	50 0 0	- -	9 10 0	151 0 0	Jan., July.
Ditto Lock Fund	45,000	12 10 0	- -	5 per cent.	11 10 0	June, Dec.
Stafford and Worcester	600	140 0 0	140 0 0	28 0 0	600 0 0	Feb., Aug.
Stourbridge	300	145 0 0	- -	18 0 0	375 0 0	Jan., July.
Stratford-on-Avon	3,647	- -	79 9 8	2 0 0	31 10 0	August.
Stroudwater	200	150 0 0	- -	24 0 0	490 0 0	May, Nov.
Swansea	513	100 0 0	180 0 0	15 0 0	245 0 0	November.
Tavistock	360	ditto	- -	2 0 0	105 0 0	

Canals.	Number of Shares.	Amount of Shares.	Average Cost per Share.	Dividend per Share per Annum.	Price per Share.	Dividend payable.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Thames and Medway -	4,805	ditto	30 4 3	- -	1 0 0	
Ditto, New -	3,344	3 10 0	2l. 15s. pd.			
Thames and Severn, New -	1,150	- -	- -	2 18 0	36 0 0	June.
Ditto, Original -	1,300	- -	- -	2 18 0	32 0 0	June.
Trent and Mersey (½) -	2,600	50 0 0	- -	32 10 0	485 0 0	Jan., July.
Warwick and { Shares -	1,000	100 0 0 }	- -	10 0 0	167 0 0	May, Nov.
Birmingham { Half-shares -	1,000	50 0 0 }				
Warwick and Napton -	980	100 0 0	- -	10 0 0	123 0 0	May, Nov.
Wey and Arun - -	905	110 0 0	110 0 0	- - -	17 10 0	May.
Wilts and Berks - -	5,000	- -	- -	1 4 0	14 0 0	June.
Wisbeach - - -	126	105 0 0	105 0 0	- -	40 0 0	February.
Worcester and Birmingham -	6,000	- -	- -	4 0 0	53 0 0	Feb., August.
Wyrley and Essington -	800	125 0 0	- -	6 0 0	173 0 0	December.

(15.) *Irish Canals.* — Various canals have been undertaken in Ireland, of which the Grand Canal and the Royal Canal are the principal. The Grand Canal was begun in 1765, by a body of subscribers; but they could not have completed the work without very large advances from government. The canal commences at Dublin, and stretches in a westerly direction, inclining a little to the south, to the Shannon, with which it unites near Banagher, a distance of 85 statute miles, and thence on the west side of the river to Ballinasloe, 14 miles. But, exclusive of the main trunk, there is a branch to Athy, where it joins the Barrow, a distance of about 27 miles; and there are branches to Portarlington, Mount Mellick, and some other places. There is also a westerly branch, recently constructed, from the Shannon to Ballinasloe, about 14 miles in length. The total length of the canal, with its various branches, is about 164 Eng. miles. Its summit elevation is 200 feet above the level of the sea at Dublin. It is 40 feet wide at the surface, from 24 to 20 feet at bottom, has 6 feet water, and cost, in all, above 2,000,000*l.* The tonnage and tolls on this canal for the eight years ending with 1837, were —

	Tonnage.	Toll.		Tonnage.	Toll.
In 1830 -	224,749	£33,464	In 1834 -	225,473	£38,123
1831 -	237,810	36,753	1835 -	215,398	36,030
1832 -	216,418	34,553	1836 -	226,770	38,953
1833 -	226,738	38,054	1837 -	215,910	37,557

Two capital errors seem to have been committed in the formation of this canal, — it was framed on too large a scale, and was carried too far north. Had it been 4 or 4½ instead of 6 feet deep, its utility would have been but little impaired, while its expense would have been very materially diminished. But the great error was in its direction. Instead of joining the Shannon about 15 miles above Lough Derg, it should have joined it below Limerick. By this means, barges and other vessels passing from Dublin to Limerick, and conversely, would have avoided the difficult and dangerous navigation of the Upper Shannon; the canal would have passed through a comparatively fertile country; and it would not have been necessary to carry it across the bog of Allen, in which, says Mr. Wakefield, "the company have buried more money than would have cut a spacious canal from Dublin to Limerick." — (*Account of Ireland*, vol. i. p. 642.)

The Royal Canal was undertaken in 1789. It stretches westward from Dublin to the Shannon, which it joins near Tormanbury. Its entire length is about 92 miles exclusive of a branch of 5 miles from Kilashee to Longford; its highest elevation is 307 feet above the level of the sea. At bottom it is 24 feet wide, having 6 feet depth of water. It had cost, exclusive of interest on stock, loans, &c. advanced by government, in February, 1823, 1,421,954*l.* The tolls produced in 1836, 25,148*l.*, the expenses of the canal for the same year being 11,912*l.*, leaving only 13,236*l.* for the nett revenue of a work which must have cost, interest included, 3,000,000*l.* — (*Second Report on Railways in Ireland*, p. 12.)

This canal seems to have been planned in the most injudicious manner. It has the same defect as the Grand Canal, of being extravagantly large; and throughout its whole course it is nearly parallel to, and not very distant from, the latter. There are consequently two immense canals, where there ought, perhaps, to be none. At all events, it is abundantly certain that one canal of comparatively moderate dimensions would have been quite enough for all the business of the district, though it were much greater than it is at this moment, or than it is ever likely to become.

Besides the above, there are some other canals, as well as various river excavations, in Ireland; but hardly one of them yields a reasonable return for the capital expended upon it. They have almost all been liberally assisted by grants of public money; and their history, and that of the two great canals now adverted to, strikingly corroborates the caustic remark of Arthur Young, that "*a history of public works in Ireland would be a history of jobs.*" — (*Tour in Ireland*, part ii. p. 66. 4to ed.) Those who wish to make themselves fully acquainted with the history and state of the canals of Ireland, may consult the *Report by Messrs. Henry, Mullins, and M'Mahon*, in the *Appendix to the*

Report of the Select Committee of 1830 *on the State of Ireland*, and the very valuable Report, referred to above, on Railways.

(16.) *American Canals.* — The United States are pre-eminently distinguished by the spirit with which they have undertaken, and the perseverance they have displayed in executing, the most magnificent plans for improving and extending internal navigation. Besides many others of great, though inferior, magnitude, a canal has been formed connecting the Hudson with Lake Erie. This immense work is 363 miles in length, the rise and fall along the entire line being 692 feet. It was originally 40 feet wide at the surface, 28 feet at bottom, and 4 feet deep. But these dimensions being found, from the rapidly increasing traffic and importance of the canal, to be far too limited, an act was passed in 1835, providing for its enlargement. Under this act the canal is to be increased, so as to be 70 feet wide on the surface, 42 feet wide at the bottom, and 7 feet in depth, the locks being of corresponding dimensions. The original cost of the canal was 9,027,456 dollars; and the cost of the enlargement has been estimated at from 23 to 24 millions of dollars, or at nearly three times its first cost. — (Art. on the Erie Canal in the *New York Register* for 1843, p. 189.) The undertaking is already considerably advanced, and, when completed, the new canal will be one of the greatest and most important works of its kind in the world. The Erie canal is the property of the state of New York; and, notwithstanding the contracted scale on which it was constructed, has completely verified the predictions of its projector, De Witt Clinton, having been at once profitable as a mercantile speculation, and of singular advantage in a public point of view to the state of New York and the Union generally. We subjoin a

Statement exhibiting the Length, original Cost, and Revenue of the principal Canals belonging to the State of New York.

Names.	Length.	Cost.	Tolls in 1830.	Tolls in 1835.	Tolls in 1842.
	Miles.	*Dollars. Cts.*	*Dollars. Cts.*	*Dollars. Cts.*	*Dollars. Cts.*
Erie canal	364	9,027,456 05	1,032,599 13	1,492,811 59	1,568,946 56
Champlain (including 3 miles of river navigation)	67	1,179,871 95			95,964 09
Oswego	38	565,437 35	12,335 18	29,180 62	31,222 19
Cayuga and Seneca	21	236,804 74	11,987 81	20,450 11	16,948 16
Chemung	23	331,693 57	- -	4,720 44	7,702 05
Crooked Lake	8	156,776 90	- -	1,829 63	989 39
Chenango	97	2,270,605 22	- -	- -	13,615 38
Navigable feeders	38				
	656	13,768,645 78	1,056,922 12	1,548,972 39	1,735,387 82

N. B. It is to be observed that the tolls have been considerably reduced since 1830.

The *Chesapeake and Ohio* Canal would, had it been completed, have been a great and useful work. It begins at the tide water of the Potomac River above Georgetown in the district of Columbia, and is intended to terminate at Pittsburgh, in Pennsylvania, a distance of 341½ miles. Its dimensions are nearly identical with those of the new Erie Canal; its breadth at the surface being from 60 to 80 feet, ditto at bottom 50 feet, with a depth of water varying from 6 to 7 feet. Several tunnels occur in the line which crosses the Alleghany ridge. The cost of this work was estimated at 22,275,000 dollars, which were to be subscribed partly by individuals, and partly by the United States and the States of Maryland and Pennsylvania. Owing, however, to the inability, or rather disinclination, of the two last mentioned states to make good their engagements, the works on the canal have been suspended, after about 10 millions of dollars have been expended upon them. But the probability is that they will be resumed and completed at some future period; their completion being the only means by which the capital already expended upon them can be made to yield any thing.

A great many other canals have been completed, and are in progress in different parts of the Union. Of the former, the Ohio Canal, uniting the Ohio with Lake Erie, is by far the most important, and is, if at all, only less advantageous than the Erie Canal. Cleveland, where the canal unites with Lake Erie, promises at no distant period to be one of the greatest emporiums on the lakes.

(17.) *Canadian Canals.* — The British government has expended a very large sum upon the Rideau River and Canal, stretching from Kingston, on Lake Ontario, to Bytown, on the Ottawa, or Grand River, an affluent of the St. Lawrence. But this work was undertaken as much in the view of improving the military defences of Canada, as of protecting its commerce, though in the latter respect it has been of considerable utility. The British government has, also, constructed the Welland Canal, uniting Lakes Erie and Ontario, the navigation between which by the river is interrupted by the falls of Niagara. This canal has become a well-frequented commercial channel, and is every day rising in importance.

(18.) *Utility of Canals.*—The utility of canals, when judiciously contrived, and opening an easy communication between places capable of maintaining an extensive intercourse with each other, has never been better set forth than in a work published in 1765, entitled "A View of the Advantages of Inland Navigation," &c. But the following ex-

tract from *Macpherson's Annals of Commerce* (anno 1760) contains a brief, and at the same time eloquent, summary of the principal advantages resulting from their construction. — "They give fresh life to established manufactures, and they encourage the establishment of new ones, by the ease of transporting the materials of manufacture and provisions; and thence we see new villages start up upon the borders of canals in places formerly condemned to sterility and solitude. They invigorate, and in many places create, internal trade, which, for its extent and value, is an object of still more importance than foreign commerce, and is exempted from the many hardships and dangers of a maritime life and changes of climate. And they greatly promote foreign trade; and consequently enrich the merchants of the ports where they, or the navigable rivers they are connected with, terminate, by facilitating the exportation of produce from, and the introduction of foreign merchandise into, the interior parts of the country, which are thus placed nearly on a level with the maritime parts; or, in other words, the interior parts become coasts, and enjoy the accommodations of shipping. The price of provisions is nearly equalised through the whole country; the blessings of Providence are more uniformly distributed; and the monopolist is disappointed in his schemes of iniquity and oppression, by the ease wherewith provisions are transported from a considerable distance. The advantages to agriculture, which provides a great part of the materials, and almost the whole of the subsistence, required in carrying on manufactures and commerce, are pre-eminently great. Manure, marl, lime, and all other bulky articles, which could not possibly bear the great expense of cartage, and also corn and other produce, can be carried at a very light expense on canals; whereby poor lands are enriched, and barren lands are brought into cultivation, to the great emolument of the farmer and landholder, and the general advantage of the community, in an augmented supply of the necessaries of life and materials of manufactures; coals (the importance of which to a manufacturing country, few people, not actually concerned in manufactures, are capable of duly appreciating), stone, lime, iron ore, and minerals in general, as well as many other articles of great bulk in proportion to their value, which had hitherto lain useless to their proprietors by reason of the expense, and, in many cases, impossibility, of carriage, are called into life, and rendered a fund of wealth, by the vicinity of a canal; which thus gives birth to a trade, whereby, in return, it is maintained. The cheap, certain, and pleasant conveyance of travellers by the treckschuyts in Holland, has been admired by all who have been in that country; and it must be owing to the universal desire in this country of flying over the ground with the greatest possible rapidity that a mode of travelling so exceedingly easy to the purse and the person is so little used here. Neither ought we entirely to forget, among the advantages of canals, the pleasure afforded to the eye and the mind by a beautiful moving landscape of boats, men, horses, &c. busied in procuring subsistence to themselves, and in diffusing opulence and convenience through the country. And, in a word, we have now the experience of about 40 years to establish as a certain truth, what was long ago said by Dr. Adam Smith, that '*navigable canals are among the greatest of all improvements.*'"

(19) *Increased Speed of Travelling by Canals.* — Great, however, as have been the advantages derived from the formation of canals, their progress has been to a considerable degree checked by the formation of RAILROADS (which see). We believe, however, that canals will always be preferred for the conveyance of coal and other bulky and heavy products; and even passengers are now conveyed along them with a rapidity that would previously have been supposed impossible. This new system was introduced on the Paisley and Glasgow Canal, by Mr. Houston, in June, 1831. The results are described in the following statements, to which it is unnecessary to call the reader's attention.

Mr. Thomas Grahame, civil engineer, in his "Letter to Canal Proprietors and Traders," says, "The experiments of great velocity have been tried and proved *on the narrowest, shallowest, and most curved canal in Scotland*, viz. the Ardrossan or Paisley Canal, connecting the city of Glasgow with the town of Paisley and village of Johnstoun, — a distance of 12 miles." The result has disproved every previous theory as to difficulty and expense of attaining great velocity on canals; and as to the danger or damage to their banks by great velocity in moving vessels along them.

"The *ordinary speed* for the conveyance of passengers on the Ardrossan Canal has, for nearly 2 years, been *from nine to ten miles an hour*; and, *although there are fourteen journeys along the canal per day, at this rapid speed, its banks have sustained no injury.* The boats are 70 feet in length, about 5 feet 6 inches broad, and, but for the extreme narrowness of the canal, might be made broader. They carry easily from 70 to 80 passengers; and, when required, can and have carried upwards of 110 passengers. The entire cost of a boat and fittings up is about 125*l.* The hulls are formed of light iron plates and ribs, and the covering is of wood and light oiled cloth. They are more airy, light, and comfortable than any coach. They permit the passengers to move about from the outer to the inner cabin, and the fares per mile are *one penny* in the *first*, and *three farthings* in the *second cabin*. The passengers are all carried under cover, having the privilege also of an uncovered space. These boats are drawn by 2 horses (the prices of which may be from 50*l.* to 60*l.* per pair), in stages of 4 miles in length, which are done in from 22 to 25 minutes, including stoppages to let out and take in passengers, each set of horses doing 3 or 4 stages alternately each day. In fact, the boats are drawn through this narrow and shallow canal, at a velocity which many celebrated engineers *had demonstrated, and which the public believed, to be impossible.*

"The entire amount of the whole expenses of attendants and horses, and of running one of these boats 4 trips of 12 miles each (the length of the canal) or 48 miles daily, including interest on the capital, and

20 per cent. laid aside annually for replacement of the boats, or loss on the capital therein vested, and a considerable sum laid aside for accidents and replacement of the horses, is 700*l.* some odd shillings; or, taking the number of working days to be 312 annually, something under 2*l.* 2*s.* 4*d.* per day, or about 11*d.* per mile. The actual cost of carrying from 80 to 100 persons a distance of 30 miles (the length of the Liverpool railway), at a velocity of nearly 10 miles an hour, on the Paisley Canal, one of the most curved, narrow, and shallow in Britain, is therefore just 1*l.* 7*s.* 6*d* sterling. Such are the facts, and, incredible as they may appear, they are facts which no one who inquires can possibly doubt."

Boats on this principle have since been established on a great many British canals, and on the Grand and Royal Canals in Ireland.

(20.) *Profits of Canals.* — It is a well-known fact, that canals, at an average, and allowing for the length of time that must elapse from the first outlay of capital before they yield any return, are not very productive. When, indeed, they connect places that have an extensive intercourse, and when no very extraordinary difficulties have to be surmounted in their construction, they most commonly yield very large profits: but, generally speaking, this does not appear to be the case; and, on the whole, they seem to have been more beneficial to the public than to their projectors.

It is customary to insert clauses in the acts authorising canals to be cut, limiting the charge which the proprietors shall be entitled to impose upon the goods conveyed by them. But we think that the dividend ought also to be limited; and that it should be stipulated that whatever a moderate toll yielded over and above defraying this dividend, and providing for the repair of the canal, should be accumulated as a fund in order to buy up the stock of the canal, so that the toll may ultimately be reduced to such a sum as may suffice merely to meet the necessary repairs. We are not aware that any good objection could be made to a plan of this sort; and had it been adopted in this country, there are several instances in which it would have been very advantageous for the public. When the canal of Languedoc was completed, the most likely method, it was found, of keeping it in constant repair, was to make a present of the tolls to Riquet the engineer. "These tolls constitute," says Dr. Smith, "a very large estate to the different branches of the family of that gentleman; who have, therefore, a great interest to keep the work in constant repair. But had these tolls been put under the management of commissioners, who had no such interest, they might, perhaps, have been dissipated in ornamental and unnecessary expenses, while the most essential parts of the work were allowed to go to ruin." Dr. Smith ought, however, to have mentioned that Riquet advanced *a fourth* part of the entire sum laid out upon the canal (*Dutens, Navigation Intérieure de la France*, tom. i. p. 119, &c.); and that officers were appointed by the crown to see that the tolls were not rendered oppressive, and the canal kept in good order. At the Revolution, most part of the property of the canal was confiscated; but at the restoration of the Bourbons in 1814, such parts of the confiscated property as had not been sold were restored to the successors of M. Riquet, who have at this moment the principal management of the canal.

*** The accompanying map of the canals, railroads, &c. of Great Britain and Ireland, has been executed with great care and attention; and will, we hope, be found to be a valuable acquisition. Those who wish to see them laid down on a larger scale, are referred to the magnificent six-sheet map, published by J. Walker, Esq. of Wakefield, and to other maps of the same kind. "An Historical Account of the Navigable Rivers and Canals, &c. of Great Britain," in 4to., attached to Mr. Walker's map by way of Index, is an accurate and useful publication.

CANARY SEED. See SEED.

CANDLE (Ger. *Lichter, Kerzen;* Du. *Kaarzen;* Fr. *Chandelle;* It. *Candelle;* Sp. and Port. *Velas;* Rus. *Swjetschi;* Lat. *Candela*), a taper of tallow, wax, or spermaceti, the wick of which is commonly of several threads of cotton spun and twisted together.

Dr. Ure gives the following table, as containing the result of certain experiments he had made, in order to determine the relative intensity of the light, and the duration of different sorts of tallow candles.

Number in a Pound.	Duration of a Candle.	Weight in Grains.	Consumption per Hour, in Grains.	Proportion of Light.	Economy of Light.	Candles equal one Argand.
10 mould	5 h. 9 m.	682	132	12½	68	5·7
10 dipped	4 36	672	150	13	65½	5·25
8 mould	6 31	856	132	10½	59½	6·6
6 do.	7 2½	1,160	163	14½	66	5·0
4 do.	9 36	1,787	186	20½	80	3·5
Argand oil flame	- -	- -	512	69·4	100	

"A Scotch mutchkin," says Dr. Ure, "or ⅛ of a gallon of good seal oil, weighs 6,010 gr., or 13$\frac{1}{10}$ oz. avoirdupois, and lasts in a bright Argand lamp 11 hours 44 minutes. The weight of oil it consumes per hour is equal to 4 times the weight of tallow in candles 8 to the pound, and 3¼ times the weight of tallow in candles 6 to the pound. But its light being equal to that of 5 of the latter candles, it appears from the above table, that 2 lbs. weight of oil, value 9*d.*, in an Argand, are equivalent in illumin-

ating power to 3 lbs. of tallow candles, which cost about 2*s*. The larger the flame in the above candles, the greater the economy of light."

Until 1831, when it was repealed, candles were, for a lengthened period, subject to an excise duty; and their consumption was, in consequence, pretty exactly ascertained.

An Account of the Rates of Duty separately charged on Tallow, Wax, and Spermaceti Candles, the Number of Pounds' Weight of each Sort produced, and the Total annual Nett Revenue derived from Candles, in Great Britain, in each Year since 1820. — (*Parl. Paper* No. 468. Sess. 1830.)

Years.	Tallow.	Rate of Duty per lb.	Wax.	Rate of Duty per lb.	Spermaceti.	Rate of Duty per lb.	Nett Revenue.		
	lbs.	*d.*	*lbs.*	*d.*	*lbs.*	*d.*	£	*s.*	*d.*
1820	88,352,461	1	692,705	3½	193,463	3½	373,455	14	5
1821	93,816,346	—	697,196	—	165,647	—	395,911	8	7
1822	98,311,801	—	682,241	—	179,208	—	415,609	15	3
1823	109,461,879	—	694,194	—	180,401	—	433,537	15	8
1824	109,810,900	—	759,751	—	179,454	—	466,042	16	1
1825	114,187,550	—	851,370	—	208,377	—	485,014	8	9
1826	110,102,643	—	705,615	—	201,790	—	467,069	12	1
1827	114,330,578	—	713,655	—	226,277	—	487,318	3	4
1828	117,342,157	—	748,293	—	270,263	—	497,770	2	9
1829	115,156,808	—	746,052	—	303,683	—	489,059	1	9

CANDLE, *Sale or Auction by Inch of*, is when a small piece of candle being lighted, the bystanders are allowed to bid for the merchandise that is selling: but the moment the candle is out, the commodity is adjudged to the last bidder.

CANELLA ALBA (Fr. *Canelle blanche*; Ger. *Weisser Zimmet*; It. *Canella bianca*; Sp. *Canella blanca*; Lat. *Canella alba*), the inner bark of the *Canella alba*, a tree growing in the West Indies. It is brought to this country packed in casks and cases, in long pieces, some rolled in quills and others flat; the quilled sort is considerably thicker than cinnamon, and the flat nearly ¼ of an inch in thickness. The quilled pieces are yellow on both sides; the flat pieces are yellow on the outside and pale brown within. The odour of both kinds, when fresh broken, is aromatic, something like a mixture of cloves and cinnamon; and the taste slightly bitter, and extremely warm and pungent.

CANES. See BAMBOO, RATTANS.

CANNON, CANNONS (Du. *Kanonen*; Fr. *Canons*; Ger. *Kanonen*; It. *Cannoni*; Pol. *Dziala*; Por. *Canhoes*; Rus. *Puschki*; Sp. *Canones*; Sw. *Kanon*), a kind of long hollow engines for throwing iron, lead, or stone balls by the force of gunpowder. They are commonly made of iron, but frequently also of a mixture of copper, tin, and brass. They are either cast hollow, or solid and then bored; those made in the latter way being very superior. Brass cannons, or cannons made of mixed metal, are said not to be so well calculated for hard service, or quick and continued firing, as those made of iron. The proportions of the ingredients used in making the former do not differ materially in different countries, though they rarely coincide. To 240 lbs. of metal fit for casting, we commonly put 68 lbs. of copper, 52 lbs. of brass, and 12 lbs. of tin. To 4,200 lbs. of metal fit for casting, the Germans put 3,687$\frac{3}{4}$ lbs. of copper, 204$\frac{1}{4}$ lbs. of brass, and 307$\frac{36}{41}$ lbs. of tin. Others, again, use 100 lbs. of copper, 6 lbs. of brass, and 9 lbs. of tin; and others, 100 lbs. of copper, 10 pounds of brass, and 15 lbs. of tin.

It seems to be the general opinion that cannon were first made use of in 1336 or 1338; but Don Antonio de Capmany has produced some statements, which render it almost certain that some sort of artillery was used by the Moors in Spain so early as 1312. — (*Questiones Criticas*, p. 181, &c.) Cannons were certainly used by the English in 1347 at the siege of Calais, and by the Venetians at Chioggia in 1366, and in their wars with the Genoese in 1379 and 1380. The Turks employed them at the sieges of Constantinople, in 1394 and 1453. When first introduced, they were for the most part very heavy and unwieldy, and threw balls of an enormous size: they were, however, owing to their frequently bursting, about as dangerous to those using them as to their opponents. There is a valuable article on the construction and history of cannons in *Rees's Cyclopædia*; but it was published previously to the appearance of Capmany's work referred to above.

CANTHARIDES, OR SPANISH FLY (Fr. *Cantharides, Mouches d'Espagne*; Ger. *Spanische Fliegen*; It. *Cantarelle*; Lat. *Cantharis*; Rus. *Hischpanskie muchi*; Sp. *Cantaridas*). This insect is found on a variety of shrubs in Spain, Italy, France, &c. Those used in this country are imported partly from Sicily, but principally from Astracan, packed in casks and small chests. The best are of a lively fresh colour, a small size, and not mouldy. They are frequently adulterated with the *Melolontha vitis*; but this is distinguishable by its form, which is squarer than the cantharis, and by its black feet. If they be properly dried and protected from the air, they may be kept for a very long period. — (*Thomson's Dispensatory.*)

CANTON, one of the greatest emporiums in the East, ranking, as a port of trade, either before, or immediately after, Calcutta, in the province of Quantong, in China; being, previously to 1843, the only place in that empire open by authority to European traders: lat. 23° 7′ 10″ N., lon. 113° 14′ E.

Canton stands on the eastern bank of the Pekiang River, which flows from the interior in a navigable stream of 300 miles to this city, where it is rather broader than the Thames at London Bridge; falling, after an additional course of 80 miles, into the southern sea of China. Near its junction with the sea, it is called by foreigners Bocca Tigris. The town is surrounded by a thick wall, partly of stone and partly of brick, and is divided into 2 parts by another wall running east and west. The northern division is called the Old, and the southern the New City. In the old city is the Mantchou or Tartar general, with a garrison of Mantchou troops under his command. The lieutenant-governor or Fooyuen's office is also in the old city, but the governor and Hoppo (principal customs officer) reside in the new city, not far from the river.

All foreign commerce is conducted in the south-west suburb, where the foreign factories are situated; and which, with the other suburbs, is probably not less populous than the city itself. The residence of Europeans is confined to a very small space, on the banks of the river; which might, however, be as pleasant as a crowded mercantile place can well be, were it not for the great number of small *dwelling boats*, which cover the face of the river. The people who occupy the larger portion of these boats are said to have come originally from the south; and being a foreign and despised race, were not, at first, allowed to dwell on shore; but most of the distinctions between them and the rest of the people have been abolished.

Although Canton is situated nearly in the same parrallel of latitude as Calcutta, there is a considerable difference in their temperature; the former being much the coolest, and requiring fires during the winter months. The streets are very narrow, paved with little round stones, and flagged close to the sides of the houses. The front of every house is a shop, and those of particular streets are laid out for the supply of strangers. China-street is appropriated to Europeans; and here the productions of almost every part of the globe are to be found. One of the shopkeepers is always to be found sitting on the counter, writing with a camel's hair brush, or calculating with his swanpan, on which instrument a Chinese will perform operations in numbers with as much celerity as the most expert European arithmetician. This part of Canton being much frequented by the seamen, every artifice is used by the Chinese retailers to attract their attention; each of them having an English name for himself painted on the outside of his shop, besides a number of advertisements composed for them by the sailors in their own peculiar idiom. The latter, it may be supposed, are often duped by their Chinese friends, who have, in general, picked up a few sea phrases, by which the seamen are induced to enter their shops: but they suit each other extremely well; as the Chinese dealers possess an imperturbable command of temper, laugh heartily at their jokes without understanding them, and humour the seamen in all their sallies.

Ships only ascend the river as far as Whampoa, about 15 miles below Canton; loading and unloading by means of native boats.

The Chinese, considered as traders, are eminently active, persevering, and intelligent. They are, in fact, a highly commercial people; and the notion that was once very generally entertained, of their being peculiarly characterised by a contempt of commerce and of strangers, is as utterly unfounded as any notion can possibly be. Business is transacted at Canton with great despatch; and nowhere in the world may cargoes be sold and bought, loaded and unloaded, with more business-like speed and activity.

Provisions and refreshments of all sorts are abundant in Canton, and, in general, of an excellent quality; nor is the price exorbitant. Every description of them, dead and alive, is sold by weight. It is a curious fact, that the Chinese make no use of milk, either in its liquid state, or in the shape of curds, butter, or cheese. Among the delicacies of a Chinese market are to be seen horse flesh, dogs, cats, hawks, and owls. The country is well supplied with fish from the numerous canals and rivers by which it is intersected.

Foreign Factories. — These extend for a considerable way along the banks of the river, at the distance of about 100 yards. They are named, by the Chinese, hongs, and resemble long courts, or closes, without a thoroughfare, which generally contain 4 or 5 separate houses. They are built on a broad quay, and have a parade in front. This promenade is railed in, and is generally called Respondentia Walk; and here the European merchants, commanders, and officers of the ships meet after dinner and enjoy the cool of the evening. The English hong, or factory, far surpasses the others in elegance and extent. This, with the American and Dutch hongs, are the only ones that keep their national flags flying. The neighbourhood of the factories is occupied with warehouses for the reception of European goods, or of Chinese productions, until they are shipped. In 1822, during a dreadful conflagration that took place at Canton, the British factories and above 10,000 other houses were destroyed; on which occasion the East India Company's loss was estimated at 500,000*l.* sterling, three fifths in woollens.

For the space of 4 or 5 miles opposite to Canton, the river resembles an extensive floating city, consisting of boats and vessels ranged parallel to each other, leaving a narrow passage for others to pass and repass. In these the owners reside with their families; the latter rarely visiting the shore.

All the business at Canton with Europeans is transacted in a jargon of the English language. The sounds of such letters as B, D, R, and X, are unknown in China. Instead of these they substitute some other letter, such as L for R, which occasions a Chinese dealer in rice to offer for sale in English a rather unmarketable commodity. The name mandarin is unknown among the Chinese; the word used by them to denote a person in authority being *quan*. Mandarin is a Portuguese word derived from the verb *mandar*, to command. — (*Hamilton's East India Gazetteer; Milburn's Orient. Commerce; Companion to Anglo-Chinese Calendar, &c.*)

Trade with China. Treaty of 1842. — The only real difficulty in trading with China originates in the despotism, pride, and jealousy of the government, and in the general corruption of its officers. The former affects to treat all foreigners with contempt, and is always exposing them to insult; while the latter endeavour to multiply and enforce vexatious regulations and demands, that they may profit by the douceurs given for their evasion. We submitted, with exemplary forbearance, for a lengthened period, to every petty indignity the Chinese government chose to inflict; but the proceedings connected with the seizure and destruction, in 1839, of the opium belonging to British subjects — (see OPIUM), led to hostilities between this country and China; and these, as every one knows, have been productive of events that will have a powerful influence over the future intercourse of Englishmen, and of foreigners generally, with the Chinese. It is due to the latter to state, that though they were uniformly defeated, how superior soever in respect of numbers, they evinced no want of courage; and there can be no doubt that their ill-success proceeded principally from their ignorance of military affairs, and the extreme inferiority of their firearms and artillery.

The following are the principal provisions in the treaty signed by Sir Henry Pottinger and the Chinese commissioners on the 29th of August, 1842:

"China to pay 21,000,000 dollars in the course of the present and three succeeding years.

"The ports of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai to be thrown open to British merchants; consular officers to be appointed to reside in them; and regular and just tariffs of import and export (as well as inland transit) duties to be established and published.

"The island of Hong Kong to be ceded in perpetuity to her Britannic Majesty, her heirs and successors.

"All subjects of her Britannic Majesty (whether natives of Europe or India) who may be confined in any part of the Chinese empire to be unconditionally released.

"An act of full and entire amnesty to be published by the Emperor, under his imperial sign manual and seal to all Chinese subjects, on account of their having held service or intercourse with, or resided under, the British government or its officers.

"Correspondence to be conducted on terms of perfect equality amongst the officers of both governments.

"On the Emperor's assent being received to this treaty, and the payment of the first instalment, 6,000,000 dollars, her Britannic Majesty's forces to retire from Nanking and the Grand Canal, and the military posts at Chinhai to be also withdrawn; but the islands of Chusan and Kolangsoo are to be held until the money payments and the arrangements for opening the ports be completed."

In the course of the present year (1843), a proclamation was issued, prohibiting, conformably to the stipulations in the above treaty, British subjects from resorting, for the purposes of trade and commerce, to any other ports in the dominions of the Emperor of China, than those of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai, or than may be in the occupation of her Majesty's forces. Any persons committing a breach or violation of this direction are, upon conviction in any of her Majesty's courts of record or Vice-Admiralty, liable to a penalty, not exceeding 100*l.*, or to imprisonment for a term not exceeding 3 months, at the discretion of the court.

It will be seen from the subjoined documents that the principal stipulations in this treaty have since been very fully carried into effect. The tariff of import and export duties, framed in compliance with the clause to that effect in the treaty, appears to be bottomed on fair and liberal principles; and the superintendent has pledged himself that it shall, in as far as the British government is concerned, be honestly acted upon.

Proclamation. — Sir H. Pottinger, Bart., G.C.B., her British Majesty's Plenipotentiary, &c. &c. in China, has the satisfaction to announce, for the general information and guidance of all subjects of her Majesty, that he has concluded and sealed with the High Commissioner appointed by his Imperial Majesty the Emperor of China to treat with him, a commercial treaty stipulated for in the definitive treaty of peace signed at Nanking on the 29th day of August, 1842, and the ratifications of which definitive treaty of peace have been lately exchanged under the sign manual and seals of her Majesty the Queen of Great Britain and Ireland, and his Majesty the Emperor of China. Her Britannic Majesty's Plenipotentiary, &c. now publishes the export and import tariff and the regulation of trade which have been, after the most searching scrutiny and examination, fixed and finally agreed upon, and which tariff and regulations of trade are to be promulgated in Chinese simultaneously with the proclamation, accompanied by a proclamation on the part of the Imperial Commissioners, &c. Her Britannic Majesty's Plenipotentiary, &c. trusts that the provisions of the commercial treaty will be found in practice mutually advantageous, beneficial, and just, as regards the interest, honour, and future augmented prosperity of the governments of the two contracting empires and their subjects, and his Excellency most solemnly and urgently calls upon all subjects of the British crown, individually and collectively, by their allegiance to their sovereign, by their duty to their country, and by their own personal reputation, respect, and good name, and by the integrity and honesty which is due from all men to the Imperial rights of the Emperor of China, not only to strictly conform and act up to the said provisions of the commercial treaty, but to spurn, decry, and make known to the world any base, unprincipled, and traitorous overtures which they, or their agents,

or *employés*, may receive from, or which may be in any shape made to them by any subject of China, whether officially connected with the government or not, for entering into any collusion or scheme for the purpose of evading or acting in contumacy of the said provisions of the commercial treaty.

Her Britannic Majesty's Plenipotentiary, &c. will not allow himself to anticipate or suppose that the appeal which he makes to all her Majesty's subjects will be unheeded or overlooked, by even a single individual; but, at the same time, it is his duty, in the responsible and unprecedented situation in which he has been placed by the course of events, to distinctly intimate that he is determined, by every means at his disposal, to see the provisions of the commercial treaty fulfilled by all who choose to engage in future in commerce with China, and that in any case where he may receive well-grounded representations from her Majesty's consuls, or from the Chinese authorities, that such provisions of the Commercial Treaty have been evaded, or have been attempted to be so, he will adopt the most stringent and decisive measure against the offending parties; and where his present power may not fully authorise and sanction such a measure as may seem to him fitting, he will respectfully trust that the Legislature of Great Britain will hold him indemnified for adopting them in an emergency directly compromising the national honour, dignity, and good faith in the estimation of the government of China and in the eyes of all other nations.

Dated at the Government House at Victoria, Hong Kong, this 22nd day of July, 1843."

(Signed) HENRY POTTINGER.

General Regulations under which the British Trade is to be conducted at the Five Ports of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai.

1. *Pilots.* — Whenever a British merchantman shall arrive off the five ports opened to trade, viz.: Canton, Foo-chow-foo, Amoy, Ningpo, or Shanghai, pilots shall be allowed to take her immediately into port; and in like manner when such British ship shall have settled all legal duties and charges, and is about to return home, pilots shall be immediately granted to take her out to sea, without any stoppage or delay. Regarding the remuneration to be given these pilots, that will be equitably settled by the British Consul appointed to each particular port, who will determine it with due reference to the distance gone over, the risk run, &c.

2. *Custom-house Guards.* — The Chinese Superintendent of Customs at each port will adopt the means that he may judge most proper to prevent the revenue suffering by fraud or smuggling. Whenever the pilot shall have brought any British merchantman into port, the superintendent of customs will depute one or two trusty custom-house officers, whose duty it will be to watch against frauds on the revenue. These will either live in a boat of their own, or stay on board the English ship, as may best suit their convenience. Their food and expenses will be supplied them from day to day from the custom-house, and they may not exact any fee whatever from either the commander or consignee. Should they violate this regulation, they shall be punished proportionately to the amount so exacted.

3. *Masters of Ships reporting themselves on Arrival.* — Whenever a British vessel shall have cast anchor at any one of the above-named ports, the captain will, within four-and-twenty hours after arrival, proceed to the British consulate and deposit his ship's papers, bills of lading, manifest, &c., in the hands of the consul; failing to do which he will subject himself to a penalty of 200 dollars. For presenting a false manifest the penalty will be 500 dollars. For breaking bulk and commencing to discharge before due permission shall be obtained, the penalty will be 500 dollars and confiscation of the goods so discharged. The consul, having taken possession of the ship's papers, will immediately send a written communication to the superintendent of customs, specifying the register tonnage of the ship, and particulars of the cargo she has on board; all of which being done in due form, permission will then be given to discharge, and the duties levied as provided for in the tariff.

4. *Commercial Dealings between English and China Merchants.* — It having been stipulated that English merchants may trade with whatever native merchants they please, should any Chinese merchant fraudulently abscond or incur debts which he is unable to discharge, the Chinese authorities, upon complaint being made thereof, will of course do their utmost to bring the offender to justice; it must, however, be distinctly understood that if the defaulter really cannot be found, or be dead or bankrupt, and there be not wherewithal to pay, the English merchants may not appeal to the former customs of the Hong merchants paying for one another, and can no longer expect to have their losses made good to them.

5. *Tonnage Dues.* — Every English merchantman, on entering any one of the above-mentioned five ports, shall pay tonnage dues at the rate of five mace per register ton, in full of all charges. The fees formerly levied on entry and departure, of every description, are henceforth abolished.

6. *Import and Export Duties.* — Goods, whether imported into or exported from any one of the above-mentioned five ports, are thenceforward to be taxed according to the tariff as now fixed and agreed upon, and no further sums are to be levied beyond those which are specified in the tariff. All duties incurred by an English merchant vessel, whether on goods imported or in the shape of tonnage dues, must first be paid up in full, which done, the superintendent of customs will grant port clearance, and this being shown to the British consul, he will thereupon return the ship's papers and permit the vessel to depart.

7. *Examination of the Goods at the Custom-house.* — Every English merchant having cargo to load or discharge, must give due intimation thereof, and hand particulars of the same to the consul, who will immediately despatch a recognised linguist of his own establishment to communicate the particulars to the superintendent of customs that the goods may be examined, and neither party subjected to loss. The English merchant must have a properly qualified person on the spot, to attend to his interests when his goods are being examined for duty; otherwise, should there be complaints, these cannot be attended to. Regarding such goods as are subject by the tariff to an *ad valorem* duty, if the English merchant cannot agree with the Chinese officer in fixing a value, then each party shall call two or three merchants to look at the goods, and the highest price at which any of these merchants would be willing to purchase shall be assumed as the value of the goods. To fix the tare on any article, such as tea: if the English merchant cannot agree with the custom-house officer, then each party shall choose so many chests out of every 100, which, being first weighed in gross, shall afterwards be tared, and the average tare upon these shall be assumed as the tare upon the whole, and upon this principle shall the tare be fixed upon all other goods in packages. If there should still be any disputed points which cannot be settled, the English merchant may appeal to the consul, who will communicate the particulars of the case to the superintendent of customs, that it may be equitably arranged. But the appeal must be made on the same day, or it will not be regarded. While such points are still open, the superintendent of customs will delay to insert the same in his books, thus affording an opportunity that the merits of the case may be duly tried and sifted.

8. *Manner of paying the Duties.* — It is herein-before provided, that every English vessel that enters any one of the five ports, shall pay all duties and tonnage dues before she be permitted to depart. The superintendent of customs will select certain shroffs, or banking establishments of known stability, to whom he will give licences authorising them to receive duties from the English merchants on behalf of government, and the receipts of these shroffs for any money paid them shall be considered as a government voucher. In the paying of these duties, different kinds of foreign money may be made use of; but as foreign money is not of equal purity with sycee silver, the English consuls appointed to the different ports will, according to time, place, and circumstances, arrange with the superintendent of customs at each port, what coins may be taken in payment, and what per centage may be necessary to make them equal to standard or pure silver.

9. *Weights and Measures.* — Sets of balance-yards for the weighing of goods, of money weights, and of measures, prepared in exact conformity to those hitherto in use at the custom-house of Canton, and duly

stamped and sealed in proof thereof, will be kept in possession of the superintendent of customs, and also at the British consulate, at each of the five ports, and these shall be the standard by which all duties shall be charged, and all sums paid to government. In case of any dispute arising between British merchants and the Chinese officers of customs regarding the weights or measures of goods, reference shall be made to these standards, and disputes decided accordingly.

10. *Lighters or Cargo Boats.* — Whenever an English merchant shall have to load or discharge cargo, he may hire whatever kind of lighter or cargo boat he pleases, and the sum to be paid for such boat can be settled between the parties themselves, without the interference of government. The number of these boats shall not be limited, nor shall a monopoly of them be granted to any parties. If any smuggling take place in them, the offenders will, of course, be punished according to law. Should any of these boat people, while engaged in conveying goods for English merchants, fraudulently abscond with the property, the Chinese authorities will do their best to apprehend them; but, at the same time, the English merchants must take every due precaution for the safety of their goods.

11. *Transhipment of Goods.* — No English merchant ships may tranship goods without special permission; should any urgent case happen where transhipment is necessary, the circumstances must first be submitted to the consul, who will give a certificate to that effect, and the superintendent of customs will send a special officer to be present at the transhipment. If any one presumes to tranship without such permission being asked for and obtained, the whole of the goods so illicitly transhipped will be confiscated.

12. *Subordinate Consular Officers.* — At any place selected for the anchorage of the English merchant ships, there may be appointed subordinate consular officers of approved good conduct to exercise due control over the seamen and others. He must exert himself to prevent quarrels between the English seamen and the natives, this being of the utmost importance. Should any thing of the kind unfortunately take place, he will in the like manner do his best to arrange it amicably. When sailors go on shore to walk, officers shall be required to accompany them; and should disturbances take place, such officers will be held responsible. The Chinese officers may not impede natives from coming alongside the ships to sell clothes or other necessaries to the sailors living on board.

13. *Disputes between British Subjects and Chinese.* — Whenever a British subject has reason to complain of a Chinese, he must proceed to the consulate and state his grievance. The consul will thereupon inquire into the merits of the case, and do his utmost to arrange it amicably. In like manner, if a Chinese have reason to complain of a British subject, he shall no less listen to his complaint, and endeavour to settle it in a friendly manner. If an English merchant have occasion to address the Chinese authorities, he shall send such address through the consul, who will see that the language is becoming, and if otherwise, will direct it to be changed, or will refuse to convey the address. If, unfortunately, any disputes take place of such a nature that the consul cannot arrange them amicably, then he shall request the assistance of a Chinese officer, that they may together examine into the merits of the case, and decide it equitably. Regarding the punishment of English criminals, the English government will enact the laws necessary to attain that end, and the consul will be empowered to put them in force; and regarding the punishment of Chinese criminals, these will be tried and punished by their own laws, in the way provided for by the correspondence which took place at Nanking after the concluding of the peace.

14. *British Government Cruizers anchoring within the Ports.* — An English government cruizer will anchor within each of the five ports, that the consul may have the means of better restraining sailors and others, and preventing disturbances. But these government cruizers are not to be put upon the same footing as merchant vessels, for as they bring no merchandise, and do not come to trade, they will of course pay neither dues nor charges. The resident consul will keep the superintendent of customs duly informed of the arrival and departure of such government cruizers, that he may take his measures accordingly.

15. *On the Security to be given for British Merchant Vessels.* — It has hitherto been the custom, when an English vessel entered the port of Canton, that a Chinese Hong merchant stood security for her, and all duties and charges were paid through such security merchant. But these security merchants being now done away with, it is understood that the British consul will henceforth be security for all British merchant ships entering into any of the Chinese ports.

Government Notification. — With reference to the preceding proclamation, it is hereby notified that the new system of trade will commence at Canton on the 1st day of the 7th month of the present Chinese year (27th July, 1843), and that from that day the Hong merchants' monopoly and Consoo charges will cease and terminate.

The other four ports of Amoy, Foo-chow-foo, Ningpo, Shanghai, which agreeably to the treaty of Nanking are to be resorted to by British merchant vessels, cannot be declared to be opened for that purpose until an imperial edict to that effect shall be received from the cabinet of Pekin. This edict is expected to reach Canton early in the month of September. An immediate public notice will be given of the arrival. In the interim, measures will be taken for the appointment of consular officers, and their establishment, to the port in question, in order that no unnecessary delay may take place in the commencement of trade at them, and merchants may make their arrangements accordingly.

The following extracts from instructions addressed to Mr. Lay, officiating consul at Canton, are published for general information, and her Majesty's chief superintendent of trade enjoins every one concerned to pay implicit obedience to them: —

"You will see from the enclosed notification, that you are for the present relieved from the exercise of your consular judicial functions; and in the event of letters or petitions (in English or Chinese) referring to disputes, or containing complaints, being presented to you, you will (unless they should be of the most trivial and easily-adjusted nature) write upon them 'referred to the assistant superintendent, &c.,' and sign your name.

"You will hold the masters of all vessels responsible to you, for the orderly and peaceable behaviour of their boats' crews, or any other persons belonging to their respective ships, who may visit Canton; and no 'liberty men' are to go up to that city without your previous permission, obtained in writing in answer to an application, specifying the number (of the propriety of which you are to consider yourself the judge), and distinctly promising and stating that an officer will accompany such liberty men, to look after and control the seamen or lascars, as the case may be.

"In any instance where you may discover that seamen or others are at Canton on liberty, without your permission, and the previous stipulations (above adverted to) having been complied with, you will request the commander of her Majesty's ship, which will be stationed at Whampoa, to support your authority; to have the seamen or others forthwith sent back to their ships, and you will report the circumstance to me, that I may adopt such further steps as the case may call for. You will at the same time intimate to the master, owner, or consignee, of the vessel from which the seamen or others unauthorisedly come, that all expenses attending the removal of the seamen or others from Canton, will be charged to the ship to which they belong, and will be recovered before she is allowed to sail.

"In cases of petty frays or assaults, or riotous and drunken conduct (unattended, however, with any marked degree of violence), in which you may be of opinion that the ends of justice will be obtained, and a sufficient example will be made, by fining the offender any sum not exceeding 10 dollars, or confining him for a period not exceeding five days, you have my authority to summarily decide in such cases, without even recording the evidence, merely making a memorandum of the fact, in a book to be kept for the purpose: but, in all cases where you may consider the offence to call for more serious notice, you will, with the assistance of the captain of her Majesty's ship, have the offender placed in confinement until a formal investigation can be held, and for which I will arrange on hearing the particulars from you.

Should you obtain positive and inconcrovertible proof, that any British merchant ship on the river has been, or is, engaged in smuggling, or evading the payment of the just dues of the Chinese government, as laid down in the Tariff and regulation of trade, you will take immediate measures for intimating the same to the Chinese high officers, and officers of customs, in order that they may, if they think proper, put a stop to such vessel either landing or shipping further cargo, as the case may be, and you will likewise apprise the master, owner, or consignee of such ship of the steps you have taken, and will acquaint them that any attempt to carry on their smuggling practices, or to trade in any shape, by force, in opposition to the wishes and directions of the Chinese authorities, will oblige me to have such ship removed from the river

I annex a table of consular fees which you are to levy, and which are to form a fund for the present, to be subject to such instructions as may be hereafter received from her Majesty's government.

(By order) G A Malcolm, Sec. of Legation.

Dated at Government-House, at Victoria, Hong-Kong, this 22d day July, 1843.

Tariff of Duties on Exports from and Imports into China, established in pursuance of the above Treaty, in Chinese and Mercantile Currency (Dollars and Cents), reduced into their equivalent Rates in sterling Money, according to English Weights and Measures

We are indebted for this valuable Table to W Tate, Esq, author of the *Modern Cambist*, an accurate and useful publication, by which we have profited on many occasions

EXPORTS.	Per	Chinese T M C C	Mer Cur D C.	Per	Sterling £ d
Alum	picul	0 1 0 0	14	ton	11 2 61
Aniseed	—	0 5 0 0	70	cwt	2 9 65
oil	—	5 0 0 0	6 94	lb	0 3 00
Arsenic	—	0 7 5 0	1 04	cwt	4 2 47
Bamboo screens, and bamboo ware of all kinds	—	0 2 0 0	28	—	1 1 46
Bangles, or glass armlets	—	0 5 0 0	70	—	2 9 65
Brass leaf	—	1 5 0 0	2 10	lb	0 0 90
Building materials	—	Duty free			
Bone and horn ware	—	1 0 0 0	1 40	cwt	5 7 30
Camphor	—	1 5 0 0	2 10	—	8 4 95
Canes of all kinds	1,000	0 5 0 0	70	1,000	3 4 06
Capoor tutchery	picul	0 3 0 0	42	cwt	1 8 19
Cassia	—	0 7 5 0	1 05	—	4 2 47
buds	—	1 0 0 0	1 40	—	5 7 30
oil	—	5 0 0 0	6 94	lb	0 3 00
China root	—	0 2 0 0	28	cwt	1 1 46
China ware of all kinds	—	0 5 0 0	70	—	2 9 65
Clothes, ready made	—	0 5 0 0	70	—	2 9 65
Copper ware, pewter ware, &c	—	0 5 0 0	70	—	2 9 65
Corals (or false coral)	—	0 5 0 0	70	lb	0 0 30
Crackers and fireworks of all kinds	—	0 7 5 0	1 05	—	0 4 45
Cubebs	—	1 5 0 0	2 10	cwt	8 4 95
Fans (as feather fans, &c)	—	1 0 0 0	1 40	lb	0 0 60
Furniture of all kinds	—	0 2 0 0	28	cwt.	1 1 46
Galangal	—	0 1 0 0	14	—	0 6 73
Gamboge	—	2 0 0 0	2 78	—	11 2 61
Glass and glass ware of all kinds	—	0 5 0 0	70	—	2 9 65
Glass beads	—	0 5 0 0	70	—	2 9 65
Glue (as fish glue, &c)	—	0 5 0 0	70	—	2 9 65
Grass cloth of all kinds	—	1 0 0 0	1 40	—	5 7 30
Hartail	—	0 5 0 0	70	—	2 9 65
Ivory ware of all kinds	—	5 0 0 0	6 94	lb	0 3 00
Kittysols, or paper umbrellas	—	0 5 0 0	70	cwt	2 9 65
Lacquered ware of all kinds	—	1 0 0 0	1 40	—	5 7 30
Lead, white	—	0 2 5 0	35	—	1 4 82
red	—	0 5 0 0	70	—	2 9 65
Marble slabs	—	0 2 0 0	28	—	1 1 46
Mats (straw, rattan, bamboo, &c)	—	0 2 0 0	28	—	1 1 46
Mother o' pearl ware	—	1 0 0 0	1 40	lb	0 0 60
Musk	catty	0 5 0 0	·70	oz	0 1 87
Nankeens and cotton cloth of all kinds	picul	1 0 0 0	1 40	cwt	5 7 30
Pictures, viz large paintings	each	0 1 0 0	14	each	0 8 01
rice paper pictures	100	0 1 0 0	14	100	0 8 01
Paper fans	picul	0 5 0 0	70	lb	0 0 30
Paper of all kinds	—	0 5 0 0	·70	cwt	2 9 65
Pearls (false)	—	0 5 0 0	70	lb	0 0 30
Preserves and sweetmeats of all kinds	—	0 5 0 0	·70	—	0 0 30
Rattan work of all kinds	—	0 2 0 0	28	cwt.	1 1 46
Rhubarb	—	1 0 0 0	1 40	lb	0 0 60
Silk, raw, whether Chekiang, Canton, or elsewhere, all kinds	—	10 0 0 0	13 89	—	0 6 01
coarse, or refuse of silk	—	2 5 0 0	3 47	—	0 1 50
organzine of all kinds	—	10 0 0 0	13 89	—	0 6 01
ribbons, thread, &c	—	10 0 0 0	13 89	—	0 6 01
piece goods of all kinds, as silks, satins, pongees, velvets, crapes, lutestrings, &c	—	12 0 0 0	16 67	—	0 7 01
N B — The additional duty of so much per piece, hitherto levied, to be henceforth abolished					
Silk and cotton mixtures, silk and woollen mixtures, and goods of such class	—	3 0 0 0	4 17	—	0 1 80
Shoes and boots, leather, satin, or otherwise	—	0 2 0 0	28	cwt	1 1 46
Sandalwood ware	—	1 0 0 0	1 40	lb	0 0 60
Soy	—	0 4 0 0	56	—	0 0 24
Silver ware and gold ware	—	10 0 0 0	13 89	oz Troy	0 0 41
Sugar, white and brown	—	0 2 5 0	35	cwt	1 4 82
Sugarcandy of all kinds	—	0 3 5 0	·49	—	1 11 55
Tinfoil	—	0 5 0 0	·70	—	2 9 65
Tea	—	2 5 0 0	3 47	lb.	0 1·50
Tobacco of all kinds	—	0 2 0 0	28	—	0 0 12
Turmeric	—	0 2 0 0	·28	cwt.	1 1 46
Tortoiseshell ware	—	10 0 0 0	13 89	lb.	0 6 01
Trunks of leather	—	0 2 0 0	·28	cwt.	1 1 46
Treasure (coin of all kinds)	—	Duty free.			
Vermillion	—	3 0 0 0	4 17	lb.	0 1 80
Articles unenumerated in this tariff to pay 5 per cent	ad valorem				
IMPORTS.					
Assafœtida	picul	1 0 0 0	1 40	cwt.	5 7 30
Bees' wax	—	1 0 0 0	1 40	—	5 7 30
Betel nut	—	0 1 5 0	21	—	0 10·09
Biche de mar, first quality, or black	—	0 8 0 0	1 12	—	4 5 84
second quality, or white	—	0 2 0 0	·28	—	1 1 46
Birds' nests, first quality, or clean	—	5 0 0 0	6 94	lb.	0 3 00

CANTON.

IMPORTS — *continued.*	Per	Chinese.	Mer. Cur.	Per	Sterling.
		T.M.C.C.	D. C.		£. d.
Birds' nests, second quality, or good middling	picul.	2 5 0 0	3·47	cwt.,	0 1·50
third quality, or uncleaned	—	0 5 0 0	·70	—	0 0·30
Camphor (Malay), first quality, or clean	catty.	1 0 0 0	1·40	—	5 0·09
second quality, or refuse	—	0 5 0 0	·70	—	2 6·04
Cloves, first quality, or picked	picul.	1 5 0 0	2·10	—	0 0·90
second quality, or mother cloves	—	0 5 0 0	·70	—	0 0·30
Clocks, watches, spy-glasses, all kinds of writing desks, dressing boxes, cutlery, perfumery, &c.		5 per cent.	ad valorem.		
Canvas, 30 to 40 yards long, 24 to 31 in. wide	piece.	0 5 0 0	·70	piece.	3 4·06
Cochineal	picul.	5 0 0 0	6·94	lb.	0 3·00
Cornelians	100	0 5 0 0	·70	100	3 4·06
beads	picul.	10 0 0 0	13·89	lb.	0 6·01
Cotton	—	0 4 0 0	·56	cwt.	2 2·92
Cotton manufactures, viz.: —					
long cloths, white, 30 to 40 yrds. long, 30 to 36 in. wide	piece.	0 1 5 0	·21	piece.	1 0·01
cambrics and muslins, 20 to 24 yards long, 41 to 46 in. wide	—	0 1 5 0	·21	—	1 0·01
grey or unbleached cottons, viz., long cloths, domestics, &c., 30 to 40 yards long, 28 to 40 in. wide	—	0 1 0 0	·14	—	0 8·01
grey twilled cottons, 30 to 40 yards long, 28 to 40 in. wide	—	0 1 0 0	·14	—	0 8·01
chintz and prints of all kinds, 24 to 30 yards long, 26 to 31 in. wide	—	0 2 0 0	·28	—	1 4·02
handkerchiefs above 1 yard square	each.	0 0 1 5	·02	each.	0 1·20
ditto under 1 yard square	—	0 0 1 0	·01	—	0 0·80
ginghams, pullicates, dyed cottons, velveteens, silk and cotton mixtures, woollen and cotton mixtures, and all kinds of fancy goods not in current consumption		5 per cent.	ad valorem.		
yarn and cotton thread	picul.	1 0 0 0	1·40	lb.	0 0·60
Cow bezoar	catty.	1 0 0 0	1·40	—	5 0·09
Cutch	picul.	0 3 0 0	·42	cwt.	1 8·19
Elephants' teeth, first quality, whole	—	4 0 0 0	4·55	—	22 5·22
second quality, broken	—	2 0 0 0	2·78	—	11 2·61
Fish maws	—	1 5 0 0	2·10	—	8 4·95
Flints	—	0 0 5 0	·07	ton.	5 7·30
Glass, glass ware, and crystal ware of all kinds		5 per cent.	ad valorem.		
Gambier	—	0 1 5 0	·21	cwt.	0 10·09
Ginseng, first quality	—	38 0 0 0	52·77	lb.	1 10·83
second quality, or refuse	—	3 5 0 0	4·86	—	0 2·10
Gold and silver thread, first quality, or real	catty.	0 1 3 0	·18	oz. Troy.	0 0·93
second quality, or imitation	—	0 0 3 0	·04	—	0 0·12
Gum Benjamin	picul.	1 0 0 0	1·40	cwt.	5 7·30
olibanum	—	0 5 0 0	·70	—	2 9·65
myrrh	—	0 5 0 0	·70	—	2 9·65
unenumerated		10 per cent.	ad valorem.		
Horns, bullocks' and buffaloes'	—	2 0 0 0	2·78	cwt.	11 2·61
unicorns' or rhinoceros'	—	3 0 0 0	4·17	—	16 9·61
Linen, fine, as Irish or Scotch, yards long, in. wide	piece.	0 5 0 0	·70	piece.	3 4·06
coarse, or linen and cotton mixtures, silk and linen mixtures, &c		5 per cent.	ad valorem.		
Mace, or flower of nutmeg	picul.	1 0 0 0	1·40	lb.	0 0·60
Mother-o'-pearl shells	—	0 2 0 0	·28	cwt.	1 1·46
Metals, viz.: —					
copper, unmanufactured, as in pigs	—	1 0 0 0	1·40	ton.	112 2·10
manufactured, as in sheets, rods, &c.	—	1 5 0 0	2·10	—	168 3·15
iron, unmanufactured, as in pigs	—	0 1 0 0	·14	—	11 2·61
manufactured, as in bars, rods, &c.	—	0 1 5 0	·21	—	16 9·91
lead, in pigs, or unmanufactured	—	0 4 0 0	·56	—	44 10·44
quicksilver	—	3 0 0 0	4·17	lb.	0 1·80
steel, manufactured	—	0 4 0 0	·56	ton.	44 10·44
tin	—	1 0 0 0	1·40	cwt.	5 7·30
tin plates	—	0 4 0 0	·56	—	2 2·92
unenumerated metals		10 per cent.	ad valorem.		
Nutmegs, first quality, or cleaned	—	2 0 0 0	2·78	lb.	0 1·20
second quality, or uncleaned	—	1 0 0 0	1·40	—	0 0·60
Pepper	—	0 4 0 0	·56	—	0 0·24
Putchuck	—	0 7 5 0	1·04	cwt.	4 2·47
Rattans	—	0 2 0 0	·28	—	1 1·46
Rice, paddy, and grain of all kinds		Duty free.			
Rose mallocs	—	1 0 0 0	1·40	—	5 7·30
Saltpetre (to be sold to government agents only)	—	0 3 0 0	·42	ton.	33 7·83
Sharks' fins, first quality, or white	—	1 0 0 0	1·40	cwt.	5 7·30
second quality, or black	—	0 5 0 0	·70	—	2 9·65
Skins and furs, viz.: —					
cow and ox hides, tanned and untanned	—	0 5 0 0	·70	lb.	0 0·30
sea otter skins	each.	1 5 0 0	2·10	each.	10 0·18
fox skins, large	—	0 1 5 0	·21	—	1 0·01
small	—	0 0 7 5	·10	—	0 6·00
tiger, leopard, and marten	—	0 1 5 0	·21	—	1 0·01
land otter, racoon, and shark skins	100	2 0 0 0	2·78	100	13 4·25
beaver skins	—	5 0 0 0	6·94	—	33 4·62
hare, rabbit, and ermine	—	0 5 0 0	·70	—	3 4·06
Smalts	picul.	4 0 0 0	5·55	lb.	0 2·40
Soap	—	0 5 0 0	·70	cwt.	2 9·65
Stockfish, &c.	—	0 4 0 0	·56	—	2 2·92
Sea horse teeth	—	2 0 0 0	2·78	lb.	0 1·20
Treasure and money of all kinds		Duty free.			
Wine, beer, spirits, &c., in quart bottles	100	1 0 0 0	1·40	100	6 8·12
in pint bottles	—	0 5 0 0	·70	—	3 4·06
in casks	picul.	0 5 0 0	·70	cwt.	2 9·65
Woods, viz.: —					
ebony	—	0 1 5 0	·21	ton.	16 9·91
sandal wood	—	0 5 0 0	·70	cwt.	2 9·65
sapan wood	—	0 1 0 0	·14	—	0 6·73
unenumerated		10 per cent.	ad valorem.		
Woollen manufactures, viz.: —					
broad cloths, stripes, habit cloths, &c., 54 to 64 in. wide	chang.	0 1 5 0	·21	yard.	0 3·06
long ells, cassimeres, flannel, and narrow cloths of this description	—	0 0 7 0	·10	—	0 1·43
blankets of all kinds	each.	0 1 0 0	·14	each.	0 8·01
Dutch camlets	chang.	0 1 5 0	·21	yard.	0 3·06
camlets	—	0 0 7 0	·10	—	0 1·43
imitation camlets, bombazettes, &c.	—	0 0 5 5	·5	—	0 0·71
bunting (narrow)	—	0 0 1 5	·2	—	0 0·30
unenumerated woollen goods, or silk and woollen, cotton and woollen mixtures		5 per cent.	ad valorem.		
Woollen yarns	picul.	3 0 0 0	4·17	lb.	0 1·80
Articles unenumerated in this tariff to pay 5 per cent. ad valorem.					
N. B. — Tonnage dues on vessels entering, in full of all charges, 5 mace	register ton.	—	·70	—	3 4·06

ESTIMATIONS. — *Chinese Weights*, per steelyard: 1 picul = 100 catties = 1,600 taels = 133⅓ avoirdupois. 1 tael = 583⅓ grains Troy. 100 lbs. avoirdupois = 3 piculs. 1 cwt. avoirdupois = 8¼ catties. 1 lb. avoirdupois = 1⅔ taels.

Chinese Measures: 1 chang = 141 English inches, or 1⅔ chang = 47 yards. Liquids and, generally, grain are sold by weight.

Chinese Monies: 1 tael = 10 mace = 100 candareen = 1,000 cash.

The principal monetary integer, the tael, is this weight of sycee silver, there being no Chinese coins in gold, and no other Chinese currency, or medium of payment, in silver, than small ingots of sycee silver, stamped by the shroffs or bankers appointed by the government. The average purity of sycee silver may be reckoned at 98 touch, or 13½ dwts., better than British standard; and as it contains, on the average, about 12 grains of gold in the pound Troy, the nett value at 60 pence per ounce standard, after making the usual allowance for the extraction of the gold, is very nearly equal to 78¾ pence sterling, per tael.

In mercantile currency, or the money of account of foreign merchants trading with China, the dollar is divided into 100 cents, and 720 taels of Chinese account are reckoned equal to 1,000 dollars in this currency, making the tael equal to 1 dollar 38-8-9ths cents; but in small amounts it is reckoned at 1 dollar 40 cents. This is, however, only a nominal valuation, by which the dollar is made nearly 56½ pence sterling, or 13½ per cent. above its real value.

According to the 8th article of the general regulations under which the British trade is to be conducted at the five ports of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai, the English consuls appointed to these ports are to arrange with the superintendents of the customs at each, what coins may be taken in the payment of the duties, and what per centage may be necessary to make them equal to standard or pure silver. In pursuance of this regulation, the following estimations have been made at Canton, and will, probably, be followed at the other ports of trade: — rupees weighing 109*t.* 7*m.* 9*c.* 0*c.*; Peruvian dollars, 111*t.* 4*m.* 5*c.* 5*c.*; Mexican dollars, 111*t.* 9*m.* 0*c.* 0*c.*; Bolivian dollars, 112*t.* 1*m.* 5*c.* 0*c.*; Chilian dollars, 112*t.* 5*m.* 2*c.* 0*c.*; and chopped dollars, 115*t.* 2*m.* 0*c.* 7*c.*; are to be accounted as 100 taels of sycee silver, being, according to this monetary tariff, respectively equal to 2 dwts., 5½ dwts., 6½ dwts., 6¾ dwts., 7½ dwts., and 9¾ dwts. worse than British standard. To these per centages are to be added ½ per cent. for difference between the hoppo's and the shroff's weights, and another ½ per cent. for refining. Hence the value of the tael of sycee silver is rendered very nearly equal to 79¼ pence, and with the 1 per cent., to 80¼ pence sterling, at which value the Chinese rates in the above schedule have been reduced. — (*Tate.*)

Opium. — A notion having been entertained that opium might be legally imported into China, under the provisions of this tariff, on paying an *ad valorem* duty of 5 per cent., the following proclamation has been issued on the subject: —

Proclamation. — It having been brought to my notice that such a step has been contemplated as sending vessels with opium on board into the ports of China to be opened by treaty to foreign trade, and demanding that the said opium shall be admitted to importation, by virtue of the concluding clause of the new tariff, which provides for all articles not actually enumerated in that tariff passing at an *ad valorem* duty of 5 per cent., I think it expedient, by this proclamation, to point out to all whom it may concern, that opium being an article the traffic in which is well known to be declared illegal and contraband by the laws and imperial edicts of China, any person who may take such a step will do so at his own risk, and will, if a British subject, meet with no support or protection from her Majesty's consuls or other officers.

This proclamation will be translated and published in Chinese, so that no one may plead ignorance of it.

Government-house, Victoria, this 1st day of August, 1843.

But, notwithstanding this proclamation, and in defiance of the strong denunciation of smuggling in the proclamation of the 2d of July (see p. 230*), it is distinctly stated in Hong Kong papers that there was, on the 21st of September 1843, almost in sight of our consular flag, a "fleet of British vessels openly engaged in the vending of opium to the Chinese!" This certainly is a curious commentary on the above proclamations; and it were much to be wished, seeing that the trade cannot be suppressed, that it were legalised on opium paying a reasonable duty.

The payment of our consuls by fees is much, and we believe justly, objected to at Canton. It is a bad practice anywhere, and especially so in China.

Supposing, however, that the treaty with China is *bonâ fide* carried into effect, still it may be doubted whether the trade with that empire will ever be so extensive as many suppose. We believe, indeed, that China will afford a most extensive outlet for various descriptions of our manufactured goods, provided we can bring away equivalents suitable for the European and other foreign markets. But this, we incline to think, will be no easy matter. Excepting tea, China has few articles suitable for extensive use in Europe, other than silk and silver. Chinese silk is, however, losing ground as compared with that of Italy and Turkey, while it is most probable that the enhancement of its price, consequent to any great increase in the exportation of silver, would, in no very long time, bring it to a close. Tea is the grand equivalent which the Chinese have to exchange for our products; and there cannot, as it appears to us, be a doubt that the effectual reduction of the present exorbitant duties on tea would be the most likely means of extending the trade with China.

Hong Kong. — The island of this name, ceded to us by the above treaty, is situated on the N. side of the entrance from the sea to the æstuary of the Canton River, being separated from the main land by a narrow channel having 14 fathoms water. It stretches about 8 miles from east to west, and is of a very irregular figure, having several promontories, and being deeply indented with bays. It consists principally of a series of high hills, the highest having an elevation of about 1,200 feet. Victoria, the principal British settlement on the north side of the island, in lat. 22° 16′ 27″ N., long. 114° 10′ 48″ E., has the advantage of an excellent roadstead with from 3 to 7 fathoms water and good holding ground. There are also numerous well-sheltered roads and bays with deep water on the south side of the island; which, indeed, appears, from its position and other advantages, extremely well fitted for a naval station. Every thing, however, will depend on the fact of its being healthy, of which, we are sorry to observe, grave doubts are entertained. Should these happily prove unfounded, it is probable that in no very lengthened period a considerable portion of the trade which is at present centred in Canton will be transferred to Hong Kong; and, under the above

condition, it can hardly fail to become an important *entrepôt*, not merely for the trade with the Canton River, but with China generally. It is intended to have it strongly fortified. — (See the *Plan of the Canton River* in the *Mercator's Chart* prefixed to the title-page of this work.)

Monies. — Accounts are kept at Canton in tales, mace, candarines, and cash; the tael being divided into 10 mace, 100 candarines, or 1,000 cash. There is but one kind of money made in China, called cash, which is not coined but cast, and which is only used for small payments: it is composed of 6 parts of copper and 4 of lead; it is round, marked on one side, and rather raised at the edges, with a square hole in the middle. These pieces are commonly carried, like beads, on a string of wire. A tael of fine silver should be worth 1,000 cash: but, on account of their convenience for common use, their price is sometimes so much raised that only 750 cash are given for the tael.

Foreign coins, however, circulate here, particularly Spanish dollars; and for small change they are cut into very exact proportions, but afterwards weighed; for which purpose merchants generally carry scales, called dotchin, made somewhat after the plan of the English steelyards.

The tael used to be reckoned at 6*s.* 8*d.* sterling in the books of the East India Company; but its value varies, and is generally computed according to the price paid per ounce for Spanish dollars in London. The tables given for this proportional value may be calculated in pence sterling, by the multiplier 1·208. Thus, if the price of the Spanish dollar be 60*d.* per ounce, the value of the tael will be 60 × 1·208 = 72·48*d.*; if at 66*d.*, the value of the tael will be 79·728*d.*; and for any other price in the same proportion.

Fineness of Gold and Silver.—The fineness of gold and silver is expressed by dividing the weight into 100 parts, called toques or touch; similar to the modern practice of France. Thus, if an ingot be 93 touch, it is understood to contain 7 parts of alloy and 93 of pure metal, making in the whole 100.

The fineness of the precious metals, expressed in these decimal proportions, may be converted into English proportions by the following analogies: — Suppose gold is 91·66 touch, say, as 100 : 91·66 : : 24 : 11, the standard, and vice *versâ*: and to convert standard silver into touch, say, as 240 : 222 : : 100 : 92·5, the touch of sterling silver. Pure gold or silver without alloy is called by the Chinese sycee; and sometimes, when of less purity, the metal is accepted as sycee.

Silver Ingots are used as money, and weigh from ½ a tael to 100 taels, their value being determined by their weight. These ingots are of the best sort of silver; that is, about 94 touch.

Gold Ingots. — Gold is not considered as money, but as merchandise: it is sold in regular ingots of a determined weight, which the English call shoes of gold; the largest of these weigh 10 taels each; and the gold is reckoned 94 touch, though it may be only 92 or 93.

Weights. — Gold and silver are weighed by the catty of 16 taels; the tael is divided into 10 mace, 100 candarines, or 1,000 cash. 100 taels are reckoned to weigh 120 oz. 16 dwts. Troy; which makes the tael equal to 579·8 English grains, or 37·566 grammes.

The principal weights for merchandise are the picul, the catty, and the tael; the picul being divided into 100 catties, or 1,600 taels.

	Lbs.	oz.	dwts.		
1 Tael weighs, avoirdupois -	0	1	5·333 =	1⅓	oz.
16 Taels, or 1 catty - -	1	5	5·333 =	1⅓	lb.
100 Catties, or 1 picul -	133	5	5·333 =	133⅓	lbs.

Hence the picul weighs 60·472 kilogrammes, or 162 lbs. 0 oz. 8 dwts. 13 grs. Troy.

The above weights are sometimes otherwise denominated, especially by the natives: thus, the catty is called gin; the tael, lyang; the mace, tchen; the candarine, fivan; and the cash, lia.

There are no commercial measures in China, as all dry goods and liquids are sold by weight. In delivering a cargo, English weights are used, and afterwards turned into Chinese piculs and catties.

Long Measure. — That used in China is the covid or cobre; it is divided into 10 punts, and is equal to 0·3713 metres, or 14·625 English inches.

The Chinese have 4 different measures answering to the foot, viz.

	Metres.	Eng.inch.
The foot of the mathematical tribunal	= 0·333	= 13·125
The builders' foot, called congpu -	= 0·3228	= 12·7
The tailors' and tradesmen's foot -	= 0·3383	= 13·33
The foot used by engineers -	= 0·3211	= 12·65

The li contains 180 fathoms, each 10 feet of the last mentioned length; therefore the li = 1,897½ English feet; and 192½ lis measure a mean degree of the meridian nearly; but European missionaries in China have divided the degree into 200 lis, each li making 1,826 English feet; which gives the degree 69·166 English miles, or 111·31 French myriametres.

European Trade at Canton.— As soon as a vessel arrives among the islands which form the entrance to the Canton river, she is generally boarded by a pilot, who conducts her into Macao or Hong Kong roads. The entrance is, however, so safe, that ships push on without waiting for the pilot, who, if the weather be bad, is sometimes long in coming on board. The pilots' names are registered at the Keun-min-foo's office, near Macao; and for a licence to act, the sum of 600 dollars is paid. The person who takes out the licence sometimes knows nothing about ships or the river; but employs fishermen to do the duty. On the vessel's arrival in the roads, the pilot goes on shore to report her at the office of the keun-min-foo, who, when he has received answers to his inquiries, gives a permit for her to pass through the Bogue, and orders a river pilot on board. This pilot seldom repairs on board the vessel before 24 hours have elapsed. When arrived, the vessel proceeds through the Bogue, and up the Canton river, to Whampoa.

Every ship that enters the port requires the service of a linguist, and comprador, before she can commence unloading. The master used to be required to give a written declaration, in duplicate, solemnly affirming that the ship has brought no opium.

All the trade with foreigners used to be confined to the Hong or security merchants; but this restriction has recently been abolished; and foreigners may now deal with any merchant or other person they think fit to employ. The Chinese have government interpreters, who procure permits for delivering and taking in cargo, transact all the Custom-house business, and keep accounts of the duties. All the minor charges of the government, also, are paid by them; in consideration of which they receive a fee of about 173 dollars, previously to the vessel's departure.

When a vessel wishes to discharge or receive cargo, the linguist is informed, a day or two previously, what kind of goods are to be received or discharged, and in what quantities. He then applies for a permit, which being issued, the lighters or chop-boats proceed to Whampoa, where they usually arrive on the evening of the second or morning of the third day. For a single boat the linguist used to receive a fee of 25 dollars; but if a permit be obtained for from 2 to 6 boats at a time, the fee for each boat was only 11 taels 2 mace 6 cand., or about 15½ dollars.

When the goods are ready to be landed from or sent to the ship, the hoppo (principal Custom-house officer) sends a domestic, a writer, and a police runner; the hong merchant who has secured the ship sends a domestic, called a court-going man (one who attends at the public offices, on ordinary occasions, in behalf of his master); and the linguist sends an accountant and interpreter, to attend at the examination of the goods. The hong merchants used to be held responsible by government for all duties, whether on imports or exports in foreign vessels; and therefore, when goods were purchased, it was custo for the parties, before fixing the price, to arrange between themselves who was actually to pay the duties.

Of an import cargo, each chop-boat, according to rule, which, however, is not rigidly enforced, should contain, — of woollens, camlets, and long-ells, 140 bales; tin, 500 bars; lead, 600 pigs; Bombay Cotton, 55 bales; Bengal cotton, 80 bales; betel nut, pepper, &c., 300 piculs.

Of export goods, a chop-boat should take, — of tea, 600 chests; of other sorts of goods, 500 piculs. If more than this, the hong merchant gives to the chop-boat, for each additional picul, 6½ dollars.

In calculating the duties on export goods, 90 catties are considered 100. The woollens, long-ells, and camlets, are measured by the chang of 10 covids, without any deduction; and single articles are numbered.

If, after entering the port, any persons tranship goods, it is considered that the one ship sold them to the other; and, in that case, the same duty has to be paid as if the goods were brought up to Canton. Provisions are not included in this regulation.

Ships' boats are not allowed to carry up or down any thing chargeable with duty.

Gold, silver, copper, and iron are prohibited to be exported; a few culinary utensils are the only exception. When it is desired to export treasure, the hong merchant must make an estimate of the value of the import and export cargoes; and whatever balance there may be in favour of the ship, may then be shipped off as treasure.

If more cargo be sent to a ship than she can take on board, and she wishes it to be shipped on board another, it must be done within 3 days after announcing the goods at the Custom-house, and a hong merchant must state it to government; if granted, a hong merchant and linguist are ordered to go to Whampoa and take an account of such goods; all which, with the expense of boats, runners, &c. at Whampoa, costs 40 or 50 dollars. — (*Companion to Anglo-Chinese Calendar*, pp. 99—101.)

Hong Merchants. — Previously to the commencement of the new system, it had, as stated above, been the invariable practice, enforced by law, that all foreign vessels arriving in the port should employ, as broker or agent, a hong or security merchant, who became, by doing so, responsible to the government for the duties. These merchants, who were but few in number, were the only individuals in the empire legally authorised to trade with foreigners, a privilege for which they had to pay very largely. But, after an arrangement had been made with any particular hong merchant for securing a ship, her captain or supercargo might deal with any other hong merchant, or even with any outside merchant (or merchant not belonging to the hong) he pleased. The peculiar duty of the hong merchant was to pay the duties on both the inward and outward cargoes; and hence arose the practice of foreigners buying all goods for export duty paid, and selling all the goods brought with them free of duty, the duties being, in both cases, paid by the hong merchants who had secured the ship; and hence, also, the ignorance of most foreigners as to the amount of the duties. But now that the privilege of the hong merchants has been abolished, the duties will have to be paid to the Chinese authorities by the parties importing and exporting, in the same way as in this country.

Foreign Merchants. — These consist of British, American, French, Dutch, Danish, Swedish, Spanish, and Portuguese, with Parsee and Indian Mohammedan British subjects. The Americans, French, and Dutch have each consular agents recognised by the Imperial government; and it is understood that the same privileges are to be conceded to all foreigners that have been granted to the English.

General Rates of Agency Commission in China, agreed upon the 1st of November, 1831; in confirmation of those fixed by a meeting of merchants on the 1st March, 1825.

1. On all sales or purchases of goods, except the following	5 per cent.
2. On all sales or purchases of opium, cotton, cochineal, quicksilver, camphor-barroes, birds' nests, diamonds and other precious stones, or pearls, ships, and houses	3 ditto.
3. On returns, if in goods	2½ ditto.
4. On ditto, if in treasure, bullion, or bills	1 ditto.
5. On sale, purchase, or shipment of bullion	1 ditto.
6. On all goods, treasure, &c. consigned, and afterwards withdrawn or sent to auction, and on goods consigned for conditional delivery to others	½ commission.
7. Ordering goods, or superintending the fulfilment of contracts, where no other commission is derived	2½ per cent.
8. On all advances of money for the purposes of trade, whether the goods are consigned to the agent or not, and where a commission of 5 per cent. is not charged	2½ ditto.
9. *Del credere*, or guaranteeing sales, when specially required	2½ ditto.
10. Guaranteeing bills, bonds, or other engagements	2½ ditto.
11. Procuring freight, or advertising as agent of owners or commanders, on the amount of freight, whether the same passes through the hands of agents or not	5 ditto.
12. Receiving inward freight	1 per cent.
13. Ships' disbursements	2½ ditto.
14. Chartering ships for other parties	2½ ditto.
15. Effecting insurance or writing orders for insurance	½ ditto.
16. Settling insurance losses, total or partial, and on procuring return of premium	1 ditto.
17. Effecting remittances by bills of the agent ... otherwise, on purchasing or negotiating bills of exchange	1 per cent.
18. Bills of exchange returned, noted, or protested	1 ditto.
19. Negotiating loans on respondentia	2 ditto.
20. Debts, where a process at law or arbitration is necessary, 2½ per cent.; and if recovered	5 ditto.
21. Collecting house-rent	2½ ditto.
22. Letters of credit granted for mercantile purposes	2½ ditto.
23. Acting for the estates of persons deceased, as executors or administrators	5 ditto.
24. The management of the estates of others, on the amount received	2½ ditto.
25. All cash receipts, not serving for the purchase of goods, and not otherwise specified above	1 per cent.
26. Shroffing	½ per mil.
27. Transhipping goods	1 per cent.
28. Upon all advances not punctually liquidated, the agent to have the option of charging a second commission as upon a fresh advance, provided the charge do not occur twice in the same year.	
29. At the option of the agent, on the amount debited or credited within the year, including interest, and excepting only items on which a commission of 5 per cent. has been charged	1 ditto.
N.B. — This charge not to apply to paying over a balance due on an account made up to a particular period, unless where such balance is withdrawn without reasonable notice.	

Port Charges are fixed under the new treaty at 5 mace per register ton, in full of all charges; so that the complex system that previously obtained for charging those duties is now, in so far at least as British ships are concerned, at an end.

Trade between England and China. — Down to 1834, the trade between the United Kingdom and China was monopolised by the East India Company, but in the above year this monopoly was happily abolished, and the trade with China thrown open to all classes under the conditions specified in the subjoined act. Tea has always been by far the principal article of import from China; and it is mainly owing to the diffusion of the taste for it, and its consumption by all ranks and orders of the people, that the trade with China has attained its present importance: and, as already seen, we believe we must principally look to the increased consumption of tea that would, no doubt, follow the effectual reduction of the exorbitant duties with which it is at present loaded, for the future increase of the trade. The other articles of import are raw silk and silk manufactures, nankeens, cassia lignea, and a few other articles; but they are of very inferior value and importance as compared with tea.

The great articles of export from this country to China consist of cotton stuffs and yarn, woollen goods, linen, &c., earthenware, iron and steel, &c. Bullion used to be largely exported to China; but latterly the current has begun to set in the opposite direction.

Previously to the abolition of the monopoly in 1834 the real value of the merchandise exported from the U. Kingdom to China did not exceed 600,000*l.*; whereas it had increased in 1836 to 1,326,388*l.* The trade appears, however, to have been then completely overdone, and next year the exports to China fell off to 678,375*l.* But in 1838 they again rose to 1,204,356*l.* The interruption of the regular trade, by the disturbances and hostilities that afterwards ensued, prevents any accurate conclusions as to its probable future amount being deduced from the returns for 1839, 1840, 1841, and 1842. Perhaps, however, we may not be far wrong in estimating that China may, under the present scale of tea duties, afford an outlet to from 1,200,000*l.* to 1,600,000*l.* worth of British produce. But it is impossible to say how much this outlet might be increased were the duty on bohea reduced, as it should be, to 6*d.* or 8*d.* per lb., and that on other teas in the same proportion.

The act 6 & 7 Victoria, cap. 80., authorises the superintendent of the trade of her Majesty's subjects in China, being at the same time governor of Hong Kong, to issue, with the advice of the legislative council of the island, laws and ordinances for the government of British subjects in China, or within 100 miles of the same. Laws and ordinances so issued are to be laid before parliament. The powers given to the superintendent under the act 3 & 4 Will. 4. c. 93. are repealed.

Account of the Quantities of Tea imported into the United Kingdom from China, in each Year from 1793 to 1842, both inclusive.

Years.	Tea.	Years.	Tea.	Years.	Tea.	Years.	Tea.
	Lbs.		*Lbs.*		*Lbs.*		*Lbs.*
1793	16,067,331	1806	22,155,557	1817	31,467,073	1830	31,897,546
1794	23,710,774	1807	12,599,236	1818	20,065,728	1831	31,648,922
1795	27,208,003	1808	35,747,224	1819	23,750,413	1832	31,708,956
1796	6,184,628	1809	21,717,310	1820	30,147,994	1833	32,057,747
1797	16,235,125	1810	19,791,356	1821	30,731,105	1834	32,029,052
1798	44,873,112	1811	21,231,849	1822	27,362,766	1835	42,052,047
1799	15,690,080	1812	28,318,153	1823	29,046,885	1836	48,520,508
1800	15,165,368	1813	The records of this year were destroyed by fire.	1824	31,681,977	1837	36,502,345
1801	29,804,739			1825	29,345,699	1838	38,998,572
1802	27,356,502			1826	29,840,401	1839	37,191,762
1803	30,843,134	1814	26,110,550	1827	39,746,147	1840	22,576,405
1804	26,680,784	1815	25,602,214	1828	32,678,546	1841	27,639,817
1805	28,538,825	1816	36,234,380	1829	30,544,382	1842	37,409,544

Account of the Quantities of Raw Silk, Nankeen Cloths, Silk Manufactures, Cassia Lignea, and other Articles of Chinese Produce, imported into the United Kingdom, in each Year from 1830 down to 1842, both inclusive.—(*Parl. Paper* No. 257. Sess. 1843.)

Years.	Raw Silk.	Silk Manufactures. Nankeen Cloths.	Silk Manufactures. Silk Mercery.	Crapes in Pieces.	Lignea.		Lignea.		Other Articles.	
		Pieces.	*Number.*	*Pieces.*	*Lbs.*	*Number.*			*Cwts.*	*Lbs.*
1830	19,198	22,758	161	6,485	925	327,366			607	56
831	8,374	2,500	85	6,538	2,074	546,675	36,373		1,138	
832	28,105	- -	126	6,755	138	485,868	73,114		101	3,825
833	22,181	9,700	1,873	10,763	2,422	5 1,087,275	108,589		1,275	110
834	582,834		4,276	973	533	23 1,102,283	110,697	139,588	56,717	12,798
1835	737,489		4,153	5,646	1,956	313 2,058,564	153,637		28,515	12,152
836	1,277,027	11,900	6,595	4,986	2,630	4,588 653,854	74,883		44,028	
837	1,754,252	129,467	30,081	10,618	7,308	47,474 1,209,502	8,252	23,580	85,938	6,376
838	698,248	59,038	21,870	8,451	3,713	18,840 461,983	44,142	12,449	55,811	
839	349,549	56,400	21,327	7,206	13,563	381 523,352	54,206	33,406	36,759	
840	247,755	2,700	2,256	1,604	3,440	7 301,948	- -	- -	15,986	
841	277,093	5,599	13,578	8,288	12,106	4 730,989	38,760	9,124	43,640	
842	180,114	3,300	9,350	2,433	20,771	24 587,746	276,117	19,716	72,518	

An Account of the Number of Merchant Ships, specifying the Amount of their Tonnage and the Number of their Crews, that have cleared out from the different Ports of the United Kingdom for China, and entered inwards from the same, during each of the last Ten Years.

Years.	Cleared out. British. Ships.	British. Tons.	British. Men.	Foreign. Ships.	Foreign. Tons.	Foreign. Men.	Years.	Entered inwards. British. Ships.	British. Tons.	British. Men.
1833	25	29,627	2,759	3	1,087	49	1833	21	27,985	2,754
1834	16	8,887	632	4	1,176	64	1834	30	29,308	2,649
1835	33	21,218	1,487	9	3,833	166	1835	67	55,427	2,308
1836	38	24,099	1,589	12	4,885	227	1836	80	40,686	2,550
1837	26	17,694	1,176	2	872	35	1837	62	32,212	1,908
1838	31	16,175	971	3	1,510	72	1838	58	32,333	1,979
1839	30	14,159	906	3	1,113	39	1839	58	31,453	1,865
1840	18	6,115	363	3	1,082	51	1840	34	20,056	1,511
1841	38	17,056	942	3	1,581	58	1841	52	23,344	1,240
1842	63	28,297	1,403	2	1,067	73	1842	73	32,818	1,692

Account of the Quantities and Value of the principal Articles of British Produce and Manufacture exported from the United Kingdom to China during each of the Four Years ending with 1840.

Principal Articles.	1837. Quantities.	1837. Declared Value.	1838. Quantities.	1838. Declared Value.	1839. Quantities.	1839. Declared Value.	1840. Quantities.	1840. Declared Value.
		£		£		£		£
Cotton manufactures, entered by the yard - - yds.	10,964,423	272,375	22,133,621	519,098	16,675,448	386,255	13,478,478	238,271
Cotton twist and yarn - - lbs.	1,873,965	103,908	3,851,365	217,047	1,389,760	76,862	1,774,350	88,748
Earthenware of all sorts - ps.	89,500	1,100	105,400	1,163	39,300	628	27,000	767
Glass entered by weight cwts.	1,444	4,712	1,056	2,368	877	2,401	769	806
Iron and steel, wrought and wrought - - - tons	863	8,930	1,087	9,397	1,192	11,921	1,340	11,771
Lead and shot - - - —	585	11,540	348	6,700	191	3,312	56	925
Leather, wrought & unwrought, lbs.	519	110	3,840	664	896	134	700	117
Linen manufactures, entered by the yard - - - yds.	17,093	762	90,349	3,927	136,671	5,191	55,765	2,539
Plate, plated ware, jewellery and watches - - -	- -	5,252	- -	5,143	- -	3,701	- -	202
Soap and candles - -	487	32	5,753	267	1,711	65	2,000	90
Woollen manufactures entered by the piece - - - ps.	88,874	245,218	183,152	407,568	132,366	334,221	73,768	162,666
Ditto, by the yard - - yds.	16,940	1,194	25,688	2,007	12,798	835	11,116	1,032
All other articles - -	- -	23,242	- -	29,007	- -	26,445	- -	16,264
Total -	- -	678,375	- -	1,204,356	- -	851,969	- -	524,198

Subjoined is an account, prepared by the British Chamber of Commerce at Canton, of the entire trade carried on in British ships at that port in 1837-38, the last year of which, owing to the subsequent breaking out of hostilities, we have any authentic accounts. This account includes, of course, the trade with British India, Australia, and other British settlements, as well as that with the United Kingdom.

Statement of Trade carried on in British Vessels at Canton, from 1st July 1837, to 30th June 1838.

Imports.	Quantity.	Average Price.	Total Value.
			Sp. Dollars.
Broad cloth - - yards	345,200	$ 1 30	448,760
Camlets - - pieces	11,737	26	305,162
Long ells -	41,607	9	374,463
Bombazetts -	2,090	6 50	13,585
Blankets - - pairs	550	4	2,200
Cotton yarn - - piculs	11,858	36	426,838
Long cloth, white (ps. 39,387) yards	1,575,480	5¼	206,782
Grey (94,566) —	3,782,642		425,547
Dyed - - —	8,000		1,120
Twills white (1,682) —	67,280	4 75	7,990
Grey (8,384) —	335,342	4 50	37,726
Domestics - (7514) —	30,065	3 50	2,628
Chintzes (14,834) —	415,472	28 yds.	59,336
Handkerchiefs doz	37,271	1 40	52,179
Gold thread - cattles	47	40	1,880
Smalts - - piculs	32	42	1,344
Tin plate - - boxes	150	8 50	1,275
Tin - - - piculs	499	16 50	8,233
Spelter - - - —	2,373	5 75	13,644
Iron (mostly nail rod and hoop), - - —	9,890		42,032
Copper sheathing - —	190		6,080
Lead - - - —	7,47		44,826
Coral - - - value	7,000		7,000
Betel nut - - piculs	25,978		90,923
Bicho de Mar	80		704
Birds' nests - - value			22,103
Camphor Baroos - catties	778	18	14,004
Cloves - - - piculs	67	34	2,278
Cow bezoar - - catties	222	18	3,996
Catch Pegue - - piculs	752	4 50	3,384
Cornelians - - value			143,500
Cotton, Bombay (bls. 146,151) piculs	401,[illegible]		4,779,855
Bengal (19,364) —	111,069		1,471,625
Madras (10,792) —	21,289	9 2	311,644
Ebony - - - —	1,304	3	3,912
Elephants' teeth - —	875	85	74,375
Fish maws - - —	1,820	65	118,300
Gambier - - —	800	2	1,600
Gum Olibanum - —	2,663	3 50	9,320
Myrrh - - —	16	4	64
Bdellium - —	25		100
Horns, unicorn - —	58		2,320
Nutmegs - - —	44		510
Mother of pearl shells (gulf)	840		3,360
Opium, Patna - chests	14,116	551	7,777,916
Benares - —	3,638	476	1,731,688
Malwa - —	7,891	486	3,995,026
Turkey - piculs	130	380	49,400
Pearls - - - value			288,487
Pepper - - piculs	8,370		62,775
Putchuck	2,016		33,264
Rattans	8,526		25,578
Rice -	55,712	1 35	75,211
Saltpetre	8,632	6	51,792
Sandal wood -	6,166	24	147,984
Shark fins	2,102	32	67,264
Stockfish	341	4 50	1,535
Skins, fox	1,175	1	1,175
Land otter	6,050	8 75	52,937
Rabbit	5,283	55	2,905
Tortoise shell	645	Value	3,225
Treasure, gold	955	24	22,920
Bar silver	89,794	6 p.c	132,750
Dollars -			595,765
Sundries -			77,408
Spanish dollars			24,785,462

Exports.	Quantity.	Average Price.	Total Value.
			Sp. Dollars.
Alum - - - piculs	28,658	$ 2 15	61,615
Anniseed - - - chests	225	10	2,250
Arsenic - - - —	150	10	1,500
Bangles - - - —	103	28	2,884
Beads - - - —	1,594	17	27,098
Brass leaf - - - —	82	50	4,100
Camphor - - - —	2,045	30	61,350
Capoor cutchery - piculs	147	7	1,019
Cassia - - - —	6,762	9 75	65,930
China root - - - —	459	3 50	1,606
China and earthenware - -		Value.	87,200
Cochineal - - piculs	39	180	7,020
Copper - - - —	2,421	23	55,683
Corals, false - - - —	59	40	2,360
Cotton yarn - - - —	120	38	4,560
Crackers - - boxes	1,354	5 50	7,447
Galangal - - piculs	292	3	876
Gum Benjamin - - —	5	38	190
Hartall - - - —	528	11	5,808
Kettledrums - - chests	1,817	10	18,170
Do. silk - - —	154	12	1,848
Marble slabs - - no.	1,517	2	3,034
Matting - - rolls	299	22	6,578
Nankeens - - —	-	Value.	41,500
Oils, spice - - boxes	167	30	5,010
Paper, white - - chests	1,509	16	24,144
Coloured - —	303	14	4,242
Gilt - - —	153	20	3,060
Pearls, false - - - —	202	50	10,100
Preserves and sweetmeats boxes	1,319	5 50	7,255
Rhubarb - - piculs	641	60	38,460
Raw silk Canton to India —	735	Value.	301,852
Nankin do. —	534	—	176,895
Do. to Gt. Brit. —	4,412	475	1,095,700
Punjam - —	1,350	—	112,051
Silk piece goods value	-	-	365,760
Sugar - - piculs	21,542	Taels 5¼	165,212
Sugar candy - - —	17,526	6 7	163,772
	Pls. tls.	Taels.	
Tea, Bohea - piculs	56 @ 13	668	
Congo - - —	169,880 @ 24	4,077,120	
Caper - - —	5,952 @ 18	107,136	
Souchong - - —	7,680 @ 35	268,800	
Campoi - - —	217 @ 25	5,425	
Ankoi - - —	540 @ 15	8,100	
Hongmuey - - —	2,887 @ 24	69,288	
Pekoe - - —	4,434 @ 48	212,832	
Orange Pekoe —	3,560 @ 26	92,560	
Black -	195,206	4,841,929	6,753,030
	Pls. tls.	Taels.	
Tea, Hyson - - —	10,457 @ 47	491,479	
Young Hyson —	6,978 @ 26	181,428	
Hyson skin - —	10,742 @ 18	193,356	
Twankay - - —	32,650 @ 21	685,650	
Gunpowder - —	3,633 @ 50	181,650	
Imperial - —	2,245 @ 47	105,515	
Green -	66,705	183,978	2,564,962
Not specified -	4,990 @ 35	—	243,584
Trunks - - - sets	117	$ 20	2,340
Umbrellas - - bxs.	102	50	5,100
Vermillion - - —	178	67	11,926
Sundries - - value	-	-	84,700
Treasure, gold - taels	34,141	24	819,384
Sycee - —	2,688,854	6 ₹ cent.	3,975,153
Dollars - - —	-	-	4,180,239
64 ships at Whampoa	@6,000	$384,000	
22 — do. (rice)	@1,500	33,000	
44 — Lintin	@ 750	33,000	
		450,000	
Balance - - -			2,770,762
Spanish dollars - -			21,785,462

An Account of the Quantities of Tea imported into the United Kingdom during each of the Ten Years ending with 1842; specifying the Quantities re-exported, the Quantities annually entered for Home Consumption, the Rates of Duty, and the annual Produce of the Duties.

Years.	Quantities imported into the United Kingdom.	Quantities re-exported from the United Kingdom.	Quantities retained for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty.
	Lbs.	*Lbs.*	*Lbs.*	*£*	
1833	32,057,832	254,460	31,829,620	3,444,102	If sold at or under 2*s.* ₹ lb., 96*l.* per centum ad valorem. At or above 2*s.* ₹ lb., 100*l.* ditto.
1834	33,643,980	1,181,005	34,969,651	3,589,361	Bohea, 1*s.* 6*d.* ₹ lb.; Congou, Twankey, Hyson Skin, Orange Pekoe, and Campoi, 2*s.* 2*d.* ₹ lb.; all other sorts, 3*s.* ₹ lb. (from 22d April).
1835	44,360,550	2,158,029	36,574,004	3,832,427	—
1836	49,307,701	4,269,863	49,142,236	4,674,535	All sorts, 2*s.* 1*d.* ₹ lb. (from 1st July).
1837	36,975,981	4,716,248	30,625,206	3,223,840	—
1838	40,413,714	2,577,877	32,351,593	3,362,035	—
1839	38,158,008	3,318,912	35,127,287	3,658,803	—
1840	28,021,882	2,383,384	32,252,628	3,472,864	— 5*l.* ₹ cent. additional thereon from 15th May.
1841	30,787,796	4,490,363	36,675,667	3,973,668	—
1842	40,742,128	5,710,127	37,355,912	4,088,957	—

Account of the Quantities, Prices, and Values of the Articles of Export from Canton in 1835-36, 1836-37, and 1837-38.

		1835-1836.			1836-1837.			1837-1838.		
				Total Value.	Quantity.	Average Price.	Total Value.	Quantity.	Average Price.	Total Value.
			Dollars.	*Dollars.*		*Dollars.*	*Dollars.*		*Dollars.*	*Dollars.*
Alum	piculs	19,230	2.12	40,828	35,632	2.50	85,080	28,658	2.15	61,615
Camphor		piculs. 1,420		44,340	chests. 863		28,479	chests. 2,045		61,350
Cassia	piculs	14,699		145,113	11,675		58,375	6,762		
China & earthenware	val.			4,524	- -		16,346			
Raw silk, viz.										
Canton to India	piculs	1,948	253.50	493,824	6,635		1,843,056			
Nankin do.		7,920	412.91	3,270,291	13,762		6,261,710			
Do. to G. Britain										
Panjam								1,350		
Silk piece goods				314,021			338,212			
Sugar	piculs	33,933	5.42	184,177	63,803		460,800	21,542	tls. 5⅓	
Sugar candy		17,194	9.93	170,843	31,377		505,054	17,526	6.7	
Tea, black		312,481	31.79	9,936,835			10,512,562	195,206		4,841,929
green		71,508	48.60	3,475,408			4,290,220	66,705		
not specified		- -		- -	1,925 at 34		327,013	4490 at 35		
Treasure gold		21,251		494,063	43,919	23.50	1,032,096	34,141		
Sycee silver				2,384,606	2,058,754	5 per cent	3,002,350	2,688,854	6 per cent.	
dollars				1,589,742			794,650			
All other articles				1,304,284			812,827			
				23,852,899			30,168,830			
				1,024,900			561,000			
				7,548,824						
				32,426,623						24,785,465

Account of the Imports of the different Sorts of Opium into China from 1816-17 to 1837-38, both inclusive.

Seasons.	Patna and Benares.			Malwa.			Total.		Turkey.		
	No. of Chests.	Aver. Price.	Total Value.	No. of Chests.	Aver. Price.	Total Value.	No. of Chests.	Value.	No. of Chests.	Aver. Price.	Total Value.
		Dollars.	*Dollars.*		*Dollars.*	*Dollars.*		*Dollars.*		*Dollars.*	*Dollars.*
1816-1817	2,610	1,200	3,132,000	600	875	525,000	3,210	3,657,000	750	300	375,000
1817-1818	2,530	1,265	3,200,450	1,150	612	703,800	3,680	3,904,250	1,000	610	610,000
1818-1819	3,050	1,000	3,050,000	1,530	725	1,109,250	4,580	4,159,250	700	625	437,500
1819-1820	2,970	1,235	3,667,950	1,620	1,175	1,915,250	4,600	5,583,200	200	975	195,000
1820-1821	3,050	1,900	5,795,000	1,720	1,515	2,605,800	4,770	8,400,800	30	1,525	45,750
1821-1822	2,910	2,075	6,038,250	1,718	1,325	2,276,350	4,628	8,314,600	500	1,025	512,500
1822-1823	1,822	1,552	2,828,930	4,000	1,200	5,160,000	5,822	7,988,930	226	1,270	287,080
1823-1824	2,910	1,600	4,656,000	4,172	925	3,859,100	7,082	8,515,100			
1824-1825	2,655	1,175	3,119,625	6,000	750	4,500,000	8,655	7,619,625			
1825-1826	3,442	913	3,141,755	6,179	723	4,466,450	9,621	7,608,205			
1826-1827	3,661	1,002	3,668,565	6,308	942	5,941,520	9,969	9,610,085			
1827-1828	5,114	998	5,105,073	4,361	1,204	5,251,760	9,475	10,356,833			
1828-1829	5,961	940	5,604,235	7,171	966	6,928,880	13,132	12,533,115	No account has been kept of Turkey opium during these years.		
1829-1830	7,143	858	5,149,577	6,837	861	5,907,580	14,000	12,057,157			
1830-1831	6,660	869	5,789,794	12,100	587	7,110,227	18,760	12,900,031			
1831-1832	5,672	967	5,484,340	7,831	695	5,447,355	13,503	10,931,695			
1832-1833	8,167	792	6,551,059	15,403	570	8,781,700	23,670	15,322,759			
1833-1834	8,672	639	5,545,845	11,114	676	7,510,695	19,786	13,056,540			
1834-1835	7,767	572	4,431,845	8,747	595	5,223,125	16,514	9,655,010			
1835-1836	6,173	696	4,292,900	10,612	580	6,146,975	16,785	10,539,875			
1836-1837	8,078	724	5,848,236	13,430	628	8,439,694	21,509	14,287,300			
1837-1838	6,165	633	3,903,129	13,875	503	6,980,028	80,040	10,883,157			

Trade between British India and China.—This trade is decidedly more valuable and important than that carried on between Great Britain and China. The greatest article of export from India to Canton used to be cotton wool, principally from Bombay; but it is now far surpassed by opium, the imports of which into China have *sextupled* since 1816-17, and are worth, at present, about 14,500,000 dollars. This increase is the more extraordinary, seeing that opium is contraband in China; but the edicts of the emperors are as unable to prevent its introduction, as the proclamations of James and Charles were to hinder the use of tobacco in England. The smuggler is, if anything, even more omnipotent in China than in Spain. Opium is everywhere imported with ease and safety. The trade was at first principally conducted at Whampoa; but the exactions of the Chinese authorities drove it to Macao, where it increased, but whence it was subsequently driven by the exactions of the Portuguese. It is now principally carried on in the Bay of Lintin and generally along the east coast. At Lintin the opium used to be kept on board receiving ships, of which there were frequently not less than 12 quietly lying at anchor, without danger or molestation of any sort.

The exports from China to India consist of sugar for Western India, tea, porcelain, nankeens, cassia, camphor, &c.; but the amount of these is not very considerable, and the returns are principally made in bills and bullion.

American Trade with China.—The American intercourse with China commenced

shortly after the termination of the revolutionary war, and speedily became of considerable importance.

Account of the Quantity and Value of the Tea imported into the United States from China during each of the Three Years ending the 30th of September, 1841.

Years.	Quantity.	Value.
1839 - -	9,296,679 *lbs.*	$2,413,283
1840 - -	19,966,166	5,414,548
1841 - -	11,162,931	3,343,359

It is seen from this statement, that the quantity of tea imported into the United States amounts to about a third part or more of the quantity imported into the United Kingdom. The proportion of its value is, however, considerably greater, the larger proportion of the American imports consisting of hyson and other comparatively high priced green teas.

Account of the Trade of the United States with China during each of the Three Years ending the 30th of September, 1841.

	Value of Imports.	Value of Exports.		Tonnage.	
		Foreign Produce.		Entered the U. States.	Cleared from the U. States
1839	$3,678,509	$430,464	$1,103,137	$1,533,601	7,392	6,419
1840	6,640,829	469,186	540,780	1,009,966	14,771	3,360
1841	3,985,388	715,522	485,494	1,200,816	11,986	4,876

The value of the exports of domestic produce from the United States to China amounted, in 1841, to 715,322 dollars; almost wholly made up of ginseng (637,885 lbs.), worth 435,766 dollars; lead (1,510,136 lbs.), worth 66,033 dollars; and cotton manufactures and twist, worth 188,039 dollars. (See *Official Papers laid before Congress*, 21 July, 1842.)

Trade of Portuguese, Spaniards, &c. at Canton. — Respecting the extent of the Portuguese, Spanish, French, Swedish, Danish, and Dutch trades, we have no data to lay before the reader on which reliance could be placed; but they are inconsiderable and fluctuating, compared with the branches already described. The Dutch trade is probably the largest; but, even with the assistance of protecting duties in Holland, the Dutch are unable to withstand the enterprise and activity of the Americans. The Portuguese trade, particularly that with the possessions of Portugal on the continent of India, was considerable during the war, but has since greatly declined. A nation of more spirit than the Portuguese would, with the advantage they enjoy in the possession of the convenient station of Macao, be able to carry on the Chinese trade with superior success. There is a considerable intercourse, carried on in Spanish ships, between Canton and Manilla. The Philippine Islands afford many commodities in demand in the Chinese markets; and the Spaniards are the only European people allowed openly to trade with the busy and commercial port of Amoy, in the province of Fokien; unfortunately, however, they are deficient in the skill and enterprise required fully to avail themselves of these advantages. It appears, from the official accounts published by the French government, that in 1841, only 2 ships, of the burden of 671 tons, arrived in French ports from China. This, we believe, is principally to be ascribed to the trifling extent to which the great article of Chinese produce, tea, is consumed in France.

Trade with the Indian Islands, &c. — In his evidence before the select committee of the House of Commons, Mr. Crawfurd gave the following instructive details with respect to the native foreign trade of China: —

Native Foreign Trade of China. — "The principal part of the junk trade is carried on by the four contiguous provinces of Canton, Fokien, Chekiang, and Kiannan.

"No foreign trade is permitted with the island of Formosa; and I have no means of describing the extent of the traffic which may be conducted between China, Corea, and the Leechew Islands. The following are the countries with which China carries on a trade in junks; viz. Japan, the Philippines, the Soo-loo Islands, Celebes, the Moluccas, Borneo, Java, Sumatra, Singapore, Rhio, the east coast of the Malayan peninsula, Siam, Cochin China, Cambodia, and Tonquin. The ports of China at which this trade is conducted are Canton, Tchao-tcheou, Nomhong, Hocitcheon, Suheng, Kongmoon, Changlim, and Hainan, in the province of Canton; Amoy and Chinchew, in the province of Fokien; Ningpo and Siang-hai, in the province of Chekiang; and Soutcheon, in the province of Kiannan. The following may be looked upon as an approximation to the number of junks carrying on trade with the different places already enumerated; viz.

	Junks.		Junks.
Japan 10 junks, two voyages	- 20	Singapore 8, Rhio 1 - -	- 9
Philippine Islands - -	- 13	East coast of Malay peninsula -	- 6
Soo-loo Islands - -	- 4	Siam - - - -	- 89
Borneo 15, Celebes 2 -	- 15	Cochin China - - -	- 20
Java - - - -	- 7	Cambodia - - -	- 9
Sumatra - - -	- 10	Tonquin - - - -	
			— Total 222.

"This statement does not include a great number of small junks belonging to the island of Hainan, which carry on trade with Tonquin, Cochin China, Cambodia, Siam, and Singapore. Those for Siam amount yearly to about 50, and for the Cochin Chinese dominions to about 43; these alone would bring the total number of vessels carrying on a direct trade between China and foreign countries to 307. The trade with Japan is confined to the port of Ningpo, in Chekiang, and expressly limited to 10 vessels; but as the distance from Nangasaki is a voyage of no more than 4 days, it is performed twice a year.

"With the exception of this branch of trade, the foreign intercourse of the two provinces Chekiang and Kiannan, which are famous for the production of raw silk, teas, and nankeens, is confined to the Philippine Islands, Tonquin, Cochin China, Cambodia, and Siam; and none of this class of vessels, that I am aware of, have ever found their way to the western parts of the Indian Archipelago. The number of these trading with Siam is 24, all of considerable size; those trading with the Cochin Chinese dominions 16, also of considerable size; and those trading with the Philippines 5; making in all 45, of which the average burden does not fall short of 17,000 tons. I am the more particular in describing this branch of the Chinese commerce, as we do not ourselves at present partake of it, and as we possess no direct means of obtaining information in regard to it. All the junks carrying on this trade with Siam are owned in the latter country and not in China; and I am not sure how far it may not also be so in the other cases. I do not doubt but that a similar commerce will, in the event of a free trade, extend to Singapore; and that through this channel may eventually be obtained the green teas of Kiannan, and the raw silks of Chekiang.

"Besides the junks now described, there is another numerous class, which may be denominated the

colonial shipping of the Chinese. Wherever the Chinese are settled in any numbers, junks of this description are to be found; such as in Java, Sumatra, the Straits of Malacca, &c.; but the largest commerce of this description is conducted from the Cochin Chinese dominions, especially from Siam, where the number was estimated to me at 200. Several junks of this description from the latter country come annually to Singapore, of which the burden is not less than from 300 to 400 tons.

"The junks which trade between China and the adjacent countries are some of them owned and built in China; but a considerable number also in the latter countries, particularly in Siam and Cochin China. Of those carrying on the Siamese trade, indeed, no less than 81 out of the 89, of considerable size, were represented to me as being built and owned in Siam. The small junks, however, carrying on the trade of Hainan, are all built and owned in China.

"The junks, whether colonial or trading direct with China, vary in burden from 2,000 piculs to 15,000, or carry dead weight from 120 to 900 tons. Of those of the last size I have only seen 3 or 4, and these were at Siam, and the same which were commonly employed in carrying a mission and tribute yearly from Siam to Canton. Of the whole of the large class of junks, I should think the average burden will not be overrated at 300 tons each, which would make the total tonnage employed in the native foreign trade of China between 60,000 and 70,000 tons, exclusive of the small junks of Hainan, which, estimated at 150 tons each, would make in all about 80,000 tons.

"The junks built in China are usually constructed of fir and other inferior woods. When they arrive in Cambodia, Siam, and the Malayan islands, they commonly furnish themselves with masts, rudders, and wooden anchors, of the superior timber of these countries. The junks built in Siam are a superior class of vessels, the planks and upper works being invariably teak. The cost of ship-building is highest at the port of Amoy in Fokien, and lowest in Siam. At these places, and at Chang-lim in Canton, the cost of a junk of 8,000 piculs, or 476 tons burden, was stated to me, by several commanders of junks, to be as follows: —

At Siam	-	7,400 dollars
Chang-lim	-	16,000 —
Amoy	-	21,000 —

A junk of the size just named has commonly a crew of 90 hands, consisting of the following officers, besides the crew; a commander, a pilot, an accountant, a captain of the helm, a captain of the anchor, and a captain of the hold. The commander receives no pay, but has the advantage of the cabin accommodation for passengers, reckoned on the voyage between Canton and Singapore worth 150 Spanish dollars. He is also the agent of the owners, and receives a commission, commonly of 10 per cent. on the *profits* of such share of the adventure, generally a considerable one, in which they are concerned. The pilot receives for the voyage 200 dollars of wages, and 50 piculs of freight out and home. The helmsman has 15 piculs of freight and no wages. The captains of the anchor and the hold have 9 piculs of freight each; and the seamen 7 piculs each. None of these have any wages. The officers and seamen of the colonial junks are differently rewarded. In a Siamese junk, for example, trading between the Siamese capital and Singapore, of 6,000 piculs burden, the commander and pilot had each 100 dollars for the voyage, with 12 piculs of freight apiece. The accountant and helmsman had half of this allowance, and each seaman had 13 dollars, with 5 piculs of freight.

"In construction and outfit, Chinese junks are clumsy and awkward in the extreme. The Chinese are quite unacquainted with navigation, saving the knowledge of the compass: notwithstanding this, as their pilots are expert, their voyages short, and as they hardly ever sail except at the height of the monsoons, when a fair and steady 7 or 8 knots' breeze carries them directly from port to port, the sea risk is very small. During 13 years' acquaintance with this branch of trade, I can recollect hearing of but 4 shipwrecks; and in all these instances the crews were saved.

"The construction and rigging of a Chinese junk may be looked upon as her proper registry, and they are a very effectual one; for the least deviation from them would subject her at once to foreign charges and foreign duties, and to all kinds of suspicion. The colonial junks, which are of a more commodious form and outfit, if visiting China, are subjected to the same duties as foreign vessels. Junks built in Siam, or any other adjacent country, if constructed and fitted out after the customary model, are admitted to trade to China upon the same terms as those built and owned in the country. If any part of the crew consist of Siamese, Cochin Chinese, or other foreigners, the latter are admitted only at the port of Canton; and if found in any other part of China, would be seized and taken up by the police exactly in the same manner as if they were Europeans. The native trade of China conducted with foreign countries is not a clandestine commerce, unacknowledged by the Chinese laws, but has in every case at least the express sanction of the viceroy or governor of the province, who, on petition, decides the number of junks that shall be allowed to engage in it; and even enumerates the articles which it shall be legal to export and import. At every port, also, where such a foreign trade is sanctioned, there is a hong or body of security merchants, as at Canton; a fact which shows clearly enough that this institution is parcel of the laws or customs of China, and not a peculiar restraint imposed upon the intercourse with Europeans.

"The Chinese junks properly constructed pay no measurement duty, and no cumshaw or present; duties, however, are paid upon goods exported and imported, which seem to differ at the different provinces. They are highest at Amoy, and lowest in the island of Hainan. The Chinese traders of Siam informed me that they carried on the fairest and easiest trade, subject to the fewest restrictions, in the ports of Ningpo and Siang-hai in Chekiang, and Soutcheon in Kiannan. Great dexterity seems every where to be exercised by the Chinese in evading the duties. One practice, which is very often followed, will afford a good example of this. The coasting trade of China is nearly free from all duties and other imposts. The merchant takes advantage of this; and, intending in reality to proceed to Siam or Cochin [illegible]

to another port, and thus deprive the public officers of their customary perquisites. I was assured of the frequency of this practice by Chinese merchants of Cochin China, as well as by several commanders of junks at Singapore. From the last-named persons I had another fact of some consequence, as connected with the Chinese trade; viz. that a good many of the junks, carrying on trade with foreign ports to the westward of China, often proceeded on voyages to the northward in the same season. In this manner they stated that about 20 considerable junks, besides a great many small ones, proceeded annually from Canton to Souchong, one of the capitals of Kiannan, and the wealth and commerce the rival of Canton, where they sold about 200 chests of opium at an advance of 50 per cent. beyond the Canton prices. Another place where the Canton junks, to the number of 5 or 6, repair annually, is Chinchew, in the province of Canton, within the Gulf of Pecheley, or Yellow Sea, and as far north as the 37th degree of latitude." —(*Appendix, Report of* 1830, p. 298.)

A Chinese ship or junk is seldom the property of one individual. Sometimes 40, 50, or even 100 different merchants purchase a vessel, and divide her into as many different compartments as there are partners; so that each knows his own particular part in the ship, which he is at liberty to fit up and secure as he pleases. The bulk-heads, by which these divisions are formed, consist of stout planks, so well caulked as to be completely water-tight. A ship thus formed may strike on a rock, and yet sustain no serious injury;

a leak springing in one division of the hold will not be attended with any damage to articles placed in another; and, from her firmness, she is qualified to resist a more than ordinary shock. A considerable loss of stowage is, of course, sustained; but the Chinese exports generally contain a considerable value in small bulk. It is only the very largest class of junks that have so many owners; but even in the smallest class the number is very considerable.

Population of China.— For some remarks on the conflicting accounts and theories that have been put forth with respect to the population of this empire, the reader is referred to the *Geographical Dictionary*, art. *China*.

CANVAS (Fr. *Toile à voile*; Ger. *Segeltuch*; It. *Canevazza, Lona*; Rus. *Parussnoe polotno, Parussina*; Sp. *Lona*), unbleached cloth of hemp or flax, chiefly used for sails for shipping. Masters of ships are required to make entry of all foreign-made sails and cordage, not being standing or running rigging, in use on board their respective ships, under a penalty of 100*l*. Sails in actual use, and fit and necessary for such ship, are imported free; but when otherwise disposed of, they are liable to an *ad valorem* duty of 20 per. cent.—(3 & 4 *Will.* 4. c. 56.) It had been the practice for a considerable period to grant bounties on the exportation of canvas or sail-cloth; these, however, finally ceased on the 1st of January, 1832. By an act passed in the reign of Geo. 2., new sails were ordered to be stamped with the maker's name and place of abode; but this regulation was repealed by the 10 Geo. 4. c. 43. § 9.

CAOUTCHOUC. "This substance, which has been improperly termed elastic gum, and vulgarly, from its common application to rub out pencil marks on paper, *India rubber*, is obtained from the milky juice of different plants in hot countries. The chief of these are the *Jatropha elastica*, and *Urceola elastica*. The juice is applied in successive coatings on a mould of clay, and dried by the fire or in the sun; and when of a sufficient thickness, the mould is crushed, and the pieces shaken out. Acids separate the caoutchouc from the thinner part of the juice at once, by coagulating it. The juice of old plants yields nearly two thirds of its weight; that of younger plants less. Its colour, when fresh, is yellowish white, but it grows darker by exposure to the air. The elasticity of this substance is its most remarkable property; when warmed, as by immersion in hot water, slips of it may be drawn out to 7 or 8 times their original length, and will return to their former dimensions nearly. Cold renders it stiff and rigid, but warmth restores its original elasticity. Exposed to the fire, it softens, swells up, and burns with a bright flame. In Cayenne it is used to give light as a candle."—(*Ure's Dictionary.*)

Caoutchouc has become an article of very considerable importance. M. de la Condamine, who was one of the first to communicate authentic information with respect to it, mentions, that, owing to its being impervious to water, it was made into boots by the Indians.—(*Voyage de la Rivière des Amazones*, p. 76.) It is now employed in a similar way here. Means have, within these few years, been discovered of reducing it to a state of solution; and when thin filaments of it are spread over cloth or any other substance, it is rendered impervious alike to air and water. Air cushions and pillows are manufactured in this way; as are water-proof cloaks, now in very extensive demand, hats, boots, shoes, &c. It is also extensively used in the manufacture of braces and other articles which it is desirable should possess considerable elasticity; and there can be little doubt that it will be employed still more extensively, and in a still greater variety of ways.

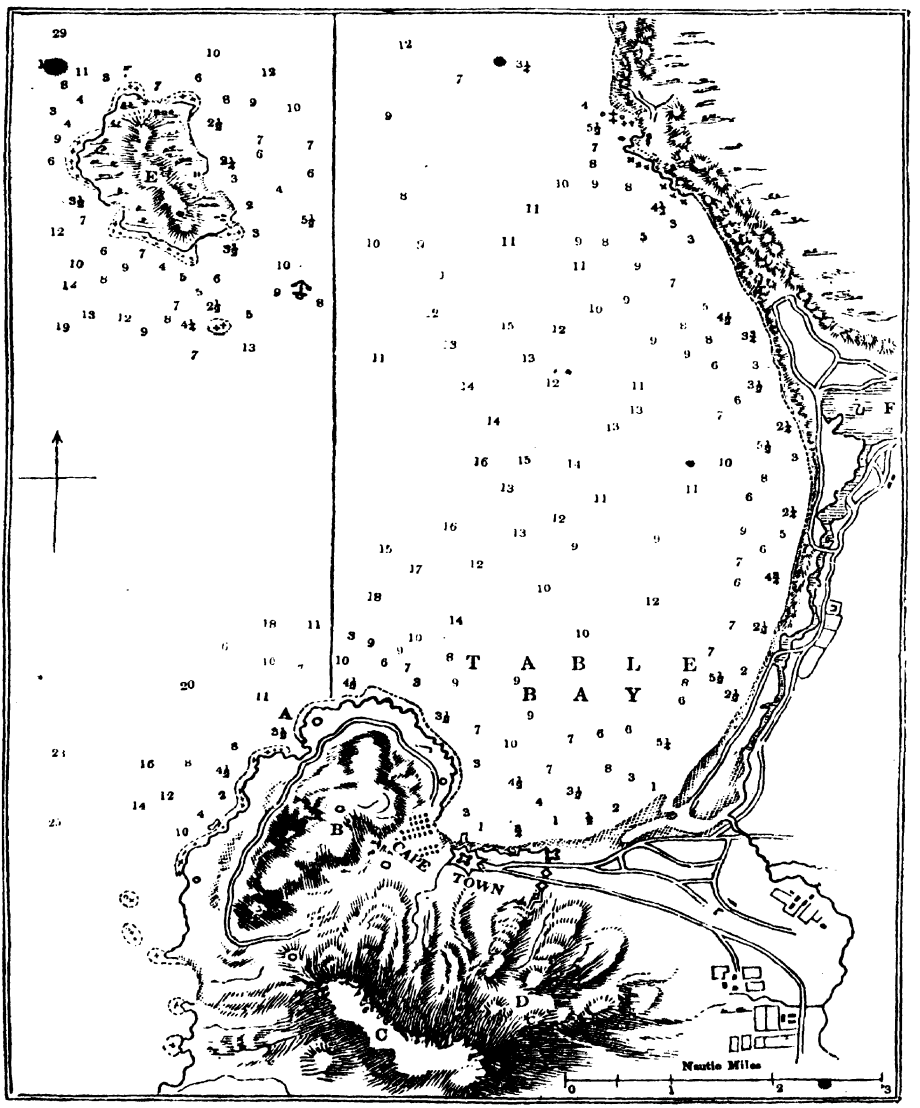
Previously to 1830, the importations of caoutchouc were comparatively inconsiderable, having in that year amounted to only 52,000 lbs.; whereas, in 1840, the duty of 1*s*. a cwt, produced 322*l*., showing that 6,640 cwts., or 721,280 lbs, had been entered for consumption. It is principally imported from Brazil, Colombia, and other parts of S. America. The imports from Brazil (Para) amounted, at an average of the 3 years ending with 1842, to 3,790 cwts. a year.—(*Parl. Paper* No. 309. Sess. 1843.) The price of caoutchouc varied in the London market, in January 1843, from 7*d*. to 1*s*. 3*d*. per lb.

CAPERS (Fr. *Capres*; Ger. *Kappern*; Du. *Kappers*; It. *Cappari*; Sp. *Alcaparras*; Rus. *Kapersziï*; Lat. *Capparis*), the pickled buds of the *Capparis spinosa*, a low shrub, generally growing out of the joints of old walls, and the fissures of rocks, in most of the warm parts of Europe. Capers are imported into Great Britain from different parts of the Mediterranean; the best from Toulon in France. Some small salt capers come from Majorca, and a few flat ones from about Lyons. The duty of 6*d*. per lb. on capers produced, in 1840, 2,100*l*. nett, showing that 84,000 lbs. had been entered for home consumption.

CAPE-TOWN, the capital of the British territory in South Africa, at the bottom of Table Bay, about 32 miles north from the Cape of Good Hope, and on the western side of the territory to which it gives its name; lat. 33° 55′ 56″ S., long. 18° 21′ E. The town was founded by the Dutch in 1650; and remained, with the territory subject to it, in their possession, till it was taken by the British in 1795. It was restored to the Dutch by the treaty of Amiens; but being again captured by the British in 1806, it was finally ceded to us in 1815. The streets are laid out in straight lines, crossing

each other at right angles; many of them being watered by canals, and planted on each side with oaks. The population in 1842 amounted, according to the statement in the *Cape Almanac*, to 22,543, of whom about a third were blacks. The town is defended by a castle of considerable strength. Table Bay is capable of containing any number of ships; but it is exposed to the westerly winds, which, during the months of June, July, and August, throw in a heavy swell, that has been productive of many distressing accidents. This, in fact, is the great drawback upon Cape-Town, which in all other respects is most admirably fitted for a commercial station. At the proper season, however, or during the prevalence of the easterly monsoon, Table Bay is perfectly safe; while the cheapness and abundance of provisions, the healthiness of the climate, and above all its position, render it a peculiarly desirable resting place for ships bound to or from India, China, Australia, &c.

The subjoined plan of Table Bay is taken from the survey of the Cape of Good Hope, executed by Lieut. Vidal and others, under the direction of Captain Owen.



References to the Plan. — A, light-house, furnished with double lights. They may be seen clearly off deck at 16 miles' distance; but they do not appear double till within 6 or 7 miles to the westward; from the northward only one light is seen. B, Lion's Rump. C, Table Mountain. D, Devil's Peak, in lat. 33° 57′ 2″. E Robbin Island. F, Salt River. The figures denote the soundings in fathoms.

Port Instructions. — Art. 1. On the arrival of merchant vessels in Table Bay, a proper berth will be pointed out to the masters thereof by the port captain, when he boards them; and no master of a merchant vessel shall shift his berth without permission from the port captain, unless in case of extreme emergency, when he must report his having done so as early as possible at the Port-office.

2. Should it be the intention of a master of a vessel to discharge or receive on board any considerable quantity of merchandize, a berth will be pointed out to him as close to the jetty, or other landing place, as the safety of the vessel and other circumstances will admit. And the master will then moor with two bower anchors, with an open hawse to the N.N.E., taking especial care, in so mooring, not to overlay the anchors of any other ship, or in any way to give the vessel near him a foul berth. Ships and vessels touching in Table Bay for water and refreshments alone, may ride at single anchor in the outer anchorage; but in this case it is particularly recommended to veer out 80 or 90 fathoms, if they ride by a chain cable, as the liability of starting or fouling the anchor, or breaking the chain, will thereby be greatly lessened; and if riding by a rope or coir cable, to run out a stream or good hedge, to steady the ship; and in both cases the other bower anchor should be kept in perfect readiness to let go. When the vessel is properly moored with bower anchors, or well secured with a bower and stream anchor, and with good cables, buoys, and buoy-ropes, the master will then take the exact place of the ship by the bearings of 2 land-marks, and the depth of the water; and should accident occur, by which the vessel may drift from this situation, or lose her anchors, a good bearing and depth of water must be taken at the time, and the same must be notified in writing to the port captain. It is particularly recommended that vessels be kept as snug as possible, to counteract the effects of the periodical winds, which at times blow with considerable violence.

The district subject to Cape Town is of very great extent, and contains every variety of soil, from the richest level land to the wildest mountain, and tracts destitute of even the appearance of vegetation. The climate fluctuates between the two extremes of rain and drought. On the whole, its advantages and disadvantages seem to be pretty equally balanced; and the prospects which it holds out to the industrious emigrant, if not very alluring, are certainly not discouraging.

Population. — According to the official returns, the population of the Cape Colony, in 1842, consisted of 171,519.

Produce. — Large quantities of corn of a very good description are produced in the immediate neighbourhood of Cape Town, and in other parts of the colony; but agriculture is crippled by the Dutch law of succession, which, by dividing a man's property equally among his children, hinders the accumulation of capital in masses, and the formation of proper farming establishments.—(*Thompson's Travels in Southern Africa*, p. 324.)

The Mauritius and Rio Janeiro are the principal markets for the corn of the Cape. The exports of wool have increased very rapidly within the last 10 years, and it now forms the most important article sent from the colony. The native breed of sheep is very inferior; its fleece is worth nothing, and it is remarkable only for the size of the tail, which sometimes weighs 20 lbs.! But fine wooled Spanish merinos, Saxon and English sheep succeed remarkably well, and their wool fetches a high price. The eastern district of Albany is especially suitable for sheep.

Large quantities of wine, and of what is called brandy, are produced at the Cape; but, with the exception of Constantia, they are very inferior. The effect of allowing the importation of Cape wines into the United Kingdom at a comparatively low duty is, not to occasion their direct consumption, but to cause them to be employed as a convenient means of adulterating others; so that, besides being injurious to the revenue, such reduction of duty promotes fraudulent practices, and detracts from the comforts of the public.

Considerable quantities of hides, skins, and horns are exported. They are principally brought from Algoa Bay, on the eastern side of the colony; and the trade has increased very fast during the last 6 or 7 years. Aloes are an important product; and horses, butter, beef, ivory, argol, and various other articles, are among the exports. The latter also include dried fish, whale and seal oil, &c., the Cape fisheries being of considerable value.

The imports at the Cape consist of woollens, cottons, hardware, earthenware, furniture, haberdashery, soap, paper, books, and portions of most articles used in this country. Piece goods and teak timber are imported from India, tea from China, sugar from India, the Mauritius, &c.

Trade. — The trade between the colonists and the independent natives is subjected to various restraints, of which it is not always very easy to discover the policy. The sale of gunpowder and firearms to the natives has been prohibited; a regulation which might have been a judicious one, had they not been able to obtain them from any one else. The Americans have however traded with the eastern coast, and have liberally supplied the natives with these and various other articles; so that by keeping up the regulation in question, we merely exclude ourselves from participating in what might be an advantageous trade. But since we have taken possession of Natal, this intercourse may perhaps have been stopped.

Account of the Quantities and Values of the Staple Articles, the Produce of the Colony of the Cape of Good Hope, exported in the Year ended 10th of October, 1842.

Articles.	Quantities.	Value.			Articles.	Quantities.	Value.		
		£	s.	d.			£	s.	d.
Aloes - - - lbs.	713,073	13,087	0	0	Horns - - - num.	108,790	2,324	10	0
Argol - - - —	86,688	1,410	0	0	Horses - - - —	419	12,214	0	0
Beef and pork - - casks	1,390	4,610	0	0	Ivory - - - lbs.	15,254	2,802	0	0
Bone (whale) - - lbs.	9,906	493	0	0	Mules - - - num.	178	3,000	0	0
Butter - - - —	84,860	3,989	0	0	Oil, viz.:—Seal - - gal.	182	91	10	0
Candles - - - —	35,564	1,080	0	0	Whale - - —	15,445	1,220	0	0
Corn, and meal, viz.:—					Skins, viz.:—Basil - -	-	-	-	-
Barley - - muids	2,300	927	0	0	Calf - num.	567	102	6	0
Beans and peas - -	269	1,039	0	0	Goat - —	186,661	18,729	10	0
Bran - - lbs.	424,614	1,467	0	0	Seal - —	588	482	0	0
Flour - - —	853,186	10,903	0	0	Sheep - —	156,633	5,810	10	0
Oats - - muids	5,639	2,017	10	0	Spirits, viz.:—Brandy - gal.	1,105	212	10	0
Wheat - - —	1,121	1,159	5	0	Tallow - - - lbs.	282,580	4,969	0	0
Feathers (ostrich) - lbs.	7192	3,457	0	0	Wax - - - —	2,090	141	10	0
Fish (dried) - - —	1,330,581	5,604	10	0	Wine, viz.:—Constantia gal.	3,042	1,950	3	0
Fruits (dried) - - —	207,703	2,836	0	0	Ordinary —	546,302	40,926	5	6
Ditto ditto - - pack.	47	66	0	0	Ditto - pipes	17	264	0	0
Hides (horse and ox) - num.	39,780	26,106	0	0	Wool - - - lbs.	1,372,483	72,497	10	0
							247,918	7	6
					Other Articles - - -		10,189	0	0
					Total - -	£	258,107	7	6

	£	s.	d.
Of the above, the produce exported from Cape Town was worth - - -	163,446	11	0
Ditto exported from Simon's Town - - - - - -	162	16	6
Ditto exported from Port Elizabeth - - - - - -	94,498	0	0*
	£258,107	7	6

* Port Elizabeth, which is rapidly rising in importance, is a *free* port.

Summary View of the Trade and Navigation of the Colony for the Year ended 10th October, 1842.

Ports.	Vessels entered inwards. No.	Vessels entered inwards. Tonnage.	Vessels cleared outwards. No.	Vessels cleared outwards. Tonnage.	Total Customs Duties. £ s. d.	Total Revenue collected by the Customs, including Fees, Wharfage, &c. £ s. d.	Total Value of Imports. £ s. d.	Total Value of Colonial and Foreign Exports. £ s. d.
Cape Town -	368	131,750	345	125,806	44,005 6 5	48,630 8 8	600,131 2 2	245,862 1 0
Coastwise - -	107	8,064	106	8,742				
Simon's Town -	34	12,311	31	11,281	313 7 3	474 15 5	3,966 16 5	162 16 6
								15,000 Specie cont.
Coastwise - -	-	-	1	255				
Port Elizabeth -	52	9,869	36	7,090	*9830 15 1	10,059 11 11	162,252 0 0	99,674 16 0
Coastwise - -	43	4,626	56	6,162				
Total colony -	454	153,930	412	144,177	54,149 8 9	59,164 16 0	766,349 18 7	360,699 13 6
Coastwise - -	150	12,690	163	15,159				
Grand total -	604	166,620	575	159,336	54,149 8 9	59,164 16 0	766,349 18 7	360,699 13 6*

* Stores to merchant vessels, and supplies to H. M. navy (11,222*l.*), are not included in the above.

Custom-house Regulations, Duties, Fees, &c.

On Admission of a Ship to Entry, observe —

1. The ship's register must be lodged in the Custom-house until the vessel clear again for sea.
2. The manifest of the cargo on board for this place must be deposited there.
3. The cockets of cargoes shipped from any place in Great Britain or Ireland for this place must also be deposited there.

From the endorsement of such cockets, an extract is to be made, which will show the contents of the different packages on board, and facilitate the making out of the entries.

4. In making out the declarations, the value by invoice of the different commodities must be given by the importer, in order to enable the Custom-house to estimate the duties payable, and to send in to government, annually, the required statement of the total duties received upon the several articles imported.

In the clearing of a Ship outwards, observe —

1. The master must produce a certificate from the harbour master, that the tonnage duties of the port have been paid.
2. The export manifest must be examined with the permits granted, in order to ascertain whether packages have been shipped without a permit.
3. Export declarations must be sent in by the several shippers, of the quantity and value of goods or produce shipped by them, in order to ascertain the amount of the exports of the colony.
4. When Cape wine is shipped for exportation to England, affidavit of the particular description of such wine must be delivered, and a certificate granted, by the collector or comptroller of customs, to the master, of his having received such affidavit.
5. Manifests, in triplicate, of such goods as are shipped from the Cape for Great Britain, must be delivered, signed and sworn to by the master, before the collector or comptroller.

The original of which is to be returned to the master to accompany the cargo.

The duplicate to be forwarded, by the first conveyance sailing subsequently to the vessel containing the original, to the commissioners of customs in England or Scotland respectively, as the case may happen.

And the triplicate, written on or covered with a stamp, to remain as an office copy.

N. B. — Ships taking in cargoes for other parts of the world, are required to deliver only original and duplicate manifests.

6. When whale oil or whale bone is shipped from the Cape for England, the proprietor of the whale fishery is to make oath, before the collector or comptroller, that the same were *bond fide* the produce of fish, or creatures living in the sea, actually taken and caught wholly by his Majesty's subjects usually residing in this colony; and the collector or comptroller is to grant a certificate under his hand and seal to the master, testifying that such oath hath been made before him.
7. When salted seal skins are shipped from the Cape for England, the shipper is to make oath before the collector or comptroller, that the same are really and *bond fide* the skins of seals taken and caught on the coast appertaining to the Cape of Good Hope, wholly by his Majesty's subjects usually residing in this colony; and that all the salt used in the curing or preserving of the same was not made in, or exported from, Great Britain or Ireland; and the collector or comptroller is to grant a certificate to the master accordingly.
8. The original manifest, and a copy thereof, of ships touching at the Cape of Good Hope, with cargoes from the eastward for England, to be delivered and sworn to by the master before the collector or comptroller. The original to be returned to the master, and the copy forwarded from the Custom-house to the commissioner of customs.
9. If any part of such cargo shall be discharged at the Cape of Good Hope, the collector or comptroller is to indorse upon the manifest the part of the cargo so discharged, and verify the same.

Duties of Customs on goods, wares, and merchandise, imported into the Cape of Good Hope under the order in council, dated 11th March, 1842.

Inwards.		Duty. £ s. d.
Coffee, produce of British possessions -	cwt.	0 5 0
produce of foreign possessions -	cwt.	0 10 0
Flour, wheaten, not being the manufacture of the U. Kingdom - -	barrel of 196 lbs.	0 3 0
Gunpowder - - -	lb.	0 0 3
Pepper - - - -	cwt.	0 4 0
Rice - - - -	cwt.	0 1 6
Sugar, viz.: —		
Not refined, the produce of any British possessions		0 2 3
Not refined, the produce of any other place	cwt.	0 4 6
Refined, or candy, not manufactured in the U. Kingdom - - -	cwt.	0 6 0
Refined, or candy, the manufacture of the U. Kingdom - - -	cwt.	0 3 0
Spirits, viz.: —		
French brandy, proof, and so in proportion for any greater strength -	imp. gal.	0 0 4
All other proof spirits, not being the manufacture of the U. Kingdom, or of any British possession, and so in proportion for any greater strength - -	imp. gal.	0
Proof spirits of all sorts, being the manufacture of the U. Kingdom, or of any British possessions, and so in proportion for any greater strength - - -	imp. gal.	0 0 4
Tea - - - - -	lb.	0 0 4½
Tobacco, viz.: —		
Not manufactured - - -	cwt.	0 12 0
Manufactured (not cigars) - -	cwt.	1 0 0
Cigars - - - -	1000	0 5 0
Wood, manufactured, viz.: —		
Mahogany, rosewood, and teakwood	cub. ft.	0 0 3
All other wood, not the produce of the U. Kingdom - - -	cub. ft.	0 0 2
Wine, viz.: —		
In bottles, not exceeding 6 to the imperial gall.	doz.	0 4 0
In bottles not exceeding 12 to the imperial gall.	doz.	0 2 0
Not in bottles - - -	imp. gal.	0 1 6
Goods, wares, and merchandise, not otherwise charged with duty, and not herein declared free of duty, the growth, produce, or manufacture of the U. Kingdom or of any British possession, for every 100*l.* of the value - - -		5 0 0
Goods, wares, and merchandise, not otherwise charged with duty, and not herein declared to be free of duty, the growth, produce, or manufacture of any foreign state, for every 100*l.* of the value - - - - -		12 0 0
Bottles of common glass, imported full		Free.
Bullion		
Casks, staves, hoops, and coopers' rivets		
Coin		
Diamonds		
Horses, mules, asses, sheep, cattle, and all other live stock, and live animals		
Seeds, bulbs, and plants		
Specimens, illustrative of natural history		

Note. — On all foreign goods imported through the bonded warehouses of the U. Kingdom, or exported on drawback, there is an abatement here of 1-10th part of the duty; and foreign goods imported from the U. Kingdom, upon which the duties have been there paid, and not drawn back, are admitted duty free.

The Fees payable in the Customs Department are —

		£ s. d.
For the entrance or clearance of a Vessel -		0 6 0
landing or shipping cargo - -	-	0 15 0
landing or shipping part cargo - -	-	0 7 6
the clearance of a coaster - - -	-	0 1 6
landing or shipping cargo of the same -	-	0 3 0
	-	0 1 6
permit to land or ship merchandise, or stores, under the value of 7*l.* 10*s.* - -	-	0 0 9
permit to land or ship merchandise, or stores, above the value of 7*l.* 10*s.* -	-	0 1 6

Queen's Warehouse Rent. — A certain sum per week is charged upon goods in proportion to their bulk and value, under the authority of a local proclamation, dated 24th June 1842.

Wharfage and Cranage. — The wharf department is under the immediate control of the customs; and the following dues are levied under authority of an ordinance of the 10th December, 1834.

On Goods landed. — On every pipe, puncheon, butt, or other cask of the capacity of 80 gallons or upwards, and containing wine, spirits, or other liquids - - - - - - - 0 1 0

On every hogshead, half puncheon, double aum, tierce, or other cask, of the capacity of 40 gallons, and under 80 gallons, and containing wine, spirits, or other liquids - - - - - 0 0 6

	£	s.	d.
On every quarter cask, barrel, anker, keg, aum, or other cask of less capacity than 40 gallons, and containing wine, spirits, or other liquids -	0	0	3
On every chest, case, cask, hamper, or other package containing wine, spirits, or other liquids, in bottles, or stone jars, viz.: —			
If the quantity shall be 15 gallons, or upwards -	0	0	9
If 10 gallons, and less than 15 gallons -	0	0	6
If 5 gallons, and less than 10 gallons -	0	0	3
If less than 5 gallons - - - -	0	0	2
On every chest, box, or other package, containing not less than 50 lbs. of tea - - - -	0	0	4
If less than 50 lbs. - - - -	0	0	2
On every roll or basket of tobacco - - - -	0	0	3
On every other package containing tobacco of 3 cwt., or upwards - - - -	0	1	6
On every bag of coffee, sugar, rice, sago, saltpetre, cloves, tamarinds, gall nuts, turmeric, or pepper -	0	0	2
On every quarter of wheat, barley, oats, rye, or other grain - - - - -	0	0	3
On every hundred deals, or battens, not the growth of the colony, viz.: —			
Each, not exceeding 16 ft. in length - - -	0	2	0
If exceeding 16 ft. in length - - -	0	3	6
On every 1000 staves, stukvat - - -	0	5	0
— pipe - - -	0	2	6
— hogshead, or barrel - -	0	1	0
— pieces of heading - - -	0	1	0
— bricks, tiles, or slates - - -	0	2	0
ton of coals - - - -	0	1	0
— paving stones - - - -	0	2	0
every ton of heavy goods, not otherwise described - - - - -	0	2	0
every 10 bundles of rattans - - -	0	0	2
every load (of 50 cubic feet) of timber or planks, not the growth of this colony, and not otherwise described - - - -	0	2	6
On every case, bale, box, trunk, or other package whatsoever, not otherwise described, and containing dry goods, viz.: —			
If measuring 40 cubic feet, and upwards - -	0	3	0
— 30 — and less than 40 cubic feet	0	2	3
— 20 — — 30 —	0	1	6
— 10 — — 20 —	0	0	9
— 5 — — 10 —	0	0	6
— 2 — — 5 —	0	0	4
— 2 — - - - -	0	0	2
On every spar, or mast, not of the growth of this colony: —			
If not exceeding 8 inches in diameter - -	0	0	6
If exceeding 8 inches in diameter - - -	0	2	6
On every mill-stone - - - -	0	1	0
On every crate of empty bottles, containing 20 dozen, or upwards - - - -	0	0	6
Less than 20 dozen - - - -	0	0	3
On every small jar, can, or bottle - - -	0	0	1
Landed or shipped. — On every horse, mule, or ass -	0	3	0
On every head of large cattle - - - -	0	1	0

Shipped. — On every article shipped, except as hereinafter mentioned, one half of the duties levied on articles landed.

Exemptions. — All casks, barrels, staves, headings, not liable to duties of customs on importation.

All articles being the growth, produce, or manufacture of this colony, landed from any place within the same.

All hides and skins shipped, being the produce of the colony.

All articles exported from the bonded warehouse.

All imported articles shipped coastwise.

All public stores, naval or military baggage, and personal baggage of passengers.

Port Dues are collected under authority of an ordinance of the 27th November, 1827, and are as follows: —

	£	s.	d.
On vessels touching for water or refreshment only - ton	0	0	2½
On vessels touching for the purpose of trade - ton	0	0	4½
On vessels engaged solely in the coasting trade, to be paid annually to the port captain of Table Bay, ton	0	0	9
For a copy of the port regulations - - -	0	3	0
For every licensed boat employed in the transport of merchandise, or other such purposes, in any of the ports of the colony, annually - - ton	0	1	6
For a port clearance or anchorage fee, for every vessel subject to pay port dues - - -	0	7	6

N.B. — Coasters and licensed boats pay this last charge annually, as well as 3s. for a copy of the port regulations.

Boats exclusively employed in fishing are exempted.

Regulations as to Trade. — All goods the produce or manufacture of the Cape of Good Hope, or the territories or dependencies thereof, are subject (on importation into England) to the same duties as are imposed on the like articles the produce or manufacture of the British possessions within the limits of the East India Company's charter, except when any other duty is expressly laid on them. — (3 & 4 *Will.* 4. c. 56. § 9.)

Commission.—The following rates of commission are charged and allowed, namely —

	Per cent.
1. On the nett amount of all sales of goods by public sale, and on the gross amount of all other sales -	- 5
2. Goods consigned, and afterwards withdrawn -	- 2½
3. On purchases effected, from the proceeds of goods on which a commission has already been charged	- 2½
4. On all other purchases, or shipments of goods -	- 5
5. On the sale or purchase of ships, houses, or lands -	- 2½
6. On ships' disbursements - - - - -	- 5
7. On procuring freight - - - - -	- 5
8. On collecting freight on ships bound to this place -	- 2½
9. On guaranteeing bills or bonds by indorsement or otherwise - - - - - - -	- 2½
10. On collecting debts without recourse to law -	- 2½
Ditto, where legal proceedings are taken -	- 5
11. On effecting remittances by bills of exchange -	- 1
12. On the negotiation of bills - - - -	- 1
13. On effecting insurances - - - -	- 0½
14. On the administration of estates - - -	- 5
15. On cash advances - - - -	- 2½
16. On the debtor and creditor sides of cash accounts, on which no other commission is charged -	- 1

Money. — Accounts are either kept in pounds, shillings, pence, and farthings, or in rix-dollars, schillings, and stivers.

1 Stiver	=	⅜ of a penny.
6 Stivers	=	2¼ Pence, or 1 schilling.
8 Schillings	=	18 Pence or 1 rix-dollar.

The commissariat department grant bills on the Treasury at a premium of 1½ per cent.

Banks, &c. — Two joint stock banking companies have been established in Cape town: the Cape of Good Hope Bank, established in 1837, with a paid up capital of 70,000*l.*; and the South African Bank, established in the following year, with a paid up capital of 60,000*l.* Both banks transact ordinary banking business, and allow interest on deposits, but the first only issues notes. Joint stock companies have also been formed for conducting the business of insurance and for other purposes.

Weights and Measures. — The weights made use of in the Cape are derived from the standard pound of Amsterdam; and those assized are from 50 lbs. down to 1 loot, or the 32d part of a pound, which is regarded as unity.

Liquid Measure.

16 Flasks	=	1 Anker.
4 Ankers	=	1 Aum.
4 Aams	=	1 Leaguer.

Corn Measure.

4 Schepels	=	1 Muid.
10 Muids	=	1 Load. 107 schepels = 82 Winch. bushels, or 4 schepels = 3. Imp. bush. very nearly.

The muid of wheat weighs, at an average, about 110 lbs. Dutch, being somewhat over 196 lbs. English.

Cloth and Long Measures.

12 Rhynland inches	=	1 Rhynland foot.
27 ditto	=	1 Dutch ell.
144 ditto	=	1 Square foot.
144 Square feet	=	1 Rood.
600 Roods	=	1 Morgen.

Colonial Weights and Measures compared with those of England.

Weights.

100 lbs. Dutch	=	nearly 109 lbs. English avoirdupois.
100 lbs. English	=	nearly 92 lbs. Dutch.

Wine or Liquid Measure.

1 Flask	=	0·6	Old gallon, or 4·916	Imperial gallons.
1 Anker	=	9½	ditto, 7·9	ditto.
1 Aum	=	38	ditto, 31½	ditto.
1 Leaguer	=	152	ditto, 126·6	ditto.
1 Pipe	=	110	ditto, 91.6	ditto.

Saldanha Bay, in lat. 33° 6′ S., long. 17° 58″ 15″ E., being 16½ leagues north of Cape-Town, is one of the best and most commodious harbours in the world. It is perfectly safe at all seasons.

Besides the *Cape Almanac* for 1843, one of the best of that class of publications, and the other authorities referred to, we have derived part of the above details from the *Geographical Dictionary*, the papers of the Board of Trade, &c.

CAPITAL, in political economy, is that portion of the produce of industry existing in a country, which may be made directly available, either for the support of human existence, or the facilitating of production. — (*Principles of Political Economy*, 3d ed. p. 96.) But in commerce, and as applied to individuals, it is understood to mean the sum of money which a merchant, banker, or trader adventures in any undertaking, or which he contributes to the common stock of a partnership. It signifies likewise the fund of a trading company, or corporation; in which sense the word *stock* is generally added to it. Thus we say the *capital stock* of the Bank, &c. The profit derived from any undertaking is estimated by the *rate* which it bears to the capital that was employed.

CAPSICUM. See PEPPER.

CARAVAN, an organised company of merchants, or pilgrims, or both, who associate together in many parts of Asia and Africa, that they may travel with greater security through deserts and other places infested with robbers; or where the road is naturally dangerous. The word is derived from the Persian *kervan*, or *cárván*, a trader or dealer. — (*Shaw's Travels in the Levant*, p. 9. 4to ed.)

Every caravan is under the command of a chief or aga (*caravan-bachi*), who has frequently under him such a number of troops or forces as is deemed sufficient for its defence. When it is practicable, they encamp near wells or rivulets; and observe a regular discipline. Camels are used as a means of conveyance, almost uniformly, in preference to the horse or any other animal, on account of their wonderful patience of fatigue, eating little, and subsisting three or four days or more without water. There are generally more camels in a caravan than men. — (See CAMEL.)

The commercial intercourse of Eastern and African nations has been principally carried on, from the remotest period, by means of caravans. During antiquity, the products of India and China were conveyed either from Suez to Rhinoculura, or from Bussorah, near the head of the Persian Gulf, by the Euphrates, to Babylon, and thence by Palmyra, in the Syrian desert, to the ports of Phœnicia on the Mediterranean, where they were exchanged for the European productions in demand in the East. Sometimes, however, caravans set out directly from China, and, occupying about 250 days in the journey, arrived on the shores of the Levant, after traversing the whole extent of Asia. — (*Gibbon*, vol. vii. p. 93.) The formation of caravans is, in fact, the only way in which it has ever been possible to carry on any considerable internal commerce in Asia or Africa. The governments that have grown up in those continents have seldom been able, and seldomer indeed have they attempted, to render travelling practicable or safe for individuals. The wandering tribes of Arabs have always infested the immense deserts by which they are intersected; and those only who are sufficiently powerful to protect themselves, or sufficiently rich to purchase an exemption from the predatory attacks of these freebooters, can expect to pass through territories subject to their incursions, without being exposed to the risk of robbery and murder.

Since the establishment of the Mohammedan faith, religious motives, conspiring with those of a less exalted character, have tended to augment the intercourse between different parts of the Eastern world, and to increase the number and magnitude of the caravans. Mohammed enjoined all his followers to visit, once in their lifetime, the Caaba, or square building in the temple of Mecca, the immemorial object of veneration amongst his countrymen; and in order to preserve continually upon their minds a sense of obligation to perform this duty, he directed that, in all the multiplied acts of devotion which his religion prescribes, true believers should always turn their faces towards that holy place. In obedience to a precept so solemnly enjoined and sedulously inculcated, large caravans of pilgrims used to assemble annually in every country where the Mohammedan faith is established; and though, owing either to a diminution of religious zeal, or the increasing difficulties to be encountered in the journey, the number of pilgrims has of late years declined greatly, it is still very considerable. Few, however, of the pilgrims are actuated only by devotional feelings. Commercial ideas and objects mingle with those of religion; and it redounds to the credit of Mohammed, that he granted permission to trade during the pilgrimage to Mecca; providing at the same time for the temporal as well as the lasting interests of his votaries. "It shall be no crime in you, if ye seek an increase from your Lord *by trading during the pilgrimage*."— (*Sale's Koran*, c. 2. p. 36. ed. 1764.)

The numerous camels of each caravan are loaded with those commodities of every country which are of easiest carriage and readiest sale. The holy city is crowded during the month of Dhalhajja, corresponding to the latter part of June and the beginning of July, not only with zealous devotees, but with opulent merchants. A fair or market is held in Mecca and its vicinity, on the twelve days that the pilgrims are allowed to remain in that city, which used to be one of the best frequented in the world, and continues to be well attended.

"Few pilgrims," says Burckhardt, "except the mendicants, arrive without bringing some productions of their respective countries for sale: and this remark is applicable as well to the merchants, with whom commercial pursuits are the main object, as to those who are actuated by religious zeal; for, to the latter, the profits derived from selling a few articles at Mecca diminish, in some degree, the heavy expenses of the journey. The Moggrebyns (pilgrims from Morocco and the north coast of Africa) bring their red bonnets and woollen cloaks; the European Turks, shoes and slippers, hardware, embroidered stuffs, sweetmeats, amber, trinkets of European manufacture, knit silk purses, &c.; the Turks of Anatolia bring carpets, silks, and Angora shawls; the Persians, Cashmere shawls and large silk handkerchiefs; the Afghans, tooth-brushes, called Mesouak Kattary, made of the spongy boughs of a tree growing in Bokhara, beads of a yellow soapstone, and plain coarse shawls manufactured in their own country; the Indians, the numerous productions of their rich and extensive region; the people of Yemen, snakes for the Persian pipes, sandals and various other works in leather; and the Africans bring various articles adapted to the slave trade. The pilgrims are, however, often disappointed in their expectations of gain; want of money makes them hastily sell their little adventures at the public auctions, and often obliges them to accept very low prices."—(*Travels in Arabia*, vol. ii. p. 21.)

The two principal caravans which yearly rendezvous at Mecca are those of Damascus and Cairo. The first is composed of pilgrims from Europe and Western Asia; the second of Mohammedans from all parts of Africa.

The Syrian caravan is said by Burckhardt to be very well regulated. It is always accompanied by the pacha of Damascus, or one of his principal officers, who gives the signal for encamping and starting by firing a musket. On the route, a troop of horsemen ride in the front, and another in the rear to bring up the stragglers. The different parties of pilgrims, distinguished by their provinces or towns, keep close together. At night torches are lighted, and the daily distance is usually performed between 3 o'clock in the afternoon and an hour or two after sunrise on the following day. The Bedouins or Arabs, who carry provisions for the troops, travel by day only, and in advance of the caravans; the encampment of which they pass in the morning, and are overtaken in turn and passed by the caravan on the following night, at their own resting place. The journey with these Bedouins is less fatiguing than with the great body of the caravan, as a regular night's rest is obtained; but their bad character deters most pilgrims from joining them.

At every watering place on the route is a small castle and a large tank, at which the camels water. The castles are garrisoned by a few persons, who remain the whole year to guard the provisions deposited there. It is at these watering-places, which belong to the Bedouins, that the sheikhs of the tribe meet the caravan, and receive the accustomed tribute for allowing it to pass. Water is plentiful on the route; the stations are nowhere more distant than 11 or 12 hours' march; and in winter, pools of rain-water are frequently found. Those pilgrims who can travel with a litter, or on commodious camel-saddles, may sleep at night, and perform the journey with little inconvenience: but of those whom poverty, or the desire of speedily acquiring a large sum of money, induces to follow the caravan on foot, or to hire themselves as servants, many die on the road from fatigue. — (*Travels in Arabia*, vol. ii. p. 3—9.)

The caravan which sets out from Cairo for Mecca is not generally so large as that of Damascus; and its route along the shores of the Red Sea is more dangerous and fatiguing. But many of the African and Egyptian merchants and pilgrims sail from Suez, Cosseir, and other ports on the western shore of the Red Sea, for Djidda, whence the journey to Mecca is short and easy.

The Persian caravan for Mecca sets out from Bagdad; but many of the Persian pilgrims are now in the habit of embarking at Bussorah, and coming to Djidda by sea.

Caravans from Bagdad and Bussorah proceed to Aleppo, Damascus, and Diarbeker, laden with all sorts of Indian, Arabian, and Persian commodities; and large quantities of European goods, principally of English cottons, imported at Bussorah, are now distributed throughout all the eastern parts of the Turkish empire by the same means. The intercourse carried on in this way is, indeed, every day becoming of more importance.

The commerce carried on by caravans, in the interior of Africa, is widely extended and of considerable value. Besides the great caravan which proceeds from Nubia to Cairo, and is joined by Mohammedan pilgrims from every part of Africa, there are caravans which have no object but commerce, which set out from Fez, Algiers, Tunis, Tripoli, and other states on the sea-coast, and penetrate far into the interior. Some of them take as many as 50 days to reach the place of their destination; and as their rate of travelling may be estimated at about 18 miles a day at an average, the extent of their journeys may easily be computed. As both the time of their outset and their route is known, they are met by the people of the countries through which they travel, who trade with them. Indian goods of every kind form a considerable article in this traffic; in exchange for which, the chief commodity the inhabitants have to give is slaves.

Three distinct caravans are employed in bringing slaves and other commodities from Central Africa to Cairo. One of them comes direct from Mourzouk, the capital of Fezzan, across the Libyan desert; another from Senaar; and the third from Darfur. They do not arrive at stated periods, but after a greater or less interval, according to the success they have had in procuring slaves, ivory, gold dust, drugs, and such other articles as are fitted for the Egyptian markets. The Mourzouk caravan is said to be under the best regulations. It is generally about 50 days on its passage; and seldom consists of less than 100, or of more than 300, travellers. The caravans from Senaar and Darfur used formerly to be very irregular, and were sometimes not seen in Egypt for 2 or 3 years together; but since the occupation of the former by the troops of Mohammed Ali, the intercourse between it and Egypt has become comparatively frequent and regular. The number of slaves imported into Egypt by these caravans is said to amount, at present, to about 10,000 a year. The departure of a caravan from Darfur is looked upon as a most important event; it engages for a while the attention of the whole country, and even forms a kind of æra. — (*Browne's Travels in Africa*, 2d ed. p. 78.) A caravan from Darfur is considered large if it has 2,000 camels and 1,000

slaves. Many of the Moorish pilgrims to Mecca cross the sea from Souakin and Massouah to the opposite coast of Arabia, and then travel by land to Mecca; and Burckhardt states, that of all the poor pilgrims who arrive in the Hedjaz, none bear a more respectable character for industry than those from Central Africa.

Caravans are distinguished into *heavy* and *light*. Camels loaded with from 500 to 600 lbs.* form a heavy caravan; light caravans being the term applied to designate those formed of camels under a moderate load, or perhaps only half loaded. The mean daily rate at which heavy caravans travel is about 18½ miles, and that of light caravans 22 miles.

The safety of a caravan depends materially on the conduct of the *caravan-bachi*, or leader. Niebuhr says, that when the latter is intelligent and honest, and the traveller understands the language, and is accustomed to the Oriental method of travelling, an excursion through the desert is rarely either disagreeable or dangerous. But it is not unusual for the Turkish pachas to realise considerable sums by selling the privilege of conducting caravans; and it is generally believed in the East, that leaders so appointed, in order to indemnify themselves, not unfrequently arrange with the Arabian sheikhs as to the attack of the caravans, and share with them in the booty! At all events, a leader who has paid a large sum for the situation, even if he should be honest, must impose proportionally heavy charges on the association. Hence the best way in travelling with caravans is, to attach oneself to one conducted by an active and experienced merchant, who has a considerable property embarked in the expedition. With ordinary precaution, the danger is then very trifling. It would be easy, indeed, were there any thing like proper arrangements made by government, to render travelling by caravans, at least on all the great routes, abundantly secure.—(*Niebuhr, Voyage en Arabie*, tome ii. p. 194. ed. Amst. 1780.)

No particular formalities are required in the formation of a caravan. Those that start at fixed periods are mostly under the control of government, by whom the leaders are appointed. But, generally speaking, any dealer is at liberty to form a company and make one. The individual in whose name it is raised is considered as the leader, or *caravan-bachi*, unless he appoint some one else in his place. When a number of merchants associate together in the design, they elect a chief, and appoint officers to decide whatever controversies may arise during the journey.—(For further details with respect to caravans, see the *Modern Part of the Universal History*, vol. xiv. pp. 214—243.; *Robertson's Disquisition on Ancient India*, Note 54.; *Rees's Cyclopædia*, art. *Caravan*, most of which is copied from Robertson, though without a single word of acknowledgment; *Burckhardt's Travels in Arabia*, vol. ii. *passim*; *Urquhart on Turkey and its Resources*, p. 137, 151, &c.)

CARAVANSERA, a large public building or inn appropriated for the reception and lodgment of the caravans. Though serving in lieu of inns, there is this radical difference between them,—that, generally speaking, the traveller finds nothing in a caravansera for the use either of himself or his cattle. He must carry all his provisions and necessaries with him. They are chiefly built in dry, barren, desert places; and are mostly furnished with water brought from a great distance and at a vast expense. A well of water is, indeed, indispensable to a caravansera. Caravanseras are also numerous in cities; where they serve not only as inns, but as shops, warehouses, and even exchanges.

CARAWAY-SEED (Fr. *Carvi, Cumin des prés*; Ger. *Keummel, Brodkümmel*; It. *Carvi*), a small seed, of an oblong and slender figure, pointed at both ends, and thickest in the middle. It is the produce of a biennial plant (*Carum carui*), with a taper root like a parsnip, but much smaller. It should be chosen large, new, of a good colour, not dusty, and of a strong agreeable smell. It is principally used by confectioners; and is extensively cultivated in several parts of Essex.

CARBUNCLE (Ger. *Karfunkel*; Fr. *Escarboukle*; It. *Carbonchio*; Sp. *Carbunculo*; Lat. *Carbunculus*), a precious stone of the ruby kind, of a very rich glowing blood-red colour, highly esteemed by the ancients.—(See RUBY.)

CARD (Fr. *Cardes*; Ger. *Kardätschen, Karden, Wollkratzen*; It. *Cardi*; Rus. *Bardü*; Sp. *Cardas*), an instrument, or comb, for arranging or sorting the hairs of wool, cotton, &c. Cards are either fastened to a flat piece of wood, and wrought by the hand; or to a cylinder, and wrought by machinery.

CARDAMOMS (Fr. *Cardamomes*; Ger. *Kardamom*; It. *Cardamomi*; Sp. *Kardamomos*; Hind. *Gujarati elachi*), seed capsules produced by a plant, of which there are different species growing in India, Cochin China, Siam, and Ceylon. The capsules are gathered as they ripen; and when dried in the sun, are fit for sale. The small capsules, or lesser cardamoms, are produced by a particular species of the plant, and are the most valuable. They should be chosen full, plump, and difficult to be broken; of a bright yellow colour; a piercing smell; with an acrid, bitterish, though not very

* This is the burden of the small camel only. The large ones usually carry from 750 to 1,000 lbs.

unpleasant taste; and particular care should be taken that they are properly dried. They are reckoned to keep best in a body, and are therefore packed in large chests, well jointed, pitched at the seams, and otherwise properly secured; as the least damp greatly reduces their value. The best cardamoms are brought from the Malabar coast. They are produced in the recesses of the mountains, by felling trees, and afterwards burning them; for wherever the ashes fall in the openings or fissures of the rocks, the cardamom plant naturally springs up. In Soonda Balagat, and other places where cardamoms are planted, the fruit or berry is very inferior to that produced in the way now mentioned. The Malabar cardamom is described as a species of bulbous plant, growing 3 or 4 feet high. The growers are obliged to sell all their produce to the agents of government, at prices fixed by the latter, varying from 550 to 700 rupees the candy of 600 lbs. avoirdupois: and it is stated that the contractor often puts an *enhanced value on the coins* with which he pays the mountaineers; or makes them take in exchange tobacco, cloths, salt, oil, betel nut, and such necessary articles, at prices which are frequently, no doubt, estimated above their proper level. Such a system ought assuredly to be put an immediate end to. Not more than *one hundredth* part of the cardamoms raised in Malabar are used in the country. They are sent in large quantities to the ports on the Red Sea and the Persian Gulph, to Sind, up the Indus, to Bengal, Bombay, &c. They form a universal ingredient in curries, pillaus, &c. The market price, at the places of exportation on the Malabar coast, varies from 800 to 1,200 rupees the candy.—(*Milburn's Orient. Commerce*, and the valuable evidence of T. H. Baber, Esq. before the Lords' Committee of 1830, p. 216.)

Malabar cardamoms were worth, in January 1843, from 2*s.* 3*d.* to 3*s.* a pound in the London market, duty (2*d.*) excluded; Ceylon cardamoms were, at the same time, worth from 1*s.* 2*d.* to 1*s.* 4*d.*

CARDS, OR PLAYING CARDS (Du. *Kaarten, Speelkarden*; Fr. *Cartes à jouer*; Ger. *Karten, Spiel Karten*; It. *Carte da giuoco*; Rus. *Kartu*; Sp. *Carras, Naipes*; Sw. *Kort*). The only thing necessary to be noticed in this place with respect to cards, is the regulations as to their manufacture, sale, and the payment of the duty.

It is regulated by the 9 Geo. 4. c. 18., that an annual licence duty of 5*s.* shall be paid by every maker of playing cards and dice. The duty on every pack of cards is 1*s.*, and is to be specified on the ace of spades. Cards are not to be made in any part of Great Britain, except the metropolis; nor in Ireland, except in Dublin and Cork; under a penalty of 100*l.* Cards are to be enclosed in wrappers, with such marks as the commissioners of stamps may appoint. Before licence can be had, bond must be given to the amount of 500*l.* for the payment of the duties, &c. Selling or exposing to sale any pack of cards not duly stamped, subjects a licensed maker to a penalty of 50*l.*; and any one else to a penalty of 10*l.* Any person having in his possession, or using, or permitting to be used, any pack of cards not duly stamped, to forfeit 5*l.* Second-hand cards may be sold by any person, if sold without the wrapper of a licensed maker; and in packs containing not more than 52 cards, including an ace of spades duly stamped, and enclosed in a wrapper with the words "*Second-hand Cards*" printed or written in distinct characters on the outside: penalty for selling second-hand cards in any other manner, 20*l.*

The duty of 1*s.* per pack on cards produced, in 1841, the sum of 9,223*l.* 18*s.*; showing that 184,478 packs had been disposed of.

CARMEN, of the city of London, are constituted a fellowship by act of common council. The rates which they are allowed to charge, and the regulations by which they are to be guided, are settled at the quarter sessions. In other respects they are subjected to the rule of the president and governors of Christ's Hospital, to whom the owner of every cart pays an annual licence duty of 17*s.* 4*d.*

Carmen are to help to load and unload their carts; and if any carman exacts more than the regular rates, upon due proof, before the Lord Mayor, or any two magistrates, he shall suffer imprisonment for the space of 21 days.

If any person shall refuse to pay any carman his hire, according to the regular rates, upon complaint made, the president of Christ's Hospital, or a justice of the peace, may compel payment.

Merchants or other persons may choose what cart they please, except such as stand for wharf-work, tackle-work, crane-work, at shops and merchants' houses, which are to be taken in turn; and every carman standing with his empty cart next to any goods to be loaded, shall, upon the first demand, load the same for the accustomed rates; and if any person shall cause a carman to attend at his house, shop, warehouse, or cellar, with his loaded cart, the carman being willing to help to unload the same, he shall pay the carman after the rate of 12*d.* for every hour after the first half hour for his ——.

Every licensed carman is to have a piece of brass fixed upon his cart, upon which is to be engraven a certain number; which number, together with the carman's name, is registered in a register kept at Christ's Hospital; so that, in case of any misbehaviour, the party offended, by taking notice of the number of the cart, may search for it in the register, and the —— will be found.

Carmen not conforming to these rules, or working without a numbered piece of brass fixed on the cart, may be suspended from their employment.

Carmen riding upon the shafts of their carts, or sitting within them, not having some person on foot to guide the horses, shall forfeit 10*s.*

CARMINE (Ger. *Karmin*; Du. *Karmyn*; Fr. *Carmine*; It. *Carminio*; Lat. *Carminium*), a powder of a very beautiful red colour, bordering upon purple, and used by painters in miniature. It is a species of *lake*, and is formed of finely pulverised cochineal. It is very high priced.

CARNELIAN. See AGATE.

CARPET, CARPETS (Ger. *Teppiche*; Du. *Tapyten, Vloer-tapyten*; Fr. *Tapis*; It. *Tappeti*; Sp. *Alfombras, Alcatifas, Tapetes*; Rus. *Kowrii, Kilimi.*) Persian and Turkish carpets are the most esteemed. In England, carpets are principally manufactured at Kidderminster, Wilton, Cirencester, Worcester, Axminster, &c.; and in Scotland, at Kilmarnock. Those made at Axminster are believed to be very little, if any thing, inferior to those of Persia and Turkey.

CARRIAGES. See COACHES.

CARROT (*Daucus carota* Lin.), a biennial plant, a native of Britain. Though long known as a garden plant, its introduction into agriculture has been comparatively recent. The uses of the carrot in domestic economy are well known. It is extensively cultivated in Suffolk, whence large quantities are sent to the London market. Horses are said to be remarkably fond of carrots.

CARRIERS are persons undertaking for hire to carry goods from one place to another.

Proprietors of carts and wagons, masters and owners of ships, hoymen, lightermen, bargemen, ferrymen, &c. are denominated common carriers. The master of a stage coach who *only carries passengers for hire*, is not liable for goods; but if he undertake to carry *goods and passengers*, then he is liable for both as a common carrier. The postmaster general is not a carrier in the common acceptation of the term, nor is he subjected to his liabilities.

1. *Duties and Liabilities of Carriers.* — Carriers are bound to receive and carry the goods of all persons, for a reasonable hire or reward; to take proper care of them in their passage; to deliver them safely, and in the same condition as when they were received (excepting only such losses as may arise from *the act of God or the king's enemies*); or, in default thereof, to make compensation to the owner for whatever loss or damage the goods may have received while in their custody, that might have been prevented.

Hence a carrier is liable, though he be robbed of the goods, or they be taken from him by irresistible force: and though this may seem a hard rule, yet it is the only one that could be safely adopted; for if a carrier were not liable for losses unless it could be shown that he had conducted himself dishonestly or negligently, a door would be opened for every species of fraud and collusion, inasmuch as it would be impossible, in most cases, to ascertain whether the facts were such as the carrier represented. On the same principle a carrier has been held accountable for goods accidentally consumed by fire while in his warehouse. In delivering the opinion of the Court of King's Bench on a case of this sort, Lord Mansfield said — "A carrier, by the nature of his contract, obliges himself to use all due care and diligence, and is answerable for any neglect. But there is something more imposed upon him by custom, that is, by the common law. *A common carrier is in the nature of an insurer.* All the cases show him to be so. This makes him liable for every thing except the act of God and the king's enemies; that is, even for *inevitable accidents*, with those exceptions. The question then is, *What is the act of God?* I consider it to be laid down in opposition to the act of *man*; such as lightning, storms, tempests, and the like, which could not happen by *any human intervention*. To prevent litigation and collusion, the law presumes negligence except in those circumstances. An armed force, though ever so great and irresistible, does not excuse; the reason is, for fear it may give room for collusion, which can never happen with respect to the act of God. We all, therefore, are of opinion that there should be judgment for the plaintiff." — (*Forward* v. *Pittard*, 1 *T. R.* 27.)

A carrier is not obliged to have a new carriage for every journey; it is sufficient if he provide one that, without any extraordinary accident, may be fairly presumed capable of performing the journey.

A carrier may be discharged from his liability by any fraud or concealment on the part of the individual employing him, or of the bailor; as if the latter represent a parcel as containing things of little or no value, when, in fact, it contains things of great value. But when the carrier has not given a notice limiting his responsibility, and when he puts no questions with respect to the parcel to the bailor, the latter need not say any thing with respect to it; and though the bailor should represent the thing delivered to the carrier as of no value, yet *if the latter know it to be otherwise*, he will be responsible in the event of its being lost or damaged. If the bailor deliver goods imperfectly packed, and the carrier *does not perceive it*, he is not liable in the event of a loss occurring; but if the defect in the package were such that the carrier could not but perceive it, he would be liable. On this principle a carrier was made to answer for the loss of a greyhound that had been improperly secured when given to him.

A carrier may refuse to admit goods into his warehouse at an unseasonable time, or before he is ready to take his journey; but he cannot refuse to do the ordinary duties incumbent on a person in his situation.

It is felony, if a carrier open a parcel and take goods out of it with intent to steal them; and it has been decided, that if goods be delivered to a carrier to be carried to a specified place, and he carry them to a different place, and dispose of them for his own profit, he is guilty of felony; but the embezzlement of goods by a carrier, without a felonious taking, merely exposes to a civil action.

No carrier, waggonman, carman, or wainman, with their respective carriages, shall travel on Sundays, under a penalty of 20*s*. — (3 *Chas.* 1. c. 1.)

A carrier is always, unless there be an express agreement to the contrary, entitled to a reward for his care and trouble. In some cases his reward is regulated by the legislature, and in others by a special stipulation between the parties; but though there be no legislative provision or express agreement, he cannot claim more than a *reasonable* compensation.

2. *Limitation of Responsibility.* — Until the act of 1830, a carrier might, by express stipulation, giving *public notice* to that effect, discharge his liability from all losses by robbery, accident, or otherwise, except those which arose from *misfeazance and gross negligence*, from which no stipulation or notice could exempt him), and provided the notice did not contravene the express conditions of an act of parliament.

Notices generally bore, that the carrier would not be responsible for more than a certain sum (usually 5*l*.) on any one parcel, the value of which had not been declared and paid for accordingly; so that a person aware of this notice, entering a box worth 1000*l*. without declaring its value, or entering it as being worth 200*l*., would, should it be lost, have got in the first case only 5*l*., and in the latter only 200*l*., unless he could have shown that the carrier had acted fraudulently or with gross negligence. But, to avail himself of this defence, the carrier was bound to show that the bailor or his servant was acquainted with the notice at the time of delivering the goods. No particular manner of giving notice was required. It might be done by express communication, by fixing it up in a conspicuous place in the carrier's office, by insertion in the public papers or Gazette, by the circulation of handbills, &c.; it being in all cases a question for the jury to decide whether the bailor was really acquainted with the notice of the limitation; since, if he were not, he was entitled to recover, whatever efforts the carrier may have made to publish it. Thus, a notice stuck up in a carrier's warehouse, where goods were delivered, was of no avail against parties who could not read; neither was it of any avail against those who could read, and who had seen it, *unless they had actually read it.* On this principle it was held, that a notice in a newspaper is not sufficient, even when it was proved that the bailor read the newspaper, unless it could also be proved that he had read the notice itself.

These attempts to limit responsibility gave rise to a great deal of litigation and uncertainty; and to obviate the inconveniences thence arising, the important statute 1 Will. 4. c. 68. was passed. This act declares, that carriers *by land* shall not be liable for the loss of certain articles specified in the act, when their value exceeds 10*l*., unless the *nature and value* of such articles be stated at the time of their delivery to the carrier, and an increased charge paid or agreed to be paid upon the same. It is further

declared, that no publication of any notices by carriers shall have power to limit their responsibility at common law for all other articles except those specified in the act. But as the act is of great importance, we subjoin it.

From and after the passing of this act, no mail contractor, stage coach proprietor, or other common carrier *by land* for hire, shall be liable for the loss of or injury to any article or articles or property of the description following, viz. gold or silver coin of this realm or of any foreign state, or any gold or silver in a manufactured or unmanufactured state, or any precious stones, jewellery, watches, clocks, or timepieces of any description, trinkets, bills, notes of the Governor and Company of the Banks of England, Scotland, and Ireland respectively, or of any other bank in Great Britain or Ireland, orders, notes, or securities for payment of money, English or foreign stamps, maps, writings, title-deeds, paintings, engravings, pictures, gold or silver plate or plated articles, glass, china, silks in a manufactured or unmanufactured state, and whether wrought up or not wrought up with other materials, furs, or lace, or any of them, contained in any parcel or package which shall have been delivered, either to be carried for hire or to accompany the person of any passenger in any mail or stage coach or other public conveyance, when the value of such article or articles or property aforesaid contained in such parcel or package shall exceed the sum of 10*l.*, unless at the time of the delivery thereof at the office, warehouse, or receiving house of such mail contractor, &c. the value and nature of such article or articles or property shall have been declared by the person or persons sending or delivering the same, and such increased charge as hereinafter mentioned, or an engagement to pay the same, be accepted by the person receiving such parcel or package. — § 1.

When any parcel or package containing any of the articles above specified shall be so delivered, and its value and contents declared as aforesaid, and such value shall exceed the sum of 10*l.*, it shall be lawful for such mail contractors, stage coach proprietors, and other common carriers, to demand and receive an increased rate of charge, to be notified by some notice, affixed in legible characters in some public and conspicuous part of the office, warehouse, or other receiving house, where such parcels or packages are received by them for the purpose of conveyance, stating the increased rates of charge required to be paid over and above the ordinary rate of carriage, as a compensation for the greater risk and care to be taken for the safe conveyance of such valuable articles; and all persons sending or delivering parcels or packages containing such valuable articles as aforesaid at such office shall be bound by such notice, without further proof of the same having come to their knowledge. — § 2.

Provided always, that when the value shall have been so declared, and the increased rate of charge paid, or an engagement to pay the same shall have been accepted as herein-before mentioned, the person receiving such increased rate of charge or accepting such agreement shall, if required, sign a receipt for the package or parcel, acknowledging the same to have been insured, which receipt shall not be liable to any stamp duty; and if such receipt shall not be given when required, or such notice as aforesaid shall not have been affixed, the mail contractor, stage coach proprietor, or other common carrier as aforesaid, shall not have or be entitled to any benefit or advantage under this act, but shall be liable and responsible as at the common law, and be liable to refund the increased rate of charge. — § 3.

And be it enacted, that from and after the 1st day of September 1830, no public notice or declaration heretofore made or hereafter to be made shall be deemed or construed to limit or in any wise affect the liability at common law of any such mail contractors, stage coach proprietors, or other public common carriers as aforesaid, for or in respect of any articles or goods to be carried and conveyed by them; but that all and every such mail contractors, stage coach proprietors, and other common carriers as aforesaid shall, from and after the said 1st day of September, be liable, as at the common law, to answer for the loss of any injury [*so in the act*] to any articles and goods in respect whereof they may not be entitled to the benefit of this act, any public notice or declaration by them made and given contrary thereto, or in anywise limiting such liability, notwithstanding. — § 4.

And be it further enacted, that for the purposes of this act, every office, warehouse, or receiving house, which shall be used or appointed by any mail contractor, or stage coach proprietor, or other such common carrier, for the receiving of parcels to be conveyed as aforesaid, shall be deemed and taken to be the receiving house, warehouse, or office of such mail contractor, stage coach proprietor, or other common carrier; and that any one or more of such mail contractors, stage coach proprietors, or common carriers, shall be liable to be sued by his, her, or their name or names only; and that no action or suit commenced to recover damages for loss or injury to any parcel, package, or person, shall abate for the want of joining any co-proprietor or co-partner in such mail, stage coach, or other public conveyance by land for hire as aforesaid. — § 5.

Provided always, and be it further enacted, that nothing in this act contained shall extend or be construed to annul or in any wise affect any special contract between such mail contractor, stage coach proprietor, or common carrier, and any other parties, for the conveyance of goods and merchandises. — § 6.

Provided also, and be it further enacted, that where any parcel or package shall have been delivered at any such office, and the value and contents declared as aforesaid, and the increased rate of charges been paid, and such parcels or packages shall have been lost or damaged, the party entitled to recover damages in respect of such loss or damage shall also be entitled to recover back such increased charges so paid as aforesaid, in addition to the value of such parcel or package. — § 7.

Provided also, and be it further enacted, that nothing in this act shall be deemed to protect any mail contractor, stage coach proprietor, or other common carrier for hire, from liability to answer for loss or injury to any goods or articles whatsoever, arising from the felonious acts of any coachman, guard, bookkeeper, porter, or other servant in his or their employ, nor to protect any such coachman, guard, bookkeeper, or other servant, from liability for any loss or injury *occasioned by his or their own personal neglect or misconduct.* — § 8.

Provided also, and be it further enacted, that such mail contractors, stage coach proprietors, or other common carriers for hire, shall not be concluded as to the value of any such parcel or package by the value so declared as aforesaid, but that he or they shall in all cases be entitled to require, from the party suing in respect of any loss or injury, proof of the actual value of the contents by the ordinary legal evidence; and that the mail contractors, stage coach proprietors, or other common carriers, as aforesaid, shall be liable to such damages only as shall be so proved as aforesaid, not exceeding the declared value, together with the increased charges as before mentioned. — § 9.

And be it further enacted, that in all actions to be brought against any such mail contractors, &c., the defendant or defendants may pay the money into court. — § 10.

It will be observed, that carriers continue, notwithstanding this act, liable, as before, for the felonious acts of their servants, and their own misfeazance or gross negligence. It is not possible, however, to lay down any general rule as to the circumstances which constitute this offence. Differing as they do in almost every case, the question, when raised, must be left to a jury. But it has been decided, that the *misdelivery* of a parcel, or its *nondelivery within a reasonable time*, is a misfeazance that cannot be defeated by any notice on the part of the carrier limiting his responsibility. In like manner, the sending of a parcel by a different coach from that directed by the bailor, the removing it from one carriage to another, are misfeazances. Where a parcel is directed to a person at a particular place, and the carrier, knowing such person, delivers the parcel to another

who represents himself as the consignee, such delivery is gross negligence. Leaving parcels in a coach or cart unprotected in the street is also gross negligence.

At common law, there is no distinction between carriage performed by sea or land; but by the 7 Geo. 2. c. 15. and 26 Geo. 3. c. 86., corrected and amended by the 53 Geo. 3. c. 159., it is enacted that ship owners are not to be liable for any loss or damage happening to goods on board through the fraud or neglect of the master, without their knowledge or privity, further than the value of the vessel and the freight accruing during the voyage. — (See OWNERS.)

3. *Commencement and Termination of Liability.* — A carrier's liability commences from the time the goods are actually delivered to him in the character of carrier. A delivery to a carrier's servant is a delivery to himself, and he will be responsible. The delivery of goods in an inn-yard or warehouse, at which other carriers put up, is not a delivery so as to charge a carrier, unless a special notice be given him of their having been so delivered, or some previous intimation to that effect.

A carrier's liability ceases, when he vests the property committed to his charge in the hands of the consignee or his agents, by actual delivery; or when the property is resumed by the consignor, in pursuance of his right of stopping it *in transitu*. It is in all cases the duty of the carrier to deliver the goods. The leaving goods at an inn is not a sufficient delivery. The rule in such cases, in deciding upon the carrier's liability, is to consider whether any thing remains to be done by the carrier, as such; and if nothing remains to be done, his liability ceases, and conversely.

A carrier has a lien upon goods for his hire. Even if the goods be stolen, the rightful owner is not to have them without paying the carriage.

For further details as to this subject see *Jeremy on the Law of Carriers*, passim; *Chitty's Commercial Law*, vol. iii. pp. 369—386.; and *Burn's Justice of the Peace*, tit. *Carriers*. There are some excellent observations with respect to it in *Sir William Jones's Essay on the Law of Bailments*. — (For an account of the regulations as to the conveyance of passengers in stage coaches, see COACHES, STAGE.)

CARTS. Every cart, &c. for the carriage of any thing to and from any place, where the streets are paved, within the bills of mortality, shall contain 6 inches in the felly. No person shall drive any cart, waggon, &c. within 5 miles of the General Post Office, unless the name, surname, and place of abode of the owner, be painted in conspicuous letters, at least 1 inch in height, on the right or off side thereof, under a penalty of 5*l*. Any person may seize and detain any cart, waggon, &c. without such mark. — (1 & 2 *Will.* 4. c. 22.)

CASH, in commerce, means the ready money, bills, drafts, bonds, and all immediately negotiable paper in an individual's possession.

CASH ACCOUNT, in book-keeping, an account to which nothing but cash is carried on the one hand, and from which all the disbursements of the concern are drawn on the other. The balance is *the cash in hand*. When the credit side more than balances the debit, or disbursement side, the account is said to be *in cash*; when the contrary, to be *out of cash*.

CASH ACCOUNT, in banking, is the name given to the account of the advances made by a banker in Scotland, to an individual who has given security for their repayment. — (See BANKS (SCOTCH).)

CASHEW NUTS (Ger. *Akajunüsse*, *Westindische Anakarden*; Du. *Catsjoenooten*; Fr. *Noix d'acajou*; It. *Acaju*; Sp. *Nueces d'acaju*; Port. *Nozes d'acaju*), the produce of the *Anacardium occidentale*. They are externally of a greyish or brownish colour, of the shape of a kidney, somewhat convex on the one side, and depressed on the other. The shell is very hard; and the kernel, which is sweet and of a very fine flavour, is covered with a thin film. Between this and the shell is lodged a thick, blackish, inflammable oil, of such a caustic nature in the fresh nuts, that if the lips chance to touch it, blisters immediately follow. The kernels are used in cooking, and in the preparation of chocolate.

CASPIAN SEA. See TAGANROG.

CASSIA. There are four species of cassia in the market, viz. *Cassia Fistula*; *Cassia Lignea* or *Cassia Bark*; *Cassia Buds*, and *Cassia Senna*.

1. *Cassia Lignea*, or *Cassia Bark* (Fr. *Casse*; Ger. *Cassia*; Port. *Cassia lenhosa*; Arab. *Seleckeh*; Hind. *Tuj*; Malay, *Kayū-legi*), the bark of a tree (*Laurus Cassia* Lin.) growing in Sumatra, Borneo, the Malabar coast, Philippine Islands, &c.; but chiefly in the provinces of Quantong and Kingsi, in China, which furnish the greatest part of the cassia met with in the European markets. The tree grows to the height of 50 or 60 feet, with large, spreading, horizontal branches. The bark resembles that of cinnamon in appearance, smell, and taste, and is very often substituted for it; but it may be readily distinguished; it is thicker in substance, less quilled, breaks shorter, and is more pungent. It should be chosen in thin pieces; the best being that which approaches nearest to cinnamon in flavour: that which is small and broken should be rejected. A good deal of the cassia in the Indian markets is brought from Borneo, Sumatra, and Ceylon. Malabar cassia is thicker and darker coloured than that of China, and more subject to foul packing: each bundle should be separately inspected. — (*Ainslie's Materia Indica*; *Milburn's Orient. Com.*, &c.)

The duty on cassia was reduced in 1825 from 2*s*. 6*d*. per lb. to 1*s*., and in 1829 to 6*d*. Owing partly to these reductions, and partly to the heavy duty on and high price of cinnamon, the consumption of cassia has more than trebled since 1820. Of 1,261,648 lbs. imported in 1841, 971,802 were brought from the

East India Company's territories and Ceylon, 178,008 lbs. from the Philippine Islands, 63,071 from the Western coast of Africa, and 38,766 from China. Cassia was quoted in the London markets, in February 1843, at from 50s. to 70s. a cwt. in bond.

2. *Cassia Buds*, the dried fruit or berry of the tree (*Laurus cassia*) which yields the bark described in

3. *Cassia Fistula* (Fr. *Casse*; Ger. *Rhonkasie*; It. *Polpa di cassia*; Lat. *Cassiæ pulpa*; Arab. *Khyar heber*) is a tree which grows in the East and West Indies, and Egypt (*Cassia fistula* Lin.). The fruit is a woody, dark brown pod, about the thickness of the thumb, and nearly 2 feet in length. Those brought to this country come principally from the West Indies, packed in casks and cases; but a superior kind is brought from the East Indies, and is easily distinguished by its smaller smooth pod, and by the greater blackness of the pulp. For details as to its importation, &c., see below.

Cassia Senna. See SENNA.

Account, specifying the Quantities of Cassia Lignea imported into, exported from, and entered for Consumption in the United Kingdom, with the Amount and Rate of Duty on the same, during each of the 13 Years, ending with 1842.

Years.	Quantities imported into the United Kingdom.	Quantities re-exported from the United Kingdom.	Quantities retained for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty.	
					From British Possessions.	From other Parts.
	Lbs.	*Lbs.*	*Lbs.*	£		
1830	837,589	797,642	65,705	1,624	6*d.* per lb.	1*s.* per lb.
1831	398,420	718,772	61,162	1,526	do.	do.
1832	1,046,556	764,060	72,339	1,843	do.	do.
1833	1,297,710	1,341,546	77,067	1,778	do.	do.
1834	2,066,836	1,680,350	100,182	2,196	do.	do.
1835	1,966,303	1,432,035	98,313	2,339	do.	do.
1836	837,413	633,083	89,396	2,242	do.	do.
1837	984,674	760,141	105,485	2,642	do.	do.
1838	380,655	557,702	100,837	2,521	do.	do.
1839	435,716	656,984	106,388	2,651	do.	do.
1840	329,310	644,520	74,050	1,933	5*l.* per cent. additional on the above rates from 15th May.	
1841	1,261,648	1,262,164	83,034	2,219	do.	do.
1842	1,312,804	1,247,496	119,470	1,692	Produce of British Possessions, 1*d.* and 5 per cent. ad. thereon.	Produce of other parts, 3*d.* from 9th July.

Average quantity of *cassia buds* imported into the United Kingdom in each of the above thirteen years, 40,231 lbs.
Ditto ditto ditto entered for home consumption during each of the said years 6,610 lbs.
Average annual amount of duty received thereon, 31*l.*
Average quantity of *cassia fistula* imported into the United Kingdom in each of these years, 9,968 lbs.
Ditto ditto ditto entered for home consumption ditto 2,103 lbs.
Average annual amount of duty received thereon, 44*l.*

CASTOR (Fr. *Castoreum*; Ger. *Kastoreunt*; It. *Castoro*; Sp. *Castoreo*), the produce of the beaver. In the inguinal region of this animal are found four bags, a large and a small one on each side: in the two large ones there is contained a softish, greyish yellow, or light brown substance, which, on exposure to the air, becomes dry and brittle, and of a brown colour. This is castor. It has a heavy but somewhat aromatic smell, not unlike musk; and a bitter, nauseous, and subacrid taste. The best comes from Russia; but of late years it has been very scarce; and all that is now found in the shops is the produce of Canada. The goodness of castor is determined by its sensible qualities; that which is black is insipid, inodorous, oily, and unfit for use. Castor is said to be sometimes counterfeited by a mixture of some gummy and resinous substances; but the fraud is easily detected, by comparing the smell and taste with those of real castor. — (*Thomson's Dispensatory.*)

CASTOR OIL (Fr. *Huile du Ricin*; Ger. *Rizinusohl*; It. *Olio di Ricino*; Sp. *Ricinsoel*) is obtained from the seeds of the *Ricinus communis*, or *Palma Christi*, an annual plant found in most tropical countries, and in Greece, the south of Spain, &c. The oil is separated from the seeds either by boiling them in water, or by subjecting them to the action of the press. It is said, that though the largest quantity of oil may be procured by the first method, it is less sweet, and more apt to become rancid, than that procured by expression, which, in consequence, is the process now most commonly followed. Good expressed castor oil is nearly inodorous and insipid; but the best leaves a slight sensation of acrimony in the throat after it is swallowed. It is thicker and heavier than the fat oils, being viscid, transparent, and colourless, or of a very pale straw colour. That which is obtained by boiling the seeds has a brownish hue; and both kinds, when they become rancid, thicken, deepen in colour to a reddish brown, and acquire a hot, nauseous taste. It is very extensively employed in the materia medica as a cathartic. — (*Thomson's Dispensatory.*)

The duty of 1*s.* 3*d.* per cwt. on castor oil entered for home consumption produced in 1842, 252*l.* 9*s.* 1*d.*, showing that the entries had amounted to 452,387 lbs. Of the total quantity imported in 1841, amounting to 871,136 lbs., no fewer than 869,947 lbs. were brought from the East India Company's territories and Ceylon. East India castor oil was worth in 1843, in the London market, from 4*d.* to 8*d.* per lb.

CATECHU (Fr. *Cachou*; Ger. *Kaschu*; Hind. *Cut*; Mal. *Gambir*), a brown astringent substance, formerly known by the name of *Terra Japonica*, because supposed to be a kind of earth. It is, however, a vegetable substance obtained from two plants; viz. the *Mimosa*, or more correctly the *Acacia catechu*, and the *Uncaria gambir*. The

first of these is a tree from 20 to 30 feet high, found in abundance in many of the forests of India, from 16° of lat. up to 30°. The places most remarkable for its production are the Burmese territories; a large province on the Malabar coast called the Concan; and the forests skirting the northern part of Bengal, under the hills which divide it from Nepaul. The catechu is obtained from this tree by the simple process of boiling the heart of the wood for a few hours, when it assumes the look and consistency of tar. The substance hardens by cooling; is formed into small balls or squares; and being dried in the sun, is fit for the market. The price to the first purchaser in the Concan is about 15*s.* a cwt. According to Dr. Davy, who analysed it, the specific gravity of Concan catechu is 1·39; and that of Pegu, 1·28. The taste of this substance is astringent, leaving behind a sensation of sweetness; it is almost wholly soluble in water. Of all the astringent substances we know, catechu appears to contain the largest portion of tannin. According to Mr. Purkis, 1 lb. is equivalent to 7 or 8 lbs. of oak bark for tanning leather. From 200 grs. of Concan catechu, Dr. Davy procured 109 of tannin, 68 of extractive matter, 13 of mucilage, and 10 of earths and other impurities: the same quantity of Pegu catechu afforded 97 grs. of tannin, 73 of extract, 16 of mucilage, and 14 of impurities. The *uncaria gambir* is a scandent shrub, extensively cultivated in all the countries lying on both sides of the Straits of Malacca; but chiefly in the small islands at their eastern extremity. The catechu is in this case obtained by boiling the leaves and inspissating the juice; a small quantity of crude sago being added, to give the mass consistency: it is then dried in the sun, and being cut like the Concan catechu into small squares, is ready for use. There is a great consumption of this article throughout all parts of India as a masticatory; it forms an ingredient in the compound of betel pepper, areca nut, and lime, which is in almost universal use. Catechu may be purchased at the Dutch settlement of Rhio, or at Malacca, in the Straits of Singapore, at the rate of about 10*s.* a cwt. Large quantities of it are imported, under the corrupted name of cutch, into Calcutta from Pegu. From Bombay a considerable quantity is annually imported into China. The quantity of catechu, under the name of gambir, produced in Rhio by the Chinese settlers, amounts to about 4,600 tons a year, about 2,000 of which are exported for the consumption of Java; the rest being sent to China, Cochin China, and other neighbouring countries. — (See *Ainslie's Materia Indica; Ure's Dictionary; Singapore Chronicle; Buchanan's Journey through Mysore, Canara, and Malabar; Bell's Review of the external Commerce of Bengal.*)

CAT'S EYE, a mineral of a beautiful appearance, brought from Ceylon. Its colours are grey, green, brown, red, of various shades. Its internal lustre is shining, its fracture imperfectly conchoidal, and it is translucent. From a peculiar play of light, arising from white fibres interspersed, it has derived its name. The French call the appearance *chatoyant*. It scratches quartz, is easily broken, and resists the blowpipe. It is set by the jewellers as a precious stone.

CAT SKINS. The skin or fur of the cat, is used for a variety of purposes, but is principally dyed and sold as false sable. It appears from evidence taken before a late Committee of the House of Commons, that it is a common practice in London to decoy the animal and kill it for the sake of its skin. The fur of the wild cat is, however, far more valuable than that of the domestic cat. The wild cat skins imported into this country are brought almost wholly from the territories of the Hudson's Bay Company. The animal from which they are taken is a good deal larger than the English wild cat, and is sometimes called the *loup cervier*, or Canadian lynx. It is very courageous. At an average about 40,000 cat-skins are annually imported, of which more than a half are retained for home consumption.

CATTLE, a collective term applied to designate all those quadrupeds that are used either as food for man, or in tilling the ground. By *neat* or *horned cattle* is meant the two species included under the names of the ox (*Bos*) and the buffalo (*Bubulus*); but as the latter is hardly known in this country, it is the former only that we have here in view.

The raising and feeding of cattle, and the preparation of the various products which they yield, have formed, in all countries emerged from the savage state, an important branch of industry.

It would be quite inconsistent with the objects and limits of this work, to enter into any details with respect to the different breeds of cattle raised in this or other countries. They are exceedingly various. In Great Britain they have been vastly improved, both in the weight of carcase, the quality of the beef, and the abundance of the milk, by the extraordinary attention that has been given to the selection and crossing of the best breeds, according to the objects in view. This sort of improvement began about the middle of last century, or rather later, and was excited and very much forwarded by the skill and enterprise of two individuals — Mr. Bakewell of Dishley, and Mr. Culley of Northumberland. The success by which their efforts were attended roused a spirit of emulation in others; and the rapid growth of commerce and manufactures since 1760

having occasioned a corresponding increase in the demand for butcher's meat, improved systems of breeding, and improved breeds, have been very generally introduced.

But the improvement in the size and condition of cattle has not been alone owing to the circumstances now mentioned. Much of it is certainly to be ascribed to the great improvement that has been made in their feeding. The introduction and universal extension of the turnip and clover cultivation has had, in this respect, a most astonishing influence, and has wonderfully increased the food of cattle, and consequently the supply of butcher's meat

It was stated in the First Report of the Select Committee of the House of Commons on Waste Lands (printed in 1795), that cattle and sheep had, at an average, increased in size and weight about *a fourth* part since 1732; but there are strong grounds for supposing that the increase had been much more considerable than is represented by the committee.

According to an estimate of Dr. Davenant in 1710, the average weight of the *nett* carcase of black cattle was only 370 lbs., of calves 50 lbs., and of sheep only 28 lbs.; but according to Sir F. M. Eden (*Hist. of the Poor*, vol. iii. Appen. p. 88.) and Mr. Middleton (*Agric. of Middlesex*, 2d ed. p. 541.), the average nett weight of the carcase of bullocks killed in London might be taken, about the end of the last or the beginning of this century, at 800 lbs., calves at 140 lbs., sheep at 80 lbs., and lambs at 50 lbs.

Consumption of Butcher's Meat in London. — The number of head of cattle, sheep, and lambs, sold in Smithfield market, each year since 1732, has been as follows: —

Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.
1732	76,210	514,700	1760	88,594	622,210	1788	92,829	679,100	1816	120,439	968,560
1733	80,169	555,050	1761	82,514	666,010	1789	93,269	693,700	1817	129,888	1,044,710
1734	78,810	566,910	1762	102,831	772,160	1790	103,708	749,660	1818	138,047	963,250
1735	83,894	590,970	1763	80,851	653,110	1791	101,164	740,360	1819	135,226	949,900
1736	87,606	587,420	1764	75,168	556,360	1792	107,348	760,859	1820	132,933	947,990
1737	89,862	607,330	1765	81,630	537,000	1793	116,848	728,480	1821	129,125	1,107,230
1738	87,010	589,470	1766	75,534	574,790	1794	109,448	719,420	1822	142,043	1,340,160
1739	86,787	568,980	1767	77,324	574,050	1795	131,092	745,640	1823	149,552	1,264,920
1740	84,810	501,020	1768	79,660	626,170	1796	117,152	758,840	1824	163,615	1,239,720
1741	77,714	536,180	1769	82,131	642,910	1797	108,377	693,510	1825	156,985	1,130,310
1742	79,601	503,260	1770	86,890	649,090	1798	107,470	753,010	1826	143,466	1,270,530
1743	76,475	468,120	1771	93,573	631,860	1799	122,986	834,400	1827	138,363	1,335,100
1744	76,648	490,620	1772	89,503	609,540	1800	125,073	842,210	1828	147,698	1,288,460
1745	74,188	563,990	1773	90,133	609,740	1801	134,546	760,560	1829	158,313	1,240,300
1746	71,582	620,790	1774	90,419	585,290	1802	126,389	743,470	1830	159,907	1,287,070
1747	71,150	621,780	1775	93,581	623,950	1803	117,551	787,430	1831	148,168	1,189,010
1748	67,681	610,060	1776	98,372	671,700	1804	113,019	903,940	1832	166,224	1,364,160
1749	72,706	624,220	1777	93,714	714,870	1805	125,043	912,410	1833	152,093	1,167,820
1750	70,765	656,340	1778	97,360	658,540	1806	120,250	858,570	1834	162,485	1,237,360
1751	69,589	631,890	1779	97,352	676,540	1807	134,326	924,030	1835	170,325	1,381,540
1752	73,708	642,100	1780	102,383	706,850	1808	144,042	1,015,280	1836	164,351	1,219,510
1753	75,252	648,440	1781	102,543	743,330	1809	137,600	989,250	1837	172,435	1,329,010
1754	70,437	631,350	1782	101,176	728,970	1810	132,155	962,750	1838	183,362	1,403,400
1755	74,290	647,100	1783	101,840	701,610	1811	125,012	966,400	1839	180,780	1,360,250
1756	77,257	624,710	1784	98,143	616,110	1812	133,854	953,630	1840	177,497	1,371,870
1757	82,612	574,960	1785	99,047	641,470	1813	137,770	891,240	1841	166,922	1,310,220
1758	84,252	550,930	1786	92,270	665,910	1814	135,071	870,880	1842	175,347	1,438,960
1759	86,439	582,260	1787	94,946	668,570	1815	124,948	962,840			

The number of *fatted calves*, exclusive of sucklers, of which no account is taken, sold annually in Smithfield from 1821 inclusive, has been as follows: —

Date.	Number.	Date.	Number.	Date.	Number.
1821	- 21,768	1829	- 20,879	1836	- 18,900
1822	- 24,255	1830	- 20,300	1837	- 17,716
1823	- 22,739	1831	- ——	1838	- 18,653
1824	- 21,949	1832	- 19,522	1839	- 18,148
1825	- 20,958	1833	- 18,374	1840	- 17,154
1826	- 22,118	1834	- 19,721	1841	- 17,054
1827	- 20,729	1835	- 20,852	1842	- 19,648
1828	- 20,832				

The contract prices of butcher's meat per cwt. at Greenwich Hospital, since 1730, have been as below: —

	£	s.	d.		£	s.	d.		£	s.	d.
1730 -	- 1	5	8	1790	- 1	16	10	1825	- 2	19	6½
1740 -	- 1	8	0	1800	- 3	4	4	1830	- 2	3	6
1750 -	- 1	6	6	1810	- 3	12		1835	- 2	0	7½
1760 -	- 1	11	6	1815	- 3	8		1840	- 2	14	0
1770 -	- 1	8	6	1820	- 3	10		1842	- 2	12	8½
1780 -	- 1	12	6								

We suspect, from what we have heard from practical men of great experience, that the weights assigned by Sir F. M. Eden and Mr. Middleton to the cattle sold in Smithfield were, at the time when their estimate was framed, decidedly in excess: but the great improvements that have since been made in the breeding and feeding of cattle in all parts of the empire, have materially increased their average size; so that the above weights are now, we have been well assured, not far from the mark. In order, however, to be within bounds, we shall take the nett weight of the cattle at 750 lbs.; and supposing this and the other estimates to be nearly right, we should be able, provided we

knew the respective numbers of sheep and lambs, to estimate the total quantity of butcher's meat furnished for London by Smithfield market, exclusive of hogs and pigs. Sheep and lambs are not, however, distinguished in the returns; but it is known that the former are to the latter nearly as 3 to 1; so that we may estimate the average weight of the sheep and lambs at about 70 lbs.

Average Number of Animals sold in Smithfield in each of the 3 Years ending 1842.	Gross Weight.	Offal.	Nett Weight.	Butcher's Meat.
	Lbs.	Lbs.	Lbs.	Lbs.
173,255 Cattle - - -	1,000	250	750	129,941,250
1,373,683 Sheep and lambs - -	90	20	70	96,157,810
17,952 Calves - - -	175	35	140	2,443,280
			Total	228,542,340

This quantity, estimated at the average price of *6d.*, would cost *5,713,558l.* 10*s.*; at 8*d.* it would cost 7,618,078*l.*

But exclusive of the above, or of the beef properly so called, a large portion of the offal, including the head and tongue, heart, tripe, fat, &c., is used as food.

A part of the cattle sold at Smithfield go to supply the towns in the vicinity; but, on the other hand, many cattle are sold in the adjoining towns, and slaughtered for the use of London, of which no account is taken. We have reason to think that the latter quantity rather exceeds the former; but, supposing that they mutually balance each other, the above quantity of 228,542,340 lbs. may be regarded as forming the annual supply of butcher's meat at present required for London; exclusive, however, of the offal used as food, and of hogs, pigs, suckling calves, &c., and exclusive also of bacon, hams, and salted provisions brought from a distance. The quantities thus omitted from the account are very large indeed; and since the introduction of steam navigation great numbers of cattle and sheep are killed in Scotland and other distant parts of the empire, the carcases of which are sent up for sale in the London market. We have no means of forming any correct conclusion on such a subject, but we are inclined to think that the carcases so sent up, added to the offal used as food, and the hogs killed in town, may be considered as fully equivalent to the butcher's meat used in the *victualling of ships*. On this hypothesis there will remain 228,542,340 lbs. of butcher's meat for the supply of the metropolis, which, taking the population at 1,870,127, gives 122⅛ lbs. for the consumption of every individual, exclusive of bacon, hams, and salted provisions, and, also, of poultry.

This, though not nearly so great as has been sometimes represented *, is, we believe, a larger consumption of animal food than takes place any where else by the same number of individuals. † According to M. Chabrol, the consumption of butcher's meat in Paris amounts to between 85 lbs. and 86 lbs. for each individual. At Brussels the consumption is a little greater, being supposed to average 89 lbs. each individual; being rather more than 3 lbs. above the mean of Paris, and 33 lbs. under the mean of London.

In estimating the weights of the animals killed in country towns, a lower standard must be adopted than that taken for London; first, because the largest and finest cattle are brought to the metropolis; and secondly, because a very large proportion of the calves killed in country towns are sucklers, which are excluded from the London accounts.

The following Table, drawn up from the Reports of the Manchester Statistical Society, shows the Consumption of Butcher's Meat in Manchester and its Environs in 1836, the Population being estimated at 343,500.

Description of Meat.	Average weight of Carcases.	Number of		Quantity to each Person.
		Carcases.	Pounds.	
Cattle - - - -	560 lbs.	40,820	22,859,200	66 lbs. 8 oz.
Sheep - - - -	68½	105,040	7,212,746	21 0
Lambs - - - -	37	96,668	3,576,716	10 7
Calves - - - -	90	11,791	1,061,190	3 1
Offal (edible) - - -	- -	254,319	34,709,852	101 0
	- -	- -	1,387,308	4 9
Total -	- -	- -	36,097,160	105 9

The consumption of butcher's meat in Glasgow is about the same, compared with the population, as in Manchester. And this statement, taken in connection with the fact

* Mr. Middleton (*Agriculture of Middlesex*, p. 643.) estimates the consumption of animal food in London, exclusive of fish and poultry, at 234 lbs. a year for every individual! And he further estimates the total average annual expense incurred by each inhabitant of the metropolis, for *all* sorts of animal food, at 8*l.* 8*s.*!

† In the former edition of this work we inadvertently deducted the offal from the *nett* instead of the *gross* weight of the animals. This blunder was soon after brought forward in the *Dictionnaire du Commerce* to show that the weight of cattle slaughtered in Paris was greater than that of those killed in London; and that the consumption of animal food was, also, greater in the former than in the latter!

that, so late as 1760, the slaughter of bullocks for the supply of the public market was unknown in Glasgow, sets the wonderful improvement that has since taken place in the food of the Scotch people in the most striking point of view. Previously to 1780 it was customary in Glasgow, Edinburgh, and the principal Scotch towns, for families to purchase in November what would now be reckoned a small half-fed cow or ox, the salted carcase of which was the only butcher's meat they tasted throughout the year. In the smaller towns and country districts this practice prevailed till the present century; but it is now everywhere abandoned. We believe, indeed, that there has never been, in any country, a more rapid increase in the quantity, or a greater improvement in the quality, of the food brought to market, than has taken place in Scotland since 1770. In so far as respects butcher's meat, this has been occasioned partly by the growing numbers and opulence of all classes, and partly by the vast increase in the food of cattle consequent to the introduction of green crops, and of an improved system of cultivation. —(See BREAD.)

The introduction of steam navigation, and the improved means of communication by railroads and otherwise, has already had, and will no doubt continue to have, a material influence over the supply of butcher's meat. Owing to the difficulty and expense of their conveyance, cattle could not formerly be conveniently fattened at any very considerable distance from the great markets; but steam navigation has gone far to remove this difficulty. Instead of selling their cattle, lean or half-fed, to the Norfolk graziers, by whom they were fattened for the London market, the producers, in various districts of Scotland, now fatten them at home, either sending the live animals or the carcases by steam to London, Liverpool, &c. This practice is indirectly as well as directly advantageous to the farmer, inasmuch as it enables him to turn his green crops to better account, and to raise larger supplies of manure. The same practice is also extending in Ireland; and will, no doubt, spread itself over every part of the country where feeding can be carried on, that has the required facility of transport.

Exclusive of the cattle raised in Great Britain, we import considerable supplies of beef and of live cattle from Ireland.

Account of the Number of Cows and Oxen, and of the Quantities of Beef, imported into Great Britain from Ireland, from 1801: —

Years.	Cows and Oxen.	Beef.	Years.		Beef.		Cows and Oxen.	Beef.
	No.	*Barrels.*		*No.*	*Barrels.*		*No.*	*Barrels.*
1801	31,543	58,911	1810	44,553	71,605	1818	58,165	80,587
1802	42,501	59,448	1811	67,680	108,282	1819	52,176	70,504
1803	28,016	62,226	1812	79,122	114,504	1820	39,014	52,591
1804	15,646	59,342	1813	48,973	104,516	1821	26,725	65,905
1805	21,862	88,519	1814	16,435	83,162	1822	34,659	43,139
1806	27,704	91,261	1815	33,809	60,307	1823	46,351	69,079
1807	26,252	85,255	1816	31,752	39,495	1824	62,314	54,810
1808	13,958	88,366	1817	45,301	105,555	1825	63,519	63,557
1809	17,917	89,771						

In 1825 the trade between Great Britain and Ireland was placed on the footing of a coasting trade, so that there are no means of continuing this account to a later date; but for further particulars, the reader is referred to Liverpool, art. DOCKS: for an account of the sales of cattle at the great fair of Ballinasloe, see FAIRS AND MARKETS.

Number of Head of Cattle in Great Britain. — It would, on many accounts, be very desirable to have an accurate estimate of the number and value of the stock of cattle in Great Britain, and of the proportion annually killed and made use of; but owing to the little attention that has been paid to such subjects in this country, where every sort of statistical knowledge is at a very low ebb, there are no means of arriving at any conclusions that can be depended upon. The following details may not, however, be unacceptable.

Arthur Young has given, both in his *Eastern* and *Northern Tours*, estimates of the number and value of the different descriptions of stock in England. The greatest discrepancy, unaccompanied by a single explanatory sentence, exists between them; but there can be no doubt that the following estimate (*Eastern Tour*, vol. iv. p. 456.), though, perhaps, rather under the mark, is infinitely nearer the truth than the other, which is about twice as great: —

Number of Draught cattle	684,491
Cows	741,532
Fatting cattle	513,369
Young cattle	912,656
Total	2,852,048

Now, taking this number at the round sum of 3,000,000, and adding a third to it for the increase since 1770, and 1,100,000 for the number of cattle in Scotland (*General Report of Scotland*, iii. *Addenda*, p. 6.), we shall have 5,100,000 as the total head of cattle of all sorts in Great Britain. The common estimate is, that about a *fourth* part

of the entire stock is annually slaughtered; which, adopting the foregoing statement, gives 1,275,000 head for the supply of the kingdom; a result which all that we have heard inclines us to think is not far from the mark.

Importation of Cattle. — Previously to 1842, the importation of horned cattle, sheep, hogs, and other animals used as food was strictly prohibited; but this prohibition was then withdrawn, and the importation of the animals in question permitted on paying a duty of 20*s.* a head on oxen and bulls, 15*s.* on cows, 3*s.* on sheep, 5*s.* on hogs, &c. This certainly was one of the most important inroads that has ever been made on the prohibitive system, and reflects the greatest credit on the administration of Sir Robert Peel. At the same time, however, the benefits of the measure are rather of a prospective and negative than of an immediate and positive description. It will most probably lead, in the course of time, to a considerable importation, and it will no doubt prevent or be a great obstruction to any oppressive rise in future in the price of butcher's meat in this country; but we doubt whether it will do more than this. The apprehensions which the measure when proposed excited amongst the agriculturists, and the panic it occasioned, were wholly destitute of any good foundation. And the fact that the price of cattle is lower now (1843), than before the repeal of the prohibition, is not, assuredly, owing to the inconsiderable importation that has taken place, but to the fact of their price having previously been quite exorbitant, and to the diminution of the consumption of butcher's meat in a large portion of the country originating in the depressed state of manufactures in 1842 and in the early part of 1843. Indeed we believe that their price would have been quite as low at this period (June 1843), as it really is, had the prohibition continued in full force.

The fact is that, low as the duties are, very few cattle can be imported into England; nor is there any such discrepancy as is commonly supposed between the prices of butcher's meat here and on the Continent. No doubt the rates at which it is quoted in the markets of the latter are in the great majority of instances a good deal below its price in London and other great British markets; but this difference is in great part apparent only, and depends on the superior quality of English butcher's meat as compared with that of other countries.

There is an immense variety in the breeds of the continental cattle; but with the exception of the cattle of Holstein, the beef of those in Western Europe is universally inferior to that of England; and the continental mutton is hardly eatable. In most parts of the Continent the object is to have a fine fleece, with but little regard to the carcase; whereas in England the carcase is an object of more importance than the fleece.

Denmark, including Holstein, exports annually from 25,000 to 30,000 head of cattle, principally to Hamburg and Altona; and there could be no reason for supposing that the repeal of the prohibition against importation into this country should lessen the demand for beef in Hamburg, otherwise than by raising its price. Inasmuch, however, as the beef of Holstein (which is principally cured and smoked) had hitherto sold in Hamburg for from 4½*d.* to 5*d.* per lb., or at but little below the cost of beef in England, it was evident that a comparatively small increase of price would suffice to prevent its exportation. And this in truth is precisely what has happened; for it has been found that when to the cost of cattle in Hamburg has been added the cost of their conveyance and sale to the butcher in England, amounting to at least 40*s.* a head, and the duty of 20*s.* a head, their price has been such that they could rarely be sold in London with a profit, and that their importation has been hardly worth notice.

But, if we except Denmark and Ireland, no country of Western Europe has hitherto been in the habit of exporting cattle. France exports a few; but her imports always overbalance her exports; and it is probable, indeed, should no change be made in the policy on which she has been acting of late years, that she will cease to export a single animal. The truth is, that there has latterly been a great increase in the price of butcher's meat in France, and a material decrease in the stock of cattle in that kingdom, occasioned by the excessive additions made to the duty on the importation of cattle. Previously to 1814 all sorts of cattle might be imported into France duty free. In that year, however, a duty of 3 francs (2*s.* 6*d.*) a head was laid on their importation; and had the duty been allowed to continue at this reasonable rate, it could not justly have been objected to. But in 1822, this moderate duty was suddenly raised to the enormous amount of 55 francs, or 44*s.*; and the result has been, that, in the interval, the stock of cattle in France has been reduced about 2,000,000 head; the price of butcher's meat has been greatly increased, and the consumption of beef in Paris has declined from about 31 kilogrammes to 25 kilogrammes per individual! In consequence, loud and well-founded complaints have been made by the town and manufacturing population of the operation of the duty; and the probability is, that it will, at no very distant period, be effectually reduced. But it is material to observe, that, despite this oppressive duty, the value of the live animals imported into France in

1839, principally from England, Wirtemberg, Bavaria, and Baden, amounted to 674,775*l.*! Under these circumstances, the idea of France supplying us with any considerable quantity of cattle is out of the question. Indeed, any one acquainted with the state of France, with the smallness of the farms, and the all but total deficiency of green crops, must treat with contempt the notion of her exporting beef or cattle.

Spain, since the repeal of the prohibition, has supplied us with a few cattle, and sanguine expectations have been entertained of her capabilities in this respect. We doubt, however, whether these be destined to be realised. The pastures of Spain are no doubt of vast extent; but it is generally believed that they are more suitable for sheep than for cattle; and the voyage across the Bay of Biscay will always be a considerable obstacle to the cheap and easy importation of the latter.

Eastern Europe, including Hungary and the southern parts of European Russia, has a vast extent of fine pasture land and some very fine breeds of cattle, with which, but for the distance, we might be abundantly supplied. Unluckily, however, the expense of their conveyance would be so very great as to preclude the possibility of their being imported; and it is even doubtful whether we shall ever be able to derive from these countries any considerable supply of salted provisions.

It appears from the customs' returns, that from the repeal of the prohibition against the importation of foreign cattle, on the 9th July 1842, down to the 5th of January 1843, only 4,277 head of cattle (including calves) were imported, and only 648 sheep and lambs (*Parl. Paper* No. 45. Sess. 1843.) And it is well known that this inconsiderable importation was unprofitable rather than otherwise; and that there has hardly been a single animal imported during the 3 months ending with June 1843. At the same time, however, it must be admitted that it is by no means improbable that agriculturists in the contiguous countries should apply themselves to the breeding of stock for the English markets; and that their importation should, in consequence, be considerably increased. But supposing (of which we regret there is little or rather no probability) that in some half dozen years we should be able annually to import 30,000 or 35,000 head of foreign cattle, and that eventually this number should be increased to 100,000 or 150,000 head, still it is easy to see it could entail no real injury on the agriculturists of this country.

We have already seen that at present (1843) the average annual slaughter of cattle in London amounts to about 175,000 head; and the average annual slaughter in Great Britain is certainly not under 1,350,000 head. Hence it appears, that even on the extravagant supposition that 100,000 head of cattle were imported, it would not amount to one thirteenth part of our supply, and could not therefore have any material influence over prices. The influence of an importation of 30,000 head would, it is obvious, be all but insensible.

In saying that an importation even of 100,000 head of cattle, which most certainly is 4 or 5 times greater than the importation will amount to for a good many years to come, would not materially affect prices, we do not reason theoretically, but on the solid foundation of experience and analogy. In 1826, for example, we imported about 57,000 head of cattle from Ireland into Great Britain; but in consequence of the increased facilities given to importation, by the introduction and extension of steam navigation, Ireland now supplies us with about 180,000 head of cattle, or between 3 and 4 times as many as we imported from her 17 years ago! But instead of the price of cattle in Great Britain falling in consequence of this immense increase of importation, every body knows that it has very decidedly increased. And when such is the fact, is it not childish to suppose that the value of stock is to be seriously depressed, and the breeders and graziers ruined, by the admission of cattle from abroad under a duty of 20*s.* each?

It is singular how, in a great and rich country like this, a vast addition may be made to the supply of any important article without materially affecting prices. In illustration of this, we may observe, that in 1840 the imports of fresh salmon into London amounted to about 1,700,000 lbs., and in 1841 they amounted to about 3,200,000 lbs. Here we have an increase of little less than 100 per cent. in the supply, and yet the wholesale price was only reduced from 11*d.* in 1840, to about 9*d.* in 1841; and it should be borne in mind that salmon is more of a luxury than beef, and that, its consumption being necessarily at all times confined within a more limited circle, it has less power of expanding and contracting with variations of price.—(See art. SALMON.) Taking the average price of beef in England at 6*d.* per lb., a fall to 5½*d.* per lb. would certainly take off 100,000 additional head of cattle; that is, it would take off more than there is much probability we shall get from the Continent, under the existing arrangements, any time during the next dozen years.

We incline to think that the principal imports of beef and other articles of provision from the Continent and elsewhere under the existing tariff, will not come to us in the shape of live animals, but of salted provisions. But even of these, the importation, we

apprehend, will be much less than has been supposed. For some years past, foreign salted and cured beef has been admitted on paying a duty of 12*s.* a cwt. If, therefore, the price in any part of the Continent had been so low as most people here imagine, a large importation of salted and cured beef could hardly have failed to have taken place under this duty. But, in point of fact, the importation has been quite inconsiderable; the entries of foreign salted beef for home consumption in 1841 being only 1,698 cwt. This shows conclusively that the notions as to the cheapness of foreign beef are nearly if not altogether chimerical; and it also shows that the reduction of the duty from 12*s.* to 8*s.* a cwt. can have but little influence over the trade.

We believe, however, that there will, under the new arrangements, be a considerable importation of bacon and hams, the duty on which has been reduced from 28*s.* to 14*s.* a cwt. It is, indeed, much to be wished that such should be the case, inasmuch as a fall in the price of bacon would be a great boon to the labouring classes, at the same time that it could do little or no injury to any one else.

It may, perhaps, be asked, If you be right in these statements, if the new measures will not materially reduce the price of provisions, where is the advantage of having interfered with the former arrangements? Why not "have let well alone?" To that ques- we might reply by asking, has not the importation of cattle from Ireland been of vast advantage, though it has not sensibly influenced prices? Though the new measure should not lower the price of butcher's meat, it will, at all events, prevent its farther increase, and enable provision to be made for the wants of our rapidly increasing population. It will also have the good effect of undeceiving the public, of proving to the conviction of every individual, that the price of butcher's meat in this country is what Adam Smith would call its natural and necessary price, and that it is not sensibly affected by restrictive regulations.

It is much to be regretted that the same manly and decisive course was not taken in respect of corn that has been taken in respect of butcher's meat. The delusion in the one case is quite as great as in the other. Suppose the ports were constantly open to importation at a fixed duty of 5*s.* a quarter on wheat, it admits of demonstration that our average prices would not thereby be in the least degree affected. But such a measure would give us an additional security against the mischievous effects of bad harvests, at the same time that it would make an end of a gigantic delusion, and dry up a most prolific source of misrepresentation, abuse, and agitation.

Cattle of the Continent. — Baron Malchus gave, in his work on European Statistics, published at Stuttgard in 1826, an account of the number of horned cattle, sheep, swine, &c., in most European countries. In so far as respects the British empire, the statements were mostly copied from Colquhoun, and are ludicrously inexact. Perhaps, however, they may, in so far as regards the Continental states, be better entitled to credit. The following statements, which we have endeavoured to deduce from the best authorities, are probably less wide of the mark: —

Countries.	Head of Cattle.	Countries.	Head of Cattle.	Countries.	Head of Cattle.
Sweden (1837)	- 1,657,976	Saxony	- 400,000?	Austria	- 10,000,000?
European Russia	- 16,000,000?	Hanover	- 900,000?	France	- 7,000,000?
Denmark	- 1,650,000?	Wirtemberg	- 800,000?	Spain and Portugal	- 3,000,000?
Belgium	- 898,076	Baden	- 480,000?	Switzerland	- 800,000?
Prussia	- 4,838,622	Bavaria (1837)	- 2,350,388		

Laws as to Cattle. — No salesman, broker, or factor, employed in buying cattle for others, shall buy for himself in London, or within the bills of mortality, on penalty of double the value of the cattle bought and sold. — (31 *Geo.* 2. c. 40.)

Cattle not to be driven on Sunday, on penalty of 20*s.* — (3 *Cha.* 1. c. 1.)

Any person unlawfully and maliciously killing, wounding, or maiming any cattle, shall be guilty of felony, and, upon conviction, may be transported, at the discretion of the court, beyond seas for life, or for any term not less than 7 years, or be imprisoned for any term not exceeding 4 years, and kept to hard labour; and, if a male, may be once, twice, or thrice publicly or privately whipped, if the court shall think fit so to order. — (7 & 8 *Geo.* 4. c. 30.)

Persons wantonly and cruelly abusing, beating, or ill-treating cattle, may, upon being convicted before a justice of such offence, be fined in any sum not exceeding 5*l.* and not below 10*s.*; and upon nonpayment of fine, may be committed to the house of correction for any time not exceeding 3 months.

Complaint must be made within 10 days after the offence. Justices are instructed to order compensation to be made, not exceeding 20*s.*, to persons vexatiously complained against. — (3 *Geo.* 4. c. 71.)

CAVIAR (Fr. *Caviar, Cavial;* Ger. *Kaviar;* It. *Caviario, Caviale;* Sp. *Caviario;* Rus. *Ikra;* Lat. *Caviarium*), a substance prepared in Russia, consisting of the salted roes of large fish. The best, which is made of the roe of the sturgeon, appears to consist entirely of the eggs, and does not easily become fetid. It is packed in small casks or kegs; the inferior sort being in the form of dry cakes. Caviar is highly esteemed in Russia, and considerable quantities are exported to other countries. It is principally made of the roe of the sturgeon caught in the Wolga, in the neighbourhood of Astrachan, as many as 30,000 barrels of caviar having been exported from that city in a single season. — (See *Geog. Dict.* art. ASTRAKHAN.)

CAYENNE PEPPER, OR GUINEA PEPPER. See CHILLIES.

CEDAR (Ger. *Zeder;* Du. *Ceder;* Fr. *Cedre;* It. and Sp. *Cedro;* Rus. *Kedr;* Lat. *Cedrus*). The cedar of Lebanon, or great cedar (*Pinus cedrus*), is famous in Scripture: it is a tall majestic-looking tree. "Behold," says the inspired writer, "the Assyrian was a cedar in Lebanon with fair branches, and with a shadowing shroud, and

of an high stature; and his top was among the thick boughs. His height was exalted above all the trees of the field, and his boughs were multiplied, and his branches became long. The fir trees were not like his boughs, and the chestnut trees were not like his branches, nor any tree in the garden of God was like unto him in beauty."—(*Ezekiel*, xxxi. 3. 5. 8.) The cedar grows to a very great size. The timber is resinous, has a peculiar and powerful odour, a slightly bitter taste, a rich yellowish brown colour, and is not subject to the worm. Its durability is very great; and it was on this account (*propter æternitatem*, Vitruvius, lib. ii. § 9.) employed in the construction of temples, and other public buildings, in the formation of the statues of the gods, and as tablets for writing upon. In the time of Vitruvius, cedars were principally produced in Crete, Africa, and some parts of Syria. — (*Loc. cit.*) Very few are now found on Lebanon; but some of those that still remain are of immense bulk, and in the highest preservation.

Cedar exceeds the oak in toughness, but is very inferior to it in strength and stiffness. Some very fine cedars have been produced in England.

There are several other kinds of timber that are usully called cedar: thus a species of cypress is called white cedar in America; and the cedar used by the Japanese for building bridges, ships, houses, &c. is a kind of cypress, which Thunberg describes as a beautiful wood, that lasts long without decay. The *Juniperus oxycedrus* is a native of Spain, the south of France, and the Levant; it is usually called the brown berried cedar. The Bermudian cedar (*Juniperus Bermudiana*), a native of the Bermuda and Bahama islands, is another species that produces valuable timber for many purposes; such as internal joiners' work, furniture, and the like. The red cedar, so well known from its being used in making black-lead pencils, is produced by the Virginian cedar (*Juniperus Virginiana*), a native of North America, the West India islands, and Japan. The tree seldom exceeds 45 feet in height. The wood is very durable, and, like the cedar of Lebanon, is not attacked by worms. It is employed in various ways, but principally in the manufacture of drawers, wardrobes, &c., and as a cover to pencils. The internal wood is of a dark red colour, and has a very strong odour. It is of a nearly uniform texture, brittle, and light. — (See *Tredgold's Principles of Carpentry*; *Lib. of Entertaining Knowledge, Veget. Substances*; *Rees's Cyclopædia, &c.*)

The duty on cedar (10*s.* a ton from a foreign country, and 1*s.* from a British possession) produced in 1842, 345*l.* Its price in bond varies from 6*d.* to 9*d.* a foot.

CERTIFICATES, in the customs. No goods can be exported by certificate, except foreign goods formerly imported, on which the whole or a part of the customs paid on importation is to be drawn back. The manner of proceeding is regulated by the 3 & 4 Will. 4. c. 52. § 68, &c. The person intending to enter outwards such goods, is to deliver to the collector or comptroller of the port where the goods were imported or warehoused, two or more bills, specifying the particulars of the importation of such goods, and of the entry outwards intended to be made; and the officers, if they find such bills to agree with the entry inwards, are to issue a *certificate* of such entry, with the particulars necessary for the computation of the drawback upon the goods, the names of the person and ship by whom and in which the goods are to be exported, &c. The merchant then enters the goods outwards, as in the common way of exportation. The cocket granted upon this occasion is called a *certificate cocket*, and differs a little in form from common over-sea cockets. Notice of the time of shipping is to be given to the searcher. Some time after the departure of the vessel, the exporter may apply for the drawback. The collector and comptroller then make out on a proper stamp a debenture, containing a distinct narration of the transaction, with the exporter's or merchant's oath, that the goods are really and truly exported beyond seas, and not relanded, nor intended to be relanded; and also with the searcher's certificate of the quantity and quality of the goods at the time of shipping. The debenture being thus duly made out and sworn to, the duties to be repaid are indorsed, the merchant's receipt taken below, and the money paid.

Certificates of origin, subscribed by the proper officers of the places where the goods were shipped, are required, to entitle the importers of sugar, coffee, cocoa, and spirits, from any British plantation, to get them entered as such. A similar certificate is required in the case of blubber — (see BLUBBER); and in the case of wine from the Cape of Good Hope; and sugar from the limits of the East India Company's charter, &c. — (See IMPORTATION AND EXPORTATION.)

CHAIN, *in surveying*, a measure of length, composed of a certain number of links made of iron wire, serving to take the distance between two or more places. Gunter's chain contains 100 such links, each measuring $7\frac{92}{100}$ inches, consequently equal to 66 feet, or four poles.

CHALDRON, a dry English measure. 36 coal bushels make a chaldron, and 21 chaldrons a score. The coal bushel is $19\frac{1}{2}$ inches wide from the outside, and 8 inches deep. It contains 2,217·6 cubic inches; but when heaped, 2,815·5, making the chaldron 58·65 cubic feet. There are 12 sacks of coal in a chaldron; and if

5 chaldrons be purchased at the same time, the seller must deliver 63 sacks: the 3 sacks additional are called the *ingrain*. But coals are now sold in London, and almost everywhere else, by the ton of 20 cwt. avoirdupois. The Newcastle chaldron of coals is 53 cwt., and is exactly double the London chaldron. — (See COAL.)

CHAMBER OF COMMERCE, is an assembly of merchants and traders, where affairs relating to trade are treated of. There are several establishments of this sort in most of the chief cities in France; and in this country, chambers of this kind have been erected for various purposes.

CHAMBER OF ASSURANCE, in France, denotes a society of merchants and others for carrying on the business of insurance; but in Holland it signifies a court of justice, where causes relating to assurances are tried.

CHAMPAGNE, one of the most esteemed and celebrated of the French wines. See WINE.

CHANKS, OR CHANK SHELLS, common conch shells, are fished up by divers in the Gulf of Manar, on the coast opposite Jaffnapatam, in Ceylon, in about 2 fathoms water; and at Travancore, Tuticoreen, and other places. Large fossil beds of chanks have also been found. They are of a spiral form, and form a considerable article of trade in India, where they are in extensive demand all over the country. They are sawn into narrow rings or bracelets, and are worn as ornaments for the arms, legs, fingers, &c. by the Hindoo women; many of them are also buried with the bodies of opulent and distinguished persons. Those which, from being taken with the fish, are called green chanks, are most in demand. The white chank, which is the shell thrown upon the beach by strong tides, having lost its gloss and consistency, is not worth the freight up to Calcutta. The value of the green chank depends upon its size. A chank opening to the right, called in Calcutta the right-handed chank, is so highly prized, as sometimes to sell for 400, or 500, or even 1,000 rupees. — (*Bell's Commerce of Bengal*, and *private communications*.)

The fishery of chanks is monopolised by government, who most commonly let the banks for about 4,000*l.* a year. Sometimes, however, they are fished by the servants of government on its account. But as the fishermen of the coast, and those belonging to the little islands where they are found, cannot be prevented from taking chanks, the better plan, as it appears to us, would be to give every one leave to fish them; but to lay a somewhat heavier duty on their exportation. We have been assured by those well acquainted with the circumstances, that this would be advantageous to all parties, but especially to government. We have heard that an arrangement of this sort has recently been made, but we have not learned any thing positive respecting it.

CHARCOAL (Fr. *Charbon de bois*; Ger. *Reine Kohle*; It. *Carbone di legna*; Sp. *Carbon de lena*; La. *Carbo ligni*), a sort of artificial coal, consisting of wood burned with as little exposure to the action of the air as possible. "It was customary among the ancients to *char* the outside of those stakes which were to be driven into the ground, or placed in water, in order to preserve the wood from spoiling. New-made charcoal, by being rolled up in clothes which have contracted a disagreeable odour, effectually destroys it. When boiled with meat beginning to putrefy, it takes away the bad taint: it is, perhaps, the best tooth-powder known. When putrid water at sea is mixed with about $\frac{1}{6}$ of its weight of charcoal powder, it is rendered quite fresh; and a much smaller quantity of charcoal will serve, if the precaution be taken to add a little sulphuric acid previously to the water. If the water casks be charred before they are filled with water, the liquor remains good in them for years: this precaution ought always to be taken for long sea voyages. The same precaution, when attended to for wine casks, will be found very much to improve the quality of the wine."—(*Thomson's Chemistry*.)

CHARLESTON, a city and sea-port of the United States, in South Carolina, in lat. 32° 46′ 33″ N., long. 79° 48′ W. Population in 1840, 29,261. The situation of Charleston has a good deal of resemblance to that of New York, being built on a point of land between the Ashley and Cooper rivers, at their point of confluence. The exports principally consist of cotton and rice (particularly the former), which are the staple products of the state. There are a few other articles exported, such as naval stores, hams, bacon, &c., but their value is inconsiderable. All the cotton sent from South Carolina to foreign countries is shipped at Charleston. In 1840-41, the shipments of cotton to foreign countries (including 12,991 bales sea-island) amounted to 162,263 bales, of which 101,564 bales went to England: the shipments of cotton coastwise during the same year were estimated at 63,959 bales. — (*Downes's Amer. Alm.* p. 238.: for the exports in 1841-42, see below.) The imports from foreign countries principally consist of cottons, woollens and linens, hardware, iron and steel, coffee, sugar, tea, wine, spices, &c. The greater part of the imports do not, however, come from abroad, but from the northern and middle states. The former supply her with fish, shoes, and all sorts of coarse manufactured goods for the use of the

slave population; while the latter supply her with wheat, flour, &c. Most part of the imports of foreign produce are also brought at second-hand from New York, which occupies the same rank in the Union that Liverpool and London do in Great Britain. The registered, enrolled, and licensed tonnage belonging to Charleston, in 1841, amounted to 21,361 tons, of which 8,388 tons were employed in the coasting trade. The total value of the articles imported into South Carolina, in the year ending 30th of September, 1841, was 1,557,431 dollars; the total value of the exports during the same year being 8,043,284 dollars. — (*Papers laid before Congress*, 21st of July, 1842.) In South Carolina, the dollar is worth *4s. 8d.* currency; so that *1l.* sterling = *1l. 0s. 8⅝d.* currency. *Weights and Measures* same as in England. — (For further details, see NEW YORK.)

Port. — Charleston harbour is spacious and convenient; but the entrance to it is incommoded by a range of sand-banks, stretching from Sullivan's Island on the north to Folly Island on the south, about 2½ leagues. There are several channels through these banks, but only three, the middle or direct channel, the ship channel, and Lawford channel, between the latter and the mainland, that ought to be attempted by ships of considerable burden. The entrance to the ship channel is in lat. 32° 40′. The depth of water on the shallowest part of the bar at ebb tide is 12 feet, and at flood from 17 to 18 feet; whilst the depth in the middle channel at low water does not exceed 9 feet, and in Lawford channel it does not exceed 10 or 11 feet. A lighthouse has been erected on the south point of Lighthouse Island, bearing from the middle of the bar of the ship channel W. N.W. ½ N. It is 80 feet high, having a revolving light, alternately brilliant and obscure, the period of obscuration being double that of brilliancy; but on approaching the light, the latter gains upon the former, and within 1½ league it is never wholly dark. The light may be seen in fine weather at from 5 to 4 leagues off. After getting into the channel, which is marked by the breakers and buoys on each side, the proper course for a ship to steer is to bring the lighthouse to bear N.W. by W., and direct for it till you get within the banks, when the course is N. by W. But it is unnecessary to enter into further details on these points, as all ships entering Charleston harbour are bound, provided they are hailed by a licensed pilot off the bar, to pay him full pilotage fees whether they accept his services or not. In point of fact, however, they are always accepted; for the shifting of the sands, the influence of the tides, &c. render the entrance so difficult to those not perfectly familiar with it, that even the packet ships that sail regularly to and from New York uniformly heave-to without the bar for a pilot. — (See Plan of Charleston Harbour, reduced from the original survey of Major H. Bache.)

Ships usually moor alongside quays or wharfs, where they are in perfect safety.

Shipping Charges. — The charges of a public nature paid by ships entering this port differ but little in amount on a native and a foreign ship. On a vessel supposed to be of 300 tons burden, entering, unloading, taking on board a mixed cargo, and clearing out, they would be as under: —

	Doll.	Cts.	£.	s.	d.
Fee on entry at the Custom-house	2	60 or	0	11	
Surveyor's fee, on a foreign ship	5	00	1	1	
Ditto, on a native ship	3	00	0	12	9
Harbour-master's fee	2	00	0	—	
Port warden's survey, when required	10	00	2	2	0
Fees on clearance at the Custom-house, of a native ship	3	50	0	14	11½
Ditto, of a foreign ship	2	70	0	11	6½
Pilotage inwards and outwards, supposing the ship to draw 14 ft. water	50	00	10	13	6½
Wharfage, per diem	1	00	0	4	3½

The difference in the fees on the clearance at the Custom-house of a native and a foreign ship, is owing to the former being obliged to give certain bonds which are not required of the latter.

The greater or smaller tonnage of the ship makes no difference on any of the above charges except that of pilotage, which is in proportion to her draught of water, and is the same whether for a foreign or a native ship.

Charleston is, after New Orleans, one of the principal ports in the United States for the shipment of cotton. We subjoin A Statement of the Quantity of Cotton shipped during the Year ending the 31st of August, 1842, from Charleston and Georgetown (a subordinate port of the state of South Carolina), specifying the Quantities respectively shipped for Foreign Ports and Coastwise.

From Charleston.	*Bales.*
To foreign ports, Upland	181,705
Sea-island	14,119
Coastwise, Upland	70,442
Sea-island	341
	269,607
From Georgetown.	12,617
Total	282,224

Rates of Commission. — The rates of commission or factorage usually charged and allowed at Charleston on transacting different sorts of business, are as follows, viz. —

For selling domestic produce, 2½ per cent.

For selling foreign merchandise, 5 per cent.

For guaranteeing either of these sales, 2½ per cent. additional is commonly allowed.

For purchasing with funds in hand, or drawing domestic bills for reimbursement, 2½ per cent.

For purchasing goods and drawing foreign bills for reimbursement, 5 per cent. is charged.

For the sale of real or personal estate, the regular charge is 5 per cent.; but where the property to be sold is of any considerable value, the parties in general enter into an agreement beforehand, and a much lower rate of commission is allowed.

Charges on Rice and Cotton shipped at Charleston.

	Cents.
Drayage, wharfage, &c.	12½ per barrel.
Cooperage	18¾ ditto.
Total	31 cents per barrel.

On cotton the charges are —	*Cents.*	
On square bales,		
Drayage, wharfage, &c.	10	per bale.
Labour, mending bagging, &c.	10	ditto.
Total	20	cents per bale.

On round bales or bags,	*Cents.*	
Drayage, wharfage, &c.	10	per bale.
Labour, mending bagging, &c.	15	ditto.
Total	25	cents per bale.

For commission, see above.

These particulars have been principally derived from consular returns from Charleston; and from private communications from the same place.

CHART (Ger. *Seekarten*; Du. *Zeekarten*; Fr. *Cartes marines*; It. *Carte marine*; Sp. and Port. *Cartas de marear*) is properly applied to a projection of some part of the sea, as the term *Map* is to a portion of the land; wherefore charts are sometimes denominated "Hydrographical Maps." They are distinguished into several kinds, as plain, globular, and Mercator charts.

CHARTERPARTY, the name given to a contract in writing, between the owner or master of a ship and the freighter, by which the former hires or lets the ship, or a part of the ship, under certain specified conditions, for the conveyance of the goods of the freighter to some particular place or places. Generally, however, a charterparty is a contract for the use of the whole ship: it is in commercial law, what an indenture is at common law.

No precise form of words, or set of stipulations, is requisite in a charterparty. The forms subjoined to this article are those most commonly in use; but these may, and, indeed, in many cases must, be varied, to suit the views and intentions of the parties.

A charterparty is generally under seal: but sometimes a printed or written instrument is signed by the parties, called a *memorandum of a charterparty*; and this, if a formal charterparty be not afterwards executed, is binding. The stamp in either case is the same.

Charterparties, when ships are let or hired at the place of the owners' residence, are generally executed by them, or some of them; but when the ship is in a foreign port, it must necessarily be executed by the master, and the merchant or his agent, unless the owners have an agent in such port, having proper authority to act for them in such matters.

A charterparty made by the master in his name, when he is in a foreign port in the usual course of the ship's employment, and, therefore, under circumstances which do not afford evidence of fraud; or when

it is made by him at home, under circumstances which afford evidence of the expressed or implied assent of the owners; is binding upon the latter. But, according to the law of England, no *direct* action can be maintained upon the instrument itself against the owners, unless it be signed and sealed by them, or unless they authorise the master (or agent, as the case may be) to enter into the contract, and unless it be distinctly expressed in the charterparty that he acts only as agent.

When a ship is chartered by several owners to several persons, the charterparty should be executed by each, or they will not be liable to an action for nonperformance. But if the charterparty be not expressed to be made between the parties, but runs thus—"This charterparty indented witnesseth, that C., master of the ship W., with consent of A. and B., the owners thereof, lets the ship to freight to E. and F.," and the instrument contains covenants by E. and F. to and with A. and B.; in this case A. and B. may bring an action upon the covenants expressed to be made with them; but unless they seal the deed, they cannot be sued upon it. This, therefore, is a very proper form.

The general rule of law adopted in the construction of this, as of other mercantile instruments, is, that the interpretation should be liberal, agreeable to the real intention of the parties, and conformable to the usage of trade in general, and of the particular trade to which the contract relates.

The charterparty usually expresses the burden of the ship; and by the famous French Ordinance of 1681, it is required to do so. According to Molloy (book ii. c. 4. § 8.), if a ship be freighted by the ton, and found of less burden than expressed, the payment shall be only for the real burden; and if a ship be freighted for 200 tons, or *thereabouts*, the addition of thereabouts (says the same author) is commonly reduced to *five* tons more or less; but it is now usual to say so many tons "register measurement."

The usual covenant, that the ship shall be seaworthy, and in a condition to carry the goods, binds the owners to prepare and complete every thing to commence and fulfil the voyage. But though the charterparty contained no such covenant, the owner of the vessel would be, at common law, bound, as a *carrier*, to take care that the ship should be fit to perform the voyage; and even though he should give notice, limiting his responsibility from losses occasioned to any cargo put on board his vessel, unless such loss should arise from want of ordinary care, &c., he would be liable if his ship were not seaworthy.—(See SEAWORTHY.)

In all maritime transactions, expedition is of the utmost consequence; for even by a short delay, the object or season of a voyage may be lost; and therefore, if either party be not ready by the time appointed for the loading of the ship, the other may seek another ship or cargo, and bring an action to recover the damages he has sustained.

The manner in which the owner is to lade the cargo is, for the most part, regulated by the custom and usage of the place where he is to lade it, unless there be any express stipulation in the charterparty with respect to it. Generally, however, the owner is bound to arrange the different articles of the cargo in the most proper manner, and to take the greatest care of them. If a cask be accidentally staved, in letting it down into the hold of the ship, the master must answer for the loss.

If the owner covenants to load a full and complete cargo, the master must take as much on board as he can do with safety, and without injury to the vessel.

The master must not take on board any contraband goods, whereby the ship or cargo may be liable to forfeiture and detention; nor must he take on board any false or colourable papers; but he must take and keep on board all the papers and documents required for the protection and manifestation of the ship and cargo by the law of the countries from and to which the ship is bound, by the law of nations in general, or by any treaties between particular states.

If the master receive goods at the quay or beach, or send his boat for them, his responsibility commences with the *receipt* in the port of London. With respect to goods intended to be sent coastwise, it has been held, that the responsibility of the wharfinger ceases by the delivery of them to the mate of the vessel *upon the wharf*. As soon as he receives the goods, the master must provide adequate means for their protection and security; for even if the crew be overpowered by a superior force, and the goods taken while the ship is in a port or river within the country, the master and owners are liable for the loss, though they may have committed neither fraud nor fault. This may seem a harsh rule; but it is necessary, to put down attempts at collusive or fraudulent combinations.

The master must, according to the terms of the charterparty, commence the voyage without delay, as soon as the weather is favourable, but not otherwise.

Sometimes it is covenanted and agreed upon between the parties, that a specified number of days shall be allowed for loading and unloading, and that it shall be lawful for the freighter to detain the vessel a further specified time, on payment of a daily sum as *demurrage*.—(See DEMURRAGE.) If the vessel be detained beyond both periods, the freighter is liable to an action on the contract. The rate of demurrage mentioned in the charterparty will, in general, be the measure of the damages to be paid; but it is not the absolute or necessary measure; more or less may be payable, as justice may require, regard being had to the expense and loss incurred by the owner. When the time is thus expressly ascertained and limited by the terms of the contract, the freighter is liable to an action for damages if the thing be not done within the time, *although this may not be attributable to any fault or omission on his part*; for he has engaged that it shall be done.—(*Abbott on the Law of Shipping*, part iii. c. 1.)

If there has been any undertaking or warranty to sail with convoy, the vessel must repair to the place of rendezvous for that purpose; and if the master neglect to proceed with convoy, he will be answerable for all losses that may arise from the want of it.

The owners or master should sail with the ship for the place of her destination with all due diligence, and by the usual or shortest course, unless in cases of convoy, which the master must follow as far as possible. Sometimes the course is pointed out in the charterparty. A *deviation* from the usual course may be justified for the purpose of repairs, or for avoiding an enemy or the perils of the seas, as well as by the sickness of the master or mariners, and the mutiny of the crew.

By an exception in the charterparty, not to be liable for injuries arising f[illegible] king's enemies, the owner or master is not responsible for any injury arising from the sea or the winds, unless it was in his power to prevent it, or it was occasioned by his imprudence or gross neglect. "The question," said Lord Mansfield, in an action brought by the East India Company, "is, whether the owners are to pay for the damage occasioned by the storm, the act of God; and this must be determined by the intention of the parties, and the nature of the contract. It is a charter of freight. The owners let their ships to hire, and there never was an idea that they insure the cargo against the perils of the sea. What are the obligations of the owners which arise out of the fair construction of the charterparty? Why, that they shall be liable for damages incurred by their own fault, or that of their servants, as from defects in the ship, or improper stowage, &c. If they were liable for damages occasioned by storms, they would become insurers." The House of Lords confirmed this doctrine by deciding (20th of May, 1788) that the owner is not liable to make satisfaction for damage done to goods by storm.

The charterer of a ship may lade it either with his own goods, or, if he have not sufficient, may take in the goods of other persons, or (if not prevented by a clause to that effect in the charterparty) he may wholly underlet the ship to another.—(For further details, see *Abbott on the Law of Shipping*, part iii. c. 1.; *Chitty's Commercial Law*, vol. iii. c. 9., &c.; and the articles BILL OF LADING, FREIGHT, MASTER, &c. in this Dictionary.)

Forms of Charterparties.

The following is one of the most usual forms of a charterparty:—

THIS charterparty, indented, made, &c., between A. B., &c., mariner, master, and owner of the good ship or vessel, called, &c., now riding at anchor, &c., of the burthen of 200 tons, or thereabouts, of the one

part, and C. D. of, &c., merchant, of the other part, witnesseth, that the said A. B., for the consideration hereinafter mentioned, hath granted, and to freight letten, and by these presents doth grant, and to freight let, unto the said C. D., his executors, administrators, and assigns, the whole tonnage of the hold, stern-sheets, and half-deck of the said ship or vessel, called, &c., from the port of London, to, &c., in a voyage to be made by the said A. B. with the said ship, in manner hereinafter mentioned, (that is to say,) to sail with the first fair wind and weather that shall happen after, &c. next, from the port of London with the goods and merchandise of the said C. D., his factors or assigns, on board, to, &c. aforesaid, (the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind, in so far as ships are liable thereto, during the said voyage, always excepted,) and there unlade and make discharge of the said goods and merchandises; and also shall there take into and on board the said ship again, the goods and merchandises of the said C. D., his factors or assigns, and shall then return to the port of London with the said goods, in the space of, &c. limited for the end of the said voyage. In consideration whereof, the said C. D., for himself, his executors, and administrators, doth covenant, promise, and grant, to and with the said A. B., his executors, administrators, or assigns, by these presents, that the said C. D., his executors, administrators, factors, or assigns, shall and will well and truly pay, or cause to be paid, unto the said A. B., his executors, administrators, or assigns, for the freight of the said ship and goods, the sum of, &c. (or so much per ton,) within twenty-one days after the said ship arrived, and goods returned, and discharged at the port of London aforesaid, for the end of the said voyage; and also shall and will pay for demurrage, (if any shall be by default of him, the said C. D., his factors or assigns,) the sum of, &c. per day, daily, and every day, as the same shall grow due. And the said A. B., for himself, his executors and administrators, doth covenant, promise, and grant, to and with the said C. D., his executors, administrators, and assigns, by these presents, that the said ship or vessel shall be ready at the port of London to take in goods by the said C. D., on or before, &c. next coming. And the said C. D., for himself, his, &c., doth covenant and promise, within 10 days after the said ship or vessel shall be thus ready, to have his goods on board the said ship, to proceed on in the said voyage; and also, on arrival of the said ship at, &c., within, &c. days to have his goods ready to put on board the said ship, to return on the said voyage. And the said A. B., for himself, his executors and administrators, doth further covenant and grant, to and with the said C. D., his executors, administrators, and assigns, that the said ship or vessel now is, and at all times during the voyage shall be, to the best endeavours of him, the said A. B., his executors and administrators, and at his and their own proper costs and charges, in all things made and kept stiff, staunch, strong, well-apparelled, furnished, and provided, as well with men and mariners sufficient and able to sail, guide, and govern the said ship, as with all manner of rigging, boats, tackle, and apparel, furniture, provision, and appurtenances, fitting and necessary for the said men and mariners, and for the said ship during the voyage aforesaid. In witness, &c.

The great variety of circumstances under which different voyages are made produce a corresponding diversity in charterparties. The charterparty of which the following is a copy affords a good example of the more complex species of these instruments.

It is this day mutually agreed between Mr. T. B. Rann, owner of the good ship or vessel called the Mermaid, William Henniker, master, of the measurement of 472 tons, or thereabouts, now in the river Thames, and Mr. David Thomson, of the firm of Messrs. Thomson, Passmore, and Thomson, of Mauritius, merchants, that the said ship, being tight, staunch, and strong, and every way fitted for the voyage, shall, with all convenient speed, sail and proceed to Calcutta, with leave to take convicts out to New South Wales, and from thence troops, merchandise, or passengers, to the aforementioned port of Calcutta, with leave to touch at Madras on her way thither, if required on owner's account, or so near thereunto as she may safely get, and there load, from the factors of the said merchants at Calcutta, a full and complete cargo of rice, or any other lawful goods which the charterer engages to ship, and proceed with the same to Port Louis, in the Isle of France, and deliver the same free of freight; afterwards load there a full and complete cargo of sugar in bags, or other lawful merchandise of as favourable tonnage, which the charterer engages to ship, not exceeding what she can reasonably stow and carry over and above her tackle, apparel, provisions, and furniture; and, being so loaded, shall therewith proceed to London, or so near thereunto as she may safely get, and deliver the same on being paid freight, viz. for such quantity of sugar equal to the actual quantity of rice, or other goods, that may be shipped at Calcutta, at the rate of 5*l*. 12*s*. 6*d*. per ton of 20 cwt. nett, shipped there; and should the vessel deliver more nett sugar in the port of London than the quantity of rice, or other goods, actually shipped in Calcutta, the owners to be paid on the excess at the regular current rate of freight for sugar which other vessels, loading at the same time at Port Louis, receive; the tonnage of the rice, wheat, or grain, to be reckoned at 20 cwt. nett per ton; that of other goods at the usual measurement (the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, during the said voyage, always excepted). The freight to be paid on unloading and right delivery of the cargo, as is customary in the port of London. Ninety running days are to be allowed the said merchant (if the ship is not sooner despatched) for loading the ship at Calcutta, discharging the cargo at Port Louis, and loading the cargo there; the said lay days to commence on the vessel being ready to receive cargo, the master giving notice in writing of the same at Calcutta, and to continue during the loading there; and from the time of her arrival at Port Louis, and being ready to discharge, till the final loading at that port, and to be discharged in the port of London with all possible despatch; and 20 days on demurrage over and above the said laying days, at 12*l*. per day. Penalty for non-performance of this agreement, 4,000*l*. The cargo to be brought to and taken from alongside at the expense and risk of the merchants. The necessary cash for the disbursements of the vessel at Calcutta, not exceeding 350*l*., to be advanced by the charterer's agents; they taking the master's drafts on the owner for the same, at the regular current rate of exchange, and at three months' sight; and if the said bills be not regularly accepted and paid when due, the same to be deducted from the freight payable by this charterparty. The vessel to be disbursed at Port Louis by the chartering agents; sum not to exceed 300*l*., free of commission; and the amount to be deducted from the freight at the final settlement at the port of London. Captain not to ship goods without consent. In the event of the ship being prevented, by damage or any other cause, reaching the Mauritius on or before the 1st day of January, 1843, the charterer or his agents shall be at liberty to employ the vessel for one or two voyages to Calcutta, at the rate of 2*l*. per ton of rice, or other goods, delivered at Mauritius. Fifty running days, to load and discharge, to be allowed on each voyage; it being understood that the charterer or his agents shall load the ship, as before agreed, either at the end of the first or second voyage, as the case may be. The freight on the intermediate voyages (if any) to be paid on delivery of the cargo, in cash, or by bills on London at usance, at the option of the master. The vessel to be addressed, both at Calcutta and Isle of France, to the agents of the charterer. In witness whereof, the said parties have hereunto set their hands and seals, at London, the 2d day of December, 1841.

Signed, sealed, and delivered, in the presence of (Signed) E. FORSYTH.

(Signed) THOS. B. RANN, (L.S.)
D. THOMSON, (L.S.)

Stamp Duty on Charterparties. — The statute 55 Geo. 3. c. 184. enacts, that any charterparty, or any agreement or contract for the charter of any ship or vessel, or any memorandum, letter, or other writing, between the captain, master, or owner of any ship or vessel, and any other person, for or relating to the

freight or conveyance of any money, goods, or effects, on board of such ship or vessel, shall be charged with a duty of 1*l.* 15*s.*

And when the same, together with any schedule, receipt, or other matter, put or indorsed thereon, or annexed thereto, shall contain 2,160 words or upwards, then for every entire quantity of 1,080 words contained therein over and above the first 1,080 words, there shall be charged a further *progressive* duty of 1*l.* 5*s.*

CHAY OR CHOY ROOT, the roots of a small biennial, rarely triennial, plant, growing spontaneously in light, dry, sandy ground near the sea; and extensively cultivated, especially on the coast of Coromandel. The cultivated roots are very slender, and from 1 to 2 feet in length, with a few lateral fibres; but the wild are shorter, and supposed to yield one fourth part more of colouring matter, and of a better quality. The roots are employed to dye the durable reds for which the Indian cotton yarn and chintzes have been long famous, and which can only be equalled by the Turkey red.

Chay root forms a considerable article of export from Ceylon. Only a particular set of people are allowed to dig it. It used to be all bought up by government, who paid the diggers a fixed price of 75 or 80 rix-dollars a candy, and sold it for exportation at about 175 rix-dollars. — (*Bertolacci's Ceylon*, p. 270.)

This root has been imported into Europe, but with no success. Dr. Bancroft suspects it may be injured by the long voyage; but he adds, that it can produce no effect which may not be more cheaply produced from madder. It is a very bulky article, and is consequently burdened with a very heavy freight. — (*Permanent Colours*, vol. ii. pp. 282—303.)

CHECKS, CHEQUES, OR DRAFTS, are orders addressed to some person, generally a banker, directing him to pay the sum specified in the check to the person named in it, or bearer, on demand. The following is the usual form: —

£100. *London, 10th July*, 1843.

Pay A. B. Esq., or bearer, One Hundred Pounds, on account of

C. D.

Messrs. Jones, Loyd, and Co.

In point of form, checks nearly resemble bills of exchange, except that they are *uniformly payable to bearer*, and should be drawn upon a regular banker, though this latter point is not essential. They are assignable by delivery only; and are payable instantly on presentment, without any days of grace being allowed. But by the custom of London, a banker has until 5 of the afternoon of the day on which a check is presented for payment, to return it; so that where a check was returned before 5, with a memorandum of "cancelled by mistake" written under it, it was held a refusal to pay. If a check upon a banker be lodged with another banker, a presentment by the latter at the clearing-house is sufficient. Checks are usually taken conditionally as cash; for unless an express stipulation be made to the contrary, if they be presented in due time and not paid, they are not a payment. It is difficult to define what is the due or reasonable time within which checks, notes, or bills should be presented. A man, as Lord Ellenborough has observed, is not obliged to neglect all other business that he may immediately present them: nevertheless it is the safest plan to present them without any avoidable delay; and if received in the place where payable, they had better be presented that day, or next at furthest. If a check be not presented within a reasonable time, the party on whom it is drawn will be justified in refusing to pay it; and the holder will lose his recourse upon the drawer. Checks drawn on bankers residing 10 miles or more from the place where they are drawn, must be on a stamp of the same value as a bill of exchange of an equal amount; but checks drawn on a banker, acting as such within 10 miles of the place where they are issued, may be on plain paper. — (*Chitty on Commercial Law*, vol. iii. p. 591.; *Woolrych on Commercial Law*, c. 3. § 2, &c.)

CHEESE (Ger. *Käse;* Du. *Kaas;* Fr. *Fromage;* It. *Formaggio, Cacio;* Sp. *Queso;* Rus. *Sur;* Lat. *Caseus*), the curd of the milk separated from the whey, and pressed or hardened. It has been used as an article of food from the earliest ages: vast quantities of it are consumed in Great Britain, and in most countries of Europe.

There is an immense variety of cheeses, the qualities of which depend principally on the richness and flavour of the milk of which they are made, and partly on the way in which they are prepared. England is particularly celebrated for the abundance and excellence of its cheese. Cheshire and Gloucestershire are, in this respect, two of its most famous counties; the cheese produced in the former has been estimated at 14,000 tons a year. There are two kinds of Gloucester cheese, double and single; the first is made of the milk and cream, the latter of the milk deprived of about half the cream. They are of various sizes, from 20 to 70 and even 80 lbs.; but they generally run from 50 to 60 lbs. A great deal of cheese is also made in that part of Shropshire which borders upon Cheshire, and in North Wiltshire. The former goes under the name of Cheshire cheese; the latter was, till lately, called Gloucestershire cheese: now it receives its appellation from the county where it is made. A strong cheese, somewhat resembling Parmesan, is made at Chedder in Somersetshire. The celebrated rich cheese called Stilton, is made in Leicestershire, principally in the villages round Melton Mowbray. It is not reckoned sufficiently mellow for cutting unless it be two years old; and is not saleable unless it be decayed, blue, and moist. A rich cheese is also made at Leigh, in Lancashire. The other cheeses made in England, which have

acquired a peculiar name, either from the quantity made, or from the quality, are the Derbyshire, Cottenham, and Southam cheeses. The last two are new milk cheeses, of a peculiarly fine flavour: the places where they are made are in Cambridgeshire. Bath and York are remarkable for their cream cheeses. The county of Warwick, and Banbury in Oxfordshire, are also remarkable for cheeses; the former for the quantity made in it, very large supplies being sent from it to London and Birmingham. Banbury cheese is distinguished for its richness.

Scotland is not celebrated for its cheese: the best is called Dunlop cheese, from a parish in Ayrshire, where it was originally manufactured. Dunlop cheeses generally weigh from 20 to 60 lbs. each; and are, in most respects, similar to those of Derbyshire, except that the latter are smaller. Cheeses made to resemble those of Dunlop are now extensively produced in other parts of Scotland.

Turmeric, marigolds, hawthorn buds, &c. were formerly used to heighten and improve the colour of cheese; but annotto (which see) is decidedly the best ingredient that can be employed for that purpose, and is at present used in Cheshire and Gloucestershire to the exclusion of every thing else. An ounce of genuine annotto will colour a hundred weight of cheese.

Large quantities of very good cheese are produced in Holland. In the manufacture of Gouda cheese, which is reckoned the best made in Holland, muriatic acid is used in curdling the milk instead of rennet. This renders it pungent, and preserves it from mites.

Parmesan cheese, so called from Parma in Italy, where it is manufactured, is merely a *skim-milk* cheese, which owes its rich flavour to the fine herbage of the meadows along the Po, where the cows feed. The best Parmesan cheese is kept for 3 or 4 years, and none is ever carried to market till it be at least six months old.

Swiss cheese, particularly that denominated Gruyère, from the bailiwick of that name in the canton of Fribourg, is very celebrated. Gruyère cheeses are made of skimmed or partially skimmed milk, and are flavoured with herbs. They generally weigh from 40 to 60 lbs. each, and are packed for exportation in casks containing 10 cheeses each.

According to Mr. Marshall, the average yearly produce of cheese from the milk of a cow, in England, is from 3 to 4 cwt., or more than double the weight of the butter

For further details, see *Statistical Account of the British Empire*, i. 492. 2d ed.

The entries of foreign cheese for home consumption amounted at an average of the 3 years ending with 1842 to 216,173 cwts. a year, producing 118,170*l.* a year of nett revenue.

The duty on all descriptions of foreign cheese amounted, previously to 1842, to 10*s.* 6*d.* a cwt.; but in that year the duty on cheese imported from a British possession was reduced to 2*s.* 6*d.* a cwt.

We derive almost the whole of our supplies of foreign cheese from Holland. Thus of the entire imports in 1841, amounting to 270,219 cwt., those from Holland amounted to 253,540 cwt.! The imports from Italy during the same year were only 738 cwt. A considerable supply (15,038 cwt.) was then, for the first time, brought from the U. States. (See *Board of Trade Returns* for 1841, and the *Parl. Paper* No. 45. Sess. 1843.)

The contract price of the cheese furnished to Greenwich Hospital, in the undermentioned years, has been as follows: —

Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.
	d.		*d.*		*d.*		*d.*
1730	3½	1770		1810	8½	1830	4
1740	3½	1780		1815	8	1835	4
1750	3½	1790		1820	7	1840	4⅜
1760	3½	1800		1825	5½		

CHERRIES, the fruit of a tree (*Prunus Cerasus* Lin.) too well known to require any description. They derive their name from Cerasus, a city of Pontus, whence the tree was brought by Lucullus, about half a century before the Christian æra. It soon after spread into most parts of Europe, and is supposed to have been carried to Britain about a century after it came to Rome. The principal supplies of cherries for the London market are brought from the cherry orchards in Kent and Herts. The wood of the cherry is close, takes a fine polish, and is not liable to split. — (*Rees's Cyclopædia; Loudon's Ency. of Agriculture, &c.*)

CHESNUT, a forest tree (*Fagus castanea*) growing abundantly in most parts of the southern countries of Europe. It was at one time very common in England; and is still frequently met with. It is long lived; grows to an immense size; and is very ornamental. The wood is hard and compact; when young, it is tough and flexible; but when old, it is brittle, and often shaky. The chesnut contains only a very small proportion of sap-wood; and hence the wood of young trees is found to be superior to even the oak in durability. It is doubtful whether the roof of Westminster Hall be of oak or chesnut; the two woods being, when old, very like each other, and having been formerly used almost indifferently in the construction of buildings. A good deal of chesnut has been planted within the last thirty years. — (*Tredgold's Principles of Carpentry.*)

CHESNUTS (Fr. *Châtaignes;* Ger. *Kastanien;* It. *Castagne;* Sp. *Castanas*), the fruit of the chesnut tree. Chesnuts grow in this country, but are very inferior both in size and perfection to those imported from the south of Europe. In some parts of the Continent they are frequently used as a substitute for bread, and form a large proportion of the food of the inhabitants. This is particulary the case in the Limousin, in Corsica, and in several districts of Spain and Italy. The inhabitants of the Limousin are said to prepare them in a peculiar manner, which deprives them of their astringent and bitter properties. Chesnuts imported from Spain and Italy are frequently kiln-dried, to prevent their germination on the passage. In this country they are principally served up roasted at desserts.

The duty of 2*s.* a bushel on chesnuts produced, in 1842, 3,435*l.* 3*s.* 0*d.* nett, showing that the consumption must have amounted to 34,351 bushels.

CHETWERT, a measure of corn in Russia, equal to $5\frac{19}{36}$ Winchester bushels; so that 100 chetwerts = 74¼ Winchester quarters.

CHICCORY OR SUCCORY, the wild endive, or *Cichorium Intybus* of Linnæus. This plant is found growing wild on calcareous soils in England, and in most countries of Europe. In its natural state the stem rises from 1 to 3 feet high, but when cultivated it shoots to the height of 5 or 6 feet. The root, which runs deep into the ground, is white, fleshy, and yields a milky juice. In Germany, and in some parts of the Netherlands and France, chiccory has long been extensively cultivated for the sake of its root, which is used as a substitute for coffee. When prepared on a large scale, the roots are partially dried, and sold to the manufacturers of the article, who wash them, cut them in pieces, kiln-dry them, and grind them between fluted rollers into a powder, which is packed up in papers containing from 2 oz. to 3 or 4 lbs. The powder has a striking resemblance to dark ground coffee, and a strong odour of liquorice. It is largly used in Prussia, Brunswick, and other parts of Germany; but as it wants the essential oil and the rich aromatic flavour of coffee, it has little in common with the latter, except its colour, and has nothing to recommend it except its cheapness.

Chiccory was formerly raised to some extent in England as an herbage plant, its excellence in this respect having been much insisted upon by the late Arthur Young. Latterly, however, chiccory has been largely substituted for coffee here, as well as on the Continent: and as foreign chiccory, when imported, pays a duty of 6*d.* per lb., while that raised at home pays no duty, its cultivation has been rapidly extended. It has, in fact, been affirmed, by those best acquainted with the subject, that in 1842 the growth of British chiccory was little, if at all, short of 3,000 tons! We need not, therefore, be surprised, considering the influence of this large and rapidly increasing supply of untaxed chiccory over the consumption of coffee and the revenue derived from it, that this subject has engaged a good deal of attention. We do not, however, think that it presents any real difficulty. If a duty is to be laid on coffee, the interests of the consumer and of the revenue alike require that an equal duty should be laid on all articles used either as substitutes for coffee, or (which is the usual method of employing chiccory) as means of adulterating the latter. We are well convinced that the substitution of chiccory for coffee has already occasioned a loss to the revenue of 100,000*l.* a year, besides its mischievous influence in adulterating and debasing a popular beverage. There cannot, therefore, as it appears to us, be a doubt that, if the culture of chiccory be permitted, it should be subjected to the same duty as coffee. Inasmuch, however, as the collection of the duty would be difficult, and much fraud and evasion would doubtless be practised, the better plan would be to follow the precedent set in the case of tobacco, by grubbing up the chiccory plantations, and making, at the same time, compensation to their owners. A measure of this sort would do justice to all parties, and would afford that protection to the interests of the consumer and of the revenue which is indispensable.

CHILLIES (Hind. *Gas Murridge;* Javan. *Lombok;* Malay, *Chabai*), the pods or fruit of the *Capsicum annuum*, or Guinea pepper. This is one of the hardiest and most productive plants found in tropical climates; growing luxuriantly in almost all dry soils, however indifferent. In the wild state, the pods are small, and so pungent and acrid as to blister the tongue; but when raised on rich soils, they are large, and comparatively mild. The plant is said to be a native of both Indies. It is very extensively cultivated; and, with the exception of salt, is far more extensively used than any other condiment. In tropical countries, the pods are frequently made use of when unripe and green: when ripe, they become of a deep red colour; and in this state they are exported dry and entire, or reduced to powder—that is, to *Cayenne pepper;* which, when genuine, consists wholly of the ground pods of the *capsicum.* —(See PEPPER.)

CHINA ROOT (Ger. *Chinawurzel;* Du. *Chinawortel;* Fr. *Squine, Esquine;* Sp. *Raiz China, Cocolmeca;* Arab. *Rhubsinie*), the root of a species of climber (*Smilax China* Lin.). It comes from the West Indies as well as from China: but that from the latter is best. It is oblong and thick-jointed, full of irregular knobs, of a reddish brown colour on the outside, and a pale red within; while new, it will snap short, and look glittering within; if old, the dust flies from it when broken, and it is light and kecky. It should be chosen large, sound, heavy, and of a pale red colour internally. It is of no value if the worm be in it. —(*Milburn's Orient. Commerce.*)

CHINA WARE. See PORCELAIN.

CHINTS OR CHINTZ (Fr. *Indiennes;* Ger. *Zitze;* It. *Indiane;* Rus. *Siz;* Sp. *Chites, Zaraza*), fine printed calico, first manufactured in the East Indies, but now largely manufactured in Europe, particularly in Great Britain. —(See CALICO.)

CHIP HATS. See HATS.

CHOCOLATE (Du. *Chocolade;* Fr. *Chocolat;* Ger. *Schokolate;* It. *Cioccolata;* Por. *Chocolate;* Rus. *Schokolad;* Sp. *Chocolate*), a kind of cake or confection, prepared principally from the cocoa nut. The nuts are first roasted like coffee; and being next reduced to powder and mixed with water, the paste is put into tin moulds of the desired shape, in which it speedily hardens, being, when taken out and wrapped in paper, fit for

the market. Besides cocoa, the Spaniards use vanilla, sugar, maize, &c. in the preparation of chocolate. This article, though celebrated for its nutritious qualities, is but little used in Great Britain; a circumstance which is probably, in some considerable degree, ascribable to the fiscal regulations to which it has been subjected. Its importation used, indeed, to be prohibited; and though this prohibition no longer exists, yet, as the duties on it are proportionally heavier than upon cocoa, we manufacture at home almost all that is required for our consumption. British chocolate is said to be very largely adulterated with flour and Castile soap. — (See *Edward's West Indies*, vol. ii. p. 364. ed. 1819; and the art. Cocoa.) The quantity of chocolate brought from abroad, and left for home consumption in the United Kingdom, in 1841, amounted to only 1,543 lbs.

"Alike easy to convey and employ as an aliment, it contains a large quantity of nutritive and stimulating particles in a small compass. It has been said with truth, that in Africa, rice, gum, and *shea* butter, assist man in crossing the deserts. In the New World, chocolate and the flour of maize have rendered accessible to him the table lands of the Andes, and vast uninhabited forests." — (*Humboldt's Pers. Nar.* vol. iv. p. 234. Eng. trans.)

CHRISTIANIA, the capital of Norway, situated at the bottom of a fiord or gulph, in the province of Aggerhuus; in lat. 59° 55½′ N., long. 10° 48¾′ E. Population in 1835, 23,121. Christiania is about 60 miles from the open sea: the gulph is in some places very narrow, and its navigation somewhat difficult; but it is sufficiently deep for the largest vessels, having 6 or 7 fathoms water close to the quay. It is compulsory on all ships to take a pilot on board at the mouth of the bay. The trade of the town is considerable. The principal exports are timber and deals; glass, particularly bottles; iron and nails, bones, smalts, oak bark, &c. Salted and pickled fish, one of the staple products of Norway, is principally exported from Bergen. The deals of Christiania have always been in the highest estimation; a consequence of the excellence of the timber, and of the care with which the sap-wood and other defective parts are cut away; and not, as Mr. Coxe seems to have supposed, of the skilful sawing of the plank. The saw mills were formerly licensed to cut a certain quantity only, and the proprietors were bound to make oath that it was not exceeded. — (*Coxe's Travels in the North of Europe*, 5th edit. vol. iv. p. 28.) This absurd regulation no longer exists. There are far fewer restrictions on industry and commerce in Norway than in Sweden. In the former, British manufactured goods are admitted on moderate duties, and are very generally made use of. The principal articles of import are corn, colonial produce; woollen, linen, and cotton goods; butter, wine, brandy, &c. We subjoin an

Account of the Quantities of the Principal Articles imported into the United Kingdom from Norway in 1838, 1839, 1840, and 1841; and of the Quantities and declared Value of the Principal Articles of British Produce and Manufacture exported from the United Kingdom to Norway in 1839, 1840, and 1841.

Imports.

Principal Articles.	1838. Quantity.	1839. Quantity.	1840. Quantity.	1841. Quantity.
Bark for tanning or dyeing - - - cwts.	24,469	31,798	25,967	9,731
Skins, goat, undressed - - - no.	6,750	7,605	8,301	6,158
Smalts - - - - lbs.	78,879	92,425	97,751	101,293
Timber, battens and batten ends - - gt. hund.	7,000	7,509	7,751	6,306
Deals and deal ends - - - —	5,182	5,171	4,658	4,613
Masts, yards, and bowsprits, under 12 inches in diameter - - - - no.	6,080	10,066	9,027	7,781
Fir, oak, and unenumerated, 8 inches square or upwards - - - - loads	35,196	22,452	28,614	26,443

Exports.

Principal Articles.	1839. Quantity.	1839. Declared Value.	1840. Quantity.	1840. Declared Value.	1841. Quantity.	1841. Declared Value.
		£		£		£
Coals, culm, and cinders - - - - tons	10,702	5,651	13,757	4,301	15,894	5,064
Cotton manufactures entered by the yard - - yards	426,992	11,620	480,049	10,996	1,159,360	21,519
twist and yarn - - - - lbs.	315,303	14,445	374,615	15,609	608,164	30,529
Earthenware of all sorts - - - pieces	556,876	4,013	514,421	3,556	550,236	4,379
Iron and steel, wrought and unwrought - - tons	267	4,134	294	4,681	489	5,998
Salt - - - - - - bushels	143,070	2,386	128,972	2,038	75,590	853
Woollen manufactures entered by the piece - pieces	3,438	9,708	3,332	8,142	3,731	10,013
All other articles - - - - value	- -	31,627		28,693		39,483
		£81,584		£78,016		£117,958

Nothing would do so much to extend our trade with Norway, and not with it only, but with the whole north of Europe, as the repeal of the discriminating duty on Norwegian and Baltic timber. And, as this measure would be, in other respects, highly advantageous, it is to be hoped that its adoption may not be long deferred.

Customs Regulations. — Within 24 hours after a vessel has got to her moorings, the master should deliver to the collector his general report as to ship and cargo, or present the requisite documents for having such report made out with the assistance of a ship broker, whose services masters of foreign ——ls cannot entirely dispense with. On making this general report, the measuring bill is to be exhibited, and payment of the tonnage and other dues inward is to be made. If the ship have not been previously measured in Norway, and is, consequently, not provided with a Norwegian measuring bill, she is to be measured, to ascertain her burden in Norwegian commercial lasts, for the calculation of the tonnage duty.

The general report having been made, the Custom-house officers in charge of the vessel are furnished with the books for delivery, and the discharge of the cargo commences under their inspection; and the consignees must make their special reports under their responsibility and signature. If they are without precise information as to the contents of any or all of the packages or bales to their address, these bales or packages may, at their request, be opened in the presence of the officers before report is made. If a consignee omits availing himself of this permission, his pretending thereafter, that more or other goods than he had entered, or been advised of, to have been sent to his address, will not be attended to. In the reports or entries is to be stated, whether it is intended to pay the duties forthwith, whether the goods are intended for exportation, or whether they are to be landed.

Prior to commencing loading outwards, the master is to give verbal notice of his intention at the Custom-house. If he have no Norwegian measuring bill, the vessel is to be measured. This being done, the shipper or shippers of the outward bound cargo, are each of them to make their special entries as to the quality, weight, and measure of the goods they mean to load. A copy of such entries is to be deposited at the Custom-house, and the loading commences under the control of the officers. This applies to all mixed cargoes; but if the outward bound cargo consist exclusively of wood, the shipper or shippers are only to notify that they intend loading wood, without specifying quantity, measure, &c., as the export duty on wood is charged according to the burden of the vessel. When the master clears outwards, he produces the proper documents for showing the burden of his vessel, and to what port she belongs, and he is then, on proper application being made, provided with a pilot, who takes his vessel to sea.

Warehousing. — In Norway, goods brought from abroad may be bonded or warehoused, with a view to their being again exported at some future period. Goods entered for home consumption may also be bonded for a certain period, in order to facilitate the payment of the duties.

The former is called "*transit oplag*," that is, depositing c warehousing system for exportation, subject to transit duties only. The latter is called "*credit oplag*," that is, warehousing or bonding on credit.

1. *Transit Oplag.* — Under this system, goods from abroad may be warehoused for exportation free of import duty, paying on exportation a transit duty, which, in most cases, is 1-10th of what they would pay if entered for home consumption. If the goods are deposited in the Custom-house warehouses, they lie free of rent or dues during 14 days, and if in private warehouses, under the key and seal of the customs, during 6 months. If they remain long, viz. beyond 14 days in the one, and beyond 6 months in the other case, they pay rent or dues equal to 1-8th of the transit duty per month; which, after the lapse of 3 months, as regards goods in the Custom-house warehouses, is increased to 1-4th of the transit duty per month.

2. *Credit Oplag.* — This system allows most goods imported from abroad to be placed in the owner's or importer's own warehouses, under his own lock, free of duty, for a given time, on his reporting to the customs, every 3 months, how much he has sold, otherwise consumed, or exported, and then paying the duty on such amount; the Custom-house officers, who are bound quarterly to examine the goods, convincing themselves, by ocular demonstration, that no more is missing than the quantity reported to have been taken away.

This credit on the duties in no case to exceed 2 years from the time the goods were imported.

By way of security for payment of the duties on which the credit is granted, government reserve to themselves —

1. Priority of mortgage on all the goods in question.

2. Priority, or first right, in the property, goods, and effects of every description belonging to the trader availing himself of this credit, in as far as such property is not previously legally mortgaged.

3. Liberty for the Custom-house officers, when and as often as they shall deem it expedient, between the stated quarterly inspection, to look over the stock on hand, with a view of ascertaining whether there remains sufficient value for the duties; and if they see reason to doubt this, full right, in default of other satisfactory security being offered, to seize the stock, and to sell the whole or as much as shall cover the duties, and

4. In case of death or failure of the party, an equal right to sell forthwith the whole of his stock at public auction, and to retain as much of the proceeds as shall cover the duties; and in case of deficiency, an established claim for the remainder on the estate of the deceased or bankrupt, as the case may be.

In charging the duties, no allowance is made for waste or damage in the warehouses.

The warehouse rent charged on goods bonded under the transit system, in the Custom-house warehouses, is as follows:

	s.	d.	
On a quarter of wheat, for the first 3 months	0	0·5538	per month
Afterwards	0	1·1076	—
On a ton of raw sugar, for the first 3 months	0	11·5381	per month
Afterwards	1	11·0769	—

Money, Weights, and Measures.—In Norway there are no gold coins. The principal silver coin, called a species dollar, is divided into 120 skillings. There are, also, half species, or 60 skilling pieces; 1-5th species, or 24 skilling pieces; 1-15th species, or 8 skilling pieces; and what is denominated skillemynt, or small change — that is, 4 and 2 skilling pieces. The species dollar contains 390·58 Eng. grs. pure silver, and is consequently worth 4*s.* 6½*d.* sterling, the par of exchange being 4 species dollars 42 6-17 skill. = 1*l.* All Norway coins, except the small change, are alloyed with 1-7th copper, so that the species dollar weighs 448·38 Eng. grs., and its divisions in proportion. Small change coins are alloyed with three times their weight of copper. There are 1 and 2 skilling pieces of copper.

Weights and Measures, same as at COPENHAGEN; which see.

Shipping Charges. — The various charges of a public nature payable by a ship of about 300 tons burden, entering the port of Christiania with a mixed cargo on board, unloading there, taking on board another cargo, and clearing out, are as follows —

	£	s.	d.
1. *Charges Inwards.* — Pilotage from Farder, at the mouth of Christiania Bay, where all ships must take a pilot on board - - -	2	2	2
Bill of health, assuming that the crew, including the master, consists of 14 persons - -	0	17	9
Tonnage dues and light money - -	9	16	9
Brokers' fees - - - -	1	5	4
	£14	2	0
2 *Charges Outwards.* — Pilotage - - -	0	9	2
Castle dues - - - - -	0	1	7
Muster roll of crew - - - -	1	0	5
Pale or stake money - - - -	0	3	2
Measuring bill - - - -	2	4	5
Charity chest - - - -	0	1	7
Tonnage dues and light money - -	10	11	1
Higholm light - - - -	0	0	9
Pilotage to Farder - - - -	1	16	8
Brokers' fees - - - - -	1	18	11
	£18	6	11

N.B. — There is no difference between the charges on native ships in Norwegian ports, and privileged foreign ships, that is, the ships of countries having reciprocity treaties with Norway; nor in the duties on goods imported by native ships and such privileged foreign ships. Great Britain is a privileged country.

The shipping of Norway has declined considerably of late years; a proof, if any such were wanting, of the groundlessness of the clamours kept up in this country as to the supposed pernicious influence of reciprocity treaties on our shipping.

Banking. — There are no private banking establishments in Norway; but there is a public bank, having its principal office at Drontheim, with branches at Christiania, Bergen, and Christiansand. It was established by a compulsory assessment in 1816. Its capital consists of 2,000,000 species dollars, in transferable shares, divided amongst those who were forced to contribute to its formation. These shares are now at a premium of 50 per cent. Its managers are appointed by, and are accountable to, the Storthing or Norwegian parliament. It issues notes for 100, 50, 10, and so low as 1 species dollar. These notes should be payable in specie on demand; but they are at a discount of 35 per cent., and are paid by the bank at that rate. It discounts bills at 2 and 3 months date at 6 per cent. per annum; advances money on mortgage at 4 per cent.; and transacts the ordinary banking business of individuals. It does not allow interest on deposits.

Credit. — Goods are sold partly for ready money, and partly on credit, but principally the former.

Commission, &c. — The number of brokers in Christiania is limited to 4. Commission on the sale of goods, 2 per cent., or, *del credere* included, 3 per cent. Brokerage is fixed by law at 5-6ths per cent., which, in practice, is paid by the sellers.

Insurance. — All houses situated in Norwegian market towns must be insured in the General Insurance Company at Christiania, which is guaranteed by the state. The premium is moderate, being, on buildings situated in towns, 1-4th, and on those situated in the country, 1-8th per cent. Sometimes, however, when very destructive fires occur, it is raised.

Provisions, &c. — Christiania is not a favourable place for careening and repairing ships; but supplies of beef, bread, water, and other sea stores, may be had as cheap or cheaper than in any other port of Norway; but its distance from the sea is too great to allow of its being visited by ships desirous merely of victualling. — (We have derived these details from various sources, but principally from Consular Returns.)

The standard Christiania deal is 11 feet long, 1¾ inch thick, and 9 inches broad; and 51·2 such deals make a load.

Freight of deals from Norway to England is calculated at the rate of single deals, the standard measure of which for Christiania and all the southern ports of Norway, except Dram (a small town on the Drammen, about 20 miles S.W. of Christiania), is 11 feet long, and 1¼ inch in thickness. A single deal from Dram is reckoned 10 feet long and 1¼ inch thick.

Battens. — Three battens make 2 deals, retaining their own length and thickness. Half deals are only counted as deal ends, if they run under 6 feet; but if they ran 6 or 7 feet long, then 2 half deals are counted a deal, retaining their own thickness.

Ends of Deals. — Four ends of deals, although 5 feet long, make but a deal 11 feet long, retaining their thickness, which the owners and captains of ships think unreasonable; but as the freighters of ships seldom wish to have this assortment, which commonly run from 3 to 5 feet, and are taken on board as stowage, consequently for the advantage of the ship and not the freighter, the ship ought to bear the burden.

Ends of Battens, called *Larwick Palings.* — No less than 6 ought to be counted a single deal, 11 feet long and 1¾ inch thick.

Pale-boards, when they have their proper length, are 7 feet long; 3 pale-boards are counted a single deal.

Staves for hogsheads take up much room; in consequence of which more than 10 cannot be computed a single deal.

The width of deal is never noticed in the calculation of freight: a good deal ought to run 9 inches within the sap,

which not a twentieth part of a cargo does at present; but, though some may be above 9 inches wide, many are only 8, therefore one must make up for the other.

Timber or *Hewn Goods*, cannot be exactly computed according to the contents in deals, because it cannot be stowed in a ship in the same manner as deals; the freight is, therefore, agreed for by the lump, or according to the number of deals which the vessel may have taken on board on a former occasion.

One hundred deals = 120.
A ton = 40 solid feet of timber, cut to a square.
One load of balk, or timber, = 50 solid feet.
Two loads of timber are reckoned for 150 deals.

The several bills of lading contain together an exact account of the cargo which the captain has received on board his ship, consequently binding him to deliver according to their contents: when, therefore, the deals are mentioned as usual 9 and 10 feet, and 11 and 12 feet, he cannot insist on more freight than half of the length, according to its description.

One thousand Norway standard deals are reckoned equal to a keel of coals, which is 21 tons.

Bowsprits pay duty as masts; capravens are above 12 and under 18 inches in circumference at the middle, and without bark. Clapboard is exported in whole pieces and unquartered. Deals from Germany pass as Norway deals; spruce deals are upwards of 20 feet in length; deals from Norway, above 7 feet long, are counted as whole deals; above 6 feet, and not above 7 feet in length, are accounted as half deals, and two of them pass as one whole deal.

The difference between the Christiania and Dram standard being nearly 1-11th part, the freights to Dram ought to be varied proportionally. It has sometimes happened that ships both for Christiania and Dram have been in company, and those for Christiania have got up, loaded, and sailed, before the others for Dram have got over Drammsroom, which runs very strong down in the spring of the year. — (*Rordanz' European Commerce.*)

CHUNAM, the name given in India to lime. The best, obtained by the calcination of shells, is employed in the composition of BETEL — (which see), to prevent, it is said, its injuring the stomach.

CIDER, OR CYDER (Fr. *Cidre*; Ger. *Zider, Apfelwein*; It. *Cidro*; Rus. *Sidor*; Sp. *Sidra*), the juice of apples expressed and fermented. The produce of the duty on cider and perry (the expressed and fermented juice of pears) amounted, in 1828, to 37,220*l.*; which, as the duty was 10s. a barrel, shows that the quantity produced and brought to charge must have amounted to 74,440 barrels, exclusive of what might be clandestinely manufactured. The perry is supposed to have amounted to about a fourth part of this quantity. The duty was repealed in 1830. — (See APPLES.) Perhaps the total produce of cider and perry may now be estimated at from 150,000 to 160,000 barrels.

CIGARS. See TOBACCO.

CINNABAR (Ger. *Zinnober*; Du. *Cinaber, Vermilioen*; Fr. *Cinnabre*; It. *Cinabro*; Sp. *Cinabrio*; Rus. *Kinowar*; Lat. *Cinnabrium*).

1. *Native Cinnabar* — a mineral substance, red, heavy, and brilliant. It is found in various places, chiefly in quicksilver mines, being one of the ores of that metal. The cinnabar of the Philippine Islands is said to be of the highest colour; but that of Almaden, in Spain, is the richest. The best native cinnabar is of a high colour, brilliant and free from earthy or stony matter.

2. *Artificial Cinnabar.* — "When two parts of mercury and one of sulphur are triturated together in a mortar, the mercury gradually disappears, and the whole assumes the form of a black powder, formerly called *Ethiops mineral*. When this mineral is heated red hot, it sublimes; and if a proper vessel be placed to receive it, a cake is obtained of a fine red colour. This cake was formerly called cinnabar; and, when reduced to a fine powder, is well known in commerce under the name of *vermillion*." — (*Thomson's Chemistry.*)

CINNAMON (Du. *Kaneel*; Fr. *Cannelle*; Ger. *Zimmet, Kanehl*; It. *Canella*; Lat. *Cinnamomum, Canella*; Por. *Canella*; Sp. *Canela*; Pers. and Hind. *Darchinie*; Arab. *Darsini*; Malay, *Kaimanis*; Greek, Κινάμον), the bark of the cinnamon tree (*Laurus cinnamomum*), a native of Ceylon, where it grows in great abundance Cochin China, and perhaps of some other countries. It is brought home in bags or bales weighing 92½ lbs. each; and, in stowing it, black pepper is mixed with the bales to preserve the cinnamon. The best cinnamon is thin and rather pliable: it ought to be about the substance of royal paper, or somewhat thicker; is of a light yellow colour, approaching nearly to that of Venetian gold; it is smooth and shining; fractures splintery; has an agreeable, warm, aromatic flavour, and a mild sweetish taste; when chewed, the pieces become soft, and seem to melt in the mouth; it is not so pungent but that it may be borne on the tongue without pain, and is not succeeded by any after taste. Whatever is hard, thick as a half-crown piece, dark-coloured or brown, or so hot that it cannot be borne, should be rejected. Particular care should be taken that it be not false packed, or mixed with cinnamon of an inferior sort. — (*Milburn's Orient. Comm.*; *Marshall's Essay*, quoted below.)

The cinnamon of Cochin China grows in the dry sandy districts lying N. W. of the town of Faifoe, between 15° and 16° N. lat. It is preferred in China to the cinnamon of Ceylon: the annual imports into Canton and other ports vary from 250,000 to 300,000 lbs. There are no fewer than 10 varieties of this species in the market. It is not cured, like that of Ceylon, by freeing it from the epidermis. — (*Crawfurd's Embassy to Siam, &c.* p. 475.)

Cinnamon Monopoly. — Down to 1833, the cultivation of cinnamon in Ceylon was restricted to a few gardens in the neighbourhood of Colombo; the production and sale of the article being wholly monopolised by government. Upon the transference of the island from the East India Company to the king's government, the former agreed to pay 60,000*l.* a year for 400,000 lbs. or 4,342⅔ bales of cinnamon: it being stipulated, that if the quantity collected exceeded this amount, *the surplus was to be burned!* *

* See an article by H. Marshall, Esq., staff surgeon to the forces in Ceylon, in *Thomson's Annals of Philosophy*, vol. x. p. 356.

But this agreement was afterwards broken off; and the cinnamon was sent to England by government, and sold on its account at quarterly sales. The nett revenue derived from the cinnamon monopoly, in 1831, is said to have amounted to 127,961*l.* As the monopoly could not be enforced, except by confining the culture of cinnamon to certain districts, it necessarily led to the most oppressive interferences with the rights of individuals, to the creation of numberless imaginary offences, and the multiplication of punishments, forming a heavy drawback upon the prosperity of the island. A sense of these disadvantages led at length to the abolition of the monopoly system in 1833, when we ceased to be amenable to the charge of upholding, without improving, the worst part of the Dutch policy, and restored to the natives their right to cultivate cinnamon any where and in any way they think fit.

Duties on Cinnamon.—Unluckily, however, the abolition of the old monopoly system was accompanied by the imposition of the exorbitant duty of 3*s.* per lb. on all cinnamon exported, without distinction of quality. This new system having been organised at the period when the former edition of this work was being printed, we took the liberty to animadvert upon it, as follows. "The natural cost of cinnamon does not, we believe, exceed 6*d.* or 8*d.* per lb.; but taking it at 1*s.*, the proposed duty is no less than 300 per cent.! So enormous a tax, by confining the export of cinnamon within the narrowest limits, will go far to deprive the island of the advantages it would otherwise derive from the repeal of the monopoly, and will be, in all respects, most injurious. We have heard, that it is contended, in vindication of this oppressive tax, that Ceylon having a natural monopoly of cinnamon, it is sound policy to burden it with the highest duty it will bear; as the largest revenue is thus obtained at the least expense to the island. But, in addition to the cinnamon produced in Cochin China, and which it is more than probable will speedily find its way to the European markets, the extent to which cassia lignea is substituted for cinnamon, shows that the monopoly possessed by Ceylon is of very trifling importance. But though it were otherwise, though cassia lignea did not exist, and cinnamon were to be found nowhere but in Ceylon, we should not the less object to so exorbitant an export duty. So long as it is maintained, it will confine within the narrowest limits, what might otherwise become a most important branch of industry, and a copious source of wealth to the island. According to the crown commissioners, the average quantity and value of the different sorts of cinnamon annually sold of late years has been—

Sorts of Cinnamon.	Quantity.	Rate.	Amount.
	Lbs.	*s.* *d.*	£ *s.*
First sort - - -	90,000	7 2½	32,842 15
Second sort - - -	230,000	5 10½	67,562 10
Third sort - - -	180,000	4 3½	38,437 10
All sorts - - -	500,000	- -	138,343 15

"It is not at all probable that the exports will materially increase under the new system; but had the duty varied from about 6*d.* per lb. on the best, to 3*d.* or 4*d.* on the inferior sorts, we have little doubt, now that the culture is free, that the exports would, at no very distant period, have amounted to some millions of pounds. It is the high price of cinnamon—a price not caused by its scarcity or the difficulty of its production, but by the oppressive monopolies and duties to which it has been subjected—that has made it be regarded as a luxury attainable only by the rich. There is no other spice that is so universally acceptable; and there is none, were it charged with a *reasonable duty*, that would be so sure to command an immense sale. We know, quite as well as the writer of an article on this subject in the Colombo Journal, that 'the cook who employs 1 ounce of cinnamon to improve the flavour of his dishes, will not employ 4 ounces when the spice is a fourth of the price;' but we further know, what the journalist would seem to be ignorant of, that were its price reduced, as it might be, to a third of what it has hitherto cost, it would be used by ten or a dozen cooks, for every one who employs it at present. In fact, the entire consumption of cinnamon in Great Britain is under 20,000 lbs. a year!

"Should the exports of cinnamon from Ceylon under the new plan amount to 500,000 lbs. a year, government will receive from it an annual revenue of 75,000*l.*; and supposing them to amount to 600,000 lbs., the revenue will be 90,000*l.* And to secure the immediate payment of this trifling sum, every ulterior consideration of profit and advantage has been sacrificed. It is, however, pretty clear, that this short-sighted rapacity will be, in the end, no less injurious to the revenue, than to the industry and trade of the island. Were cinnamon allowed to be exported for a few years under a low duty, or till such time as the taste for it was fully diffused throughout this and other countries, it would then be easy, by gradually raising the duty, to obtain from it, without materially checking the consumption, a *very large revenue*; at least 5 or 6 times more than it will ever produce under the present plan.

"Suppose that we had had the power effectually to monopolise the inventions by which Sir Richard Arkwright and others have so prodigiously facilitated the spinning of cotton; what would have been thought of the policy of those who should have proposed laying a duty on exported cottons equivalent to the peculiar advantages we enjoyed in their production? Had this been done, we should have got a *monopoly value* for our exports of cotton; but instead of amounting, as at present, to 22,000,000*l.* a year, they would not, under such a plan, have amounted to 200,000*l.*; and instead of affording subsistence for some 1,300,000 or 1,400,000 individuals, the cotton manufacture would not have supported 50,000! And yet this is the mischievous nostrum—for it would be an abuse of terms to call it a principle—on which we have proceeded to regulate the export of the staple product of Ceylon."

The experience of the last 10 years has more than confirmed the truth of these statements. Instead of increasing, as they certainly would have done but for the exorbitancy of the duty, the exports of cinnamon have declined even below their amount during the monopoly. Notwithstanding the reduction of the duty in 1841 to 2*s.* per lb., the exports in that year amounted to only 323,461 lbs., producing a revenue of 33,111*l.*! This result has been brought about, as we anticipated, partly by the high duty and its consequent high price restricting the demand for cinnamon; partly by the duty operating as a bounty to introduce the culture of the plant into other places; and partly and principally by its encouraging the use of *cassia lignea* and other substitutes in the place of the genuine article.

"It does not," says Mr. Cook*, "admit of a doubt, that unless the export duty of 2*s.* per lb. payable on the shipment of cinnamon at Ceylon, be removed, the trade must speedily be annihilated. From 1798 to 1825 the cultivation was known in no other part of the world, and notwithstanding the impolicy even then of such an exorbitant charge, the trade was comparatively little affected; but in 1825 a successful attempt was made in Java by an experienced planter from Ceylon, and the shipments from that island, which, having since been annually increasing, are now estimated for this year (1842) at 117,000 lbs. at least, on which is levied a duty, on the value, of 4 per cent. only. The culture has also extended itself to Guiana and the West Indies; and, judging from a small parcel lately received from Jamaica, there can be no question it can be successfully produced in that quarter, and that a supply may at no distant period confidently be expected from thence, the duty there being only 2½ *per cent.* From Cochin China, Malabar, &c. large quantities will also doubtless ere long find their way to Europe, their produce being comparatively free from fiscal charges. It is therefore evident that Ceylon cinnamon cannot, under existing circumstances withstand the competition of that of other countries; and if the merits of the question were understood by the government, this interesting trade would assuredly be no longer suffered to remain in

* Of the firm of Trueman and Cook, brokers, the highest authority that can be referred to on such a subject.

its present anomalous state. Indeed Ceylon cinnamon, independently of other adverse influences, would be very soon driven out of the European markets by the increased use of cassia lignea as a substitute. The question of revenue will no doubt engage the attention of government, the cinnamon duty having yielded in 1833 as much as 160,000*l.*, or about half the revenue of the island; whereas in 1841 the governor estimated it at 47,000*l.* only, and it is doubtful if it will realise even this much, — (in fact it only realised 33,111*l.*); so that the levying an impost so oppressive has proved as injurious to the collection of revenue as to the prosperity of the trade."

It is unnecessary to add any thing to this conclusive statement. We may mention, however, that the export duty either has been or is to be immediately reduced to 1*s.* per lb. But even this reduced duty will be most oppressive. A duty of 3*d.*, or at most 4*d.* per lb., is the very highest that should be imposed.

During the 3 years ending with 1842 the cinnamon entered for consumption, and the duties, were —

	1840.	1841.	1842.		1840.	1841.	1842.
	Lbs.	*Lbs.*	*Lbs.*		£ s. d.	£ s. d.	£ s.
Quantities	16,432	15,625	17,009	Duties	410 12 10	415 10 10	327 2 11

In 1842 the home consumption duty was reduced from 6*d.* to 3*d.* per lb. The price of cinnamon varies in the London market from about 4*s.* or 5*s.* per lb. (export and import duty included) to from 7*s.* to 10*s.* per lb. Subjoined is an

Account of the Quantities of Cinnamon shipped from Ceylon from 1837 to 1841 inclusive, the Amount of Duty received thereon, and the Rates of Duty. — (*Parl. Paper* No. 186. Sess. 1843.)

	Quantities shipped.				Amount of Export Duty collected.	Rates of Duty charged on the Export.
	First Sort.	Second Sort.	Third Sort.	Aggregate of the Three Sorts.		
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	£	
From 5th April 1837 to 5th January 1838	47,800	157,429	115,054	320,283	37,161	Previously to 1st June 1841: On the 1st sort - - 2*s.* 6*d.* ₰ lb.
Year 1838	25,771	200,058	172,338	398,167	45,383	2d sort - - 2*s.* 6*d.* —
1839	81,308	340,366	174,914	596,588	70,200	3d sort - - 2*s.* —
1840	44,631	142,432	202,310	389,373	45,613	Subsequently to 1st June 1841:
1841	26,688	106,966	189,807	323,461	33,111	On all the three sorts - 2*s.* ₰ lb.

CINQUE PORTS. These are ancient trading towns, lying on the coast of Kent and Sussex, which were selected, from their proximity to France, and early superiority in navigation, to assist in protecting the realm against invasion, and vested with certain privileges by royal charter.

"The ports so privileged, as we at present account them, are Dover, Sandwich, Romney, Hastings, Hythe, and the two ancient towns of Winchelsea and Rye; although the two latter places appear to have been originally only members. The services which they were appointed to perform were either honorary, viz. assisting at the coronation and sending members to parliament; or auxiliary to the defence of the realm, as furnishing a certain supply of vessels and seamen, on being summoned to that service by the king's writ.

"In process of time the Cinque Ports grew so powerful, and, by the possession of a warlike fleet, so audacious, that they made piratical excursions in defiance of all public faith; on some occasions they made war, and formed confederacies as separate independent states. It seems, however, that these irregularities were soon suppressed, when the government was strong, and sufficiently confident to exert its powers. So long as the mode of raising a navy by contributions from different towns continued, the Cinque Ports afforded an ample supply; but since that time their privileges have been preserved, but their separate or peculiar services dispensed with. Their charters are traced to the time of Edward the Confessor; they were confirmed by the Conqueror, and by subsequent monarchs. William the Conqueror, considering Dover Castle the key of England, gave the charge of the adjacent coast, with the shipping belonging to it, to the constable of Dover Castle, with the title of Warden of the Cinque Ports; an office resembling that of the Count of the Saxon coast (*Comes littoris Saxonici*) on the decline of the Roman power in this island. The lord warden has the authority of admiral in the Cinque Ports and its dependencies, with power to hold a court of admiralty; he has authority to hold courts both of law and equity; is the general returning officer of all the ports, — parliamentary writs being directed to him, on which he issues his precepts; and, in many respects, he was vested with powers similar to those possessed by the heads of counties palatine. At present the efficient authority, charge, or patronage of the lord warden is not very great; the situation is, however, considered very honourable, and the salary is 3,000*l.* He has under him a lieutenant and some subordinate officers; and there are captains at Deal, Walmer, and Sandgate Castles, Archcliff Fort, and Moats Bulwark.

"There is an exclusive jurisdiction in the Cinque Ports (before the mayor and jurats of the ports), into which exclusive jurisdiction the king's ordinary writ does not run; that is, the court cannot direct their process immediately to the sheriff, as in other cases. In the Cinque Ports, the process is directed to the governor of Dover Castle, his deputy or lieutenant. A writ of error lies from the mayor and jurats of each port to the lord warden of the Cinque Ports, in his court of Shepway, and from the court of Shepway to the King's Bench; a memorial of superiority reserved to the crown at the original creation of the franchise; and prerogative writs, as those of habeas corpus, prohibition, certiorari, and mandamus, may issue, for the same reason, to all these exempt jurisdictions, because the privilege, that the king's writ runs not, must be intended between party and

party, and there can be no such privilege against the king." — (*Chitty's Commercial Law*, vol. ii. p. 12.)

CITRON (Ger. *Succade*; Da. *Sukkat*; It. *Confetti di cedro*; Sp. *Acitron verde*; Fr. *Citronat verd*), an agreeable fruit, resembling a lemon in colour, smell, and taste. The principal difference lies in the juice of the citron being somewhat less acid, and the yellow rind being somewhat hotter, and accompanied with a considerable bitterness. — (*Lewis's Mat. Med.*) It is imported, preserved and candied, from Madeira, of the finest quality.

CIVET (Ger. *Zibeth*; Du. *Civet*; Fr. *Civette*; It. *Zibetto*; Sp. *Algalia*), a perfume taken from the civet cat. It is brought from the Brazils, Guinea, and the interior of Africa. When genuine, it is worth 30*s.* or 40*s.* an ounce.

CIVITA VECCHIA, a fortified sea-port town of the papal dominions, on the Mediterranean, lat. 42° 4′ 38″ N., lon. 11° 44′ 52″ E. Population 7,000.

Harbour. — The port of Civita Vecchia is artificial, and is formed by three large moles. Two of them projecting from the mainland, inclined one to the north and the other to the south, form the sides of the harbour; while a third mole, or breakwater, constructed opposite to the gap between the other two, serves to protect the harbour from the heavy sea that would otherwise be thrown in by the westerly gales. A lighthouse, having the lantern elevated 74 feet above the level of the sea, is erected on the southern extremity of the outward mole; the distance from its extremities to the extremities of the lateral moles, on which there are towers, being about 90 fathoms. Vessels may enter either by the south or north end of the outer mole, but the southern channel is the deepest, having from 8 to 6 and 4 fathoms. Ships may anchor within the port, in from 16 to 18 feet water; or between it and the outer mole, where the water is deeper. Within the port there is a dock and an arsenal. — (*Plan of Civita Vecchia.*)

Historical Notice. — This harbour, which is by far the best on the western side of the papal dominions, owes its origin to the Emperor Trajan, and affords the most unequivocal proof, not of his power merely, but of his sagacity and desire to promote the interests of commerce and navigation. There is in one of Pliny's Letters (lib. vi. epist. 31.) a clear and interesting account of this great work, which has obviously been planned and constructed with equal skill and judgment. The outer mole was mostly formed, precisely like the breakwater at Plymouth, by sinking immense blocks of stone into the sea, which became fixed and consolidated by their own weight, till by degrees it was raised above the waves. (*Assurgit autem arte visendâ: ingentia saxa latissima navis provehit. Contra hæc alia super alia dejecta ipso pondere manent, ac sensim quodam velut aggere construuntur.*) Originally it was called *Trajanus Portus*, and it is to be regretted that it did not always bear the name of its illustrious founder. But in the latter ages of the Roman empire it was called *Centum Cellæ*, and in modern times *Civita Vecchia*. — (*Cellarii Notitia Orbis Antiquæ*, i. p. 734.)

Money. — Accounts are kept here, and throughout the papal states, in crowns or *scudi*, called scudi Romani and scudi moneta. 1 *scudo* = 10 *paoli*, and 1 *paoli* = 10 *bajocchi*. The scudo contains 403 grains of English standard silver, and is, consequently, worth 4*s.* 4*d.* sterling. Payments above 5 scudi are made in *cedole*, or schedules, a species of bank notes; but these, not being payable in specie on demand, are uniformly at a discount.

Weights. — The *libra*, or pound of 12 *onci* or 6,192 *grani*, contains 5,234 English grains. Hence, 100 Roman pounds = 74,771 lbs. avoirdupois = 90,868 lbs. Troy = 33,906 kilo grammes = 70,008 lbs. of Hamburg. There are three different cantaros or quintals; viz. of 100, 160, and 250 lbs. The migliajo = 1,000 lbs.

Measures. — The Roman foot = 11·72 Eng. inches; the *can* = 78·34 Eng. inches; the canna used by builders = 87·96 English inches; the *barrel* of wine = 12,841 imp. gallons, and the barrel of oil = 12·64 imp. galls.; the *soma* of oil = 36·13 imp. do.; the rubbio of corn = 8·143 imp. bushels. — (*Kelly's Cambist; Nelkenbrecher, Manuel Universel.*)

Imports and Exports. — Though the wealth and population of the country round Civita Vecchia be much fallen off in modern times compared with antiquity, it still continues to be the entrepôt of Rome, and engrosses almost the entire trade of the papal dominions on the side of the Mediterranean. The imports consist principally of cotton, woollen, silk, and linen stuffs; coffee, sugar, cocoa, and other colonial products; salt and salted fish, wines, jewellery, glass and earthenware, &c. The exports consist of staves and timber, corn, coal, wool, cheese, potash, pumice-stone, alum, from Tolfa, in the vicinity, and other articles. The total value of the imports may be reckoned at from 650,000*l.* to 700,000*l.*, and it may be fairly presumed that the real value of the exports is not much inferior. Marseilles and Genoa have the largest share of the foreign trade of Civita Vecchia, and next to them England.

Duties. — Civita Vecchia is a free port, that is, a port into which produce may be imported, and either consumed or re-exported, free of duty.

Quarantine regulations are strictly enforced; no vessel with a foul bill of health being permitted to enter any of the papal ports. — (*Annuaire du Commerce Maritime*, tom. ii. p. 366, &c.

CLARET, one of the best French wines. See the articles BORDEAUX and WINE.

CLEARING, among *London Bankers*, is a method adopted by them for exchanging the drafts on each other's houses, and settling the differences. Thus, at half-past 3 o'clock, a clerk from each banker attends at the clearing-house, where he brings all the drafts on the other bankers, which have been paid into his house that day, and deposits them in their proper drawers (a drawer being allotted to each banker); he then credits their accounts separately with the articles which they have against him, as found in the drawer. Balances are then struck from all the accounts, and the claims transferred from one to another, until they are so wound up and cancelled, that each clerk has only to settle with two or three others, and their balances are immediately paid.

It appears from an account given in the Appendix to the Second Report of the Committee of the House of Commons on Banks of Issue, that, in 1839, the aggregate demands made through the clearing house on the different bankers who make use of its agency, amounted to the vast sum of 954,401,600*l.*, in the settlement of which the payment of only 66,275,600*l.* bank notes, or about $\frac{1}{14}$th part of the total amount, was required.

"Such drafts as are paid into a banker's too late for clearing, are sent to the houses on which they are drawn, to be *marked*, which is understood as an engagement that they will be paid the next day." — (*Kelly's Cambist.*) The technical operations carried on at the clearing-house have been described by Mr. Gilbart, in his *Practical Treatise on Banking*, pp. 16—20.

CLEARING-HOUSE, the place where the operation termed clearing is carried on.

CLOCK, CLOCKS (Ger. *Uhren, Grosse Uhren, Wiandunrhe;* Du. *Uuren, Uurwerken, Horologien;* Fr. *Horloges;* It. *Orologgi, Oriuoli;* Sp. *Relojes;* Rus. *Tschasii*), a kind of machine, put in motion by a gravitating body, and so constructed as to divide, measure, and indicate the successive portions of time with very great accuracy. Most clocks mark the hour by striking or chiming. It is a highly useful instrument, and is extensively employed for domestic and philosophical purposes. Clocks are made of an endless variety of materials and models, so as to suit the different uses to which they are to be applied, and the different tastes of their purchasers. Their price consequently varies from a few shillings to more than 100*l.* The Germans and Dutch are particularly celebrated for their skill in the manufacture of wooden clocks; while the English, French, and Genevese, especially the former, have carried the art of making metallic clocks, so as to keep time with the greatest precision, to a high degree of perfection.

The history of the invention, introduction, and successive improvements in the manufacture of clocks, has been carefully investigated by some very learned and industrious antiquaries—(see *Beckmann's Hist. of Inventions*, vol. i. pp. 419—462. Eng. ed.; and *Rees's Cyclopædia*); but, notwithstanding these researches, the subject is still involved in considerable obscurity. It seems, however, that the middle of the fourteenth century may be regarded as the epoch when clocks, having weights suspended as a moving power, and a regulator, began to be introduced. The period when, and the individual by whom, the pendulum was first applied to clockwork, have been subjects of much contention. Galileo and Huygens have disputed the honour of the discovery. "But whoever may have been the inventor, it is certain that the invention never flourished till it came into the hands of Huygens, who insists, that if ever Galileo thought of such a thing, he never brought it to any degree of perfection. The first pendulum clock made in England was in the year 1662, by one Fromantel, a Dutchman."—(*Hutton's Math. Dictionary.*)

The clock manufacture is of considerable importance and value. It is carried on to a great extent in London.

The *ad valorem* duty of 25 per cent. on foreign clocks produced, in 1841, 7,378*l.* nett. It is principally derived from the wooden clocks brought from Holland and Germany. In 1842 the duty was reduced to 20 per cent. *ad valorêm.*

Under the article WATCHES, the reader will find some statements as to the importation and exportation of clocks, as well as watches.

Clockmakers are obliged to engrave upon the dial-plate of all clocks made by them their name, and the place of their residence. No outward or inward box, case, or dial-plate of any clock or watch, with the maker's name engraved thereon, shall be exported without the movement or machinery being in or with such box or case, under forfeiture of double its value.—(3 & 4 *Will.* 4. cap. 52. § 104.) It is illegal to import, or to enter to be warehoused, any clock or watch impressed with any mark purporting to represent any legal British mark, or not having the name of some foreign maker visible on the frame, and also on the face, or not being in a complete state.—(§ 57.)

It is said, however, not to be an uncommon practice among the less reputable portion of the trade, to engrave their names and "London" on foreign clocks and watches, and to sell them to the public as English work. The fraud may be detected by referring to any respectable watchmaker.

By a Treasury order of the 4th of September, 1828, clocks and watches for private use, though not marked in the manner now specified, may be admitted on payment of the duty, on the parties making affidavit of their entire ignorance of the law in question.

Persons hired by, or in the employment of, clock and watch makers, who shall fraudulently embezzle, secrete, sell, &c. any metal, material, or precious stone, with which he may happen to be intrusted, shall, upon trial and conviction before a justice of the peace, forfeit 20*l.* for the first offence; and for the second, and every subsequent offence, he shall forfeit 40*l.*; and, in default of payment, is to be committed to the house of correction.—(27 *Geo.* 2. c. 7. § 1.)—(See WATCH.)

CLOTH. See WOOL, LINEN, &c.

CLOVER (Ger. *Klee;* Du. *Klaver;* Fr. *Treflle, Luzerne;* It. *Trifoglio;* Sp. *Trebol;* Rus. *Trilistnik;* Lat. *Trifolium*), a very important species of grass. Some of the species in cultivation are annual; others biennial or triennial; and others perennial. The seed used formerly to be principally imported from Holland; but that which is raised in this country is now said to be of a superior quality.—(*Loudon's Encyclopædia of Agriculture.*) Culture for seed is, however, very precarious, and of uncertain profit.

The entries of clover seed for home consumption amounted, at an average of 1840 and 1841, to 111,318 cwts. a year, showing that notwithstanding the improvement of the home produce, foreign seed is still in very extensive demand. And there can be no doubt that the importation in the above years would have been much greater but for the heavy duty of 20*s.* a cwt. with which foreign clover seed was then loaded. Such duty had the mischievous effect of tempting farmers to use seed of inferior quality, and fell with peculiar severity on Scotland and those parts of the country which grow no seed. We are, therefore, glad to have to state that the duty was reduced to 10*s.* a cwt. in 1842; and we are much mistaken if, in addition to its beneficial influence in other respects, this reduced duty do not yield as great a revenue as the high duty did before. The price of foreign clover seed varies from 30*s.* to 35*s.* a cwt. ex duty.

CLOVES (Ger. *Näglein, Gewürznelken;* Du. *Kruidnagelen;* Fr. *Clous de girofle, Girofles;* It. *Chiovi di garofano Garofani, Garoffoli;* Sp. *Clavos de especia, Clavillos;* Rus. *Gwosdika;* Arab. *Kerenful;* Malay, *Chankee*), the fruit, or rather cups of the unopened flowers, of the clove tree, or *Caryophyllus aromaticus.* The clove tree is a

native of the Moluccas, where it was originally found; but plants have since been carried to Cayenne and other places, where they succeed tolerably well. Cloves are shaped like a nail; whence the name, from the French *clou*, nail. They are imported from the Dutch settlements; the best in chests, and an inferior kind in bags. The best variety of the Amboyna cloves is smaller and blacker than the other varieties, very scarce, and, as a mark of pre-eminence, is termed the Royal clove. Good cloves have a strong, fragrant, aromatic odour; and a hot, acrid, aromatic taste, which is very permanent. They should be chosen large sized, perfect in all parts; the colour should be a dark brown, almost approaching to black; and, when handled, should leave an oily moisture upon the fingers. Good cloves are sometimes adulterated by mixing them with those from which oil has been drawn; but these are weaker than the rest, and of a paler colour; and whenever they look shrivelled, having lost the knob at the top, and are light and broken, with but little smell or taste, they should be rejected. As cloves readily absorb moisture, it is not uncommon, when a quantity is ordered, to keep them beside a vessel of water, by which means a considerable addition is made to their weight — (*Thomson's Dispensatory; Milburn's Oriental Commerce.*)

Policy of the Dutch as to the Trade in Cloves. — From the expulsion of the English from Amboyna, in 1623, the Dutch have, a few short intervals only excepted, enjoyed the exclusive possession of the Moluccas, or Clove Islands. In their conduct as to the clove trade, they have exhibited a degree of short-sighted rapacity, which has been, we believe, seldom equalled even in the annals of monopoly. Their object has not been to encourage the growth and trade of cloves, but to confine both within the narrowest limits. They have preferred deriving a large profit from a stunted and petty trade, to a moderate profit from a trade that might have afforded employment for a very large amount of capital; and to prevent their narrow and selfish projects from being counteracted by the operations of the natives, they have subjected them to the most revolting tyranny. "That they might," says Mr. Crawfurd, "regulate and control production and price just as they thought proper, the clove trees were extirpated every where but in Amboyna, the seat of their power; and the surrounding princes were bribed, by annual stipends, to league with them for the destruction of their subjects' property and birthright. This plan was begun about the year 1551. The contracts are still in force, and an annual fleet visits the surrounding islands to suppress the growth of cloves, which, in their native country, spring up with a luxuriance which these measures of Satanic rigour, and of sacrilege towards bountiful nature, can scarce repress. By the plan on which the clove trade is now conducted, — a plan carried into effect through so much iniquity and bloodshed, — the country of spices is rendered a petty farm, of which the natural owners are reduced to the worst condition of predial slavery; and the great monopoliser and oppressor is that government, whose duty it should have been to insure freedom and afford protection. Human ingenuity could hardly devise a plan more destructive of industry, more hostile to the growth of public wealth, or injurious to morals, than this system framed in a barbarous age; and it reflects disgrace upon the character of a civilised people to persevere in it.

"It is curious to remark how the monopolisers, in carrying the details of this system into effect, at once impose upon the natives and deceive themselves. The *nominal* price paid to the natives is actually above the natural price of the commodity, but they are cheated in the details. The cultivator brings his produce to the public stores, where it is subjected at once to a deduction of one fifth for payment of the salaries of the civil and military officers. The price of the remainder is fixed at the rate of 9·6 Spanish dollars the picul: but before payment is made, another deduction of one fifth is made; one half of which is for the chiefs or *rajas*, and the other for the native *elders*, who are overseers of the forced culture. The real price, therefore, paid to the grower is 8 Spanish dollars per picul, or $3\frac{1}{4}d.$ per lb. avoirdupois, instead of $11\frac{32}{100}$ Spanish dollars per picul, or $4\frac{3}{4}d.$ per lb., which is pretended to be given.

"When cloves have been sold on the spot, the price usually exacted has been about 64 Spanish dollars the picul, or 8 times the price paid to the cultivator. The average price in Holland, previously to the war of the French revolution, may be taken at 6*s.* per lb., or $177\frac{78}{100}$ Spanish dollars per picul, being 2,122 per cent. advance on the real cost of the commodity in the place of its growth. When brought direct to England, they have cost at an average 3*s.* 8*d.* the lb., making $108\frac{64}{100}$ Spanish dollars per picul, an advance on the natural export price of 1,258 per cent." — (*Eastern Archipelago*, vol. iii. pp. 388—390.)

The Duty on Cloves was considerably reduced in 1819; and there has been, in consequence, a considerable increase in the consumption of the article; though not nearly so great as it would have been, had it been supplied under a more liberal system. At an average of the 3 years ending with 1842, the entries of cloves for home consumption amounted to 85,015 lbs. a year, producing annually 2,219*l.* 4*s.* 1*d.* of revenue. The cultivation of the clove is carried on to some extent in Cayenne; but its culture there depends entirely on the existence of the present system in the Moluccas. The superiority which the latter enjoy over every other place in the production of cloves is so very great, that were any thing like freedom given to those engaged in their culture, they would very speedily exclude every other from the market. It is not to be imagined, that so liberal and intelligent a government as that of Holland can much longer continue insensible to the disgrace of supporting a system like the present, and to the many advantages that would result from its abolition.

In 1842 the duty on cloves was farther reduced from 3*s.* per lb. to 6*d.*, a reduction which, there can be no doubt, will be followed by a considerable increase of consumption.

The price of cloves, exclusive of the duty in the London market, varied, in January 1843, from 1*s.* to 2*s.* 2*d.* per lb.

CLOVES, OIL OF, is procured from cloves by distillation. When new, it is of a pale reddish brown colour, which becomes darker by age. It is extremely hot and fiery, and sinks in water. The kind generally imported from India contains nearly half its weight of an insipid expressed oil, which is discovered by dropping a little into spirits of wine; and on shaking it, the genuine oil mixes with the spirit, and the insipid separating, the fraud is discovered. — (*Milburn.*)

COACHES, vehicles for commodious travelling. They have sometimes two, and sometimes four wheels. The body of the coach is generally suspended, by means of springs, upon the framework to which the wheels are attached. They are usually drawn by horses, but recently have been impelled by steam. The forms and varieties of coaches are almost innumerable.

1. *Historical Notice.* — Beckmann has investigated the early history of coaches with

his usual care and learning. It is certain that a species of coaches were used at Rome; but whether they were hung on springs, like those now made use of, is not certain. After the subversion of the Roman power, horseback was almost the only mode of travelling. About the end of the fifteenth century, however, covered carriages began to be employed by persons of distinction on great occasions. In 1550, there were at Paris only three coaches; one of which belonged to the queen; another to the celebrated Diana of Poitiers; and the third to a corpulent, unwieldy nobleman, René de Laval, lord of Bois Dauphin. Coaches were seen, for the first time, in Spain, in 1546. They began to be used in England about 1580; and were in common use among the nobility in the beginning of the seventeenth century. — (*Hist. of Invent.* vol. i. pp. 111. 127. Eng. trans.)

2. *Manufacture of Carriages.* — This is a department of considerable value and importance. The best built and handsomest carriages are made in London, where only the trade of a coach currier is carried on; but the carriages made at Edinburgh, and some other places, are also very superior. Down to 1825, a duty was laid on all carriages made for sale; and it appears from the following account, that, in 1812, 1,531 four-wheeled carriages, 1,700 two-wheeled ditto, and 105 taxed carts (small carriages without springs), were made for sale.

3. *Duties on Carriages.* — These duties have been long imposed, and have fluctuated considerably at different periods. The Table on the next page shows the number of four-wheeled and other carriages (exclusive of hackney coaches) charged with duties in the years 1812, 1825, 1830, and 1840, the rates of duty on each species of carriage, and the produce of the duties.

4. *Stage Coaches, Travelling by.* — Owing to the improvement in the breed of horses and the building of carriages, but above all, to the extraordinary improvements that have been effected, within these few years, in the laying out, construction, and keeping of roads, the ordinary rate of travelling by stage coaches is seldom under 9 or 10 miles an hour, stoppages included, and, on some roads, is as much as 11 or 12! The stages having been shortened, this wonderful speed is not found to be materially more injurious to the horses than the slower rate at which they travelled some years ago. The surface of the roads being perfectly smooth, and most sharp turns or rapid descents having been got rid of, travelling even at this speed has been rendered comparatively safe; and it is astonishing, considering the number of coaches, how few accidents occur. They are occasioned, for the most part, by the misconduct of the drivers; and principally by their endeavouring to make up by increased speed for time lost at stoppages, or by their attempting to pass each other.

Law as to Stage Coaches. — This is now embodied in the acts 2 & 3 Will. 4. c. 120. and 3 & 4 Will. 4. c. 48.

Definition. — A stage coach is any carriage travelling along the road at the rate of 3 miles or more an hour, without regard to form, provided the passengers pay separate fares for their places therein; but all carriages used wholly on a railway, or impelled by steam, are excepted from this definition. — (2 & 3 *Will.* 4. c. 120. § 4.)

Licences, Duties, &c. — A large portion of the act is occupied with regulations as to licences, duties, plates, &c. But it is sufficient for our purpose to give the following schedule of the duties: —

	Duty. £	s.	d.
For and in respect of every original licence to be taken out yearly by the person who shall keep, use, or employ any stage carriage in Great Britain, (that is to say,) for every such stage carriage -	5	0	0
And for and in respect of every supplementary licence for the same carriage, for which any such original licence shall have been granted, which shall be taken out in any of the several cases provided for by this act, during the period for which such original licence was granted - - -	0	1	0
And for and in respect of every mile which any such stage carriage shall be licensed to travel, the several sums following respectively, (that is to say,) if such stage carriage shall be licensed to carry —	Duty per Mile.		
Not more than 4 passengers - - -	0	0	1
More than 4 and not more than 6 passengers -	0	0	1½
More than 6 and not more than 9 passengers -	0	0	2
More than 9 and not more than 12 passengers -	0	0	2½
More than 12 and not more than 15 passengers	0	0	3
More than 15 and not more than 18 passengers	0	0	3½
More than 18 and not more than 21 passengers	0	0	4

	£	s.	d.
And if such stage carriage shall be licensed to carry more than 21 passengers, then for every 3 additional passengers exceeding 21 which such stage carriage shall be licensed to carry, the additional duty of - - - -	0	0	0½

And where such excess above 21 shall not be exactly 3, or a multiple of 3, then such additional duty of ½*d.* shall be payable for any number of such excess being less than 3, or progressively less than any multiple of 3, which such stage carriage shall be licensed to carry.

Provided always, that the number of passengers for carrying of which any stage carriage shall be licensed, shall be reckoned exclusive of the coachman or driver, and also exclusive of the conductor or guard, if there shall be a conductor or guard.

And also the duties on passengers conveyed for hire by carriages travelling upon railways; (that is to say,)

The proprietor or company of proprietors of every railway in Great Britain, along which any passengers shall be conveyed for hire, in or upon carriages drawn or impelled by the power of steam, or otherwise, shall pay for and in respect of all such passengers at and after the rate of ½*d.* per mile for every 4 passengers so conveyed.

Want of Licence, &c. — Keeping, using, &c. any stage carriage without a licence, or without plates, or with recalled plates, or contrary to their licences, or with improper plates, are offences punishable each by a penalty of 20*l.* — § § 27, 28.

Penalty on Drivers of Coaches without Plates, if not the owner, 10*l.*; if the owner, 20*l.* — § 30.

Forging Plates, a misdemeanor. — § 32.

Names of Proprietors, &c. to be painted outside, in legible and conspicuous characters, the names of the extreme places between which such carriage shall be licensed to go, and also the greatest number of passengers licensed to be carried inside and outside. Penalty for neglect in this particular, 5*l.* — § 36.

Certain Carriages not to carry outside Passengers or Luggage, viz. those, the top or roof of which shall be more than 8 feet 9 inches from the ground, or the bearing of which on the ground, that is, the distance between the centres of the tracks of the wheels, shall be less than 4 feet 6 inches. Penalty 5*l.* — § 37.

Luggage on the Roof not to exceed a certain Height, viz. 10 feet 9 inches from the ground on a carriage drawn by 4 or more horses; and 10 feet 3 inches from ditto, if on a carriage drawn by 2 or 3 horses. Driver of any carriage where such offence is committed liable in a penalty of 5*l.* — § 43.

Account of the Numbers of four-wheeled and other Carriages (exclusive of Hackney Coaches) charged with Duties in 1812, 1825, 1830, and 1840, the Rates of Duty, and the Produce of the Duties.

	1812.			1825.			1830.			1840.		
	Number of Carriages.	Rates of Duty.	Amount of Duty.	Number of Carriages.	Rates of Duty.	Amount of Duty.	Number of Carriages.	Rates of Duty.	Amount of Duty.	Number of Carriages.	Rates of Charge.	Amount of Duty.
Four-wheeled Carriages.												
Carriages charged at progressive rates:		£ s. d.	£ s. d.		£ s. d.	£ s. d.			£ s. d.			£ s. d.
Persons keeping 1	12,866	12 0 0	154,392 0 0	17,242	6 0 0	103,452 0 0	19,417	The same as for 1825	116,502 0 0	18,308	The same as for 1825	109,848 0 0
— 2	2,799	13 0 0	39,296 0 0	3,292	6 10 0	21,398 0 0	5,173	do.	133,624 10 0	6,981	do.	45,376 10 0
— 3	657	14 0 0	9,198 0 0	693	7 0 0	4,851 0 0	1,006	do.	7,042 0 0	1,262	do.	8,834 0 0
— 4	180	15 0 0	27,000 0 0	172	7 10 0	1,290 0 0	216	do.	1,620 0 0	324	do.	2,430 0 0
— 5	60	15 15 0	945 0 0	75	7 17 6	590 12 6	101	do.	795 7 6	156	do.	1,228 10 0
— 6	18	16 8 0	295 4 0	30	8 4 0	246 0 0	30	do.	246 0 0	59	do.	483 16 0
— 7	7	17 0 0	119 0 0	- -	8 10 0	- - -	35	do.	297 10 0	29	do.	246 10 0
— 8	16	17 12 0	281 12 0	- -	8 16 0	- - -	- -	do.	- - -	5	do.	44 0 0
— 9 and upwards	- -	18 3 0	- - -	10	9 1 6	90 15 0	14	do.	127 1 0	70	do.	635 5 0
Total	16,596	- - -	204,226 16 0	21,514	- - -	131,918 7 6	25,992	- - -	160,254 8 6	27,194	- - -	169,126 11 0
Additional bodies	143	6 6 0	900 18 0	68	3 3 0	214 4 0	54	do.	170 2 0	15	As for 1825	47 5 0
Carriages let to hire without horses	249	12 0 0	2,288 0 0	419	6 0 0	2,514 0 0	518	do.	3,108 0 0	693	do.	4,158 0 0
Post chaises and other carriages let to hire with horses	5,295	10 10 0	55,597 10 0	5,786	5 5 0	30,376 10 0	6,983	do.	36,660 15 0	7,143	with name, 3l. without, 5l. 5s.	24,048 0 0
Public stage coaches	1,355	10 10 0	14,227 10 0	2,747	5 5 0	14,421 15 0	3,138	do.	16,474 10 0			
Two-wheeled Carriages.												
Drawn by 1 horse	25,957	6 10 0	168,720 10 0	49,121	3 5 0	127,143 5 0	47,962	do.	155,811 10 0	38,888	do.	126,386 0 0
2 or more horses	1,329	9 0 0	11,961 0 0	539	4 10 0	2,425 10 0	408	do.	1,836 0 0	80	do.	360 0 0
Total	27,286	- - -	180,681 10 0	38,680	- - -	129,568 15 0	59,133	- - -	214,060 17 0			
Additional bodies	11	3 3 0	34 13 0	20	1 11 6	31 10 0	18	do.	28 7 0	2	- - -	3 3 0
Taxed Carts.												
Without springs	7,592	1 9 0	11,008 8 0							24,483	The same as for 1830	110,173 10 0
With springs, not metallic	11,549	2 15 0	31,759 15 0							1,459		4,741 15 0
Total	19,141	- - -	42,768 3 0							772		1,930 0 0
Duties paid by coachmakers and by persons selling carriages.										£ s. d.		
Four-wheeled carriages made for sale	1,531	1 5 0	1,913 15 0							2,381	3 0 0	7,143 0 0
Two-wheeled do. do.	1,701	0 12 6	1,063 2 6							1,383	1 5 0	1,728 15 0
Taxed carts made for sale	407	0 3 0	61 1 0									
Four-wheeled carriages sold by auction, or on commission	105	1 5 0	131 5 0							30,478	- - -	125,717 0 0
Two-wheeled carriages do.	184	0 12 6	115 0 0									
Taxed carts do.	46	0 3 0	6 18 0								Total in 1840	
Total	3,974	- - -	3,291 1 6									

Repealed in 1825.

Exclusive of the above, there paid duty in 1830 —

	£ s. d.
Four-wheeled carriages drawn by 1 horse, 5,838, at 4l. 10s.	26,271 0 0
with wheels of less diameter than 30 in., drawn by ponies, 383, at 3l. 5s.	1,244 5 0
used by carriers, 179, at 2l. 10s.	447 10 0
Two-wheeled carriages let to hire 2,246, at 3l. 5s.	7,299 10 0
used by carriers, 241, at 1l. 5s.	301 5 0
	35,563 10 0
Total duty collected from carriages in 1830,	409,907 2 6

The clauses in the act 2 & 3 Will. 4. c. 120. relating to the distribution of outside passengers, &c. have been repealed by the act 3 & 4 Will. 4 c. 48., which substitutes the following in their stead.

Number of outside Passengers, &c. — Any licensed stage carriage with 4 wheels or more, the top or roof of which shall not be more than 8 feet 9 inches from the ground, and the bearing of which on the ground shall not be less than 4 feet 6 inches from the centre of the tracks of the wheels, if such carriage shall be licensed to carry any number not more than 9 passengers, shall be allowed to carry not more than 5 of such passengers outside; and if licensed to carry more than 9 and not more than 12 passengers, shall be allowed to carry not more than 8 of such passengers outside; and if licensed to carry more than 12 and not more than 15 passengers, shall be allowed to carry not more than 11 of such passengers outside; and if licensed to carry more than 15 and not more than 18 passengers, shall be allowed to carry not more than 12 of such passengers outside; and if licensed to carry any greater number than 18 passengers, shall be allowed to carry not more than 2 additional passengers outside for every 3 additional passengers which such carriage shall be so licensed to carry in the whole; provided that in no case a greater number of passengers shall be carried on the outside than is authorised by the licence. If more be carried, driver to forfeit 5*l.* — § 2.

Driver, Guard, and Children in lap, not to be counted as passengers; 2 children under 7 years reckoned as 1 passenger. — § 3.

No Person to sit on Luggage on the Roof, nor more than 1 person besides driver on the box. Penalty 5*l.* — § 14.

Justices, Road-surveyors, Toll-keepers, &c. authorised to cause stage carriages and luggage to be measured; any passenger authorised to require the driver to stop at a toll-gate, and to require the gate-keeper to measure the carriage and luggage, and to count the number of inside and outside passengers. Penalty on driver refusing to stop, 5*l.*; on gate-keeper neglecting to provide a measure, or refusing to measure and count, 5*l.* — (2 & 3 *Will.* 4. c. 120. § 45.)

Conduct of Drivers, &c. — Drivers quitting the box before a proper person shall stand at the head of the horses; such person leaving the horses before some other person shall be placed in like manner, or have the command of the horses, or before the driver has resumed his seat on the box and taken the reins; driver allowing any passenger or other person to drive for him, or leaving the box without any reasonable occasion, or for a longer time than is absolutely necessary; concealing or misplacing plates; guard discharging fire-arms unnecessarily; driver, conductor, or guard neglecting to take care of luggage; asking more than the proper fare; neglecting to account to his employer; or assaulting or using abusive language to any person having travelled, or about to travel, as a passenger, or to any person accompanying the same: shall in each and every such case forfeit 5*l.* — § 47.

Drunkenness, &c. — Drivers, conductors, or guards having the care of any stage carriage, endangering, through intoxication, negligence, or wanton and furious driving, the safety of any passenger or other person, or the property of the owner of such carriage or other person, shall each person so offending forfeit 5*l.* — § 49.

Owners liable for penalties, when driver or guard is not known or cannot be found. — § 49.

Railway Proprietors are to render accounts of the passengers conveyed along the same to the Stamp Office, and to give security to keep and render such accounts, and to pay the duties. — § § 50, 51.

Treasury may compound with proprietors of railways for the duties chargeable on passengers conveyed by them. — § 52.

Mail Coaches are under the regulations of the postmaster general; and the enactments in this act as to plates, inscriptions, outside passengers, and luggage, do not extend to them; but the other regulations as to the conduct of drivers, guards, &c. do apply to them. Mail coaches have only four outside passengers; one on the box, and three immediately behind the box. No passenger allowed to sit beside the guard. The rate of travelling, the time allowed for stoppages, the quantity of luggage to be carried, &c. are all regulated by the postmaster general.

Rates of Duty on Carriages. — On those having —

Four wheels.	Rate. £	s.	d.
Persons keeping 1 - 6	0	0	
— 2 - 6	10	0	
— 3 - 7	0	0	
— 4 - 7	10	0	
— 5 - 7	17	6	
Additional bodies - - - -	- 3	3	0
Carriages let to hire - - - -	- 6	0	0
Post chaises - - - -	- 5	5	0
Carriages with wheels of less diameter than 30 inches, drawn by ponies or mules not exceeding 13 hands - - - -	- 3	5	0

	Rate. £	s.	d.
Persons keeping 6 - 8	4	0	
— 7 - 8	10	0	
— 8 - 8	16	0	
9 and upwards - 9	1	6	

Two wheels	Rate. £	s.	d.
Carriages drawn by 1 horse - - -	- 4	10	0
Carriages used by common carriers -	- 2	10	0
Drawn by 1 horse - - - -	- 3	5	0
Drawn by 2 or more - - - -	- 4	10	0
Additional bodies - - - -	- 1	11	6
Described in act 2 & 3 Will. 4. cap. 32. No. I. charged - - - -	- 1	10	0
Ditto, ditto, No. II., common stage carts	- 1	10	0
Let out to hire - - - -	- 3	5	0
Carriages used by common carriers -	- 1	5	0

For an account of Hackney Coaches, see the term.

COAL (Du. *Steenkoolen*; Fr. *Charbon de terre*; Ger. *Steinkohlen*; It. *Carboni fossili*; Lat. *Lithanthrax*; Port. *Carvoes de terra, ou de pedra*; Rus. *Ugolj, Kamennoe*; Sp. *Carbones de tierra, Carbones de piedra*; Sw. *Stenkol*). This highly important combustible mineral is divided by mineralogists into the three great families of black coal, uninflammable coal, and brown coal; each of these being again divided into many subordinate species.

All the common coals, as slate coal, foliated coal, cannel coal, &c., belong to the black coal family. Slate and foliated coal is found in vast quantities in Durham and Northumberland, at Whitehaven in Cumberland, in the river district of the Forth and Clyde, in South Wales, &c. The best Newcastle coal kindles easily; in burning it cakes or runs together into a solid mass, emitting a great deal of heat, as well as of smoke and flame; it leaves a small quantity of heavy, dark-coloured residuum or ashes. Most of the Scotch coals are what are familiarly called *open burning* coals. They do not last so long as the Newcastle coal, yield less heat, do not cake or run together in burning, and usually leave a considerable quantity of light, white ashes. They make, however, a very pleasant, cheerful fire; and, for most household purposes, the best fire is said to be made of a mixture of Scotch and Newcastle coal.

Cannel coal is sometimes met with in the Newcastle pits, in Ayrshire, &c.; but the largest beds of it, and of the purest kind, are near Wigan in Lancashire. It burns with a beautiful clear flame, emitting a great deal of light, but not much heat. It takes a good polish; and articles made of it are often passed off for pure jet.

The uninflammable coals are those known by the names of Welsh culm or stone coal, Kilkenny coal, and the *blind* or *deaf* coal of Scotland. These coals are difficult to kindle, which has given rise to their name; but when once thoroughly ignited, they burn for a long time: they make a hot, glowing fire, like charcoal, without either flame or smoke; but owing to their emitting noxious vapours, they cannot be used in dwelling houses, though they are in considerable demand among maltsters, dyers, &c.

Brown, or Bovey coal, so called from its being principally found at Bovey near Exeter, is light, yields but little heat in burning, and is seldom used as fuel.

In all, about *seventy* species of coal are said to be imported into London, of which *forty-five* are sent from Newcastle! Of course, many of them differ from each other by almost imperceptible degrees, and can only be distinguished by those thoroughly conversant with the trade.

Origin of Coal. Phenomena of Combustion, &c. — Coal beds, or strata, lie among those of gravel, sand, chalk, clay, &c., which form great part of the present surface of the earth, and have been evidently accumulated during remote ages by the agency of "moving water,"—similar to accumulations now in process of formation at the mouths of all great rivers, and in the bottoms of lakes and seas. When these strata had, by long contact and pressure, been solidified into a rocky crust to the earth, this crust, by subsequent convulsions of nature, of which innumerable other proofs remain, has been in various parts broken and heaved up above the level of the sea, so as to form the greater part of our dry or habitable land; in some places appearing as lofty mountains, in others as extended plains. In many situations, the fracture of the crust exhibits the edges of the various distinct strata found in a given thickness of it. When the fracture has the form of a precipitous cliff, these edges appear one above another, like the edges of piled planks or books; but often also they are met with in horizontal succession along a plain, as the edges of a pile of books laid down upon a table; or they may be seen surrounding hills of granite, which protrude through them. Coal, and other precious minerals, were first discovered at the fractures of the strata above described, and by the continued digging of the strata or veins the vast excavations called mines have been gradually formed. When it was at last discovered that the mineral strata occur every where in nearly the same order or succession, so that the exposure of a portion of one stratum is a good indication of the other strata being near, the operations of the miner became of much surer result, and expensive boring through superior strata might be prudently undertaken, even where no specimen of the desired but more deeply buried substance had yet been seen.

Before the discovery of coal mines, or the invention of cheap means of working them, wood was generally used as fuel; and in many countries where the arts have not much flourished, it continues to be principally employed as such. Coal, however, for many purposes, answers much better than wood; and, in fact, the two, although in appearance so different, are in their ultimate composition very nearly allied. They both have for their basis or chief ingredient the substance called by the chemists *carbon*, and for their chief other ingredient, the substance called hydrogen, which, when separated, exists in the form of air or gas. The hydrogen is easily driven away or volatilised from either coal or wood, by heating in a close place; and when it is caught and preserved, it forms the gas now used to light our streets and public buildings. What remains of coal, after being so treated, is the substance called *coke*; and what remains of wood, similarly treated, is the substance called *charcoal*, — both being nearly pure carbon, but differing as to the states of compactness. This kindred nature of coal and wood does not surprise, when the fact is known, that much of our coal is really transformed wood; many coal mines being evidently the remains of antediluvian forests, swept together in the course of the terrestrial changes already alluded to, and afterwards solidified to the state now seen. In these mines, the species of the plants or trees which formed them are still quite evident in abundant specimens, mixed often with the remnants of the animals which inhabited the earth at the same time. The extensive peat-mosses now existing on the surface of the earth, consist chiefly of vegetable remains in an early stage of the kind of change which terminates in the formation of coal.

A substance which, like coal or wood, cheaply answers the purpose of producing great heat and light, is called fuel, and the phenomenon of that production is called combustion. Now, modern discovery has ascertained that, in every instance, combustion is merely an appearance which accompanies the mutual action, when very intense, of two substances in the act of forming an intimate or chemical union. Where that act is less energetic, the heat produced is less intense, and there is no light. Thus, water and sulphuric acid when mixing produce great heat, but no light. Water and quicklime produce still greater heat; sufficient, it is known, to set fire to a ship in which the mixture unfortunately occurs. It is an occurrence of the same kind when heat is evolved from an acid dissolving a metal; and it is still of the same kind when a mass of coal or wood in a

fire-grate is, with the appearance of combustion, undergoing solution in the oxygen of the atmosphere. In this last case, however, the temperature of the fuel is, by the very intense action, raised so much that the fuel becomes incandescent or luminous; an appearance assumed by every substance, whether burning or not, — of a stone, for instance, or piece of metal, — when heated beyond the temperature indicated by 800° of Fahrenheit's thermometer. The inferior degrees of such incandescence are called *red heat*; the superior degrees, *white heat*. The reason why any strongly heated body throws out light, we cannot yet explain. When a quantity of wood or coal has been burned to ash in a confined portion of air, the whole of the fuel, vanished from view, is held in solution by the air, as salt is held in water, and is again recoverable by the art of the chemist. The phenomenon of common fire, or combustion, then, is merely the fuel being chemically dissolved in the air of the atmosphere. If the fuel has nothing volatile in it, as is true of pure carbon, and nearly true of coke and charcoal, it burns with the appearance of red-hot stones; but if there be an ingredient, as hydrogen, which, on being heated, readily assumes the form of air, that ingredient dilates before burning, and in the act produces the more bulky incandescence called flame.

The two great purposes which combustion serves to man, are, to give light and heat. By the former he may be said to lengthen considerably the duration of his natural existence; for he converts the dismal and almost useless night into what, for many ends, serves him as well as day; and by the latter, besides converting winter into any climate which he desires, he is enabled to effect most important mutations in many of the substances which nature offers for his use; and, since the invention of the steam engine, he makes heat perform a great proportion of the work of society. From these considerations may be perceived the importance of having fire at command; and, as the cheapest means of commanding fire, of having abundance of coal.

As respects the supply of coal, Britain is singularly favoured; a large portion of the surface of the country having under it continuous and thick beds of this valuable mineral, — vastly more precious to us than would have been mines of the precious metals, like those of Peru and Mexico; for coal, since it has been applied to the steam-engine, is really hoarded power, applicable to almost every purpose which human labour directed by ingenuity can accomplish. It is the possession of her coal mines which has rendered Britain, in relation to the whole world, what a city is to the rural district which surrounds it, — the producer and dispenser of the various products of art and industry. Calling her coal mines the coal cellars of the great city, there is in them a supply, which, at the present rate of expenditure, will last for 2,000 years at least; and, therefore, a provision which, as coming improvements in the arts of life will naturally effect economy of fuel, or substitution of other means to effect similar purposes, may be regarded as inexhaustible.

The kinds or differences of coal depend on their comparative proportions of carbon and hydrogen, and of earthy impurities totally incombustible. While some species of coal contain nearly a third of their weight of hydrogen, others have not a fiftieth part. The former kinds are flaming coal, pleasing in parlour fires, and fit for the manufacture of gas. The other kinds — some of the Welch stone coal, for instance — will only burn when in large heaps, or when mixed with more inflammable coal: they have no flame. When flaming coal is burned where a sufficiency of oxygen cannot pass through or enter above the fire, to combine with and consume the hydrogen as fast as it rises, a dense smoke is given out, consisting of hydrogen and carbon combined in the proportions which form a pitchy substance. The Welch coal above mentioned can as little give out smoke as flame, and hence is now much used in great breweries, and in the steam-engine furnaces of towns, where smoke is a serious nuisance. The foliated or cubical coal, and slate coal, are chiefly used as fuel in private houses; the caking coals, for smithy forges; the slate coal, from its keeping open, answers best for giving great heats in a wind furnace, as in distillation on a large scale; and glance coal, found in Staffordshire, is used for drying grain and malt. The coals of South Wales contain less volatile matter than either the English or the Scotch; and hence, when employed in smelting the ore, produce a greater quantity of iron. It is supposed that 3 parts of good Newcastle coal are equivalent, as fuel, to 4 parts of good Scotch coal.

Consumption of Coal. Number of Persons engaged in the Trade. Supply of Coal. — The great repositories of coal in this kingdom are in Northumberland and Durham, whence London and most parts of the south of England are at present supplied; in Cumberland, whence large quantities of coal are exported to Ireland; and in Staffordshire, Derbyshire, Lancashire, Yorkshire, Leicestershire, Warwickshire, South Wales, &c. In Scotland, coal is found in the Lothians, Lanarkshire, Renfrewshire, Ayrshire, and other counties. In Ireland, coal is both deficient in quantity and inferior in quality to that of Great Britain; and turf forms the great article of fuel.

It is not easy to form any very accurate estimate of the annual consumption of coa in Great Britain; probably, however, the following may not be far from the mark.

	Tons.
Domestic consumption in 1842 and smaller manufactures	18,000,000
Production of pig and bar iron	7,000,000
Copper smelting, brass manufactures, &c.	1,000,000
Cotton manufacture	800,000
Woollen, linen, silk ditto	800,000
Salt works	400,000
Lime works	600,000
Railway carriages, steam boats, &c.	1,200,000
Home consumption	29,800,000
Exports to Ireland	1,000,000
Ditto to colonies and foreign parts	2,000,000
Total home and foreign consumption	32,800,000

Mr. Buddle, of Wallsend, an extremely well informed coal engineer, gave, in 1829 the following estimate of the number of persons engaged in the different departments of the coal trade on the Tyne and Wear, in the conveyance of coal to London, and in the London coal trade:—

"I hold a paper in my hand stating the number of people employed in the coal trade in each department. I would beg to observe, the returns from the Tyne are official documents; from the Wear I have no returns, but it is by an approximate calculation. The number of persons employed under-ground on the Tyne are,—men, 4,937; boys, 3,554; together 8,491: above ground,—men, 2,745; boys, 718; making 3,463; making the total employed in the mines above and below ground, 11,954, which in round numbers I call 12,000, because I am pretty sure there were some omissions in the returns. On the river Wear, I conceive there are 9,000 employed; making 21,000 employed in digging the coal, and delivering it to the ships on the two rivers. From the best calculations I have been able to make, it would appear that, averaging the coasting vessels that carry coals at the size of 220 London chaldrons each vessel, there would be 1,400 vessels employed, which would require 15,000 seamen and boys. I have made a summary. There are, seamen, 15,000; pitmen and above-ground people employed at the collieries, 21,000; keel-men, coal-boatmen, casters, and trimmers, 2,000: making the total number employed in what I call the Northern Coal Trade, 38,000. In London, whippers, lightermen, and so forth, 5,000; factors, agents, &c. on the Coal Exchange, 2,500;—7,500 in all, in London. Making the grand total in the North country and London departments of the trade, 45,500. This does not, of course, include the persons employed at the outports in discharging the ships there." It is necessary, however, to bear in mind that these statements apply only to 1830, and that there must have been a material increase in the interval.

In another place, Mr. Buddle states, that "colliers are always paid by the piece," and consequently their wages, although at the same rate per chaldron, vary according to the quantity of work they have to do; and it is difficult to form an average, they vary so very considerably: they have varied from 14*s.* a week, to, in some instances, 40*s.* "The colliers can earn up to 5*s.* or even more per day; but there is not full employment for them; they sometimes do not earn more than half that sum; 2*s.* 6*d.* is the certain wages that they are hired to receive from their employers, whether they are employed or not; that is, consequently, a tax on the coal owner, during the suspension of his colliery from any accident. The men have the option of finding work elsewhere; but if they cannot do this, they may call upon their master to pay them 14*s.* per week; it was 15*s.* a week till 1828."

We regret that we are unable to lay any estimates before our readers of the number of persons employed in the other branches of the coal trade; but taking into view the proportion which the trade on the Tyne and the Wear bears to the trade of Great Britain, and the increase since 1830, we are inclined to think that the total number of persons directly engaged in the coal trade may be set down at from 190,000 to 220,000.

The importance of coal as a necessary of life, and the degree in which our superiority in arts and manufactures depends upon our obtaining supplies of it at a cheap rate, has naturally attracted a good deal of attention to the question as to the period when the exhaustion of the coal mines may be anticipated. But the investigations hitherto made as to the magnitude and thickness of the different coal-beds, and the extent to which they may be wrought, are too vague and unsatisfactory to afford grounds for forming any thing like a tolerably near approximation to a solution of this question. But such as they are, they are sufficient to show that *many centuries* must elapse before posterity can feel any serious difficulties from a diminished supply of coal. According to an estimate prepared by Mr. Taylor, an intelligent coal engineer, in 1829, the coal-fields of Durham and Northumberland are adequate to furnish the present annual supply for a very long period. We subjoin Mr. Taylor's estimate.

ESTIMATE OF THE EXTENT AND PRODUCE OF THE DURHAM AND NORTHUMBERLAND COAL-FIELDS.

	Sq. Miles.
Durham.	
"From South Shields southward to Castle Eden, 21 miles; thence westward to West Auckland 32 miles; north-east from West Auckland to Eltringham, 33 miles; and then to Shields, 22 miles; being an extent or area of	594
Northumberland.	
"From Shields northward, 27 miles, by an average breadth of 9 miles	243
	837
Portion excavated.	
"In Durham, on Tyne, say	39
on Wear	40
	79
"In Northumberland, say 13 miles by 2	26
	105
	732

	Tons.
"Estimating the workable coal strata at an average thickness of 12 feet, the contents of 1 square mile will be 12,390,000 tons, and of 732 square miles	9,069,480,000
"Deduct one third part for loss by small coal, interceptions by dikes, and other interruptions	3,023,160,000
Remainder	6,046,320,000

"This remainder is adequate to supply the present vend from Newcastle, Sunderland, Hartley, Blyth, and Stockton, of 3,500,000 tons, for a period of 1,727 years.

"It will be understood that this estimate of the quantity of coal in Durham and Northumberland can only be an approximation, especially as the south-eastern coal district of Durham is yet almost wholly unexplored; but the attempt is made, in the hope of satisfying your Lordships that no apprehension need be entertained of this valuable mineral being exhausted for many future generations.

"There is also a considerable extent of coal-field in the northern and south-western districts of Northumberland; but the foregoing comprises that which is continuous, and most suitable and available for exportation. It is, however, to be observed that the shipments of coal from the ports mentioned by Mr. Taylor has been largely increased during the last dozen years; so that, supposing the estimate to be in other respects accurate, it must now be modified accordingly."—(*Lords' Report*, 1829, p. 124.)

Dr. Buckland, the celebrated geologist, considers Mr. Taylor's estimate as greatly exaggerated; but in his examination before the committee of the House of Commons in 1829, he quoted with approbation a passage of Bakewell's *Geology*, in which it is stated that the coal-beds in South Wales were alone sufficient to supply the then demand of England for coal for 2,000 years. The passage is as follows:—

"Fortunately we have in South Wales, adjoining to the Bristol Channel, an almost exhaustless supply of coal and ironstone, which are yet nearly unwrought. It has been stated, that this coal-field extends over about 1,200 square miles; and that there are 23 beds of workable coal, the total average thickness of which is 95 feet; and the quantity contained in each acre is 100,000 tons, or 65,000,000 tons per square mile. If from this we deduct one half for waste, and for the minor extent of the upper beds, we shall have a clear supply of coal equal to 32,000,000 tons per square mile. Now, if we admit that 5,000,000 tons from the Northumberland and Durham mines is equal to nearly one third of the total consumption of coal in England, each square mile of the Welsh coal-field would yield coal for 100 years' consumption; and as there are from 1,000 to 1,200 square miles in this coal-field, it would supply England with fuel for 2,000 years, after all our English coal mines are worked out!"

But supposing this supply to last only 1,000 years, that carries us so far into futurity, that it appears to be quite idle either to prohibit, or impose heavy duties on the exportation of coal, on the ground of its accelerating the exhaustion of the mines.

Profits of Coal Mining. Coal Owners' Monopoly, &c.—Instead of the business of coal mining being, generally speaking, an advantageous one, it is distinctly the reverse. Sometimes, no doubt, large fortunes have been made by individuals and associations engaged in this business; but these are rare instances. The opening of a mine is a very expensive and hazardous operation, and of very uncertain result. Collieries are exposed to an infinite number of accidents, against which no caution can guard. The chances of explosion have, it is true, been a good deal lessened by the introduction of Sir Humphry Davy's lamp; and some mines are now wrought, that, but for the invention of this admirable instrument, must have been entirely abandoned. But besides explosions, which are still every now and then occurring, from the carelessness of the workmen, and other contingencies, mines are very liable to be destroyed by *creeps*, or by the sinking of the roof, and by drowning, or the irruption of water from old workings, through fissures which cannot be seen, and consequently cannot be guarded against. So great, indeed, is the hazard attending this sort of property, that it has never been possible to effect an insurance on a coal-work, against fire, water, or any other accident.

Mr. Buddle informed the committee of the House of Lords, in 1829, that "although many collieries, in the hands of fortunate individuals and companies, have been, perhaps, making more than might be deemed a reasonable and fair profit, according to their risk, like a prize in a lottery; yet, as a trade, taking the whole capital employed on both

rivers, he should say that certainly it has not been so."—(*First Report*, p. 56.) Again, being asked, "What have the coal owners on the Tyne and Wear, in your opinion, generally made on their capital employed?" he replied, "According to the best of my knowledge, I should think that *by no means ten per cent. has been made at simple interest, without allowing any extra interest for the redemption of capital.*"—(p. 57.)

In addition to the vast expense attending the sinking of shafts, the erection of steam engines, &c., and the risk of accidents, the coal, after being brought to the surface, has frequently to be conveyed 7 or 8 miles to the place of shipping; and those whose collieries are in that situation, have to pay *way-leave* rents, amounting, in some cases, to 500*l.* a year, for liberty to open a communication, or a railroad, through the properties lying between them and the shore.

Much has frequently been said of the monopoly of the coal owners on the Tyne and the Wear; but we are satisfied, after a pretty careful investigation of the circumstances, that no such monopoly has ever existed; and that the high price of coal in the metropolis is to be ascribed wholly to the various duties and charges that have been laid upon it, from the time that it has passed from the hands of the owner to the time that it is lodged in the cellar of the consumer. What means have the coal owners of obtaining a *monopoly price* for their coal? They enjoy no exclusive privileges of any sort; they are a numerous body; and the trade is as open as any other to all capitalists to engage in. The number of places on the east and west coasts, both of England and Scotland, and the southern parts of Wales, from which coals are exported, render it quite visionary to suppose that any general agreement to keep up prices can take place amongst the various coal proprietors. And though such an agreement were entered into, it is imposible it could be maintained. The *power* of producing coal greatly exceeds the present demand; many new mines have been recently opened, and many others would be brought into activity were the price artificially enhanced. It is true that the coal owners referred to, having experienced the ruinous effects of throwing a superabundant quantity of coal upon restricted and already glutted markets, have occasionally met together; and each having named the price he thinks his coal will command, and at which he intends to sell it, they have proceeded jointly to regulate, according to the probable demand, the quantity that each shall raise during any particular period. By means of this arrangement, the supply and price of coal have been kept, during the time it has existed, comparatively steady. Common prudence prompts and justifies such an arrangement; but it also suggests the necessity of reducing the price of coal to the lowest level that will afford the customary rate of profit. For were the price demanded by the northern coal owners raised above this level, new mines would be opened in Durham and Northumberland; the imports from the Tees, whence a large supply of excellent coal *is at present brought* to the London market, would be augmented; and fresh competitors, from Swansea and other places, would come into the field and undersell them. Government should encourage and promote this fair competition; but it ought, at the same time, to do equal justice by all the competitors. It is not to lend assistance to, or remove burdens from, one set of adventurers, which it does not lend to or remove from others. It is no part of its duty to say *how* coals, or any species of produce, shall be carried to market. It is bound to give every reasonable facility for the opening of new channels or modes of conveyance between all parts of the country; but it would be glaringly unjust to lay a tax on the coals conveyed by a particular channel from which those conveyed by other channels were exempted.

Mr. Buddle thinks that the aggregrate capital employed by the coal owners on the Tyne amounts to about 1,500,000*l.* exclusive of the craft in the river: and supposing this estimate to be nearly correct, it will follow, allowing for the value of the ships, that the total capital employed in the coal trade may be moderately estimated at from *eight* to *ten* millions; an immense sum to be almost wholly at the risk of the owners, without any insurance upon it.

Progressive Consumption of Coal. Duties and Regulations affecting it, particularly in the Port of London.—There are no mines of coal in either Greece or Italy; and no evidence has been produced to show that the ancients had learned to avail themselves of this most useful mineral. Even in England, it does not seem to have been used previously to the beginning of the thirteenth century; for the first mention of it occurs in a charter of Henry III., granting licence to the burgesses of Newcastle to dig for coal. In 1281, Newcastle is said to have had a considerable trade in this article. About the end of this century, or the beginning of the fourteenth, coals began to be imported into London, being at first used only by smiths, brewers, dyers, soap-boilers, &c. This innovation was, however, loudly complained of. A notion got abroad that the smoke was highly injurious to the public health; and, in 1316, parliament petitioned the king, Edward I., to prohibit the burning of coal, on the ground of its being an intolerable nuisance. His Majesty issued a proclamation conformably to the prayer of the petition; but it being but little attended to, recourse was had to more vigorous measures;

a commission of oyer and terminer being issued out, with instructions to inquire as to all who burned sea-coal within the city, or parts adjoining, to punish them for the first offence, by "pecuniary mulcts;" and upon a second offence, to demolish their furnaces; and to provide for the strict observance of the proclamation in all time to come.

But notwithstanding the efforts that were thus made to prohibit the use of coal, and the prejudice that was long entertained against it, it continued progressively to gain ground. This was partly, no doubt, owing to experience having shown that coal smoke had not the noxious influence ascribed to it, but far more to the superior excellence of coal as an article of fuel, and the growing scarcity and consequent high price of timber. In the reign of Charles I. the use of coal became universal in London, where it has ever since been used to the exclusion of all other articles of fuel. At the Restoration, the quantity imported was supposed to amount to about 200,000 chaldrons. In 1670, the imports had increased to 270,000 chaldrons. At the Revolution, they amounted to about 300,000 chaldrons, and have since gone on increasing with the growing magnitude and population of the city; being, in 1750, about 500,000 chaldrons; in 1800, about 900,000 chaldrons; and at present about 1,700,000 chaldrons. — (*Campbell's Political Survey of Great Britain*, vol. ii. p. 30.; *Edington on the Coal Trade*, p. 41, &c.)

It might have been supposed, considering that coal is, in this country, a prime necessary of life, and by far the most important of all the instruments of manufacturing industry, that it would have been exempted from every species of tax; and that every possible facility would have been given for its conveyance from the mines to the districts in the south of England, and other places in want of it. But such has not been the case. The coal trade of Great Britain was, for more than a century and a half, subjected to the most oppressive regulations. From a very early period, the corporation had undertaken the task of weighing and measuring the coal brought to London; and had been accustomed to charge 8*d.* a ton for their trouble. In 1613, the power to make this charge was confirmed to the city by royal charter, it being at the same time ordered that no coal should be unladen from any vessel till the Lord Mayor had given leave. The right to charge this sum according to the chaldron of coal, has since been confirmed to the city by act of parliament; and as the labouring meters, notwithstanding they have been very well paid, have received only 5*d.* out of the 8*d.*, the balance of 3*d.* per chaldron, which produced about 20,000*l.* a year, went to the city treasury.

But besides the above, duties for civic purposes have been laid on the coal imported into London from the reign of Charles II. downwards. They were originally imposed in 1667, after the great fire, in order to assist in the rebuilding of churches and other public edifices; and have ever since been continued, to enable the corporation to execute improvements in the city; though it is probable most of our readers will be inclined to think that few improvements could be so great, as a reduction in the price of so very important an article as coal.

Exclusive of the corporation duties, a duty payable to government was laid on *all sea-borne* coal in the reign of William III., which only ceased in 1831. This duty was at once glaringly unjust and oppressive: unjust, inasmuch as it fell only on those parts of the empire to which coals had to be carried by sea; and oppressive, inasmuch as it amounted to full *fifty* per cent. upon the price paid to the coal owner for the coal. This tax, after being long stationary at 5*s.* a chaldron, was raised to 9*s.* 4*d.* during the late war; but was reduced to 6*s.* in 1824. But the inequality of the tax was not confined to its affecting those parts only of the empire to which coal had to be carried by sea. Even there its pressure was not equal; for, while it amounted to 6*s.* a chaldron, or 4*s.* a ton, in the metropolis and all the south of England, it only amounted to 1*s.* 7½*d.* a ton on coal carried by sea to Ireland, and to 1*s.* 8*d.* on that carried to Wales; while Scotland was for many years entirely exempted from the duty.

Besides this striking partiality and injustice, various troublesome Custom-house regulations were required, in consequence of distinctions being made between the duties on large and small coal, between those on coal and culm (a species of coal), and coal and cinders, and of coal being allowed to be imported duty free into Cornwall, Devon, &c. for the use of the mines. These distinctions were, however, wholly abolished in 1830, and no duties exist on coal except those collected in London and a few other ports, and appropriated to local purposes.

A small supply of coal was of late years brought to London from Staffordshire, by canal navigation. This coal was charged with a duty of 1*s.* a chaldron; but this is now also repealed.

The regulations to which the sale and delivery of coals were subjected in the city of London were, if possible, still more objectionable than the duties imposed on them. Instead of being sold by weight, all coals imported into the Thames were, previously to 1831, sold by measure. It is curious to observe the sort of abuses to which this practice has given rise. It is stated by the celebrated mathematician, Dr. Hutton, who, being a native of Newcastle, was well acquainted with the coal trade, that, "If

one coal, measuring exactly a cubic yard (nearly equal to 5 bolls), be broken into pieces of a moderate size, it will measure 7½ bolls; if broken very small, it will measure 9 bolls; which shows that the proportion of the weight to the measure depends upon the size of the coals; therefore, accounting by weight is the most rational method." The shippers were well aware of this, and insisted upon the coal owners supplying them with large coal only; and to such an extent was this principle carried, that all coal for the London market was *screened*, as it is technically termed, or passed over gratings, to separate the smaller pieces. Inasmuch, however, as coals were sold in all their subsequent stages by measure, no sooner had they been delivered by the owner, than it was for the interest of every one else into whose hands they came before reaching the consumer, to break them into smaller portions. In fact, the profit of many of the retailers in London has arisen chiefly from the increase of measure by the breakage of coal. And Mr. Brandling, a very intelligent and extensive coal owner, stated to the Commons' committee of 1829, that, in consequence of the breakage, coals are reduced in London to a size inferior to what they would be, were they put on board *unscreened*, and subjected to no additional breakage.

The statements now made sufficiently evince the nullity of all the regulations enforcing the sale of coal by correct measures: for even though these regulations had been enforced, instead of being, as they usually were, wholly neglected, they would have been of almost no use; inasmuch as any dishonest dealer was as able to cheat, by breaking his coals a little smaller than usual, as if he had sold them in deficient measures.

The loss occasioned by the useless process of screening has been very great. The quantity of coal separated by it has amounted in some cases to from 20 to 25 per cent. of the whole; and the greater part of this residue, containing a portion of the very best coal, is *burned on the spot*. "I have known," says Mr. Buddle, "at one colliery, as many as from 90 to 100 chaldrons a day destroyed. If they were not consumed, they would cover the whole surface, and in the burnings of them they are extremely destructive; they destroy the crops a great way round, and we pay large sums for injury done to the crops, and for damage to the ground."—(*First Lords' Report*, p. 72.) The waste of coal has been in this way enormous; and the coal owner has been obliged to charge a higher price upon the coal sold, in order to indemnify himself for the loss of so great a quantity, and for the mischief he does to others in burning.

The fact, that so monstrous a system should have been persevered in for more than a century, sets the power of habit in reconciling us to the most pernicious absurdities in a very striking point of view. Happily, however, the nuisance was at last abated; the sale of coal by weight taking away both the temptation to break coal, and the necessity of screening.

The duties of all sorts that were formerly paid to the corporation of the city of London were commuted in 1830 for a duty of 1*s.*1*d.* per ton*, which produced in 1841 a gross revenue of 152,887*l.* 9*s.* 5*d.* (*Westminster Review*, No. 77. p. 532). Various oppressive duties and regulations were then also abolished, a measure which has been productive of a considerable saving to the public. Supposing the average price of a ton of coal, in the pool below London Bridge, to be at present (1843) 20*s.*, it would perhaps be made up nearly as follows:

	£	s.	d.
Prime cost and shipping charges in the Tyne or the Wear	0	9	3 per ton.
Freight	0	8	6
Insurance	0	0	1¼
City dues	0	1	1
Half weighage	0	0	1¼
Allowance to the buyer, of tret, discount, and scorage	0	0	6
Factory, 3*d.* *Del credere*, 1*d.*	0	0	4
Stamps and petty incidents	0	0	1½
	0	20	0

The charges on the conveyance of coal from the vessel to the cellar of the consumer amounted, in 1830, to about 11*s.* a ton, but at present they do not exceed 7*s.*; thus:—

	£	s.	d.		£	s.	d.
Lighterage	0	1	3	Cartage	0	3	6
Wharfinger	0	0	6	Shooting	0	1	0
Loading	0	0	9	Total	0	7	0

No doubt, however, the expenses attending the delivery of coal to the consumer might be farther and very materially reduced, were quays constructed at which ships could lie alongside, and discharge their cargoes without the intervention of lighters, and without being subject to the delays to which they are now exposed. It appears also, that, the practice of sending coals to the consumers in bags might in the great majority of cases be advantageously dispensed with. No such practice exists in Manchester, Liverpool, Glasgow, or other large towns; and, generally speaking, it seems to occasion not only a heavy, but a perfectly useless, expense. There is a very keen competition in the retail coal trade in London, and the individual who deals with a respectable coal merchant may be pretty well assured that he gets his coals at the lowest price at which, as matters now stand, they can be sold.

* Eightpence per ton of this duty will (unless the regulations under which it is now imposed be altered in the interval) cease in 1862, its produce having been mortgaged till that year, to defray the cost of certain city improvements.

Account exhibiting the Quantities of the various Descriptions of Coal imported into London by Sea in 1842, and specifying also the Number of Ships or Cargoes.

Descriptions of Coal.	Ships or Cargoes.	Tons.
Newcastle	1,884	650,777
Newcastle Wallsend	1,696	514,055
Sunderland	13	3,168
Sunderland Wallsend	2,435	724,964
Stockton	18	3,199
Stockton Wallsend	2,049	559,103
Blyth	408	100,294
Scotch	201	19,484
Welch	249	73,699
Yorkshire	703	69,512
From sundry places	6	430
Small coal	5	1,108
	9,667	2,719,793
Culm	5	1,283
Cinders	19	2,124
Total imports	9,691	2,723,200

Account exhibiting the Importation of Coal into London by Sea during each of the 11 Years ending with 1842.

Years.	Cargoes.	Tons.	Years.	Cargoes.	Tons.
1832	7,528	2,139,078	1838	9,003	2,581,085
1833	7,077	2,010,409	1839	9,340	2,625,323
1834	7,404	2,078,685	1840	9,132	2,566,899
1835	7,958	2,298,812	1841	10,311	2,909,144
1836	8,162	2,398,352	1842	9,691	2,723,200
1837	8,720	2,626,997			

Regulations as to Sale in London. — A seller's ticket is to accompany all coals sold within the city of London and its environs, specifying the species of coal, and the number of sacks and weight of coal sent. The coals may be either in bags containing 1 or 2 cwt., or in bulk. The carman is in all cases bound to carry a weighing machine with the coal, which machine is to be made conformably to regulation; and, upon being desired, he is to weigh any one sack, or the whole sacks in his wagon. Penalty on refusing to weigh, or otherwise obstructing the weighing, 20*l.* Penalty on non-delivery of ticket to purchaser, 20*l.* In the event of the weight being deficient, a penalty is imposed of 10*l.* or 50*l.*, according to deficiency. Quantities of less than 560 lbs. may be sold without being weighed. — (1 & 2 *Will.* 4. c. 76.

In order to save trouble in collecting the duties that still attach to coal in the port of London, the corporation is authorised to compound with the owner or master of any ship or vessel importing coal, for the tonnage upon which the duties are to be paid. A certificate of such composition, expressing the number of tons of coal, cinders, or culm, agreed to be taken as the cargo of the ship or vessel compounded for, is to be given to the master or owner of the same, and to be taken as evidence of the quantity on board.

When no composition is entered into, the coal is to be weighed in the presence of an officer of the customs *at the port of shipment;* and the duties are to be paid upon the weight so shipped.

The shipment of coal in the Tyne is at present regulated by the act 5 Geo. 4. c. 72., commonly called the *Turn Act.* The object of this act is to make all ships engaged in the trade of the Tyne be loaded in the order in which they arrive. It prevents any preference being given to particular ships; and renders it nearly impossible for any coal owner to give constant employment to any vessel in the trade which he may wish to employ. In some respects this act is probably advantageous, but, on the whole, its policy seems very questionable. Why should a coal owner be prevented from employing certain ships in preference to others? Under this act, if more ships engage in the trade than can be profitably employed in it, the loss produced by detention in port, and waiting for a cargo, instead of falling, as it naturally would, were the trade free, on particular ships, and driving them from the business, falls equally on every ship employed, and depresses the whole trade. There is no regulation of this sort on the Wear.

The question as to the policy of laying duties on the exportation of coal depends (as the exhaustion of the mines need not be thought of) on the fact, whether British coal be necessary or of considerable consequence to the progress of manufactures and of the arts in foreign countries. If it be, then certainly it would be good policy to preserve that superiority which we derive from the possession of coal by prohibiting its exportation, or burdening it when exported with a considerable duty; but if the possession of our coal be not necessary or of considerable importance to the foreigner, such prohibition or duty would encourage the working of foreign mines by discouraging the working of our own, without producing any corresponding advantage. It is not, however, very easy to say how the fact stands. But on the whole there seems to be little doubt that a supply of British coal, though not indispensable, is of very considerable advantage to the foreigner; and if so, there can be no question that it is sound policy to lay reasonable duties on its exportation — such, for example, as those imposed in 1842. It would, indeed, be easy to show that no just grounds of complaint have been or can be alleged against these duties.

An Account of the Quantity and Value of the Coal, Culm, &c. exported from the United Kingdom in 1842, specifying the Quantity and Value of the Coal sent to different Countries.

Countries.	Coal exported.	Value.	Countries.	Coal exported.	Value.
	Tons.	£		*Tons.*	£
Russia	83,582	26,227	African Ports on the Red Sea	583	262
Sweden	37,995	10,618	Cape Verde Islands	297	112
Norway	18,801	5,829	St. Helena and Ascension Islands	1,261	801
Denmark	145,286	41,276	Mauritius	2,242	1,337
Prussia	111,681	31,397	East Indies and China	54,151	28,746
Germany	170,038	46,732	Australian Settlements	1,752	1,311
Holland	180,434	60,659	New Zealand	203	131
Belgium	5,882	1,617	British North American Colonies	50,051	21,740
France	515,975	173,378	British West Indies	95,770	54,955
Portugal, Azores, and Madeira	33,066	11,534	Foreign West Indies	56,609	24,959
Spain and the Canaries	53,548	25,096	United States of America	60,856	29,633
Gibraltar	14,316	5,647	Texas	28	28
Italy	46,927	21,792	Mexico	1,704	677
Malta	39,158	16,127	Columbia	50	22
Ionian Islands	1,853	766	Brazil	40,553	17,552
Morea and Greek Islands	3,712	1,547	States of the Rio de la Plata	3,645	1,637
Turkey and Continental Greece	40,231	17,611	Chili	1,877	766
Syria and Palestine	16	7	Peru	340	310
Egypt	12,893	5,591	Isles of Guernsey, Jersey, Alderney, and Man	83,402	32,798
Tripoli, Tunis, Algiers, and Morocco	19,825	7,926			
Western Coast of Africa	2,866	1,246			
Cape of Good Hope	8,066	4,460	Total	1,999,504	734,000

An Account of the Quantities of Coals, Cinders, and Culm exported from the United Kingdom to Foreign Countries and the British Settlements abroad in 1842, with the Rates and Amount of Duties received thereon.

	Quantities exported.	Duties received thereon. Duty payable on Exportation in Foreign Ships.	Duty payable on Exportation in British Ships.	Total.
	Tons.	£ s. d.	£ s. d.	£ s. d.
Large	1,828,069	25,031 8 9	25,706 19 9	50,738 8 6
Small	147,211	3,854 17 9	3,615 9 9	7,470 7 6
Culm	790	27 6 10	2 10 0	29 16 10
Cinders	23,434	79 16 6	30 5 7	110 2 1
Total	1,999,504	28,993 9 10	29,355 5 1	58,348 14 11

Rates of Duty on Coals, Cinders, and Culm exported from the United Kingdom in the Year 1842.

	In British Ships or in Foreign Ships under Reciprocity Treaties.	In Foreign Ships not under Reciprocity Treaties.
Coals, cinders, and culm exported:	*s. d.*	*s. d.*
Previously to the 9th July,		
To British possessions	Free	4 $2\frac{8}{20}$ per ton.
To foreign countries	10 6 per cent. ad valorem.	4 $2\frac{8}{20}$ per ton.
Subsequently to the 9th July		
To British possessions	Free	Free.
To foreign countries, viz.:		
Large coals	2 0 per ton	4 0 per ton.
Small coals and culm	1 0 per ton	4 0 per ton.
Cinders	Free	4 0 per ton.

An Account of the Quantities of Coals, Cinders, and Culm shipped at the several Ports of England, Scotland, and Ireland, coastwise to other Ports of the United Kingdom, during the Years 1841 and 1842.

Ports from which shipped.	Year 1841. Coals.	Cinders.	Culm.	Total.	Year 1842. Coals.	Cinders.	Culm.	Total.
England.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Gloucester	80,988	- -	1,541	82,529	90,942	- -	1,745	92,687
Newport	505,974	104	- -	506,078	503,215	93	- -	503,308
Cardiff	153,576	2,831	- -	156,407	234,707	3,612	- -	238,319
Swansea	* 200,448	111	249,560	450,119	225,938	81	245,222	471,241
Llanelly	125,016	105	37,968	163,119	128,134	- -	41,584	169,718
Whitehaven } Maryport }	414,137	13	6,920	451,370	295,137	- -	6,110	301,247
					141,317	61	15	141,391
Newcastle	2,388,139	9,838	- -	2,397,977	2,341,071	9,409	- -	2,350,480
Sunderland	937,857	138	- -	937,995	859,137	94	- -	859,231
Stockton	1,476,922	136	6,560	1,483,618	1,501,596	- -	- -	1,501,596
Goole	154,283	- -	- -	154,283	158,776	- -	- -	158,776
All other ports	182,920	859	53,035	236,794	235,423	1,174	54,997	291,594
Scotland.								
Borrowstoness	113,236	102	- -	113,338	104,147	28	25	104,200
Alloa	80,974	- -	- -	80,974	70,817	- -	- -	70,817
Kirkaldy	57,159	- -	- -	57,159	47,677	- -	- -	47,677
Glasgow	74,963	107	168	75,238	53,542	108	371	54,021
Irvine	191,254	- -	- -	191,254	185,833	- -	- -	185,833
Ayr	81,973	- -	- -	81,973	81,286	- -	- -	81,286
All other ports	27,124	- -	- -	27,124	23,126	76	- -	23,202
Ireland	2,550	- -	- -	2,550	2,815	- -	- -	2,845
Total	7,279,823	14,324	355,752	7,649,899	7,284,666	14,736	350,067	7,649,169

Price of Coal. — The following is an account of the contract price of coal supplied to Greenwich Hospital in the undermentioned years.

Years.	Per Chaldron.	Years.	Per Chaldron.	Years.	Per Chaldron.	Years.	Per Chaldron.	Years.	Per Chaldron.	Years.	Per Chaldron.
	£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
1730	1 4 6	1755	1 8 $7\frac{1}{2}$	1780	1 17 $5\frac{3}{4}$	1805	2 11 $8\frac{1}{2}$	1830	1 12 11
1735	1 5 0	1760	1 12 8	1785	1 11 $2\frac{1}{2}$	1810	3 0 8	1835	16 8
1740	1 9 0	1765	1 12 $4\frac{1}{2}$	1790	1 11 $4\frac{1}{2}$	1815	2 15 $6\frac{1}{2}$	1840	19 8
1745	1 10 0	1770	1 9 $1\frac{1}{2}$	1795	1 19 9	1820	2 5 9	1841	19 5
1750	1 7 $7\frac{1}{2}$	1775	1 10 $11\frac{1}{2}$	1800	2 11 7	1825	2 3 2	1842	18 9

This table sets the beneficial influence of the abolition of the duty on coals, and of the other alterations that have been made in the management of the trade, in a very striking point of view.

COASTING TRADE, the trade or intercourse carried on by sea between two or more ports or places of the same country.

It has been customary in most countries to exclude foreigners from all participation in the coasting trade. This policy began in England in the reign of Elizabeth (*5* Eliz. c. *5.*), or, perhaps, at a more remote æra; and was perfected by the acts of navigation passed in *1651* and *1660*. A vast number of regulations have been since enacted at different periods. The existing rules with respect to it, which have been a good deal simplified, are embodied in the act 3 & 4 Will. 4. c. *52.*, and are as follow: —

Definition of Coasting Trade. — All trade by sea from any one part of the United Kingdom to any other part thereof, or from one part of the Isle of Man to another thereof, shall be deemed to be a coasting trade, and all ships while employed therein shall be deemed to be coasting ships; and no part of the United Kingdom, however situated with regard to any other part thereof, shall be deemed in law, with reference to each other, to be parts beyond the seas, in any matter relating to the trade or navigation or revenue of this realm. — § 105.

Lords of Treasury to regulate what shall be deemed trading by Sea under this Act. — It shall be lawful for the said commissioners of his Majesty's treasury to determine and direct in what cases the trade by water from any place on the coast of the United Kingdom to another of the same shall or shall not be deemed a trade by sea within the meaning of this act or of any act relating to the customs. — § 106.

Coasting Ship confined to coasting Voyage. — No goods shall be carried in any coasting ship, except such as shall be laden to be so carried at some port or place in the United Kingdom, or at some port or place in the Isle of Man respectively; and no goods shall be laden on board any ship to be carried coastwise until all goods brought in such ship from parts beyond the seas shall have been unladen; and if any goods shall be taken into or put out of any coasting ship at sea or over the sea, or if any coasting ship shall touch at any place over the sea, or deviate from her voyage, unless forced by unavoidable circumstances, or if the master of any coasting ship which shall have touched at any place over the sea shall not declare the same in writing under his hand to the collector or comptroller at the port in the United Kingdom or in the Isle of Man where such ship shall afterwards first arrive, the master of such ship shall forfeit the sum of 200*l.* — § 107.

Before Goods be laden or unladen, Notice of Intention, &c. to be given, and proper Documents to issue. — No goods shall be laden on board any ship in any port or place in the United Kingdom or in the Isle of Man to be carried coastwise, nor having been brought coastwise shall be unladen in any such port or place from any ship, until due notice in writing, signed by the master, shall have been given to the collector or comptroller, by the master, owner, wharfinger, or agent of such ship, of the intention to lade goods on board the same to be so carried, or of the arrival of such ship with goods so brought, as the case may be, nor until proper documents shall have been granted as herein-after directed for the lading or for the unlading of such goods; and such goods shall not be laden or unladen except at such times and places, and in such manner, and by such persons, and under the care of such officers, as are herein-after directed; and all goods laden to be so carried, or brought to be so unladen, contrary hereto, shall be forfeited. — § 108.

Particulars in Notice. — In such notice shall be stated the name and tonnage of the ship, and the name of the port to which she belongs, and the name of the master, and the name of the port to which she is bound or from which she has arrived, and the name or description of the wharf or place at which her lading is to be taken in or discharged, as the case may be; and such notice shall be signed by the master, owner, wharfinger, or agent of such ship, and shall be entered in a book to be kept by the collector, for the information of all parties interested; and every such notice for the unlading of any ship or vessel shall be delivered within 24 hours after the arrival of such ship or vessel, under a penalty of 20*l.* to be paid by the master of such ship or vessel; and in every such notice for the lading of any ship or vessel shall be stated the last voyage on which such ship or vessel shall have arrived at such port; and if such voyage shall have been from parts beyond the seas, there shall be produced with such notice a certificate from the proper officer of the discharge of all goods, if any, brought in such ship, and of the due clearance of such ship or vessel inwards of such voyage. — § 109.

From and to Ireland. — Upon the arrival of any coasting ship at any port in Great Britain from Ireland, or at any port in Ireland from Great Britain, the master of such ship shall, within 24 hours after such arrival, attend and deliver such notice, signed by him, to the collector or comptroller; and if such ship shall have on board any goods subject on arrival to any duty of excise, or any goods which had been imported from parts beyond the seas, the particulars of such goods, with the marks and numbers of the packages containing the same, shall be set forth in such notice; and if there shall be no such goods on board, then it shall be declared in such notice that no such goods are on board; and the master shall also answer any questions relating to the voyage as shall be demanded of him by the collector or comptroller; and every master who shall fail in due time to deliver such notice, and truly to answer such questions, shall forfeit the sum of 100*l.* — § 110.

After Notice given of lading, Collector may grant a general Sufferance. — When due notice shall have been given to the collector or comptroller at the port of lading of the intention to lade goods on board any coasting ship, such collector or comptroller shall grant a general sufferance for the lading of goods (without specifying the same) on board such ship, at the wharf or place which shall be expressed in such sufferance; and such sufferance shall be a sufficient authority for the lading of any sort of goods, except such, if any, as shall be expressly excepted therein: provided always, that before any sufferance be granted for any goods prohibited to be exported, or subject to any export duty other than any *ad valorem* duty, the master or owner of any such ship, or the shipper of such goods, shall give bond, with one sufficient surety, in treble the value of the goods, that the same shall be landed at the port for which such sufferance is required, or shall be otherwise accounted for to the satisfaction of the commissioners of his Majesty's customs. — § 111.

Master of Coasting Vessel to keep a Cargo Book. — The master of every coasting ship shall keep or cause to be kept a cargo book of the same, stating the name of the ship and of the master, and of the port to which she belongs, and of the port to which bound on each voyage; and in which book shall be entered, at the port of lading, an account of all goods taken on board such ship, stating the descriptions of the packages, and the quantities and descriptions of the goods therein, and the quantities and descriptions of any goods stowed loose, and the names of the respective shippers and consignees, as far as any of such particulars shall be known to him; and in which book, at the port of discharge, shall be noted the respective days upon which any of such goods be delivered out of such ship, and also the respective times of departure from the port of lading, and of arrival at any port of unlading; and such master shall produce such book for the inspection of the coast-waiter or other proper officer, so often as the same shall be demanded, and who shall be at liberty to make any note or remark therein; and if such master shall fail correctly to keep such book, or to produce the same, or if at any time there be found on board such ship any goods not entered in the cargo book as laden, or any goods noted as delivered, or if at any time it be found that any goods entered as laden, or any goods not noted as delivered, be not on board, the master of such ship shall forfeit the sum of 50*l.*; and if, upon examination at the port of lading, any package entered in the cargo book as containing any foreign goods shall be found not to contain such goods, such package, with its contents, shall be forfeited; and if at the port of discharge any package shall be found to contain any foreign goods which are not entered in such book, such goods shall be forfeited. — § 112.

Accounts of Foreign Goods, &c. to be delivered to Collector. — Before any coasting ship shall depart from the port of lading, an account, together with a duplicate of the same, all fairly written, and signed by the master, shall be delivered to the collector or comptroller; and in such account shall be set forth such particulars as are required to be entered in the cargo book of all foreign goods, and of all goods subject to export duty (other than any *ad valorem* duty), and of all corn, grain, meal, flour, or malt, laden on board, and generally, whether any other British goods or no other British goods be laden on board, as the case may be, or whether such ship be wholly laden with British goods not being of any of the descriptions before mentioned, as the case may be; and the collector or comptroller shall select and retain one of such accounts, and shall return the other, dated and signed by him, and noting the clearance of the ship thereon; and such account shall be the clearance of the ship for the voyage, and the transire for the goods expressed therein; and if any such account be false, or shall not correspond with the cargo book, the master shall forfeit the sum of 50*l.* — § 113.

Transire to be delivered to Collector. — Before any goods be unladen from any coasting ship at the port of discharge, the master, owner, wharfinger, or agent of such ship shall deliver the transire to the collector or comptroller of such port, who shall thereupon grant an order for the unlading of such ship at the wharf or place specified in such order: provided always, that if any of the goods on board such ship be subject to any duty of customs or excise payable on arrival coastwise at such port, the master, owner, wharfinger, or agent of such ship, or the consignee of such goods, shall also deliver to the collector or comptroller a bill of the entry of the particulars of such goods, expressed in words at length, together with a copy thereof, in which all sums and numbers may be expressed in figures, and shall pay down all duties of customs, or produce a permit in respect of all duties of excise, which shall be due and payable on any of such goods, as the case may be; and thereupon the collector and comptroller shall grant an order for the landing of such goods, in the presence or by the authority of the coast-waiter. — § 114.

Collector in certain Cases may grant general Transire for Coasting Vessels. — It shall be lawful for the collector and comptroller, in the cases herein-after mentioned, to grant for any coasting ship a general transire, to continue in force for any time not exceeding one year from the date thereof, for the lading of any goods (except such goods, if any, as shall be expressly excepted therein), and for the clearance of the ship in which the goods shall be laden, and for the unlading of the goods at the place of discharge; (that is to say,)

For any ship regularly trading between places in the river Severn eastward of the Holmes;

For any ship regularly trading between places in the river Humber;
For any ship regularly trading between places in the Frith of Forth;
For any ship regularly trading between places to be named in the transire, and carrying only manure, lime, chalk, stone, gravel, sand, or any earth, not being fullers' earth:
Provided always, that such transire shall be written in the cargo book herein-before required to be kept by the masters of coasting ships: provided also, that if the collector and comptroller shall at any time revoke such transire, and notice thereof shall be given to the master or owner of the ship, or shall be given to any of the crew when on board the ship, or shall be entered in the cargo book by any officer of the customs, such transire shall become void, and shall be delivered up by the master or owner to the collector or comptroller.—§ 115.

Coast-waiter, &c. may go on board and examine any Coasting Ship.—It shall be lawful in any case, and at all legal times, for the coast-waiter, and also for the landing-waiter, and for the searcher, and for any other proper officer of the customs, to go on board any coasting ship in any port or place in the United Kingdom or in the Isle of Man, or at any period of her voyage, and strictly to search such ship, and to examine all goods on board, and all goods being laden or unladen, and to demand all documents which ought to be on board such ship.—§ 116.

Times and Places for landing and shipping.—No goods shall be unshipped from any ship arriving coastwise in the United Kingdom or in the Isle of Man, and no goods shall be shipped, or waterborne to be shipped, in the United Kingdom or in the Isle of Man, to be carried coastwise, but only on days not being Sundays or holidays, and in the daytime, (that is to say,) from the 1st of September until the last day of March betwixt sun-rising and sun-setting, and from the last day of March until the 1st of September between the hours of 7 o'clock in the morning and 4 o'clock in the afternoon; nor shall any such goods be so unshipped, shipped, or waterborne, unless in the presence or with the authority of the proper officer of the customs, nor unless at places which shall be appointed or approved by the proper officer of the customs.—§ 117.

Goods prohibited or restrained.—Whenever any goods which may be prohibited to be exported by proclamation or by order in council under the authority of this act shall be so prohibited, it shall be lawful in such proclamation or order in council to prohibit or restrict the carrying of such goods coastwise; and if any such goods shall be carried coastwise, or shall be shipped or waterborne to be carried coastwise, contrary to any such prohibition or restriction, the same shall be forfeited.—§ 118.

Dues of the City of London.—For the purpose of enabling the dues payable to the city on articles imported coastwise to be ascertained and collected, it is enacted, that if all or any of the following goods, viz. firkins of butter, tons of cheese, fish, eggs, salt, fruit, roots eatable, and onions, brought coastwise into the port of the said city, and which are liable to the said dues, be landed or unshipped at or in the said port before a proper certificate of the payment of the said dues shall have been obtained, such goods shall be forfeited, and may be seized by an officer of customs empowered to seize any goods that may be landed without due entry thereof.—(7 & 8 *Geo.* 4. c. 56. § 15.)

An Account of the Number and Tonnage of the Vessels employed in the Coasting Trade, which entered inwards and cleared outwards, with Cargoes, at the several Ports of the United Kingdom, in 1840 and 1841, distinguishing the Vessels employed in the Intercourse between Great Britain and Ireland from other Coasters.

	Entered inwards.				Cleared outwards.			
	1840.		1841.		1840.		1841.	
	Ships.	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*
Employed in the intercourse between Great Britain and Ireland	9,423	1,150,395	10,905	1,200,467	17,369	1,677,264	16,520	1,628,358
Other coasting vessels	123,876	9,615,661	120,397	9,676,293	128,758	9,740,727	127,357	10,121,794
Totals	133,299	10,766,056	130,402	10,876,750	146,127	11,417,991	143,877	11,750,152

COBALT (Ger. *Kobalt;* Du. *Kobal;* Sw. *Cobolt;* Fr. *Cobalt;* It. *Cobalto;* Rus. *Kobolt;* Lat. *Cobaltum*), a mineral of a grey colour, with a shade of red, and by no means brilliant. It has scarcely any taste or smell; is rather soft; specific gravity about 8·6. Sometimes it is composed of plates, sometimes of grains, and sometimes of small fibres adhering to each other. Its oxides are principally employed.—(See SMALTS, or SMALTZ.) They form the most permanent blue with which we are acquainted. The colouring power of oxide of cobalt on vitrifiable mixtures is greater, perhaps, than that of any other metal. One grain gives a full blue to 240 grains of glass.—(*Thomson's Chemistry*, and *Ure's Dictionary.*)

COCCULUS INDICUS, OR INDIAN BERRY (Sans. *Kakamari;* Malay, *Tubabidgi*), the fruit of the *Menispermum Cocculus*, a large tree of the Malabar coast, Ceylon, &c. It is a small kidney-shaped berry, having a white kernel inside, of a most unpleasant taste. It is of a poisonous and intoxicating quality, and has been employed to adulterate ale and beer. But its employment in that way is prohibited under a penalty of 200*l.* upon the brewer, and of 500*l.* upon the seller of the drug, by the 56 Geo. 3. c. 58.

COCHINEAL (Ger. *Koschenilje;* Du. *Conchenilje:* Fr. *Cochenille;* It. *Cocciniglia;* Sp. *Cochinilla, Grana;* Port. *Cochenilha;* Rus. *Konssenel*), an insect (*Coccus cacti*) found in Mexico, Georgia, South Carolina, and some of the West India islands: recently, also, it has been introduced into Java, and promises to become an important product of that rapidly improving colony. Formerly it was in Mexico only that it was reared with care, and formed a valuable article of commerce; but its culture is now more or less attended to in various parts of the West Indies and of the United States. It is a small insect, seldom exceeding the size of a grain of barley; and was generally believed, for a considerable time after it began to be imported into Europe, to be a sort of vegetable grain or seed. There are two sorts or varieties of cochineal: the best or domesticated, which the Spaniards called *grana fina*, or fine grain; and the wild, which they call *grana sylvestra*. The former is nearly twice as large as the latter; probably because its size has been improved by the favourable effects of human care, and of a more

copious and suitable nourishment, derived solely from the *Cactus cochinellifer*, during many generations. Wild cochineal is collected six times in the year; but that which is cultivated is only collected thrice during the same period. The insects, of which there are about 70,000 in a pound, being detached from the plants on which they feed by a blunt knife, are put into bags, and dipped in boiling water to kill them, after which they are dried in the sun. It is principally used in the dyeing of scarlet, crimson, and other esteemed colours. The watery infusion is of a violet crimson; the alcoholic, of a deep crimson; and the alkaline, of a deep purple, or rather violet hue. It is imported in bags, each containing about 200 lbs.; and has the appearance of small, dry, shrivelled, rugose berries or seeds, of a deep brown, purple, or mulberry colour, with a white matter between the wrinkles. In this state they suffer no change from length of keeping. Dr. Bancroft says that that cochineal is the best, which is "large, plump, dry, and of a *silver white* colour on the surface."

The species of cochineal called *granilla*, or dust, is supposed by Dr. Bancroft to be principally formed of *grana sylvestra*. The insects of which it consists are smaller than those composing the fine cochineal; and it does not yield more than a third part of the colouring matter that is yielded by the latter. The cochineal insect was introduced into India in 1795; but a very inferior sort only is produced. It has also been introduced into Java and Spain, but with what success remains to be seen. — (*Thomson's Dispensatory; Bancroft on Colours, &c.*)

An Account of the Quantities of Cochineal imported into the United Kingdom in 1839, 1840, and 1841, specifying the Countries whence it came, and the Quantities brought from each, and specifying also the Quantities entered for Consumption, and the Produce of the Duties, in each of the 3 Years ending with 1842.

Countries.	1839.	1840.	1841.	1842.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*
British West Indies	473,420	564,064	901,249	
Cuba and other foreign West Indies	56,660	14,180	11,403	
United States of America	160,093	130,789	139,443	
Mexico	195,903	41,074	20,678	
Guatemala	- -	335,655	34,174	
Elsewhere	115,505	19,792	13,708	
Total imports	1,001,581	1,105,554	566,657	
Quantities entered for home consumption	- -	510,886	1,120,655	604,267
Duties paid thereon	- -	£ s. d. 236 18 10	£ s. d. 266 13 2	£ s. d. 283 17 11

The duties on cochineal were reduced (foreign from 6*d.*, and colonial from 2*d.* per lb.) in 1842 to 1*s.* a cwt.

The price of cochineal fluctuated very much during the war, partly on account of the obstacles which it occasionally threw in the way of importation, and partly on account of its being an article of direct government expenditure. In 1814 the price of the best cochineal was as high as 36*s.* and 39*s.*; and it has since gone on regularly declining, with hardly a single rally, till it has sunk to from 4*s.* to 6*s.* per lb. Previously to the war it had never been under 12*s.* or 13*s.* Lac dye has recently been employed to some extent in dyeing scarlet; but notwithstanding this circumstance, the consumption of cochineal, occasioned, no doubt, partly by its cheapness, and partly, perhaps, by some change of fashion, has been materially increased since 1824. This, however, has not had any material influence on its price; and it would appear, from the long continuance of low prices, not only without any diminution, but with a large increase of imports, that they are still sufficient to remunerate the growers of the article. — (*Tooke, &c. on High and Low Prices; Cook's Commercial Circulars.*)

COCOA, or, more properly, CACAO, (Fr. and Sp. *Cacao;* Ger. *Kakao*) the seed or nuts of the cocoa tree (*Theobroma cacao*), growing in the West Indies, and in many parts of South America. It is said, by Mr. Bryan Edwards, to bear some resemblance, both in size and shape, to a young *blackheart cherry*. The nuts are contained in pods, much like a cucumber, that proceed immediately from all parts of the body and larger branches; each pod contains from 20 to 30 nuts, of the size of large almonds, very compactly set. The shell of the nut is of a dark brown colour, brittle, and thin; the kernel is, both internally and externally, brownish, divided into several unequal portions, adhering together, but separating without much difficulty; it has a light agreeable smell, and an unctuous, bitterish, rather rough and peculiar, but not ungrateful taste. The nuts should be chosen full, plump, and shining, without any mustiness, and not worm-eaten. They yield, by expression, a great deal of oil; but they are cultivated only that they may be employed in the preparation of the excellent beverage cocoa, and the manufacture of chocolate, of which they form the principal ingredient. The finest cocoa is said to be that of Socomusco. The principal importations are, however, derived from the Caraccas and Guayaquil, particularly the former, the cocoa of which is, also, the more valuable. The exports from Guayaquil amounted, at an average of the 3 years ending with 1838, to 8,878,255 lbs. a year. — (*Geog. Dict.* art GUAYAQUIL.)

M. Humboldt estimated the consumption of cocoa in Europe, in 1806, at 23,000,000 lbs., of which from 6,000,000 to 9,000,000 were supposed to be consumed in Spain. The production of cocoa had been languishing in the Caraccas for several years previously to the commencement of the disturbances in South America; and latterly the cultivation

of one or other of the great staples of cotton, sugar, and coffee, seems to have been, in most parts, gaining the ascendancy. — (*Humboldt, Pers. Narrative*, vol. iv. pp. 236—247. Eng. trans.)

Duties. Consumption in England. — Down to a late period the consumption of cocoa in England was confined within very narrow limits; a result which we are inclined to ascribe to the oppressiveness of the duties with which it has been loaded, and not to its being unsuitable to the public taste. It is now many years since Mr. Bryan Edwards declared that the ruin of the cocoa plantations, with which Jamaica once abounded, was the effect of "*the heavy hand of ministerial exaction.*" — (*Hist. of West Indies*, ii. 363. ed. 1819.) And, unaccountable as it may seem, this pressure was not materially abated till 1832, when the duties on cocoa from a British possession were reduced from 6*d.* to 2*d* per lb. And such has been the influence of this judicious measure, that the consumption of cocoa, which, at an average of the 3 years ending with 1831, amounted to 440,578 lbs. a year, had increased, at an average of the 3 years ending with 1842, to 2,072,332 lbs.! It is seen from the accompanying table that the duty on foreign cocoa continued from 1830 down to 1842 to be (generally 6*d.* per lb.,) *three* times as great as that on coffee from a British possession; and in consequence of this enormous discrepancy, none of it was entered for home consumption under the duty, though it is worthy of remark that cocoa for the navy, which pays no duty, is almost always taken from foreign stock. In 1842 the duty on cocoa from a British possession was farther reduced $1\frac{1}{20}d.$ per lb.; and it might have been expected that the ratio of protection in favour of plantation cocoa would then, also, have been diminished; but, on the contrary, it has been increased from 300 to 400 per cent., the duty on foreign cocoa being at this moment $4\frac{1}{5}d.$ per lb.

Cocoa nut husks and shells may be imported and entered for consumption on paying a duty (if from a British possession) of about $\frac{1}{4}d.$ per lb. They are brought not only from the West Indies, but from Gibraltar and other places, being the refuse of the chocolate manufactories carried on in them.

Cocoa cannot be entered as being the produce of a British possession in America, or of the Mauritius, until the master of the ship by which it is imported delivers to the collector or comptroller a *certificate*, and declares that the goods are the produce of such places. — (3 & 4 *Will.* 4. c. 52. § 37.) Neither shall they be deemed to be the produce of such places, unless imported direct from thence. — (7 *Geo.* 4. c. 48.)

No abatement of duty is made on account of any damage received by cocoa. — (3 & 4 *Will.* 4. c. 52. § 32.)

An Account of the Quantity, in Pounds Weight, of Cocoa imported into the United Kingdom, in each Year from 1832 down to 1842, both inclusive, specifying the Quantities annually entered for Home Consumption, the Rates of Duty, and the Total Annual Produce of the Duty: —Also, a similar Return for Cocoa Husks and Shells.

Years.	Cocoa. Quantities imported into the United Kingdom.	Quantities retained for Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty per Lb. Of British Possessions.	Rates of Duty per Lb. Foreign.
	Lbs.	*Lbs.*	£		
1832	2,971,019	1,150,193	14,352	2*d.*	6*d.* (from 5d August.)
1833	4,599,565	1,268,287	9,979	—	—
1834	2,984,894	1,173,795	9,799	—	—
1835	2,118,756	1,084,170	9,034	—	—
1836	2,788,224	1,130,168	9,434	—	—
1837	2,853,000	1,416,613	11,801	—	—
1838	4,096,409	1,601,787	13,386	—	—
1839	1,654,666	1,606,800	13,405	—	—
1840	3,499,746	2,041,678	17,515	$2\frac{1}{10}d.$	$6\frac{9}{10}d.$ (from 15th May)
1841	5,014,861	1,928,847	16,891	—	—
1842	3,172,255	2,246,473	13,362	$1\frac{1}{20}d.$	$4\frac{1}{5}d.$ (from 9th July.)

Years.	Cocoa Husks and Shells. Quantities imported into the United Kingdom.	Quantities retained for Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty per Lb. Of British Possessions.	Rates of Duty per Lb. Foreign.
	Lbs.	*Lbs.*	£		
1832	349,504	392,878	2,374	1*d.* (from 3d August.)	
1833	515,688	449,168	1,872	—	
1834	404,039	345,786	1,849	—	
1835	273,401	368,222	1,533	—	
1836	425,648	464,144	1,587	—	
1837	511,757	481,170	1,995	—	
1838	384,842	21,548	1,759	—	
1839	609,599	513,157	2,147	—	
1840	692,091	753,580	3,229	$1\frac{1}{20}d.$ (from 15 May)	
1841	598,172	566,278	2,508	—	
1842	839,770	640,057	2,800	Of & from British Possessions. $0\frac{21}{40}d.$	Of & from Foreign Countries. $1\frac{1}{20}d.$ (from 9th July.)

Sources of Supply.— Trinidad furnishes by far the largest proportion of the cocoa brought from the British West Indies, the imports from that island, in 1841, having amounted to 2,493,302 lbs., while the imports from all the other islands amounted to only 426,996 lbs.! Of 5,014,681 lbs. cocoa imported in 1841, 2,920,298 lbs. were brought from the West India colonies, 1,802,547 lbs. from Columbia, and 269,794 from Brazil.

British plantation cocoa was worth in bond in the London market, in June 1843, from 34*s.* to 40*s.* a cwt.

COCO, COKER, OR, more properly, COCOA NUTS (Ger. *Kokonüsse*; Du. *Kokosnooten*; Fr. and Sp. *Cocos*; It. *Cocchi*; Rus. *Kokos*; Sans. *Narikéla*), the fruit of a species of palm tree (*Cocos nucifera* Lin.). This tree is common almost every where within the tropics, and is one of the most valuable in the world. It grows to the height of from 50 to 90 feet; it has no branches, but the leaves are from 12 to 14 feet in length, with a very strong middle rib. The fruit is nearly as large as a man's head; the external rind is thin, tough, and of a brownish red colour; beneath this there is a quantity of very tough fibrous matter, which is used in many countries in the manufacture of cordage, and coarse sail-cloth — (see COIR); within this fibrous coating is the shell of the nut, which is nearly globular, very hard, susceptible of a high polish, and used for many domestic purposes; the kernel is white, in taste and firmness resembling that of a hazel nut; it is hollow in the interior, the hollow being filled with a milky fluid. While the nut is green, the whole hollow of the shell is filled with fluid, which is refreshing, agreeable, and pleasant to the taste. The solid part of the ripe kernel is extremely nutritious, but rather indigestible. The kernels yield by expression a great deal of oil, which, when recent, is equal to that of sweet almonds; but it soon becomes rancid, and is then employed by painters. A tree generally yields about 100 nuts, in clusters near

the top of about a dozen each. The wood of the tree is made into boats, rafters, the frames of houses, and gutters to convey water. The leaves are used for thatching buildings; and are wrought into mats, baskets, and many other things, for which osiers are employed in Europe; so that every part of it is applied to some useful purpose.

If the body of the tree be bored, there exudes from the wound a white liquor, called palm wine or toddy. It is very sweet when fresh; kept a few hours, it becomes more poignant and agreeable; but next day it begins to grow sour, and in the space of 24 hours is changed into vinegar. When distilled, it produces the best species of Indian arrack; it also yields a great deal of sugar. Toddy is obtained from several species of palms, but that of the *Cocos nucifera* is the best. — (See *Ainslie's Materia Indica; Rees's Cyclopædia, &c.*)

An improvement has recently been effected in the preparation of cocoa oil, which promises to be of much importance in the arts, by making it available in the manufacture of candles and soap, and for various purposes to which it was not previously applicable.

The palm oil met with in the market is not obtained from the *Cocos nucifera*, but from another species of palm. It is chiefly imported from the coast of Guinea. — (See PALM OIL.)

Cocoa nuts are produced in immense quantities in Ceylon, forming, with their products, — oil, arrack, and coir, — the principal articles of export from that island. They are also very abundant in the Maldive Islands, Siam, and on several places of the coast of Brazil. Cocoa oil is in very extensive use all over India, and large quantities are manufactured in the lower provinces of Bengal. This latter is said to be superior to that imported from Ceylon.

The duty on cocoa nuts, which is imposed by tale, was judiciously reduced in 1832, from 5*s.* per 120 on those fron a British possession to 1*s.* per 1,200; those from a foreign country pay 20 per cent. *ad valorem*.

COD (Ger. *Kabljau, Bakalau;* Du. *Kabeljaauw, Baukaelja;* Da. *Kabliau, Skreitorsk, Bakelau;* Sw. *Kabeljo, Bakelau;* Fr. *Morue, Cabillaud;* It. *Baccalà, Baccalare;* Sp. *Bacalao;* Port. *Bacalhão;* Lat. *Gadus*), a species of fish, too well known to require any description. "It is amazingly prolific. Leewenhoek counted 9,384,000 eggs in a cod-fish of a middling size; a number that will baffle all the efforts of man to exterminate. In our seas they begin to spawn in January, and deposit their eggs in rough ground, among rocks. Some continue in roe till the beginning of April.

"The cod is only found in the northern parts of the world; it is an ocean fish, and never met with in the Mediterranean. The great rendezvous of the cod-fish is on the banks of Newfoundland, and the other sand banks that lie off the coasts of Cape Breton, Nova Scotia, and New England. They prefer those situations, by reason of the quantity of worms produced in these sandy bottoms, which tempt them to resort there for food. But another cause of the particular attachment the fish have to these spots is their vicinity to the polar seas, where they return to spawn: there they deposit their roes in full security; but want of food forces them, as soon as the more southern seas are open, to repair thither for subsistence. Few are taken to the north of Iceland, but they abound on its south and west coasts. They are also found to swarm on the coasts of Norway, in the Baltic, and off the Orkney and Western Isles; after which their numbers decrease in proportion as they advance towards the south, when they seem quite to cease before they reach the mouth of the Straits of Gibraltar.

"Before the discovery of Newfoundland, the greater fisheries of cod were on the seas of Iceland, and off our Western Isles, which were the grand resort of ships from all the commercial nations; but it seems that the greatest plenty was met with near Iceland. The English resorted thither before the year 1415; for we find that Henry V. was disposed to give satisfaction to the King of Denmark for certain irregularities committed by his subjects on those seas. In the reign of Edward IV. the English were excluded from the fishery, by treaty. In later times, we find Queen Elizabeth condescending to ask permission to fish in those seas, from Christian IV. of Denmark. In the reign of her successor, however, no fewer than 150 English ships were employed in the Iceland fishery; which indulgence might arise from the marriage of James with a princess of Denmark." — (*Pennant's British Zoology.*)

Cod is prepared in two different ways; that is, it is either gutted, salted, and then barrelled — in which state it is denominated green or pickled cod, — or it is dried and cured — in which state it is called dried cod. Ready access to the shore is indispensable to the prosecution of the latter species of fishery.

Cod Fishery, British. — This fishery, including under the term not only that of common cod, but of haddock, ling, hake, torsk, &c., is of very considerable value and importance. It consists of two grand departments, which may be respectively termed the *home*, and the *distant* or *colonial* fishery. The first is carried on in a great variety of places contiguous to the shores of the British islands; but the most productive and valuable of the adjacent fisheries are those in the neighbourhood of the Shetland and Orkney islands, and off the shores of Essex, Suffolk, Norfolk, Lincoln, &c. Formerly the principal part of the cod brought to London was taken round the edges of the Dogger-bank, or rather in the hollows between it and the Well-bank; and the finest is still brought from thence. But within the last few years the London market has been in great part supplied with cod taken between Yarmouth and the Nore; and in conse-

quence of its being procured so much nearer home, the average price of cod has fallen from 30 to 50 per cent. below what it was from 1815 to 1820.—(*Report on the Channel Fisheries*, p. 85.) This change has occasioned a great increase in the number of fishing smacks belonging to Barking, Gravesend, and other ports on the Thames; while those belonging to Harwich and the more distant ports have been materially reduced. The cod taken by the fishermen of Shetland and the Western Isles is mostly cured dried, but it is partially, also, cured green or in pickle; and it is sometimes, though much seldomer now than formerly, conveyed alive in welled vessels to London. The haddocks taken on the Aberdeenshire coast, and cured at the village of Finnan, near Aberdeen, are held in the highest estimation. The haddocks taken in Dublin bay are the largest of any taken on the British coasts.

There are no means by which to form any estimate either of the number of fishing vessels, or of the quantity or value of the fish annually taken in the home cod fishery; by far the larger portion being landed without account or notice of any kind, and disposed of fresh. The following account contains such particulars only as have been brought under the notice of the commissioners for the improvement of the British fisheries.

Account of the Total Quantity of Cod, Ling, or Hake, cured, punched, or branded, and exported, since 1826, in so far as the same has been brought under the Cognizance of the Officers of the Fishery Board.

Periods.	Total Quantity of Cod, Ling, or Hake cured.			Total Quantity of Cod, Ling, or Hake punched or branded.		Total Quantity of Cod, Ling, or Hake exported.	
	Cured dried.	Cured in Pickle.		Cured dried.	Cured in Pickle.	Cured dried.	Cured in Pickle.
Year ended 5th April,	*Cwt.*	*Cwt.*	*Barrels.*	*Cwt.*	*Barrels.*	*Cwt. qrs. lbs.*	*Barrels.*
1826 - - -	69,136¼	3,634¾	5,621	66,515¾	5,337	7,281 1 14	—
1827 - - -	95,161¼	9,273	9,025	82,185¾	8,008½	14,051 2 27	—
1828 - - -	82,515¼	6,726½	6,142½	74,103¾	6,609½	13,208 2 0	—
1829 - - -	81,321¾	5,786	6,819	73,500¼	6,204	20,587 3 4	—
1830 - - -	101,014	5,652½	8,836½	92,314¼	8,464	16,369 3 15	—
1831 - - -	37,617	- -	2,950¼	31,337¾	2,4594	11,920 1 1	—
1832 - - -	50,293	- -	3,779¾	13,879¾	3,230	20,168 3 16	47
1833 - - -	58,461¼	- -	6,167¾	13,581¼	4,393¾	14,754 1 26	67
1834 - - -	52,710¾	- -	5,522½	14,255¼	3,829	16,298 3 0	24
1835 - - -	44,152	- -	3,767	9,492	2,235	10,632 0 0	—
1836 - - -	38,040	- -	6,276	6,766	3,018	10,992 0 0	—
1837 - - -	66,976	- -	7,273½	9,589	3,206	10,195 0 0	1½
1838 - - -	84,996¾	- -	10,303	9,259¼	4,373	22,166 2 12	36
1839 - - -	85,279¾	- -	10,051¼	23,936¾	5,093	26,701 3 0	150½
1840 - - -	93,560¾	- -	6,053	21,695¼	3,205	29,656 1 0	24
1841 - - -	91,494¾	- -	9,480	21,029¾	3,891	30,550 1 0	44
1842 - - -	76,849	- -	7,038½	13,283¾	2,164	25,293 1 0	—

N. B.— The books of this department do not exhibit the total quantity of cod, ling, or hake cured till the year commencing 5th of April, 1825. The bounty from the commencement of this abstract to the 5th of April, 1830, was near 4*s.* per cwt. for fish cured dried, and 2*s.* 6*d.* per barrel for fish cured in pickle, taken by the crews of vessels or boats not on the tonnage bounty; while the bounty vessels licensed for cod, ling, or hake fishery, on the tonnage bounty, was 50*s.* per ton for tonnage and cargo to the 5th of July, 1826; 45*s.* from thence to the 5th of July, 1827; 40*s.* to the 5th of July, 1828; and 35*s.* to the 5th of April, 1830; when the bounties ceased altogether, and have not since been renewed.

Distant Cod Fishery.—The great bank of Newfoundland, discovered by John or Sebastian Cabot in 1497, was long, and perhaps still is, the principal seat of the distant cod fishery. The extraordinary abundance of cod-fish on its banks having been speedily ascertained, the French, Portuguese, and Spaniards soon after engaged in the fishery. The English were later in coming into the field. In 1578, France had on the banks of Newfoundland 150 vessels, Spain 120 or 130, Portugal 50, and England from 30 to 50. During the first half of last century, the fishery was principally carried on by the English, including the Anglo-Americans, and the French; but the capture of Cape Breton, and of their other possessions in America, gave a severe blow to the fishery of the latter. The American war divided the British fishery; that portion of it which had previously been carried on from New England being thereafter merged in that of the United States. Still, however, we contrived to preserve the largest share. At an average of the 3 years ending with 1789, we are said to have had 402 ships, 1,911 boats, and 16,856 men, engaged in the American fisheries. During last war, the French being excluded from the fisheries, those of England attained to an extraordinary degree of prosperity; the total value of the produce of the Newfoundland fishery in 1814 having exceeded 2,800,000*l.* But since the peace, the British fishery on the Newfoundland banks has rapidly declined; and can hardly, indeed, be said, at this moment, to exist. It is now carried on almost entirely by the French and the Americans; the facilities enjoyed by the latter for its prosecution being greater than those of any other people, and the former being tempted to engage in it by the extraordinary encouragements afforded by government. At present, the British fishery carried on by the inhabitants of Newfoundland is confined entirely to the shore or boat fishery. But this, though probably not so good a nursery of sailors as the bank fishery, is admitted to be "the most productive of merchantable fish and oil."—(*M'Gregor's British America*, 2d ed. vol. i.

p. 206.) The average annual produce of the fisheries of all sorts, including seal, salmon, &c., exported from Newfoundland, during the 3 years ended with 1832, is stated by Mr. M'Gregor to have amounted to 516,417*l.* — (Vol. i. p. 161.) A considerable fishery is also carried on from the ports and harbours of Nova Scotia and Cape Breton, New Brunswick, &c. But next to that of Newfoundland, the principal British fishery is carried on along the coast of Labrador. We borrow from the valuable work now referred to, the following statements with respect to it: —

"During the fishing season, from 280 to 300 schooners proceed from Newfoundland to the different fishing stations on the coast of Labrador, where about 20,000 British subjects are employed for the season. About one third of the schooners make two voyages, loaded with dry fish, back to Newfoundland during the summer, and several merchant vessels proceed from Labrador with their cargoes direct to Europe, leaving, generally, full cargoes for the fishing vessels to carry to Newfoundland. A considerable part of the fish of the second voyage is in a green or pickled state, and dried afterwards at Newfoundland. Eight or nine schooners from Quebec frequent the coast, having on board about 80 seamen and 100 fishermen. Some of the fish caught by them is sent to Europe, and the rest to Quebec; besides which, they carry annually about 6,000*l.* worth of furs, oil, and salmon to Canada.

"From Nova Scotia and New Brunswick, but chiefly from the former, 100 to 120 vessels resort to Labrador. The burden of these vessels may amount to 6,000 or 7,000 tons, carrying about 1,200 seamen and fishermen. They generally carry the principal part of their cargoes home in a green state.

"One third of the resident inhabitants are English, Irish, or Jersey servants, left in charge of the property in the fishing rooms, and who also employ themselves, in the spring and fall, catching seals in nets. The other two thirds live constantly at Labrador, as furriers and seal-catchers on their own account, but chiefly in the former capacity, during winter, and all are engaged in the fisheries during summer. Half of these people are Jerseymen and Canadians, most of whom have families.

"From 16,000 to 18,000 seals are taken at Labrador in the beginning of winter and in spring. They are very large; and the Canadians, and other winter residents, are said to feast and fatten on their flesh. About 4,000 of these seals are killed by the Esquimaux. The whole number caught produce about 350 tuns of oil, value about 8,000*l.*"— (Vol. i. p. 185.)

The total produce of the Labrador fishery in 1832 was estimated by Mr. M'Gregor at 302,050*l.*; and he farther estimated the total produce of the British fisheries in the various seas and rivers of America, including seal oil and skins, at an average of the 5 years ending with 1832, at 857,210*l.* a year. — (Vol. ii. p. 596.) We subjoin

An Account of the Quantities and Value of each kind of Fish taken in the Newfoundland Fishery (including that carried on at Labrador by Boats from Newfoundland) in 1837, 1838, and 1839.

Description.	1837.		1838.		1839.	
	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
Cod-fish, dried - - - quin.	848,096	£528,986	724,515	£484,649	865,377	£508,157
Core fish - - - —	3,431	2,210	4,408	2,011	1,223	507
Salmon - - - tierc.	2,795	9,188	4,408	13,310	2,922	11,692
Herrings - - - barls.	4,158	2,466	15,726	10,728	20,806	13,840
Mackerel - value				4		
Caplin, cod sounds, and tongues pkgs.	1,961	726	948	281	925	210
Seal and cod oil, and blubber - gall.	2,105,738	280,041	2,173,674	249,428	2,244,262	245,269
Seal skins - - - no.	255,954	34,232	375,361	30,474	437,501	46,336
Total value	- -	£857,849	- -	£790,885	- -	£826,011

Note. — The number of ships employed in the fisheries cannot be ascertained; the number of boats was 6,159.

About eight tenths of the dried fish exported from Newfoundland by British subjects are sent to Spain, Portugal, Italy, and other Continental nations; the rest goes to the West Indies and to Great Britain.

The act 5 Geo. 4. c. 51. contains several regulations with respect to the Newfoundland fisheries. Aliens are prohibited from fishing on the coasts, or in the bays or rivers of Newfoundland, excepting, however, the rights and privileges granted by treaty to foreign states at amity with his Majesty.

All British subjects may take, cure, and dry fish, occupy vacant places, cut down trees for building, and do other things useful for the trade. — § 3.

Certificates shall be granted to vessels clearing out for the fishery; and on arrival at Newfoundland a report shall be made of such certificate, and registered; and on leaving the fishery the usual clearance shall be obtained. Vessels having on board any goods other than fish, &c. to forfeit the fishing certificate. — § 4.

Persons throwing out ballast, &c. to the prejudice of the harbours in Newfoundland, shall be subject to a penalty. — § 5.

A contract in writing, specifying wages, and how to be paid, must be entered into with seamen and fishermen. — § 7.

A fisherman is prohibited receiving more than three fourths of his wages during service; but the balance due to him is to be paid immediately upon the expiration of the covenanted time of service. No fisherman to be turned off, except for wilful neglect of duty, or other sufficient cause, under a penalty, for each offence, of not less than 5*l.* nor more than 50*l.*

In order to fulfil the conditions in any treaty with a foreign state, his Majesty may empower the governor of Newfoundland to remove any works erected by British subjects for the purpose of carrying on the fishery between Cape St. John and Cape Ray, and to compel them to depart to another place.— § 12.

Every person so refusing to depart shall forfeit 50*l.* — § 13.

The governor is empowered to sell or lease places within the island called Ship-rooms. — § 14.

For the regulations, &c. as to the importation of fish into Great Britain, see FISH.

It is doubtful whether the distant cod fishery may not have passed its zenith. Spain, Italy, and other Catholic countries, have always been the great markets for dried fish: but the observance of Lent is every day becoming less strict; and the demand for dried fish will, it is most likely, sustain a corresponding decline. The relaxed observance of Lent in the Netherlands and elsewhere has done more than any thing else to injure the herring fishery of Holland.

Cod Fishery, American. — The Americans have at all times prosecuted the cod fishery with great vigour and success. Their fishermen are remarkable for their activity and

enterprise, sobriety, and frugality; and their proximity to the fishing grounds, and the other facilities they possess for carrying on the fishery, give them advantages with which it is very difficult to contend. In 1795, the Americans employed in the cod fishery about 31,000 tons of shipping; in 1807, they are said to have employed 70,306 tons: but it subsequently declined for several years, and was almost entirely suspended during the late war. According to the official returns (laid before Congress the 21st of July, 1842), the Americans had in the year ending the 30th of September, 1841, 66,556 tons shipping engaged in the cod fishery. During the same year they exported 252,199 quintals of dried, and 36,508 barrels of pickled cod; their aggregate value being 751,783 dollars.

"The Americans follow two or more modes of fitting out for the fisheries. The first is accomplished by 6 or 7 farmers, or their sons, building a schooner during winter, which they man themselves (as all the Americans on the sea coast are more or less seamen as well as farmers); and after fitting the vessel with necessary stores, they proceed to the banks, Gulf of St. Lawrence, or Labrador; and, loading their vessel with fish, make a voyage between spring and harvest. The proceeds they divide, after paying any balance they may owe for outfit. They remain at home to assist in gathering their crops, and proceed again for another cargo, which is salted down, and not afterwards dried: this is termed mud-fish, and kept for home consumption. The other plan is, when a merchant, or any other, owning a vessel, lets her to 10 or 15 men on shares. He finds the vessel and nets. The men pay for all the provisions, hooks and lines, and for the salt necessary to cure their proportion of the fish. One of the number is acknowledged master; but he has to catch fish as well as the others, and receives only about 20*s.* per month for navigating the vessel: the crew have five eighths of the fish caught, and the owners three eighths of the whole.

"The first spring voyage is made to the banks; the second either to the banks, Gulf of St. Lawrence, or the coast of Labrador; the third or fall voyage, is again to the banks; and a fourth, or second fall voyage, is also made, sometimes, to the banks." —(*M'Gregor*, vol. i. p. 220.)

It is stipulated in the first article of a convention between Great Britain and the United States, signed at London, 20th of October, 1818, that the subjects of the United States shall have liberty to take all sorts of fish "on that part of the coast of Newfoundland from Cape Ray to the Rameau Islands, on the western and northern coasts of Newfoundland from Cape Ray to the Quirpon Islands, on the Magdalen Islands, and also on the coasts, bays, harbours, and creeks, from Mount Joly, on the southern coast of Labrador, to and through the Straits of Belleisle, and thence northwardly indefinitely along the coast, without prejudice, however, to any of the exclusive rights of the Hudson's Bay Company; and that the American fishermen shall also have liberty, for ever, to dry and cure fish in any of the unsettled bays, harbours, and creeks of the southern parts of the coast of Newfoundland here above described, and of the coast of Labrador; but so soon as the same, or any portion thereof, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish without previous agreement for such purpose with the inhabitants, proprietors, or possessors of the ground. And the United States hereby renounce for ever any liberty heretofore enjoyed or claimed by the inhabitants thereof, to take, dry, or cure fish on or within 3 marine miles of any of the coasts, bays, creeks, or harbours of his Britannic Majesty's dominions in America not included within the above mentioned limits." The American fishermen are, however, admitted into all bays, &c. for the purpose of shelter, of repairing damages, of purchasing wood, and of obtaining water, and for no other purpose whatever; and when there, they are to be placed under such restrictions as may be necessary to prevent their abusing the privileges hereby reserved to them.

Cod Fishery, French. — France has always enjoyed a considerable share of the cod fishery. The following Table shows the extent so which she has carried it since the peace.

Account of the Number of Ships, with their Tonnage, Crews, and Cargoes, that have entered the different Ports of France from the Cod Fishery during the under-mentioned Years.

Years.	Shipping.			Imports.		
	Ships.	Tons.	Men.	Codfish, green.	Codfish, dry.	Oil.
				Quint.	*Quint.*	*Quint.*
1825	336	35,172	6,311	72,889	158,237	12,943
1830	377	45,036	8,174	104,003	136,457	11,560
1835	463	55,881	11,225	161,657	87,742	12,870
1840	458	54,583	9,897	336,740		17,962
1841	449	54,064	9,239			

The quantities of oil are exclusive of *draches* (huiles non epurés); there are also sounds, &c. Marseilles, Granville, Dunkirk, Bordeaux, La Rochelle, and Nantes, are the principal ports whence ships are fitted out for the fishery.

But notwithstanding the apparent prosperity of this branch of industry, it may be doubted whether it be really so beneficial to France as would at first sight appear. It depends more upon artificial regulations than upon any thing else Foreign cod is excluded from the French markets by the oppressive duty with which it is loaded; and the comparatively great demand for dried fish in Catholic countries renders this a very great boon to the French fishermen. But it is admitted that this would not be enough to sustain the fishery; and high bounties are paid to those engaged in it. These, however, have been reduced of late years; and they will probably, in no long time, undergo still further alterations.

St. Pierre and Miquelon, small islands on the coast of Newfoundland, belong to the French. Their right of fishing upon the shores of that island, and upon the great bank, was replaced, in 1814, upon the footing on which it stood in 1792. This concession has been much objected to by Mr. M'Gregor and others: we believe, however, that they have materially over-rated its influence.

COFFEE (Ger. *Koffe, Koffebohnen*; Du. *Koffy, Koffiboonen*; Da. *Kaffe, Kaffebönner*; Sw. *Koffe*; Fr. It. and Port. *Caffé*; Sp. *Café*; Rus. *Kofé*; Pol. *Kawa*; Lat. *Coffea, Caffea*; Arab. *Bun*; Malay, *Kāwa*; Pers. *Tochem, Kéwéh*; Turk. *Chaube*), the berries of the coffee plant (*Coffea Arabica* Lin.). They are generally of an oval form, smaller than a horse-bean, and of a tough, close, and hard texture; they are prominent on the one side and flattened on the other, having a deeply marked furrow running lengthwise along the flattened side; they are moderately heavy, of a greenish colour, and a somewhat bitterish taste.

Historical Notice of Coffee. — The coffee plant is a native of that part of Arabia called *Yemen — terris faba missa Sabæis*; but it is now very extensively cultivated in the southern extremity of India, in Java, the West Indies, Brazil, &c. We are ignorant of the precise period when it began to be roasted, and the decoction used as a drink, though the discovery is not supposed to date further back than the early part of the fifteenth century. No mention of it is made by any ancient writer; nor by any of the moderns previously to the sixteenth century. Leonhart Rauwolf, a German physician, is believed to be the first European who has taken any notice of coffee. His work was published in 1573, and his account is, in some respects, inaccurate. Coffee was, however, very accurately described by Prosper Albinus, who had been in Egypt as physician to the Venetian consul, in his works *de Plantis Egypti*, and *de Medicina Egyptiorum*, published in 1591 and 1592.

A public coffee-house was opened for the first time, in London, in 1652. A Turkey merchant, of the name of Edwards, having brought along with him from the Levant some bags of coffee, and a Greek servant accustomed to make it, his house was thronged with visitors to see and taste this new sort of liquor; and, wishing to gratify his friends without putting himself to inconvenience, he allowed his servant to make and sell coffee publicly. In consequence of this permission, the latter opened a coffee-house in Newman's Court, Cornhill, on the spot where the Virginia Coffee-house now stands. Garraway's was the first coffee-house opened after the great fire in 1666. — (See the learned and elaborate treatise of Moseley on coffee, 5th ed. p. 15.) *

M. de la Roque mentions that the use of coffee was introduced into France between 1640 and 1660; and he further states, that the first coffee-house for the sale of coffee in France was opened at Marseilles, in 1671. — (*Voyage de la Syrie*, tom. ii. pp. 310—319.) It was hardly, however, known, except to a few travellers who had visited the East, till 1669, when it was introduced to the best society in Paris by Solyman Aga, ambassador from the Grand Seignior to Louis XIV. It immediately became fashionable; and the taste for it having been quickly diffused, a coffee house was opened for its sale in 1672, which, in no long time, had several competitors. — (See the excellent work of Le Grand D'Aussy, *Vie Privée des François*, iii. 127. ed. 1815.)

Some time between 1680 and 1690, the Dutch planted coffee beans they had procured from Mocha, in the vicinity of Batavia. In 1690, they sent a plant to Europe; and it was from berries obtained from this plant that the first coffee plantations in the West Indies and Surinam were derived.

Progressive Consumption of Coffee in Great Britain. Influence of the Duties. — In 1660, a duty of 4*d.* a gallon was laid on all coffee made and sold. Previously to 1732, the duty on coffee amounted to 2*s.* a pound; but an act was then passed, in compliance with the solicitations of the West India planters, reducing the duty to 1*s.* 6*d.* a pound; at which it stood for many years, producing, at an average, about 10,000*l.* a year. In consequence, however, of the prevalence of smuggling, caused by the too great magnitude of the duty, the revenue declined, in 1783, to 2,869*l.* 10*s.* 10½*d.* And it having been found impossible otherwise to check the practice of clandestine importation, the duty was reduced, in 1784, to 6*d.* The consequences of this wise and salutary measure were most beneficial. Instead of being reduced, the revenue was immediately raised to near *three* times its previous amount, or to 7,200*l.* 15*s.* 9*d.*, showing that the consumption of legally imported coffee must have increased in about *a ninefold proportion!* — a striking and conclusive proof, as Mr. Bryan Edwards has observed, of the effect of heavy taxation in defeating its own object. — (*Hist. of the West Indies*, vol. ii. p. 340. 8vo. ed.)

The history of the coffee trade abounds with similar and even more striking examples of the superior productiveness of low duties. In 1807, the duty was 1*s.* 8*d.* a pound; and the quantity entered for home consumption amounted to 1,170,164 lbs., yielding a revenue of 161,245*l.* 11*s.* 4*d.* In 1808, the duty was reduced from 1*s.* 8*d.* to 7*d.*;

* Charles II. attempted, by a proclamation issued in 1675, to suppress coffee-houses, on the ground of their being resorted to by disaffected persons, who "devised and spread abroad divers false, malicious, and scandalous reports, to the defamation of his Majesty's government, and to the disturbance of the peace and quiet of the nation." The opinion of the Judges having been taken as to the legality of the proceeding, they resolved, "That retailing coffee might be an innocent trade; but as it was used to nourish sedition, spread lies, and scandalise *great men*, it might also be a common nuisance!"

and in 1809, no fewer than 9,251,847 lbs. were entered for home consumption, yielding, notwithstanding the reduction of duty, a revenue of 245,856*l.* 8*s.* 4*d.* The duty having been raised, in 1819, from 7*d.* to 1*s.* a pound, the quantity entered for home consumption, in 1824, was, 7,993,041 lbs., yielding a revenue of 407,544*l.* 4*s.* 3*d.* In 1824, however, the duty being again reduced from 1*s.* to 6*d.*, the quantity entered for home consumption, in 1825, was 10,766,112 lbs., and in 1831 it had increased to 22,740,627 lbs., yielding a nett revenue of 583,751*l.*

The rapid increase in the consumption from 1825 to 1832 must not, however, be wholly ascribed to the reduction of the duty. This, no doubt, had the greatest influence; but a good deal is also owing to the low price of coffee from 1824 to 1830; and also to the great reduction during the same period in the price of low brown sugar (fully 1½*d* per pound), a cheap and abundant supply of which is so indispensable to the extensive use of coffee.

These statements, which are principally deduced from the accompanying account, No. I., refer to the consumption of Great Britain only; but the account No. II. includes the United Kingdom, and is brought down to 1842. The most remarkable features in this account are the reduction of the duty on coffee from the East Indies and Ceylon to the same level as that on coffee from the West Indies, and the farther reduction of the duty on coffee from British possessions in 1842 to 4½*d.* per lb. The equalisation of the duty on East and West India coffee had become indispensable after the rapid decline in the supplies from the West Indies consequent to the emancipation of the slaves; for, as foreign coffee is burdened with a high discriminating duty, the price of British coffee must otherwise have risen to such a height as materially to interfere with the consumption. The latter, indeed, has not increased since 1832, in the ratio which might have been expected from the increasing wealth and population of the country, and has, in fact, continued stationary during the last three years (1840, 1841, and 1842). This result is no doubt in part to be ascribed to the late comparatively depressed situation of the manufacturing classes; but we believe that it is mainly owing to the admixture of chiccory, and other matters, with coffee. We have already seen (art. Chiccory) the extent to which chiccory is produced free of duty in this country, and the rapid increase of its culture; and as it is wholly used as a substitute for coffee, or rather as a means for its adulteration, we need not be surprised at the stationary consumption of the latter, even with low prices and a reduced duty. It is, indeed, indispensable, if we would do justice to the coffee planters and protect the revenue, either to lay the same duty on chiccory that is laid on coffee, or, if that be impracticable, to grub up the chiccory plantations, on making compensation to their owners. But exclusive of chiccory, it is affirmed, and we believe truly, that other and more objectionable substances have latterly been extensively employed in the adulteration of coffee. Something, perhaps, may be done to obviate such frauds by increased vigilance on the part of the police and the revenue officers; but the only effectual remedy is to buy coffee before it is ground; and as a mill for grinding may be bought for a small sum, and coffee is sold ready "roasted," there is, in this way, no great difficulty in obviating adulteration. Those who use ground coffee will also be secure against fraud, if they resort only to shops of the highest character.

Sound policy would seem to suggest that the duty on foreign coffee should be materially reduced; for though it be absolutely less now than formerly, it amounts to 8¾*d.* per pound, being double that on coffee from a British possession. But its reduction to about 6*d.* per pound, at the same time that it would allow Brazil and other foreign coffee to be freely entered for consumption in the event of the supply of British colonial coffee becoming deficient, or rising in price, would leave a protection of no less than 50 per cent. in favour of the latter; which surely is as much as can be conceded with any due regard to the interests of the consumer.

The introduction of tea and coffee, it has been well remarked, "has led to the most wonderful change that ever took place in the diet of modern civilised nations,—a change highly important both in a moral and physical point of view. These beverages have the admirable advantage of affording stimulus without producing intoxication, or any of its evil consequences. Lovers of tea or coffee are, in fact, rarely drinkers; and hence the use of these beverages has benefited both manners and morals."—(*Scotsman*, 17th of October, 1827.) So early as 1710, the famous Latin poet Vanierius described the preparation and eulogised the virtues of coffee.

> 'illo medicamine vates
> Ingenium emendet, lætusque infecta resumat
> Carmina; nec fontes alios, quibus ora poëtæ
> Proluerint, fluxisse solo male credat Achivo."
> Lib. xi. p. 272. ed. 1774.

I.—An Account of the Quantity of Coffee retained for Home Consumption in Great Britain, the Rates of Duty thereon, and the Produce of the Duties, in each Year from 1789 to 1832, both inclusive.

Years.	Quantities retained for Home Consumption.	Rates of Duty on British Plantation.	Rates of Duty on East India.		Nett Revenue of Customs and Excise.
	Lbs.	Per lb. *s.* *d.*	Per lb. *s.* *d.*	Per cent. ad valorem. £ *s.* *d.*	£ *s.* *d.*
1789	930,141	0 10⅝	2 0⅛	Nil.	46,286 17 11
1790	973,110	—	—	—	50,799 7 4
1791	1,047,276	—	—	—	57,659 5 11
1792	946,666	—	—	—	48,825 6 2
1793	1,070,438	—	—	—	67,357 11 9
1794	969,512	—	—	—	74,430 4 6
1795	1,054,588	1 5⅛	2 6⅝	—	65,788 3 7
1796	396,953	—	—	—	30,048 6 11
1797	637,001	1 5⅛	3 7	—	92,469 3 11
1798	697,487	1 5⅞	2 7⅝	—	78,966 6 9
1799	682,432	1 5⅞	2 7⅝	2 0 0	74,001 2 2
1800	826,590	—	—	—	142,867 11 5
1801	750,861	1 5⅛	2 7	2 0 0	106,076 2 7
1802	829,435	1 6	2 7⅛	2 0 0	72,183 2 3
1803	905,532	1 6⅝	1 11⅝	2 16 3	72,093 15 8
1804	1,061,327	1 7⅛	2 0⅛	3 2 6	151,388 0 11
1805	1,201,736	1 7⅛	2 0⅝	3 3 9	120,172 18 7
1806	1,157,014	1 7⅞	2 0⅝	3 7 11	152,759 6 9
1807	1,170,164	—	—	—	161,245 11 4
1808	1,069,691	0 7	0 10	3 7 11	229,738 16 8
1809	9,251,837	0 7	0 10	3 6 8	245,886 8 4
1810	5,308,096	—	—	—	175,567 1 4
1811	6,390,122	—	—	—	212,890 12 10
1812	8,118,734	—	—	—	255,184 7 1
1813	8,788,601	0 7⅜	0 10⅜	3 19 2	Custom records destroyed.
1814	6,324,267	0 7⅜	0 11⅓	Nil.	213,513 18 4
1815	6,117,311	—	—	—	258,762 18 3
1816	7,557,471	—	—	—	290,834 0 11
1817	8,688,726	—	—	—	298,540 5 1
1818	7,967,857	—	—	—	250,106 4 10
1819	7,429,352	1 0	1 6	—	292,154 8 10
1820	6,869,286	—	—	—	340,223 6 7
1821	7,327,283	—	—	—	371,252 5 6
1822	7,404,204	—	—	—	374,596 19 7
1823	8,209,245	—	—	—	416,324 3 9
1824	7,993,040	—	—	—	407,544 4 3
1825	10,766,112	0 6	0 9	—	307,204 14 2
1826	12,724,139	—	—	—	324,667 11 1
1827	14,974,378	—	—	—	384,994 13 2
1828	16,522,423	—	—	—	425,389 3 7
1829	18,906,373	—	—	—	484,975 10 8
1830	21,840,520	—	—	—	558,544 3 10
1831	21,747,813	—	—	—	559,431 19 6
1832	22,053,326	—	—	—	575,264 18 8

II. — An Account of the Quantity, in Pounds Weight, of Coffee imported into the United Kingdom, the Quantity retained for Consumption, the Produce of the Duties, and the Rates of Duty on the same, in each Year from 1820.

Years.	Quantities imported into the United Kingdom.	Quantities retained for Home Consumption in the U. Kingdom.	Amount of Duty received thereon.	Rates of Duty per Pound.	£ *s.* *d.*
	Lbs.	*Lbs.*	£		
1820	48,841,626	7,103,409	342,828	Of any British possession in America or Africa	0 1 0
				From any place within the limits of the East India Company's charter	0 1 6
				All other coffee	0 2 6
1821	45,237,869	7,593,001	384,283		
1822	44,003,124	7,669,351	387,342		
1823	45,053,373	8,454,920	428,613		
1824	50,674,249	8,262,943	420,988		
1825	52,597,518	11,082,970	315,804	Of any British possession in America	0 0 6
				Of any British possession within the limits of E. I. Company's charter	0 0 9
				Of any other place	0 1 3
				(From 5th April.)	
1826	42,017,103	13,199,235	336,570	Of any British possession in America	0 0 6
				Of Sierra Leone	0 0 9
				Imported from any British possession within the limits of the East India Company's charter	0 0 9
				Imported from any other place within those limits	0 1 0
				Otherwise imported	0 1 3
				(From 5th July.)	
1827	47,938,047	15,560,117	399,690		
1828	41,069,731	17,114,635	440,245		
1829	39,071,215	19,466,028	498,951		
1830	40,952,163	22,669,253	579,363		
1831	43,007,828	22,715,807	583,751		
1832	49,982,939	22,952,527	598,038		
1833	34,426,109	22,741,984	591,241		
1834	41,865,111	23,785,095	614,434		

Table II.—*continued.*

Years.	Quantities imported into the United Kingdom.	Quantities retained for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty per Pound.	£ s. d.
	Lbs.	*Lbs.*	£		
				Of any British possession in America, or within the limits of the East India Company's charter, or of Sierra Leone	0 0 6
1835	28,398,493	23,295,046	652,124	Imported from any British possession within the limits of the East India Company's charter, not being the produce thereof	0 0 9
				Imported from any other place within those limits	0 1 0
				Otherwise imported	0 1 3
				(From 9th September.)	
1836	34,054,837	24,947,690	691,616		
1837	36,412,514	26,346,961	696,615		
1838	39,932,279	25,765,673	685,082		
1839	41,003,316	26,789,945	779,115		
				Of any British possession in America, or within the limits of the East India Company's charter, or of Sierra Leone	0 0 $6\frac{3}{10}$
1840	70,250,766	28,664,341	921,551	Imported from any British possession within the limits of the East India Company's charter, not being the produce thereof	0 0 $9\frac{9}{20}$
				Imported from any other place within those limits	0 1 $0\frac{3}{4}$
				Otherwise imported	0 1 $3\frac{1}{4}$
				(From 15th May.)	
1841	43,317,762	28,370,857	887,747	Of and from British possessions	0 0 $4\frac{1}{5}$
1842	41,444,414	28,519,646	768,886	Of and from foreign countries	0 0 $\frac{2}{5}$
				(From 9th July.)	

III. — An Account exhibiting the different Sources whence the Coffee imported into the United Kingdom in 1820, 1830, 1835, and 1842 was derived, with the Quantities imported and admitted to Home Consumption from each.

Countries or Colonies from which imported.	1820.		1830.		1835.		1842.	
	Quantities imported.	Quantities admitted to Home Consumption.	Quantities imported.	Quantities admitted to Home Consumption.	Quantities imported.	Quantities admitted to Home Consumption.	Quantities imported.	Quantities admitted to Home Consumption.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
British West Indies	30,176,877	-	27,460,421	21,674,313	14,866,580	17,633,326	9,491,646	9,405,671
Hayti - -	7,295,247	-	966,609	478	1,124,213	288	1,559,609	5,766
Cuba - -	1,558,110	-	1,598,528	183	609,418	1	2,019,626	200,503
Porto Rico -	346,996	-	241,687	-	-	-	72,466	3,981
St. Thomas -	730,565	-						
Brazil - -	2,927,978	-	3,242,513	495	4,117,094	708	5,833,345	47,015
Chili - -	-	-	-	-	-	-	443,651	77,460
Columbia -	-	-	274,386	3	228	11	1,746,011	529,034
Sierra Leone, and British possessions on the west coast of Africa -	1,348	-	267	1,496	32,306	55,833	588	478
Cape of Good Hope	-	-	189	189	338	4,024	1,572,027	6,149,489
Mauritius -			29,506	224	243,296	1,983	69,075	3,706
East India Company's territories -	5,497,721	The quantities from each country admitted to consumption in this year cannot be ascertained.	5,212,637	989,160	3,312,713	3,085,440	7,052,424	4,129,199
Ceylon - -			803,779		1,870,143	2,319,047	11,154,024	7,938,731
Java - -			973,450	-	1,034,262	19,736	43,063	492
Philippine Islands			6,427	-	34,019	192	26	359
France - -	27	-	15	15	971,990	142,982	28	22
Other parts -	306,757	-	141,749	2,697	181,893	31,475	386,805	27,740
Total -	48,841,626	7,103,409	40,952,163	22,669,253	28,398,493	23,295,046	41,444,414	28,519,646

It should be observed, with reference to the large quantity of coffee from the Cape of Good Hope admitted to consumption in 1842, that this coffee was not grown in the Cape Colony, but was sent to it from Brazil, Java, and other foreign countries. This round-about importation grew out of the fact that, the Cape being a British possession within the limits of the East India Company's charter, foreign coffee carried to it might, under the regulations established in 1835 and 1840, be imported thence and entered for home consumption in the United Kingdom, on paying 6*d.* per lb. less duty than if it had been imported direct from the place of its growth. And this advantage was sufficient to make the coffee of Brazil, Cuba, Hayti, and other countries, intended for England, be carried to the Cape in the first instance. The act of 1842 has put an end to this costly and absurd method of introducing foreign coffee into our markets, by charging it with the same duty, however imported. The too great magnitude of the

duty on foreign coffee is the only thing, in respect to its importation, that can now be objected to.

Supply and Consumption of Coffee. — Owing to the increasing consumption of coffee in this country, the Continent, and America, the great value of the article, the large amount of capital and labour employed in its production, and the shipping required for its transport, it has become a commodity of primary commercial importance. It deserves particular attention, too, inasmuch as there are few, if any, articles that exhibit such variations, not only as to consumption, but also as to growth and price. These are occasioned partly by changes of commercial regulations and duties, and partly, also, by the plant requiring 4 or 5 years before it comes to bear; so that the supply is neither suddenly increased when the demand increases, nor diminished when it falls off. St. Domingo used formerly to be one of the greatest sources of supply, having exported, in 1786, about 35,000 tons; and it is supposed that, but for the negro insurrection which broke out in 1792, the exports of that year would have amounted to 42,000 tons. The devastation occasioned by this event caused, for a series of years, an almost total cessation of supplies. They have again, however, increased, and are understood to amount, at present, to about 15,000 tons a year. From Cuba, the exports of coffee have, for some years, owing partly to an increased consumption in the island, and partly to the efforts of the planters having been more directed to the cultivation of sugar, been comparatively stationary. They may at present amount to about 22,000 tons, or, including Porto Rico, to 25,000 tons. In Java and Brazil, the culture of coffee has increased with unprecedented rapidity (see BATAVIA and RIO JANEIRO); so much so, that the exports from Java, which did not, a few years ago, exceed 18,000 tons, now amount to at least 65,000; while those from Brazil, which have increased, in an equal degree, amount to about 80,000 tons. The growth of coffee in India and Ceylon has been very greatly increased, especially in the latter, where, within the last few years, the plantations have been so much extended, that it is believed their produce will very shortly equal the present consumption of the U. Kingdom. There has, no doubt, been a serious decrease in the exports of coffee from the British West Indies; the imports into the United Kingdom having declined from 11,014 tons in 1832 to 4,237 do. in 1842; but when reference is made to the whole supply, this diminution is but inconsiderable.

The following may, we believe, be regarded as a pretty fair estimate of the present (1843) *exports* of coffee from the principal places where it is produced, and of the annual *consumption* in those countries into which it is imported from abroad.

Exports.	Tons.	
Mocha, Hodeida, and other Arabian ports	10,000	
Java	65,000	
Sumatra and other parts of foreign India	8,000	
Brazil and the Spanish Main	80,000	
Hayti	15,000	
Cuba and Porto Rico	25,000	
British West India colonies	5,000	
India and Ceylon	12,000	
Dutch West Indies	5,000	
French West Indies and the Isle de Bourbon	8,000	
		233,000

Consumption.	Tons.	
Great Britain	13,000	
Netherlands and Holland	40,500	
Germany, Russia, and countries round the Baltic	50,000	
France, Spain, Italy, Turkey in Europe, the Levant, &c.	45,000	
The United States	45,000	
Canada and Australia	5,000	
		198,500

Of the entire export of coffee from Arabia, not more, perhaps, than 5,000 or 6,000 tons finds its way to the places mentioned above; so that, supposing these estimates to be about correct, it follows that the supply of coffee at present exceeds the demand by above 30,000 tons a year. The latter, however, is rapidly increasing; and it is not easy to say whether it be destined to outrun, keep pace with, or fall short of the supply. On the whole, however, we should be inclined to think, that though they may occasionally vary to the extent of a few thousand tons on the one side or the other, the probability is that the supply and demand will be pretty nearly balanced; so that, supposing peace to be preserved, we do not anticipate any very great variation of price. When prices are considerably depressed, consumption is stimulated, and production checked, and conversely when prices are high. Oscillations will, no doubt, continue to take place in future, as they have done hitherto; but unless the cost of producing coffee should be seriously affected, which probably is not very likely, (unless some violent measures should be adopted with respect to the slaves in Brazil,) they will not be more than temporary.

The consumption of coffee in the United States has increased with great rapidity since 1821, in which year it amounted to 5,306 tons. Part of this increase is, no doubt, to be ascribed to the reduction of the duty, first from 5 to 2 cents per pound, and

its subsequent repeal; part to the fall in the price of coffee; and a part, perhaps, to the increase of temperance societies. Probably, also, it was in some degree ascribable to the comparatively high duties formerly laid on the teas imported into the United States; these, however, finally ceased in 1833.

Account of the Imports of Coffee into the United States, the Exports from the same, and the Quantities left for Home Consumption, during each of the 21 Years ending the 30th of September, 1841.—(*Papers published by Order of Congress.*)

Years.	Imports.	Exports.	Left for Home Consumption.	
	Lbs.	*Lbs.*	*Lbs.*	*Tons.*
1821	21,273,659	9,387,596	11,886,063	5,306
1822	25,782,390	7,267,119	18,515,271	8,266
1823	37,337,732	20,900,687	16,437,045	7,338
1824	39,224,251	19,427,227	19,797,024	8,838
1825	45,190,630	24,512,568	20,678,062	9,231
1826	43,319,497	11,584,713	31,734,784	14,167
1827	50,051,986	21,697,789	28,354,197	12,658
1828	55,194,697	16,037,964	39,156,733	17,487
1829	51,133,538	18,083,843	33,046,695	14,754
1830	51,488,248	13,124,561	38,363,687	17,127
1831	81,759,386	6,056,629	75,702,757	33,796
1832	91,722,329	55,251,158	40,471,171	18,067
1833	99,955,020	24,897,114	75,057,906	33,508
1834	80,153,366	35,806,861	44,346,505	19,797
1835	103,199,577	11,446,775	91,752,802	40,961
1836	93,790,507	16 143,207	77,647,300	34,664
1837	88,140,403	12,096,332	76,044,071	33,948
1838	88,139,720	5,267,087	82,871,633	36,996
1839	106,696,992	6,824,475	99,872,517	44,586
1840	94,996,095	8,698,334	86,297,761	38,525
1841	114,984,783	5,784,536	109,200,247	48,750

According to Mr. Cook, the prices of Jamaica and St. Domingo (Hayti) coffee, exclusive of duty, in the London market, at the close of each year since 1814, have been —

Years.	Jamaica.	St. Domingo.	Years.	Jamaica.	St. Domingo.
1814	81*s.* to 105*s.* per cwt.	90*s.* to 104*s.* per cwt.	1829	30*s.* to 75*s.* per cwt.	32*s.* to 34*s.* per cwt.
1815	61 — 110	72 — 80	1830	32 — 78	34 — 35
1816	68 — 102	74 — 75	1831	50 — 86	45 — 46
1817	86 — 105	93 — 98	1832	60 — 90	55 — 57
1818	134 — 155	144 — 148	1833	77 — 110	65 — 66
1819	147 — 165	128 — 134	1834	68 — 124	48 — 52
1820	112 — 135	118 — 120	1835	80 — 113	51 — 53
1821	85 — 125	98 — 102	1836	66 — 120	46 — 54
1822	85 — 135	95 — 100	1837	75 — 127	42*s.* 6*d.* — 44*s.*
1823	79 — 117	75 — 79	1838	77 — 141	43 — 45*s.* 6*d.*
1824	50 — 102	58 — 61	1839	88 — 148	47 — 49
1825	48 — 100	55 — 56	1840	73 — 148	41 — 43*s.* 6*d.*
1826	42 — 95	50 — 51	1841	54 — 144	37 — 42
1827	30 — 80	37 — 39	1842	47 — 138	31 — 34
1828	28 — 80	36 — 38			

The following statement shows the Prices of the different sorts of coffee in London in July, 1843.

	s. *d.*	*s.* *d.*
Jamaica: —		
Good middling to fine	115 0 to	135 0
Middling	91 0 —	109 0
Good and fine ordinary	70 0 —	88 0
Ordinary and Triage	30 0 —	48 0
Berbice and Demerara: —		
Middling to fine middling	105 0 —	0 0
Dominica and St. Lucia: —		
Good middling to fine	0 0 —	0 0
Middling	95 0 —	100 0
Good and fine ordinary	62 0 —	88 0
Ordinary	40 0 —	60 0
Ceylon: —		
Ordinary and fine ordinary	43 0 —	45 0
Colourv	47 0 —	55 0
Plantation (cultivated coffee)	73 0 —	97 0
Havannah, Porto Rico, and Cuba: —		
Fine ordinary	34 0 —	46 0
Ordinary to good ordinary	32 0 —	36 0
Brazil: —		
Good to fine ordinary	30 0 —	33 0
St. Domingo	29 0 —	33 0
Mocha, ordinary to fine	62 0 —	90 0
Cheribon: —		
Ordinary to good yellow	0 0 —	0 0
Sumatra and Samarang	21 0 —	27 0

Coffee is sold in bond; the business is done in the public market, either by public sale or private contract. The terms are — E. I. and W. I. British Plantation, 1 month, 1 per cent. discount, allowing 4 per cent. for cash; East India at a prompt of three months from the day of sale, without discount; Foreign 1 month, 2½ per cent. discount, and 4 per cent. for cash. The tares are the same as allowed by the revenue. The draft on B. P., namely, casks of 5 cwt. and upwards, 5 lbs.; under 5 cwt., 4 lbs.; barrels and bags, 2 lbs.; Foreign and East India, 1 lb.

Species of Coffee. Roasting, &c. — The coffee of Mocha is generally esteemed the best; then follow the coffees of Jamaica, Dominica, Berbice, Demerara, Bourbon, Java, Martinique, and Hayti. Arabian or Mocha coffee is produced in a very dry climate, the best being raised upon mountainous slopes and sandy soils. The most fertile soils are not suitable for the growth of very fine coffee. Mr. Bryan Edwards observes, that "a rich deep soil, frequently ameliorated by showers, will produce a luxuriant tree and a great crop; but the beans, which are large, and of a dingy green, prove, for many years, rank and vapid." And the same remark is made by Mr. Crawfurd, with respect to the coffee of Java. —(*East Indian Archipelago*, vol. i. p. 487.) Coffee is improved by being kept; it then becomes of a paler colour.

Mocha, or, as it is commonly called, Turkey coffee, should be chosen of a greenish light olive hue, fresh and new, free from any mustiness, the berries of a middling size, clean, plump, and without any intermixture of sticks or other impurities. Particular care should be taken that it be not false packed. Good West India coffee should be of a greenish colour, fresh, free from any unpleasant smell, the berries small and unbroken.

Coffee berries readily imbibe exhalations from other bodies, and thereby acquire an

adventitious and disagreeable flavour. Sugar placed near coffee will, in a short time, so impregnate the berries, as to injure their flavour. Dr. Moseley mentions, that a few bags of pepper, on board a ship from India, spoiled a whole cargo of coffee.

"The roasting of the berry to a proper degree requires great nicety: the virtue and agreeableness of the drink depend upon it; and both are often injured by the ordinary method. Bernier says, when he was at Cairo, where coffee is so much used, he was assured by the best judges, that there were only two people in that great city who understood how to prepare it in perfection. If it be under-done, its virtues will not be imparted, and, in use, it will load and oppress the stomach; if it be over-done, it will yield a flat, burnt, and bitter taste, its virtues will be destroyed, and, in use, it will heat the body, and act as an astringent." — (*Moseley*, p. 39.)

Regulations with respect to Sale, Importation, &c. — Roasted beans and rye, reduced to powder, have frequently been used to adulterate ground coffee: and the possession of such substitutes for coffee was formerly an offence punishable by the forfeiture of the articles, and a penalty of 100*l*. But by the act 3 Geo. 4. c. 53., persons who are *not dealers in coffee* may take a licence for roasting and selling corn, peas, beans, or parsneps, labelling the parcels with the names, and conforming to the various regulations prescribed in the act.

Dealers in coffee must take out a licence, renewable annually, which, at present, costs 11*s*.

No coffee can be imported in packages of less than 100 lbs. *nett* weight.

No abatement of duties is made on account of any damage coffee may have received.

Coffee cannot be entered as being the produce of any British possession in America or of the Mauritius, until the master of the ship in which the coffee is imported deliver to the collector or comptroller a certificate of its origin, and declare that the coffee is the produce of such place. — (3 & 4 *Will.* 4. c. 52. §§ 36, 37.)

We subjoin two *pro formâ* accounts, one of the sale of 100 bags Brazil coffee, the other of the sale of 10 tierces Jamaica coffee. They may be depended upon as accurate; and are interesting from their showing in detail the various charges, exclusive of duty, affecting this important article.

PRO FORMA ACCOUNT SALE of A. B. 100 Bags Coffee per "London," from Rio Janeiro, on Account of C. D. and Co.

1842.		£ s. d.	£ s. d.
Oct. 30.	By E. F. for 100 bags. Prompt 1 month.		
	Cwt. qrs. lbs.		
	Lots 1 to 5. weighing 145 0 0 gross.		
	3 2 8 Tare 4 lb. Draft 2 lb. per bag.		
	141 1 20 nett - - - - at 3*l*. 3*s*.	445 10 0	
	Discount 2½ per cent.	11 2 9	
			434 7 3
	Charges. £ s. d.		
	To Sea insurance on 400*l*. at 2*l*. per cent. - - - - 8 0 0		
	Policy 5*s*. 6*d*. per cent. - - - - - - 1 2 0		
	Commission ½ per cent. - - - - - - 2 0 0	11 2 0	
	Dock rates on 143 cwt. 0 qr. 24 lbs. at 1*s*. 2*d*.* - - - 8 7 1		
	Lotting 1*d*. per bag - - - - - - 0 8 4	8 15 5	
	Insurance against fire - - - - - - -	0 12 5	
	Freight on 143 cwt. 0 qr. 24 lbs. at 3*s*. - - - 21 0 8		
	Primage 5 per cent. 1*l*. 1*s*. 6*d*. Pierage 2*s*. 1*d*. - - 1 3 7	22 13 3	
	Public sale charges 17*s*. 6*d*. Petty expenses 8*s*. 6*d*. - - -	1 6 0	
	Brokerage 1 per cent. - - - - - - -	4 9 1	
	Commission 2½ per cent. - - - - - - -	11 2 9	
			60 0 11
	Errors excepted.	Nett proceeds	£374 6 4
		(Cash, 30th of November, 1842.)	

London, 2d of November, 1842.

PRO FORMA ACCOUNT SALE of G. H. 10 Tierces Coffee per "Kingston," from Jamaica, on Account of I. K. and Co.

1842.		£ s. d.	£ s. d.
Oct. 30.	By L. M. for 10 tierces. Prompt 1 month.		
	Casks. *Cwt. qrs. lbs.* *Cwts. qrs. lbs.*		
	Lot. 4. 5 weighing 45 0 0 Tare 3 2 18		
	3 3 15 Draft 0 0 25		
	31 0 13 nett - - - - at 5*l*. 10*s*.	171 2 9	
	2. 5 — 35 0 0 Tare 3 2 18		
	3 3 15 Draft 0 0 25		
	31 0 13 nett - - - - at 4*l*. 5*s*.	132 4 10	
		303 7 7	
	Discount 1 per cent.	3 0 0	
			300 6 11
	Charges. £ s. d.		
	To Sea Insurance on 300*l*. at 2*l*. per cent. - - - - 6 0 0		
	Policy 5*s*. 6*d*. per cent. - - - - - 0 16 6		
	Commission ½ per cent. - - - - - 1 10 0	8 6 6	
	Dock rates on 62 cwt. 2 qrs. 20 lbs. at 1*s*. 6*d*. - - 4 14 0		
	Lotting at 9*d*. per tierce - - - - - 0 7 6	5 1 6	
	Insurance against fire - - - - - - -	0 8 3	
	Freight on 62 cwt. 2 qrs. 20 lbs. at 6*s*. - - - 18 16 1		
	Primage 5*s*. and pierage 3*s*. 9*d*. - - - - 0 8 9	19 4 10	
	Public sale charges 7*s*. Petty expenses 7*s*. 6*d*. - - -	0 14 6	
	Brokerage 1 per cent. - - - - - - -	3 0 8	
	Commission 2½ per cent. - - - - - - -	7 11 8	
			44 7 11
	Errors excepted.	Nett proceeds	£255 19 0
		(Cash, 30th of November, 1842.)	

London, 2d of November, 1842.

* Coffee in bags pays 1*s*. 2*d*., and in casks 1*s*. 6*d*. dock dues.

COINS, pieces of metal, most commonly gold, silver, or copper, impressed with a public stamp, and frequently made legal tender in payment of debts, either to a limited or an unlimited extent.

1. *Circumstances which led to the Introduction and Use of Coins.* — When the precious metals first began to be used as money, or as standards by which to measure the value of different articles, and the equivalents for which they were most commonly exchanged, they were in an unfashioned state, in bars or ingots. The parties having agreed upon the quantity of metal to be given for a commodity, the exact amount was then ascertained by weight. But it is obvious that a practice of this sort must have been attended with a great deal of trouble and inconvenience. There can, however, be little doubt that the greatest obstacle to the use of unfashioned metals as money would be found in the difficulty of determining their quality, or the degree of their purity, with sufficient precision. The operation of assaying is one of great nicety and difficulty; and could not be performed in the early ages otherwise than in a clumsy, tedious, and inaccurate manner. It is, indeed, most probable, that when the precious metals were first used as money, their quality would be appreciated only by their weight and colour. A very short experience would, however, be sufficient to show the extreme inexactness of conclusions derived from such loose and unsatisfactory criteria; and the devising of some method, by which the fineness of the metal might be easily and correctly ascertained, would very soon be felt as indispensable to the general use of gold and silver as money. Such a method was not long in presenting itself: it was early discovered, that, to ascertain the purity of the metal, and also to avoid the trouble and expense of weighing it, no more was necessary than to mark each piece with a *stamp*, declaring its weight and fineness. This invention was made at a very early period. According to Herodotus, the Lydians were the first who coined money. — (Lib. i. c. 94.) Other ancient authors say that the art of coining was invented during the period when Saturn and Janus reigned in Italy; that is, in a period antecedent to authentic history. — (*Goguet, de l'Origine des Loix, &c.* tom. i. p. 267.)

2. *Metal used in the Manufacture of Coins.* — Before the art of metallurgy was well understood, the baser metals were frequently used as money. Iron was the primitive money of the Lacedæmonians, and copper of the Romans. But both iron and copper deteriorate by being kept; and besides this defect, the rapid improvement of the arts, by lowering their price, rendered their bulk too great in proportion to their value to permit of their continuing to be used as money. Copper, indeed, is still used in the form of tokens, convertible into silver in very small payments. In this country, copper pence and halfpence are rated at about 72 per cent. above their real value; but as their issue is exclusively in the hands of government, and as they are only legal tender to the extent of one *shilling* in any one payment, this over-valuation is not productive of any bad effect. The use of copper in other countries is limited in much the same way; gold and silver being every where the only metals made use of in the manufacture of the coins used in considerable payments.

3. *Standard of Coins.* — By the standard of a coin, is meant the degree of its purity, and its weight; that is, the fineness of the metal of which it is made, and the quantity of metal contained in it.

(1.) *Silver Coins.* — A pound Troy, or 12 ounces, of the metal of which English silver coins are made, contains 11 oz. 2 dwts. pure silver, and 18 dwts. alloy. This pound is coined into 66 shillings; so that each shilling contains 80·727 grains fine silver, and 87·27 grains standard silver; and the *money pound*, consisting of 20 shillings, contains 1614·545 grains pure silver, and 1745·454 grains standard silver. From 1600 down to 1816, the pound weight of standard silver bullion was coined into 62 shillings. All the English silver coins have been coined out of silver of 11 oz. 2 dwts. fine, from the Conquest to this moment, except for the short period of 16 years, from the 34th Henry VIII. to the 2d Elizabeth.

(2.) *Gold Coins.* — The purity of gold is not estimated by the weights commonly in use, but by an Abyssinian weight called a *carat*. The carats are subdivided into four parts, called grains, and these again into quarters; so that a *carat grain*, with respect to the common divisions of a pound Troy, is equivalent to 2½ dwts. Gold of the highest degree of fineness, or pure, is said to be 24 carats fine. When gold coins were first made at the English mint, the standard of the gold put in them was of 23 carats 3½ grains fine and ½ grain alloy; and so it continued, without any variation, to the 18th of Henry VIII., who, in that year, first introduced a new standard of gold of 22 carats fine, and 2 carats alloy. The first of these standards was called the old; and the second the new standard, or crown gold; because crowns, or pieces of the value of 5*s.*, were first coined of this new standard. Henry VIII. made his gold coins of both these standards under different denominations; and this practice was continued by his successors until 1633. From that period to the present, the gold of which the coins of this kingdom have been made has been invariably of the *new* standard, or

crown gold; though some of the coins made of the old standard, previously to 1633, continued to circulate till 1732, when they were forbidden to be any longer current. — (*Liverpool on Coins*, p. 27.)

The purity of our present gold coins is, therefore, 11 parts fine gold and 1 part alloy. The sovereign, or 20 shilling piece, contains 113·001 grains fine gold, and 123·274 grains standard gold. The pound Troy of standard gold is coined into 46 $\frac{89}{113}$ sovereigns, or into 46*l.* 14*s.* 6*d.* The mint, or standard price of gold is, therefore, said to be 46*l* 14*s.* 6*d.* per lb. Troy, or 3*l.* 17*s.* 10½*d.* an ounce.

The alloy in coins is reckoned of no value. It is allowed, in order to save the trouble and expense that would be incurred in refining the metals, so as to bring them to the highest degree of purity; and because, when its quantity is small, it has a tendency to render the coins harder, and less liable to be worn or rubbed. If the quantity of alloy were considerable, it would lessen the splendour and ductility of the metals, and would add too much to the weight of the coins.

The standard of the coins of foreign countries may be learned at a glance, by inspecting the *Table of Coins* subjoined to this article.

4. *Variations of the Standard.* — The value of all sorts of property being estimated, and the stipulations in almost all contracts for its purchase, sale, or hire, being made in money or coins, it is plain that no change can take place in the value of such money or coins, without virtually subverting these estimates and contracts, and enriching the debtor portion of society at the expense of the creditor portion, or *vice versâ*. As the cost of producing all commodities is liable to vary from improvements in the arts, the exhaustion of the present or the discovery of new sources of supply, none can be selected to serve as money or coin that may not vary in its real value. It is believed, however, that the precious metals vary less than any material that could be suggested. And with the exception of the extraordinary fall in their value caused by the discovery of the American mines, it seems to have been remarkably constant at other periods.

But in addition to the fluctuations naturally inherent in the value of coins, arising from variations in the cost of the metal of which they are made, their standard has been repeatedly changed. Notwithstanding that money or coin, from its being universally used as a scale by which to compute the value of all commodities, and as the equivalent for which they are commonly exchanged, is by far the most important of all the measures used in society; and should, consequently, be preserved as invariable as possible; there is none that has been so frequently altered. The necessities or extravagance of governments have forced them to borrow; and to relieve themselves of the incumbrances thus contracted, they have almost universally had recourse to the disgraceful expedient of degrading the coin; that is, of *cheating* those who lent them money, to the extent of the degradation, and of enabling every other debtor in their dominions to do the same.

The ignorance of the public in remote ages facilitated this species of fraud. Had the names of the coins been changed when the quantity of metal contained in them was diminished, there would have been no room for misapprehension. But, although the weight of the coins was undergoing perpetual, and their purity occasional, reductions, their ancient denominations were almost uniformly preserved: and the people who saw the same names still remaining after the substance was diminished; who saw coins of a certain weight and fineness circulate under the names of florins, livres, dollars, and pounds; and who saw them continue to circulate as such, after both their weight and the degree of their fineness had been lessened; began to think that they derived their value more from the *stamp* affixed to them by authority of government, than from the quantity of the precious metals they contained. This was long a very prevalent opinion. But the rise of prices which invariably followed every reduction of the standard, and the derangement that was thereby occasioned in every pecuniary transaction, undeceived the public, and taught them, and their rulers, the expediency of preserving the standard of money inviolate.

The standard may be reduced by simply raising the denomination of the coin; by ordering, for example, that a half-sovereign should pass for a sovereign, and the latter for a double sovereign, &c. If injustice be resolved upon, this is the least mischievous way in which it can be perpetrated, inasmuch as it saves all the trouble and expense of a recoinage. But as it renders the fraud obvious and glaring, it has rarely been resorted to; and most reductions have been effected either by diminishing the weight of the coins, or by increasing the proportion of alloy in the metal of which they are made, or both.

Originally the coins of all countries seem to have had the same denomination as the weights commonly used in them; and contained the exact quantity of the precious metals indicated by their name. Thus, the *talent* was a weight used in the earliest period by the Greeks, the *as* or *pondo* by the Romans, the *livre* by the French, and the *pound* by the English and Scotch; and the coins originally in use in Greece, Italy,

France, and England, bore the same names, and weighed precisely a talent, a pondo, a livre, and a pound. The standard has not, however, been preserved inviolate, either in modern or ancient times. It has been less degraded in England than any where else; but even here the quantity of silver in a pound sterling is less than the *third* part of a pound weight, — the quantity it contained in 1300. In France, the livre current in 1789 contained less than *one sixty-sixth* part of the silver implied in its name, and which it had actually contained previously to 1103. In Spain, and some other countries, the degradation has been carried still further.*

From 1296 to 1355, the coins of England and Scotland were of the same weight and purity; but at the last mentioned epoch the standard of Scotch money was, for the first time, sunk below that of England; and by successive degradations, the value of Scotch money, at the union of the crowns in 1600, was only a *twelfth* part of the value of the English money of the same denomination. It remained at this point till the union of the kingdoms cancelled the separate coinage of Scotland.

The gold and silver coins of Ireland have been for a considerable period the same as those of Great Britain; but, until 1825, they were nominally rated 8⅓ per cent. higher. This difference of valuation, which was attended with considerable inconveniences, was put an end to by the act 6 Geo. 4. c. 79., which assimilated the currency throughout the empire.

The Tables annexed to this article contain all the information that can be desired by mercantile men with respect to the weight, fineness, &c. of English and Scotch gold and silver coins, from the earliest periods to the present moment.

5. Mint, or Government Valuation of Gold and Silver Coins. — If both gold and silver coins be made legal tenders, it is obviously indispensable that their value with respect to each other should be fixed by authority; or that it should be declared, that individuals shall be entitled to discharge the claims upon them by payments, either of gold or silver coins, according to some regulated proportion. The practice of making both metals legal tenders was long adopted in England. From 1257 till 1664, the value of gold coins was regulated by proclamation; or, which is the same thing, it was ordered that the gold coins, then current, should be taken as equivalent to certain specified sums of silver. — (*Liverpool on Coins*, p. 128.) From 1664, down to 1717, the relation of gold to silver was not fixed by authority; and silver being then the only legal tender, the value of gold coins fluctuated, according to the fluctations in the relative worth of the metals in the market. But, in 1717, the ancient practice was again reverted to; and it was fixed that the guinea should be taken as the equivalent of 21 shillings, and conversely.

But the value of each of the precious metals is liable to perpetual changes. And hence, how accurately soever their proportional value, as fixed by the mint regulations, may correspond with the proportion which they actually bear to each other in the market when the regulation is made, the chances are 10 to 1 that it will speedily cease to express their relation to each other. But the moment that such a change takes place, it becomes the obvious interest of every one who has a payment to make, to make it in the *overvalued* metal; which, consequently, becomes the sole, or nearly the sole, currency of the country. Hence the reason why the coins of some countries are almost wholly of silver, and others almost wholly of gold. It is estimated, for example, that when it was fixed, in 1717, that the guinea should exchange for 21 shillings, gold was overvalued as compared with silver to the extent of 1$\frac{10}{11}$ per cent. — (*Liverpool on Coins*, p. 85.); and as the real value of silver with respect to gold continued to increase during the greater part of last century, the advantage of paying in gold in preference to silver became more decided, and ultimately led to the universal use of gold in all large payments, and to the fusion or exportation of all silver coins of full weight. — (*Liverpool, loco cit.*)

In France, a different valuation of the metals has had a different effect. Previously to the recoinage in 1785, the *Louis d'or* was rated in the mint proportion at only 24 livres, when it was really worth 25 livres 10 sols. Those, therefore, who should have discharged the obligations they had contracted by payments of gold coin instead of silver, would plainly have lost 1 livre 10 sols on every sum of 24 livres. In consequence, very few such payments were made; gold was almost entirely banished from circulation, and silver became almost the only species of metallic money used in France. — (*Say, Traité d'Economie Politique*, tom. i. p. 393.)

In 1816, however, a new system was adopted in this country; it being then enacted (56 Geo. 3. c. 68.), *that gold coins only should be legal tender in all payments of more than* 40 *shillings*. The pound of silver bullion, that had previously been coined into 62 shillings, was then also coined into 66 shillings, the additional *four* shillings being retained by government as a *seignorage* or duty (amounting to 6$\frac{4}{11}$ per cent.) upon the

* For an account of the degradation of the coins of the ancient and modern Continental nations, see the article *Money*, in the Supplement to the old, or in the new edition of the *Encyclopædia Britannica*.

coinage. To prevent the silver coins from becoming redundant, government has retained the power to issue them in its own hands. Under these regulations, silver has ceased to be a standard of value, and forms merely a subordinate or subsidiary species of currency, or change, occupying the same place in relation to gold that copper occupies in relation to itself. This system has been found to answer exceedingly well.

A good deal of difference of opinion has existed as to whether gold or silver coins are best fitted for being made legal tender. It does not seem that the one possesses any very striking advantage over the other; none, certainly, that would justify a change, after a selection has been made, and acted upon for any considerable period.

Down to 1626, a seignorage or duty upon the coinage was usually charged upon the gold and silver coins issued by the mint; and it may be easily shown that the imposition of such a duty, when it is not carried to an undue height, is advantageous. A coin is more useful than a piece of uncoined bullion of the same weight and purity; the coinage fitting it for being used as money, while it does not unfit it for being used for any other purpose. When, therefore, a duty or seignorage is laid upon coin equal to the expense of coinage, it circulates at its real value; but when this charge is defrayed by the public, it circulates at *less* than its real value, and is consequently either melted down or exported whenever there is any demand for bullion in the arts, or any fall in the exchange. It is, indeed, true, that were a seignorage to be laid on gold coins, it would be necessary, to prevent an enhancement of the value of the currency, that their weight should be proportionally reduced; and it is on this account better, perhaps, to let them remain on the present footing. But when a seignorage was laid on the silver coins, in 1816, it was not necessary to take the circumstance now alluded to into consideration; for as they were made subordinate to gold, and were intended to serve as change merely, its imposition had no tendency to raise the value of the currency, at the same time that it was calculated effectually to prevent the fusion of the coins, and to yield a small revenue to government.

6. *Coinage since* 1790. *Amount of Coin in Circulation.*— No. V. of the subjoined Tables shows the amount of the gold and silver coinage at the British mint, each year, from 1790 downwards.

It will be seen from this account, that gold coin to the amount of 60,126,047*l.* has been coined at the mint between 1817 and 1841, both inclusive. It is not, however, possible to form any very precise estimate of the portion of this immense sum now in circulation. In consequence of the exemption of gold coin from any seignorage, large quantities of the coins carried abroad during an unfavourable exchange find their way to the foreign mints, where they are melted and recoined. Large quantities are also conveyed away by emigrants, of which no account is or can be taken; and it is neither possible to estimate the sums in the coffers of the different banks or of individuals. On the whole, however, we shall not perhaps be far wrong if we estimate the stock of coin at present (1843) in possession of the public and of the different private and joint stock banks (ex. Bank of England) at 30,000,000*l.*

7. *The Exportation and Importation of Gold and Silver Coins* was formerly prohibited: but in 1819 it was enacted (59 Geo. 3. c. 49.), that they might be freely exported and imported, without being liable to any charge or duty whatever; and they may be imported without being either reported or entered at the Custom-house. This regulation has rendered it next to impossible to ascertain the value of the bullion imported.

8. *Forgery of Coin. Issue of forged or spurious Coins.* — The forgery of coin is an offence that is practised more or less at all periods. The most effectual means of preventing it is to improve the fabric of the genuine coins, to cut the dies with great delicacy, and occasionally to vary the form of the coins. During the lengthened period from 1770 down to 1816, the genuine silver coins in circulation were so much worn and defaced, that it was very difficult to distinguish between them and counterfeits, which, in despite of the severest penalties, were thrown into circulation in immense quantities. But since the issue of the new coins, in 1816, forgery has been comparatively rare. Sufficient time has not yet been afforded for determining the influence of the law exempting the offence of counterfeiting from the punishment of death.

9. *Law as to the counterfeiting, &c. of Coin.* — The acts as to this were consolidated and amended by the 2 & 3 Will. 4. c. 34., of which the following is a brief abstract: —

Counterfeiting the gold or silver coin of the realm, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years; and every such offence shall be deemed to be complete, although the counterfeiting be not finished. — § 3.

Colouring counterfeit coin, or any pieces of metal, with intent to make them pass for gold or silver coin; colouring or altering genuine coin, with intent to make it pass for higher coin; transportation for life, or for any term not less than 7 years, or imprisonment for any term not exceeding 4 years. — § 4.

Impairing the gold or silver coin, with intent to make the coin so impaired pass for gold or silver coin of full weight, transportation for not exceeding 14, nor less than 7 years, or imprisonment for not exceeding 3 years. — § 5.

Buying or selling, &c. counterfeit gold or silver coin for lower value than its denomination, importing counterfeit coin from beyond seas, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 6.

Uttering counterfeit gold or silver coin, imprisonment for not exceeding 1 year; and uttering, accompanied by possession of other counterfeit coin, or followed by a second uttering within 10 days, imprisonment for not exceeding 2 years; every second offence of uttering after a previous conviction, shall

be felony: transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 7.

Having 3 or more pieces of counterfeit gold or silver coin in possession, with intent to utter the same, imprisonment for not exceeding 3 years; second offence, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 8.

Making, mending, having possession of, or selling any mould, &c., or coining tools, or any press or engine, conveying tools or monies out of the mint without authority, felony: transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 10, 11.

Counterfeiting any current copper coin, or making, mending, or having in his possession any coining tool, or buying, selling, &c. any counterfeit copper coin for lower value than its denomination, transportation for not exceeding 7 years, or imprisonment for not exceeding 2 years; and uttering any counterfeit copper coin, or having in his possession 3 or more pieces of counterfeit copper coin, imprisonment for not exceeding 1 year. — § 12.

Gold or silver coin tendered to any person suspecting any piece to be counterfeit, may be broken by such person; and if it shall appear to be counterfeit, the person tendering shall bear the loss; but if it shall be of due weight, and appear to be of lawful coin, the person breaking it is to receive it at the rate it was coined for, and any dispute shall be finally determined by any justice; and the tellers of the Exchequer and the receivers-general of the revenue are to break or deface every piece of counterfeit coin tendered for payment. — § 13.

Any person discovering any counterfeit coin, gold, silver, or copper, or any coining tool, is to carry the same forthwith before some justice, and on reasonable cause to suspect any person of counterfeiting, or having such coin, or any tool, &c., such justice may cause any place under the control of such suspected person to be searched, either in the day or night, and if any such coin or tool shall be found, to cause the same to be seized forthwith, and carried before a justice, who is to secure the same for the purpose of being produced in evidence, and afterwards of being delivered up to the mint. — § 14.

The necessity of the evidence of any officer of the mint to prove counterfeit coin dispensed with. — § 17.

The court may order hard labour or solitary confinement. — § 19.

The words "king's coin" include all coin lawfully current in the United Kingdom; and wilfully having in any dwelling-house or other building, lodging, apartment, field, or other place, open or inclosed, whether belonging to or occupied by himself or not, and whether for his own use or benefit, or for that of another, shall be deemed having in his possession within this act. — § 21.

Persons acting in the execution of this act, protected in the usual manner, by requiring notice of action, &c., and allowing tender of amends, &c. — § 22.

10. *Convictions for Coining and Uttering.* — In the 7 years ending with 1818, 63 persons were convicted in England and Wales of the offence of counterfeiting the coin of the realm, of whom 1 was executed. In the next 7 years the convictions for coining were reduced to 14, but of these 5 were executed. In the last septennial period, ending with 1832, the convictions were 34, and the executions 7. The convictions for issuing forged coins in the first of the above periods were 21, in the second, 9, and in the third, 32.

Tables relative to the Coins of Great Britain and other Countries.

No. I. English Coins. — Account of the Quantity of *Fine* Silver coined into 20*s.* or the Pound Sterling; the Quantity of *Standard* Silver, of 11 oz. 2 dwts. Fine and 11 dwts. Alloy, contained in 20*s.* or the Pound Sterling, in the different Reigns, from the Time of Edward I. to the Reign of William IV. — A similar Account with respect to Gold. — And an Account of the proportional Value of Fine Gold to Fine Silver, according to the Number of Grains contained in the Coins. — *Calculated in Grains and 1000th Parts Troy Weight.*

A. D.	Anno Regni.	Silver. 1. Number of Grains of Fine Silver in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Silver. 2. Number of Grains of Standard Silver, 11 oz. 2 dwts. Fine in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Gold. 3. Number of Grains of Fine Gold in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Gold. 4. Number of Grains of Standard Gold 22 Carats fine, in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	5. Proportionate Value of Fine Gold to Fine Silver, according to the Quantity of each Metal contained in the
		Grains.	*Grains.*	*Grains.*	*Grains.*	*Gold to Silver.*
1506	Conquest - -	4,995·000	5,400·000			
1280	8 Edward I. -	4,995·000	5,400·000			
1344	18 Edward III. -	4,933·333	5,333·333	407·990	445·080	1 to 12·091
1349	23 ——— -	4,440·000	4,800·000	383·705	418·588	1 — 11·571
1356	30 ——— -	3,996·000	4,320·000	358·125	390·682	1 — 11·158
1401	3 Henry IV. -	3,996·000	4,320·000	358·125	390·682	1 — 11·158
1421	9 Henry V. -	3,330·000	3,600·000	322·312	351·613	1 — 10·331
1464	4 Edward IV. -	2,664·000	2,880·000	257·850	281·291	1 — 10·331
1465	5 ——— -	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1470	49 Henry VI. -	2,664·000	2,880.000	238·750	260·454	1 — 11·158
1482	22 Edward IV. -	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1509	1 Henry VIII. -	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1527	18 ——— -	2,368·000	2,560·000	210·149	229·253	1 — 11·268
1543	34 ——— -	2,000·000	2,162·162	191·666	209·090	1 — 10·434
1545	36 ——— -	1,200·000	1,297·297	176·000	192·000	1 — 6·818
1546	37 ——— -	800·000	864·864	160·000	174·545	1 — 5·000
1547	1 Edward VI. -	800·000	864·864	160·000	174·545	1 — 5·000
1549	3 ——— -	800·000	864·864	155·294	169·412	1 — 5·151
*1551	5 ——— -	400·000				
———	——— -	1,760·000	1,902·702	160·000	174·545	1 — 11·000
1552	6 ——— -	1,768·000	1,911·351	160·000	174·545	1 — 11·050
1553	1 Mary - -	1,760 000	1,902·702	159·166	173·636	1 — 11·057
1560	2 Elizabeth -	1,776·000	1,920·000	160·000	174·545	1 — 11·100
1600	43 ——— -	1,718·709	1,858·064	157·612	171·940	1 — 10·904
1604	2 James I. - -	1,718·709	1,858·064	141·935	154·838	1 — 12·109
1626	2 Charles I. -	1,718·709	1,858·064	128·780	140·487	1 — 13·346
1666	18 Charles II. -	1,718·709	1,858·064	118·651	129·438	1 — 14·485
1717	3 George I. -	1,718·709	1,858·064	113·001	123·274	1 — 15·209
†1816	56 George III. -	1,614·545	1,745·454	113·001	123·274	1 — 14·287

* 1551 — 5 Edward VI.] The coinage of debased silver money in the 5th year of Edward VI. of 3 oz. fine, ought more properly to be considered as Tokens. The sum of 120,000*l.* only was so coined. — (See *James's Essays*, chap. iv.)

† 1816—56 George III.] The government having taken the coinage of silver into its own hands, there is at present no fixed price paid to the public, by the mint, for standard silver. And supposing the government to continue the present mint regulations, and to keep gold at 77*s.* 10½*d.* an ounce, as the price of silver varies, the relative value of gold to silver will vary in like proportion.

No. II. ENGLISH COINS. — Account of the English Silver and Gold Coins; showing their Value, the Seignorage or Profit upon the Coinage, and the Price of the Pound Troy of Standard Gold and Silver, from the Conquest to the present Time.

A. D.	Anno Regni.	Silver. 1. Fineness of the Silver in the Coins.	2. Pound Weight of such Silver coined into	3. Profit or Seignorage on the Coinage.	4. Equal to the Mint Price for Standard Silver of 11oz. 2 dwts. fine Troy weight.	Gold. 5. Fineness of the Gold in the Coins.	6. Pound Weight of such Gold coined into	7. Profit or Seignorage on the Coinage.	8. Equal to the Mint Price for Standard Gold of 22 Carats fine Troy weight.
		Oz. dts.	£ s. d.	£ s. d.	£ s. d.	Crts. grs.	£ s. d.	£ s. d.	£ s. d.
1606	Conquest -	11 2	1 0 0						
1280	8 Edward I. -	— —	1 0 0	0 1 0	1 0 3¼				
1300	28 ——— -	— —	1 0 3	0 1 2½					
1344	18 Edward III.	— —	1 0 3	0 1 3	1 0 3¼	23 3½	13 3 4	0 8 4	12 10 8
1349	23 ——— -	— —	1 2 6	0 1 3	1 2 8	— —	14 0 0	0 11 8	13 3 9
1356	30 ——— -	— —	1 5 0	0 0 10	1 5 9⅛	— —	15 0 0	0 6 8	14 8 4
1394	18 Richard II.	— —	1 5 0	0 0 10	1 5 9⅛	— —	15 0 0	0 5 0	14 9 11
1401	3 Henry IV. -	— —	1 5 0	0 0 10	1 5 9⅛	— —	15 0 0	0 5 0	14 9 11
1421	9 Henry V. -	— —	1 10 0	0 1 0	1 10 11¼	— —	16 13 4	0 5 0	16 2 9
1425	4 Henry VI.	— —	1 10 0	0 1 0	1 10 11¼	— —	16 13 4	0 5 10	16 1 11
1464	4 Edward IV.	— —	1 17 6	0 4 6	1 15 2½	— —	20 16 8	2 10 0	18 0 5
1465	5 ——— -	— —	1 17 6	0 4 6	1 15 2½	— —	22 10 0	1 0 10	21 1 10
1470	49 Henry VI. -	— —	1 17 6	0 2 0	1 17 10⅜	— —	22 10 0	0 13 0	21 9 7
1482	22 Edward IV.	— —	1 17 6	0 1 6	1 18 4⅝	— —	22 10 0	0 7 6	21 15 0
1483	1 Richard III.	— —	1 17 6	0 1 6	1 18 4⅝	— —	22 10 0	0 7 6	21 15 0
1485	1 Henry VII.	— —	1 17 6	0 1 6	1 18 4⅝	— —	22 10 0	0 7 6	21 15 0
1509	1 Henry VIII.	— —	1 17 6	0 1 0	1 18 11¼	— —	22 10 0	0 2 6	22 0 0
*1527	18 ———	— —	2 0 0	0 1 0¾	1 18 11¼	— —	24 0 0	0 2 8	22 0 0
——	———	— —	2 5 0	0 1 0	2 4 0	— — {	27 0 0	0 2 9	
——	———	- -	- -	- -	- -	22 0 {	25 2 6	0 3 0	24 19 6
1543	34 ———	10 0	2 8 0	0 8 0	2 4 4¾	23 0	28 16 0	1 4 0	26 8 0
1545	36 ———	6 0	2 8 0	2 0 0	2 11 9¼	22 0	30 0 0	2 10 0	27 10 0
1546	37 ———	4 0	2 8 0	4 4 0	2 15 6	20 0	30 0 0	5 0 0	27 10 0
1547	1 Edward VI.	4 0	2 8 0	4 4 0	2 15 6	20 0	30 0 0	1 10 0	31 7 0
1549	3 ———	6 0	3 12 0	4 0 0	2 19 2½	22 0	34 0 0	1 0 0	33 0 0
1551	5 - ———	3 0	3 12 0						
——	———	11 0	3 0 0	- -	- -	23 3½ {	36 0 0		
——	———	- -	- -	- -	- -	22 0 {	33 0 0		
1552	6 ———	11 1	3 0 0	0 1 0	2 19 3½	23 3½ {	36 0 0	0 2 9	
——	———	- -	- -	- -	- -	22 0 {	33 0 0	0 3 0	32 17 8
1553	1 Mary - -	11 0	3 0 0	0 1 0	2 19 6½	23 3½	36 0 0	0 3 0	33 0 8
1560	2 Elizabeth -	11 2	3 0 0	0 1 6	2 18 6	23 3½ {	36 0 0	0 5 0	
——	——— -	- -	- -	- -	- -	22 0 {	33 0 0	0 4 0	32 16 0
1600	43 ——— -	— —	3 2 0	0 2 0	3 0 0	23 3½ {	36 10 0	0 10 0	
——	———	- -	- -	- -	- -	22 0 {	33 10 0	0 10 0	33 0 0
1604	2 James I. -	— —	3 2 0	0 2 6	2 19 6	22 0	37 4 0	0 10 0	35 14 0
1626	2 Charles I. -	— —	3 2 0	0 2 0	3 0 0	— —	41 0 0	1 1 5	39 18 7
†1666	18 Charles II.	— —	3 2 0	0 0 0	3 2 0	— —	44 10 0	- -	44 10 0
1717	3 George I. -	— —	3 2 0	0 0 0	3 2 0	— —	46 14 6	- -	46 14 6
1816	56 George III.	— —	3 6 0	0 4 0	- -	— —	46 14 6	- -	46 14 6

(The preceding Tables, Nos. I. and II., are taken from Part II. of *Essays on Money, Exchanges, and Political Economy*, by Henry James.)

No. III. SCOTCH COINS. — Account of the Number of Pounds, Shillings, and Pennies Scotch which have been coined out of One Pound Weight of Silver, at different Times; with the Degree of Purity of such Silver, or its Fineness, from the Year 1107 to the Year 1601. — (From *Cardonnel's Numismata Scotiæ*, p. 24.)

A.D.	Anno Regni.	Purity.	Alloy.	Value of the Money coined out of a Lb. Weight of Silver.	A. D.	Anno Regni.	Purity.	Alloy.	Value of the Money coined out of a Lb. Weight of Silver.
		Oz. pw.	Oz. pw.	£ s. d.			Oz. pw.	Oz. pw.	£ s. d.
From 1107 to 1296	Alexander I. David I. William Alexander II. Alexander III. John Baliol	11 2	0 18	1 0 0	1451	James II. 15	11 2	0 18	3 4 0
					1456	——— 20	11 2	0 18	4 16 0
					1475	James III. 16	11 2	0 18	7 4 0
					1484	——— 24	11 2	0 18	7 0 0
					1488	James IV. { 1 2 }	11 2	0 18	7 0 0
					1489				
From 1306 to 1329	Robert I. -	11 2	0 18	1 1 0	1529	James V. 16	11 0	1 0	9 12 0
					1544	Mary 3	11 0	1 0	9 12 0
					1556	——— 14	11 0	1 0	13 0 0
					1565	——— 23	11 0	1 0	18 0 0
1366	David II. 38	11 2	0 18	1 5 0	1567	James VI. 1	11 0	1 0	18 0 0
1367	——— 39	11 2	0 18	1 9 4	1571	——— 5	9 0	3 0	16 14 0
From 1371 to 1390	Robert II.	11 2	0 18	1 9 4	1576	——— 10	8 0	4 0	16 14 0
					1579	——— 13	11 0	1 0	22 0 0
					1581	——— 15	11 0	1 0	24 0 0
					1597	——— 31	11 0	1 0	30 0 0
1393	Robert III. 4	11 2	0 18	1 12 0	1601	——— 35	11 0	1 0	36 0 0
1424	James I. 19	11 2	0 18	1 17 6					

* 1527—Henry VIII.] The Saxon or Tower pound was used at the mint up to this time, when the pound Troy was substituted in its stead. The Tower pound was but 11 oz. 5 dwts. Troy; so that, from the Conquest to the 28th of Edward I., 20 shillings in tale were exactly a pound in weight.

† 1666—18 Charles II.] The seignorage on the coinage was at this time given up, and the gold bullion brought to the mint has ever since been coined free of expense. A seignorage of 6¼ per cent. was imposed on the coinage of silver by 56 Geo 3.

No. IV. Scotch Coins. — Account of the Number of Pounds, Shillings, and Pennies Scotch which have been coined out of One Pound Weight of Gold; with the Degree of their Purity, and the Proportion that the Gold bore to the Silver. — (*Cardonnel*, p. 25.)

A. D.	Anno Regni.		Fineness.			Alloy.			Value of the Coin coined out of One Pound of Gold.			Pound of Pure Gold weighed of Pure Silver.			
			Oz.	pw.	gr.	Oz.	pw.	gr.	£	s.	d.	Lbs.	oz.	pw.	gr.
1371, &c.	Robert II.	-	11	18	18	0	1	6	17	12	0	11	1	17	22
1390, &c.	Robert II.	-	11	18	18	0	1	6	19	4	0	11	1	17	22
1424	James I.	19	11	18	18	0	1	6	22	10	0	11	1	17	22
1451	James II.	15	11	18	18	0	1	6	33	6	0	9	8	4	14
1456	———	20	11	18	18	0	1	6	50	0	0	9	8	4	14
1475	James III.	16	11	18	18	0	1	6	78	15	0	10	2	0	20
1484	———	24	11	18	18	0	1	6	78	15	0	10	5	7	9
1488	James IV.	1	11	18	18	0	1	6	78	15	0	10	5	7	9
1529	James V.	16	11	18	18	0	1	6	108	0	0	10	5	7	9
1556	Mary	14	11	0	0	1	0	0	144	0	0	10	5	8	6
1567	James VI.	10	11	0	0	1	0	0	240	0	0	10	5	8	6
1579	———	13	10	10	0	1	10	0	240	0	0	11	5	2	20
1597	———	31	11	0	0	1	0	0	360	0	0	12	0	0	0
1601	———	35	11	0	0	1	0	0	432	0	0	12	0	0	0
1633	Charles I.	9	11	0	0	1	0	0	492	0	0	13	2	7	11

No. V. — Account of the Value of the Gold and Silver Coins, specifying each, coined at the Mint, each Year since 1790.

Years.	Gold coined.			Silver coined.			Years.	Gold coined.			Silver coined.		
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
1790	2,660,521	10	0	Nil.			1816	Nil.			1,805,251	16	0
1791	2,456,566	17	6	Nil.			1817	4,275,337	10	0	2,436,207	12	0
1792	1,171,863	0	0	251	17	6	1818	2,862,373	10	0	576,279	0	0
1793	2,747,430	0	0	Nil.			1819	3,574	10	8	1,267,272	12	0
1794	2,558,894	12	6	Nil.			1820	949,516	0	10	847,717	4	0
1795	493,416	0	0	293	11	11	1821	9,520,758	13	10	433,686	0	0
1796	464,680	2	6	Nil.			1822	5,356,787	12	6	31,430	7	1
1797	2,000,297	5	0	Nil.			1823	759,748	10	0	285,271	16	0
1798	2,967,504	15	0	Nil.			1824	4,065,075	0	0	282,070	16	0
1799	449,961	15	0	Nil.			1825	4,580,919	0	0	417,535	16	0
1800	189,937	2	6	Nil.			1826	5,896,461	7	6	608,605	16	0
1801	450,242	2	0	53	7	1	1827	2,512,636	17	6	33,019	16	0
1802	437,018	18	6	62	0	0	1828	1,008,559	2	6	16,288	3	0
1803	596,444	12	6	72	6	8	1829	2,446,754	12	6	108,259	16	0
1804	718,396	17	6	77	10	0	1830	2,387,881	2	6	151	16	0
1805	54,668	5	0	182	18	0	1831	587,949	14	5	33,696	5	8
1806	405,105	15	0	Nil.			1832	3,730,757	12	6	145	4	0
1807	Nil.			108	10	0	1833	1,225,269	13	6	145	4	0
1808	371,744	2	0	Nil.			1834	66,949	12	5	432,775	4	0
1809	298,946	11	0	114	14	0	1835	1,109,718	8	10	151,615	4	0
1810	316,935	13	6	120	18	0	1836	1,787,782	5	5	503,857	4	0
1811	312,263	3	6	Nil.			1837	1,253,088	8	2	76,111	4	0
1812	Nil.			52	14	0	1838	2,855,364	15	0	201,168	0	0
1813	519,722	3	6	89	18	0	1839	504,310	14	3	402,534	0	0
1814	Nil.			161	4	0	1840	Nil.			216,414	0	0
1815	Nil.			Nil.			1841	378,472	10	0	96,175	4	0

No. VI. Gold Coins of different Countries. — A Table containing the Assays, Weights, and Values of the principal Gold Coins of all Countries, computed according to the Mint Price of Gold in England, and from Assays made both at London and Paris, which have been found to verify each other.*

*** The publishers of this work purchased the right to publish this Table from Dr. Kelly, in the second edition of whose *Cambist* it originally appeared.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.	
		Car. gr.	Dwt. gr.	Dwt. gr. m	Grains.	s.	d.
Austrian Dominions	Souverain	W. 0 0½	3 14	3 13 15	78·6	13	10·92
	Double ducat	B. 1 2½	4 12	4 20 5	106·4	18	9·97
	Ducat Kremnitz, or Hungarian	B. 1 3	2 5½	2 10 3	53·3	9	5·91
Bavaria	Carolin	W. 3 2	6 5½	5 5 10	115·	20	4·23
	Max d'or, or Maximilian	W. 3 2½	4 4	3 14 0	77·	13	7·44
	Ducat	B. 1 2½	2 5½	2 19 11	52·8	9	4·12
Bern	Ducat (double, &c. in proportion)	B. 1 1½	1 23	2 2 1	45·9	8	1·48
	Pistole	W. 0 1½	4 21	4 19 0	105·5	18	7·86
Brunswick	Pistole (double in proportion)	W. 0 1½	4 21½	4 19 5	105·7	18	8·48
	Ducat	B. 1 0½	2 5½	2 8 9	51·8	9	2·
Cologne	Ducat	B. 1 2	2 5½	2 9 8	52·6	9	3·70
Denmark	Ducat current	W. 0 3½	2 0	1 21 19	42·2	7	5·62
	Ducat specie	B. 1 2	2 5½	2 9 8	52·6	9	3·70
	Christian d'or	W. 0 1	4 7	4 5 16	93·3	16	6·14

* The London Assays in this Table were made by Robert Bingley, Esq. F.R.S., the King's Assay Master of the Mint, and those at Paris by Pierre Frédéric Bonneville, Essayer du Commerce, as published in his elaborate work on the coins of all nations.

Specimens of all the foreign coins brought to London for commercial purposes have been supplied for this Table from the Bullion-office, Bank of England, by order of the Bank Directors, and have been selected by John Humble, Esq., the chief clerk of that office, who also examined the Tables in their progress. It may likewise be added, that the Mint Reports of these commercial coins are chiefly from average assays; and that all the computations have been carefully verified by different calculators. — (Note by Dr. Kelly, to second edition of the *Cambist*, published in 1821.)

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.
		Car. gr.	Dwt. gr.	Dwt. gr. mt.	Grains.	s. d.
England	Guinea	Stand.	5 9¼	5 9 10	118·7	21 0
	Half-guinea	Stand.	2 16⅝	2 16 15	59 3	10 6
	Seven shilling piece	Stand.	1 19	1 19 0	39·6	7 0
	Sovereign	Stand.	5 3¼	5 3 5	113·1	20 0
France	Double Louis (coined before 1786)	W. 0 2	10 11	10 5 6	224·9	39 9·64
	Louis	W. 0 2	5 5½	5 2 12	112·4	10 10·71
	Double Louis (coined since 1786)	W. 0 1½	9 20	9 15 19	212·6	37 7·53
	Louis	W. 0 1⅝	4 22	4 19 19	106·3	18 9·75
	Double Napoleon, or piece of 40 francs	W. 0 1⅜	8 7	8 3 0	179·	31 8·36
	Napoleon, or piece of 20 francs	W. 0 1⅛	4 3½	4 1 10	89·7	15 10·5
	New Louis (double, &c.) the same as the Napoleon.					
Franckfort on the Maine	Ducat	B. 1 2½	2 5⅝	2 9 14	52·9	9 4·34
Geneva	Pistole, old	W. 0 2	4 7½	4 4 18	92·5	16 4·45
	Pistole, new	W. 0 0⅝	3 15⅝	3 15 4	80·	14 1·9
Genoa	Sequin	B. 1 3⅜	2 5⅝	2 10 6	53·4	9 5·41
Hamburgh	Ducat (double in proportion)	B. 1 2½	2 5⅝	2 9 14	52·9	9 4·35
Hanover	George d'or	W. 0 1½	4 6½	4 5 3	92·6	16 4·66
	Ducat	B. 1 3½	2 5⅝	2 10 3	53·3	9 5·19
	Gold florin (double in proportion)	W. 3 0⅝	2 2	1 18 6	39·	6 10·83
Holland	Double ryder	Stand.	12 21	12 21 0	283·2	50 1·46
	Ryder	Stand.	6 9	6 9 0	140·2	24 9·75
	Ducat	B. 1 2½	2 5⅝	2 9 12	52·8	9 4·13
Malta	Double Louis	W. 1 3½	10 16	9 18 18	215·3	38 1·25
	Louis	W. 1 3	5 8	4 21 16	108·	19 1·37
	Demi Louis	W. 1 2½	2 16	2 11 3	54·5	9 7·75
Milan	Sequin	B. 1 3	2 5⅝	2 10 0	53·2	9 4·98
	Doppia or pistole	W. 0 1	4 1⅝	4 0 8	88·4	15 7·74
	Forty lire piece of 1808	W. 0 1⅜	8 8	8 4 0	179·7	31 9·64
Naples	Six ducat piece of 1783	W. 0 2½	5 16	5 12 18	121·9	21 6·89
	Two ducat piece, or sequin, of 1762	W. 1 2⅝	1 20½	1 16 6	37·4	6 7·42
	Three ducat piece, or oncetta, of 1818	B. 1 3⅛	2 10½	2 15 1	58·1	10 3·40
Netherlands	Gold lion, or 14 florin piece	Stand.	5 7⅝	5 7 16	117·1	20 8·69
	Ten florin piece (1820)	W. 0 1⅝	4 7¼	4 5 15	93·2	16 5·93
Parma	Quadruple pistole (double in proportion)	W. 1 0	18 9	17 12 18	386·	68 3·78
	Pistole or Doppia of 1787	W. 0 3	4 14	4 10 4	97·4	17 2·85
	Ditto of 1796	W. 1 0½	4 14	4 8 14	95·9	16 11·67
	Maria Theresa (1818)	W. 0 1⅝	4 3½	4 1 10	89·7	15 10·5
Piedmont	Pistole coined since 1785 (½, &c. in proportion)	W. 0 1½	5 20	5 17 0	125·6	22 2·75
	Sequin (½ in proportion)	B. 1 2½	2 5⅝	2 9 12	52·9	9 4·34
	Carlino, coined since 1785 (½, &c. in proportion)	W. 0 1½	29 6	28 20 0	634·4	112 3·33
	Piece of 20 francs, called *Marengo*	W. 2 0	4 3½	3 18 4	82·7	14 7·63
Poland	Ducat	B. 1 2½	2 5⅝	2 9 12	52·9	9 4·34
Portugal	Dobraon of 24,000 rees	Stand.	34 12	34 12 0	759·	134 3·96
	Dobra of 12,800 rees	Stand.	18 6	18 6 0	401·5	71 0·70
	Moidore or Lisbonnine (½, &c. in prop.)	Stand.	6 22	6 22 0	152·2	26 11·24
	Piece of 16 testoons, or 1,600 rees	W. 0 0⅝	2 6	2 5 14	49·3	8 8·70
	Old crusado of 400 rees	W. 0 0¼	0 15	0 14 18	13·6	2 4·88
	New crusado of 480 rees	W. 0 0⅜	0 16½	0 16 2	14·8	2 7·43
	Milree (coined for the African colonies 1755)	Stand.	0 19⅝	0 19 15	18·1	3 2·44
Prussia	Ducat of 1748	B. 1 2½	2 5⅝	2 9 14	52·9	9 4·04
	Ducat of 1787	B. 1 2	2 5⅝	2 9 6	52·6	9 3·71
	Frederick (double) of 1769	W. 0 1⅝	8 14	8 9 18	185·	32 8·90
	Frederick (single) of 1778	W. 0 1⅜	4 7	4 5 4	92·8	16 5·08
	Frederick (double) of 1800	W. 0 2	8 14	8 9 6	184·5	32 7·84
	Frederick (single) of 1800	W. 0 2	4 7	4 4 13	92·2	16 3·42
Rome	Sequin (coined since 1760)	B. 1 3½	2 4½	2 9 0	52·2	9 2·86
	Scudo of the Republic	W. 0 1⅝	17 0½	16 16 6	367·	64 11·43
Russia	Ducat of 1796	B. 1 2½	2 6	2 10 0	53·2	9 4·98
	Ducat of 1763	B. 1 2	2 5⅝	2 9 8	52·6	9 3·71
	Gold ruble of 1756	Stand.	1 0⅝	1 0 10	22·5	3 11·78
	Ditto of 1799	W. 0 0½	0 18⅝	0 18 14	17·1	3 0·31
	Gold poltin of 1777	Stand.	0 9	0 9 0	8·2	1 5·41
	Imperial of 1801	B. 1 2½	7 17½	8 6 8	181·9	32 2·31
	Half Imperial of 1801	B. 1 2½	3 20¾	4 3 4	90·9	16 1·05
	Ditto of 1818	B. 0 0½	4 [illegible]	4 3 12	91·3	16 1·98
Sardinia	Carlino (½ in proportion)	W. 0 2⅝	10 7½	9 23 16	219·8	30 8·10
Saxony	Ducat of 1784	B. 1 2½	2 5⅝	2 9 8	52·6	9 3·71
	Ducat of 1797	B. 1 2½	2 5⅝	2 9 14	52·9	9 4·34
	Augustus of 1754	W. 0 2⅝	4 6⅝	4 3 8	91·2	16 1·69
	Augustus of 1784	W. 0 1⅝	4 6½	4 4 12	92·2	16 3·81
Sicily	Ounce of 1751	W. 1 2⅝	2 20½	2 15 8	58·2	10 3·60
	Double ounce of 1758	W. 1 2	5 17	5 7 14	117·	20 8·48
Spain	Doubloon of 1772 (double and single in proportion)	W. 0 2¼	17 8⅛	61 21 16	372·	65 10·05
	Quadruple pistole of 1801	W. 1 1	17 9	16 9 6	360·5	63 9·62
	Pistole of 1801	W. 1 1	4 8½	4 2 6	90·1	15 11·35
	Coronilla, gold dollar, or vintem of 1801	W. 1 2⅛	1 3	1 0 18	22·8	4 0·42
Sweden	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22

Much variation is found in the fineness of the Sicilian gold coins.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.
		Car. gr.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
SWITZERLAND	Pistole of the Helvetic Republic of 1800	W. 0 1½	4 21⅓	4 19 9	105·9	18 8·91
TREVES	Ducat	B. 1 2	2 5⅝	2 9 8	52·6	9 3·71
TURKEY	Sequin fonducli of Constantinople of 1773	W. 2 2½	2 5⅝	1 23 6	43·3	7 7·94
	Sequin fonducli of 1789	W. 2 3½	2 5⅝	1 22 16	42·9	7 7·11
	Half missier (1818)	W. 5 3½	0 18⅛	0 13 5	12·16	2 1·82
	Sequin fonducli	W. 2 3	2 5	1 22 7	42·5	7 6·26
	Yermeebeshlek	B. 0 3½	2 1⅝	3 4 13	70·3	12 5·30
TUSCANY	Zecchino or sequin	B. 1 3⅔	3 5⅝	2 10 14	53·6	9 5·83
	Ruspone of the kingdom of Etruria	B. 1 3⅔	6 17½	7 7 13	161·	28 5·93
UNITED STATES	* Eagle (½ and ¼ in proportion)	W. 0 0⅓	11 6	11 4 8	246·1	43 6·66
VENICE	Zecchino or sequin (½ and ¼ in proportion)	B. 1 3½	2 6	2 10 10	53·6	9 5·83
WIRTEMBERG	Carolin	W. 3 2	6 3½	5 4 0	113·7	20 1·47
	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22
	Ducat (double and ½ ducat in proportion)	B. 1 2	2 5⅝	2 9 8	52·6	9 3·71
EAST INDIES.						
	Mohur of 1770	B. 1 2½	7 22½	8 11 15	186·8	33 0·72
	Mohur, Half (1787), (½ in proportion)	B. 1 2½	3 23⅓	4 16 10	94·	16 7·64
	Mohur Sicca of Bengal	B. 1 3⅔	7 23	8 15 0	189·8	30 1·04
	Mohur of the Dutch East India Company (1783)	W. 3 3½	10 2	8 8 0	183·4	32 5·50
	Mohur, Half Ditto (1801)	W. 3 1½	5 3½	4 18 18	96·2	17 0·30
	Rupee, Bombay (1818)	B. 0 0⅔	7 11	7 11 13	164·7	29 1·78
	Rupee of Madras (1818)	Stand.	7 12	7 12 0	165·	29 2·42
	Pagoda, star	W. 3 0	2 4⅝	1 21 11	41·8	7 4·77

No. VII. SILVER COINS OF DIFFERENT COUNTRIES.—A Table containing the Assays, Weights, and Values of the principal Silver Coins of all Countries, computed at the Rate of 5*s.* 2*d.* per Ounce Standard, from Assays made both at the London and Paris Mints.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
AUSTRIA	Rixdollar of Francis II. (1800)	W. 1 5	18 1	16 0 4	355·5	4 1·64
	Rixdollar of the kingdom of Hungary	W. 1 2	18 1	16 6 1	360·9	4 2·39
	Half rixdollar, or florin, *Convention*	W. 1 3	9 0½	8 2 1	179·6	2 1·07
	Copftsuck, or 20 creutzer piece	W. 4 3	4 6½	2 16 3	59·4	0 8·29
	17 Creutzer piece	W. 4 8	4 0	2 9 18	53·5	0 7·47
	Halbe copf, or 10 creutzer piece	W. 5 5	2 11	1 7 1	28·8	0 4·01
BADEN	Rixdollar	W. 1 4	18 2	16 3 1	358·1	4 2·
BAVARIA	Rixdollar of 1800 (½ in proportion)	W. 1 4½	17 12	15 13 13	345·6	4 0·25
	Copftsuck	W. 4 3	4 6½	2 16 3	59·4	0 8·29
BERN	Patagon or crown (½ in proportion)	W. 0 7	18 22	18 7 14	406·7	4 8·79
	Piece of 10 batzen	W. 1 2	5 3	4 14 17	102·5	1 2·31
BREMEN	Piece of 48 grotes	W. 2 2	11 0	8 22 1	198·	2 3·64
BRUNSWICK	Rixdollar, *Convention*	W. 1 3	18 1	16 4 4	359·2	4 2·15
	Half rixdollar	W. 1 3	9 0½	8 2 2	179·6	2 1·07
	Gulden, or piece of ⅓, fine, of 1764	B. 0 16	8 10½	9 1 1	200·8	2 4·03
	Gulden, common, of 1764	W. 1 2	9 0	8 2 10	180·	2 1·13
	Gulden, ditto, of 1795	W. 2 2	11 1⅛	8 23 7	199·1	2 3·80
	Half gulden, or piece of ⅙, of 1764	W. 1 2	4 12	4 1 5	90·	1 0·56
DENMARK	Ryksdaler, specie, of 1798	W. 0 13	18 14	17 11 17	388·4	4 6·23
	New piece of 4 marks	W. 0 12	12 9	11 16 14	259·8	3 0·27
	Half ryksdaler	W. 0 13	9 7	8 17 8	194·2	2 3·11
	Mark, specie, or ¼ ryksdaler	W. 3 1	4 0	2 21 12	64·4	0 7·59
	Rixdollar, specie, of Sleswig and Holstein (pieces of ⅔ and ⅓ in prop.)	W. 0 12	18 13	17 12 6	389·4	4 6·37
	Piece of 24 skillings	W. 4 7	5 2½	3 2 10	68·9	0 9·62
ENGLAND	Crown (*old*)	Stand.	19 8½	19 8 10	429·7	5 0·
	Half-crown	Stand.	9 16¼	9 16 5	214·8	2 6·
	Shilling	Stand.	3 21	3 21 0	85·9	1 0·
	Sixpence	Stand.	1 22½	1 22 10	42·9	0 6·
	Crown (*new*)	Stand.	18 4½	18 4 7	403·6	4 8·36
	Half-crown	Stand.	9 2	9 2 4	201·8	2 4·18
	Shilling	Stand.	3 15½	3 15 6	80·7	0 11·27
	Sixpence	Stand.	1 19⅝	1 19 14	40·3	0 5·63
FRANCE	Ecu of 6 livres	W. 0 7	18 18	18 7 16	403·1	4 8·28
	Demi ecu	W. 0 7	9 9	9 1 18	201·5	2 4·13
	Piece of 24 sous (divisions in prop.)	W. 0 7	3 20	3 16 19	83·4	0 11·64
	Piece of 30 sous (⅛ in proportion)	W. 3 8	6 12	4 12 4	100·2	1 1·99
	Piece of 5 francs	W. 0 7	16 1	15 12 4	344·9	4 0·16
	Piece of 2 francs	W. 0 7	6 11	6 6 2	138·8	1 7·38
	Franc	W. 0 7	3 5½	3 3 1	69·4	0 9·69
	Demi franc	W. 0 8½	1 15	4 13 6	34·7	0 4·84
FRANKFORT †						
GENEVA	Patagon	W. 1 0	17 9	15 19 8	351·	4 1·03
	Piece of 15 sous of 1794	W. 2 6	2 1½	1 15 1	36·1	0 5·04

* This value of the American eagle is taken from average assays of the coins of twelve years.

† "By one of the articles of the Zollverein, or Customs-union of Germany, it was stipulated that the settlements for the duties should be made either in Prussian dollars or in florins, at the rate of 7 florins

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mt.*	*Grains.*	*s. d.*
GENOA	Scudo, of 8 lire, of 1796 ($\frac{1}{3}$, $\frac{1}{4}$, &c. in proportion)	W. 0 8	21 9	20 14 10	457·4	5 3·87
	Scudo of the Ligurian Republic	W. 0 $9\frac{1}{2}$	21 9	20 11 2	454·3	5 3·43
HAMBURG	Rixdollar, specie	W. 0 10	18 18	17 21 12	397·5	4 7·49
	Double mark, or 32 schilling piece (single in proportion)	W. 2 3	11 18	9 11 8	210·3	2 5·36
	Piece of 8 schillings	W. 3 12	3 $8\frac{1}{4}$	2 6 4	50·1	0 6·99
	Piece of 4 schillings	W. 4 6	2 2	1 6 12	28·3	0 3·95
HANOVER	Rixdollar, *Constitution*	W. 0 9	18 19	18 0 14	400·3	4 7·89
	Florin, or piece of $\frac{2}{3}$, fine	B. 0 16	8 10	9 0 10	200·3	2 3·96
	Half florin, or piece of $\frac{1}{3}$, ditto	B. 0 16	4 4	4 11 4	99·2	1 1·85
	Quarter, or piece of 6 good groschen, ditto	B. 0 16	2 1	2 4 10	48·6	0 6·78
	Florin, or piece of $\frac{2}{3}$, base	W. 2 1	11 $0\frac{3}{4}$	8 23 15	199·6	2 3·87
HESSE CASSEL	Rixdollar, *Convention*	W. 1 6	18 1	15 22 6	353·	4 1·39
	Florin, or piece of $\frac{1}{3}$ ($\frac{1}{6}$ in proportion)	W. 1 6	9 $0\frac{1}{2}$	7 23 3	176·8	2 0·68
	Thaler of 1789	W. 0 $10\frac{1}{2}$	12 $7\frac{1}{2}$	11 17 5	259·7	3 0·26
	Ecu, *Convention* (1815)	W. 1 6	17 $23\frac{3}{4}$	15 21 2	349·3	4 0·77
	Bon gros	W. 6 14	1 4	0 11 5	10·3	0 1·43
HOLLAND	Ducatoon	B. 0 3	20 22	21 4 15	471·6	5 5·85
	Piece of 3 florins	W. 0 2	20 7	20 2 12	446·4	5 2·33
	Rixdollar (the assay varies)	W. 0 16	18 6	16 20 8	375·9	4 4·99
	Half rixdollar	W. 0 16	9 0	8 8 8	185·4	2 1·88
	Florin or guilder ($\frac{1}{2}$ in proportion)	W. 0 $4\frac{1}{2}$	6 18	6 14 14	146·8	1 8·49
	12 Stiver piece	W. 0 $16\frac{1}{2}$	4 12	4 3 18	92·4	1 0·90
	Florin of Batavia	W. 0 $5\frac{1}{2}$	6 13	6 9 2	141·6	1 7·77
	Rixdollar, or 50 stiver piece	W. 0 $5\frac{1}{2}$	17 0	16 13 18	367·9	4 3·37
LUBEC	Rixdollar, specie	W. 0 13	18 8	17 15 12	391·9	4 6·72
	Double mark	W. 2 3	11 18	9 11 8	210·3	2 5·36
	Mark	W. 2 3	5 21	4 17 14	105·1	1 2·67
LUCCA	Scudo	W. 0 3	17 0	16 18 10	372·3	4 3·98
	Barbone	W. 3 3	1 $20\frac{1}{2}$	1 7 14	29 3	0 4·09
MALTA	Ounce of 30 tari of Emmanuel Pinto	W. 2 5	19 $1\frac{1}{2}$	15 4 14	337·4	3 11·11
	2 Tari piece	W. 2 19	1 2	0 19 2	17·7	0 2·41
MILAN	Scudo of 6 lire ($\frac{1}{2}$ in proportion)	W. 0 7	14 $20\frac{3}{4}$	14 9 10	319·6	3 8·62
	Lira, new	W. 4 10	4 0	2 9 0	52·8	0 7·37
	Lira, old	W. 0 3	2 10	2 9 4	52·9	0 7·38
	Scudo of the Cisalpine Republic	W. 0 7	$1\frac{1}{2}$ $21\frac{1}{2}$	14 10 4	320·2	3 8·71
	Piece of 30 soldi of ditto	W. 2 18	4 17	3 11 8	77·2	0 10·78
MODENA	Scudo of 15 lire, 1739 (double, &c. in proportion)	W. 0 14	18 $12\frac{1}{2}$	17 8 9	385·2	4 5·78
	Scudo of 5 lire, of 1782	W. 0 3	5 19	5 17 2	126·8	1 5·70
	Scudo of 1796	W. 3 3	18 $1\frac{3}{4}$	12 22 12	287·4	3 4·13
NAPLES	Ducat, new ($\frac{1}{3}$ in proportion)	W. 1 0	14 15	13 7 8	295 4	3 5·24
	Piece of 12 Carlini of 1791	W. 1 0	17 15	16 0 18	356·	4 1·71
	Ditto of 1796	W. 1 2	17 $16\frac{3}{4}$	15 22 12	353·9	4 1·41
	Ditto of 1805 ($\frac{1}{3}$ in proportion)	W. 1 2	17 $18\frac{1}{4}$	15 23 18	355·2	4 1·60
	Ditto of 10 Carlini (1818)	W. 1 2	14 $18\frac{3}{4}$	13 7 0	295·1	3 5·20
NETHERLANDS	Crown ($\frac{1}{3}$, &c. in proportion)	W. 0 14	19 0	17 19 4	395·2	4 7·18
	5 Stiver piece	W. 6 3	3 4	1 9 18	31·3	0 4·37
	Florin of 1816	W. 0 $7\frac{1}{2}$	6 22	6 16 6	148·4	1 8·72
	Half florin (with divisions in prop.)	W. 4 $5\frac{1}{2}$	5 11	3 9 2	75·	0 10·46

for four Prussian dollars. There were, however, no florins in existence exactly of this value; but as the nearest approach to it was a valuation called the 24 guldenfuss, or florin-foot, these Zollverein florins were nominally reckoned to be in this rate, though the difference amounts to more than 2 per cent.

"The term 24 guldenfuss implies that the mark weight of fine silver is rated at 24 gulden or florins. It was formed by giving to the coins minted or valued in 20 guldenfuss an increased value of one-fifth, as rating the 20 kreutzer piece at 24 kreutzers. At 60*d.* per ounce standard, the value of this mark of fine silver is worth 40*s.* $7\frac{1}{2}$*d.* sterling, from which the value of the different German monetary integers is readily obtained; as reckoning $27\frac{2}{3}$ marks banco or 34 marks current of Hamburg, 14 dollars of Prussia, $21\frac{1}{3}$ florins of South Germany, 20 florins of Austria, and also 60 lire Austriache of Lombardy, to be of this amount.

"In order, therefore, to prevent the loss or inconvenience which would attend their adhering to this mode of valuation, a money convention was entered into on the 25th of August, 1837, among the states forming the union, by which it was agreed upon that a new basis of valuation should be adopted for their coins, under the term of Süddeutscher Währung, or South German valuation, at the rate of $24\frac{1}{2}$ gulden or florins from the mark's weight of fine silver.

"Bavaria, Wirtemberg, Baden, and Saxony have since issued their coins at this rate, and the other states of the confederation are doing or preparing to do the same. Among them Frankfort, in 1840, began the mintage of coins of this value; and by a regulation of the Chamber of Commerce of this free city, all the rates of exchange, as well as the values of bullion and foreign coins, were ordered to be expressed in this Süddeutscher Währung from the beginning of this present year (1843). One of these new and very exactly-minted florins was assayed by Messrs. Johnson and Cock, of Hatton Garden, who reported it to be, full weight, 6 dwts. $19\frac{1}{2}$ grains, worse 6 dwts., gold under 2 grains; from which the value, at 60*d.* per ounce standard, is very exactly $19\frac{1}{2}$*d.* sterling, making the par of exchange with London $120\frac{1}{2}$ florins in S. D. W. for 10*l.* sterling.

"I have been thus particular in these explanations, partly because several persons imagine that the late-alteration in the rate of exchange with Frankfort was made in compliance with the wishes, or to suit the convenience, of one or more of our leading houses in exchange negotiations, but more particularly because it is maintained by many that the valuation of this rate is not merely nominally, but really, in 24 guldenfuss. This is a point of no small importance to the commercial world, for had it been so, the par of exchange with London would have been only 118 florins for 10*l.* sterling, and the difference between this and the present price of sight bills on Frankfort would have exceeded $2\frac{1}{2}$ per cent.; a variation which every practical cambist well knows could not exist, except under very extraordinary circumstances, and with nearly corresponding differences in the other rates of exchange: neither of which causes is now in operation."—(*Letter of William Tate, Esq., cambist to the Times.*)

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	Dwt. gr.	Dwt. gr. wi.	Grains.	s. d.
PARMA	Ducat of 1784	W. 0 9	16 11	15 18 18	350·6	4 0·95
	Ducat of 1796 (1/3 in proportion)	W. 0 8½	16 12½	16 2 18	357·9	4 1·97
	Piece of 3 lire	W. 1 4	4 14	4 2 2	90·7	1 0·66
PIEDMONT	Scudo, 1755 (1/2, &c. in proportion)	W. 0 5½	22 14	22 0 10	488·9	5 8·26
	Scudo, 1770 (1/8 and 1/4 in proportion)	W. 0 5	22 14	22 1 16	490·	5 8·42
	Piece of 2 lire (1714)	W. 0 4½	7 20½	7 16 13	170·8	1 11·85
	5 Franc piece (1801)	W. 0 8	16 1½	15 11 12	343·7	3 11·99
POLAND	Rixdollar, old	W. 1 2	18 1	16 6 0	360·8	4 2·38
	Rixdollar, new (1794)	W. 2 17	15 10½	11 11 6	254·3	2 11·51
	Florin, or gulden	W. 4 2	6 0	3 18 16	84·	0 11·72
PORTUGAL	New crusado (1690)	W. 0 4	11 0	10 19 0	239·2	2 9·40
	Ditto (1718)	W. 0 6½	9 8	9 1 0	200·2	2 3·95
	Ditto (1795)	W. 0 7	9 9	9 1 18	201·6	2 4·15
	Doze vintems, or piece of 240 rees (1799)	W. 0 7	4 16	4 12 10	100·4	1 2·01
	Testoon (1799)	W. 0 7	2 0½	1 22 18	43·4	0 ·6·06
	New crusado (1809)	W. 0 4	9 3	8 23 0	198·2	2 4·67
	Seis vintems, or piece of 120 rees (1802)	W. 0 9	2 4½	2 2 8	46·6	0 6·50
	Testoon (1802)	W. 0 9	2 0	1 22 0	42·5	0 5·93
	Tres vintems, or piece of 60 rees (1802)	W. 0 9	1 2½	1 1 4	23·3	0 3·25
	Half testoon (1802)	W. 0 9	0 23	0 22 0	20·4	0 2·84
PORTUGUESE COLONIES'	Piece of 8 macutes, of Portuguese Africa	W. 0 9	7 12	7 4 14	159·8	1 10·31
	Ditto of 6 ditto	W. 0 9	5 13	5 7 12	118·	0 4·47
	Ditto of 4 ditto	W. 0 9	3 16	3 12 8	78·1	1 10·90
PRUSSIA	*Rixdollar, Prussian currency, (1/2 in proportion)	W. 2 5	14 6½	11 9 0	252·6	2 11·27
	Rixdollar, *Convention*	W. 1 3	18 1	16 4 2	359·	4 2·13
	Florin, or piece of 2/3	W. 2 3	11 2	8 22 8	198·4	2 3·70
	Florin of Silesia	W. 2 2	9 11	7 16 0	170·3	1 11·78
	Drittel, or piece of 8 good groschen	W. 3 3	5 8⅔	3 20 4	85·3	0 11·91
	Piece of 6 groschen	W. 2 8	3 14⅔	2 19 6	62·3	0 8·69
ROME	Scudo, or crown (coined since 1753)	W. 0 4	17 1	16 17 13	371·5	4 3·87
	Mezzo scudo, or half-crown	W. 0 4	8 12½	8 8 16	185·7	2 1·93
	Testone (1785)	W. 0 5	5 2	4 23 4	110·3	1 3·40
	Paolo (1785)	W. 0 4	1 17	1 16 4	37·2	0 5·19
	Grosso, or half Paolo (1785)	W. 0 5	0 20½	0 20 0	18·5	0 2·58
	Scudo of the Roman Republic (1799)	W. 0 6	17 1	16 13 18	368·1	4 3·40
RUSSIA	Rouble of Peter the Great	W. 2 7	18 1	14 1 8	312·1	3 7·58
	Ditto of Catherine I. (1725)	W. 2 4½	17 11	13 23 0	309·9	3 7·27
	Ditto of Peter II. (1727)	W. 2 12	18 5⅔	13 23 4	310·	3 7·28
	Ditto of Anne (1734)	W. 1 11	16 14⅔	14 6 16	317·2	3 8·29
	Ditto of Elizabeth (1750)	W. 1 7	16 12	14 11 16	321·8	3 8·93
	Ditto of Peter III. (1762)	W. 2 2	15 10	12 12 0	277·5	3 2·75
	Ditto of Catherine II. (1780)	W. 2 4	15 12	12 10 6	275·9	3 2·52
	Ditto of Alexander	W. 0 16	13 12	12 12 12	278·1	3 2·83
	N. B. It was ordered by a ukase, dated the 1st of July, 1839, that this coin should be the standard of value in Russia. It is divided into 100 copecks; and the other silver coins are of the value of 75, 50, 25, and 10 copecks each. This same ukase enacts, that 1 silver rouble shall henceforth be equal to 3½ old paper roubles.					
SARDINIA	Scudo, or crown (1/5 and 1/4 in prop.)	W. 0 7	15 2⅘	14 15 0	324·7	3 9·34
SAXONY	Rixdollar, *Convention* (1/3 and 1/4 in proportion)	W. 1 3	18 0	16 3 4	358·2	4 2·01
	Piece of 16 groschen of Leipsic	W. 2 2	9 9⅓	7 14 16	169·1	1 11·61
	Rixdollar current of Saxe Gotha	W. 4 4⅓	18 1	11 4 2	248·1	2 10·64
	1/3 Thaler of 1804	W. 4 11	3 11	2 0 19	45·3	0 6·32
	Ditto of 1808	W. 4 11⅓	3 5⅓	1 21 8	42·1	0 5·87
	Ditto of Jerome Bonaparte of 1809	W. 5 4	3 17	1 23 6	43·7	0 6·10
SICILY	Scudo (1/3 in proportion)	W. 1 4	17 14	15 16 6	348·2	4 0·62
	Piece of 40 grains	W. 1 2	5 21	5 7 2	117·5	1 4·40
SPAIN	†Dollar, of late coinage	W. 0 8	17 8	16 17 0	370·9	4 3·79
	Half dollar, ditto	W. 0 8	8 16	8 8 10	185·4	2 1·88
	Mexican peceta (1774)	W. 0 8	4 7⅓	4 3 16	92·3	1 0·88
	Real of Mexican plate (1775)	W. 0 8	2 3⅔	2 1 20	46·1	0 6·43
	Peceta provincial of 2 reals of new plate (1775)	W. 1 9⅓	3 18	3 6 0	72·2	0 10·08
	Real of new plate (1795)	W. 1 9⅓	1 21	1 15 0	36·1	0 5·04
SWEDEN	Rixdollar (1762)	W. 0 12	18 20	17 19 10	395·5	4 7·22
	Rixdollar of late coinage	W. 0 14⅓	18 17	17 12 0	388·5	4 6·28
SWITZERLAND	Ecu of 40 batzen of Lucerne (1796)	W. 0 5	19 0	18 13 14	412·3	4 9·57
	Half ditto	W. 1 2	9 20	8 20 12	196·7	2 3·46
	Florin, or piece of 40 schillings of Lucerne (1793)	W. 1 5	4 22	4 8 14	96·8	1 1·51
	Ecu of 40 batzen of the Helvetic Republic, 1798 (1/3 in proportion)	W. 0 6	18 23	18 10 14	409·5	4 9·18
	Ecu of 4 franken	W. 0 7	18 23	18 8 12	407·6	4 9·18
TURKEY	Piastre of Selim of 1801	W. 5 6	8 6	4 7 8	95·7	1 1·36
	Piastre of Crim Tartary (1778)	W. 6 13	10 5	4 2 4	90·9	1 0·69
	Piastre of Tunis (1787)	W. 6 5⅓	10 0	4 8 6	96·5	1 1·47
	Piastre (1818)	W. 5 14	6 6⅓	3 1 4	67·7	0 9·45
TUSCANY	Piece of 10 Paoli of the kingdom of Etruria (1801)	W. 0 4	17 13⅓	17 5 18	382·9	4 5·46

* The Prussian coins, having been debased at different periods, vary in their reports.
† This is the coin which is universally circulated under the name of the Spanish dollar.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	Dwt. gr.	Dwt. gr. mi.	Grains.	s. d.
	Scudo Pisa of ditto (1803) - -	W. 0 2	17 12	17 8 4	385·0	4 5·76
	Piece of 10 lire ditto (1803) -	B. 0 7	25 6	26 1 12	578·7	6 8·80
	Lira (1803) - - -	B. 0 7	2 8	2 9 16	53·4	0 7·45
UNITED STATES	*Dollar, 1795 ($\frac{1}{2}$, &c. in proportion) -	W. 0 6$\frac{1}{2}$	17 8	16 19 16	373·5	4 4·15
	Dollar (1798) - - -	W. 0 7	17 10$\frac{1}{2}$	16 21 6	374·9	4 4·35
	Dollar (1802) - - -	W. 0 10$\frac{1}{2}$	17 10	16 14 0	368·3	4 3·42
	Dollar, an average of 8 years -	W. 0 8$\frac{1}{2}$	17 8	16 16 0	370·1	4 3·68
	Dime, or one-tenth dollar - -	W. 0 4	1 19$\frac{1}{2}$	1 18 14	39·5	0 5·71
	Half dime - - -	W. 0 7	0 21$\frac{1}{2}$	0 21 0	19·5	0 2·72
VENICE -	Piece of 2 lire, or 24 creutzers (1800) -	W. 8 4$\frac{1}{2}$	5 19$\frac{1}{2}$	1 12 2	33·4	0 4·66
	Ditto of 2 lire, called moneta provinciale (1808) - - -	W. 8 3	5 13$\frac{1}{2}$	1 11 8	32·8	0 4·58
	Ditto of 2 lire, 1802 ($\frac{1}{2}$ and $\frac{1}{4}$ in prop.)	W. 8 4	5 6$\frac{1}{2}$	1 8 19	30·5	0 4·25
WIRTEMBERG	Rixdollar, specie - - -	W. 1 3	18 1	16 14 2	359·1	4 2·14
	Copfstuck - - -	W. 4 2	4 16$\frac{1}{2}$	2 16 12	59·8	0 8·35
EAST INDIES.						
	Rupee Sicca, coined by the East India Company at Calcutta - -	B. 0 13	7 11$\frac{1}{2}$	7 22 0	175·8	2 0·54
	Company's or Standard -	Stand.	- -	- -	165·	1 11·11
	Calcutta (1818) - -	Stand.	8 0	8 0 0	175·9	2 0·56
	Bombay, new, or Surat (1818) -	W. 0 0$\frac{1}{2}$	7 11	7 10 4	164·7	1 11·01
	Fanam, Cananore - - -	W. 0 1$\frac{1}{2}$	1 11$\frac{5}{6}$	1 11 10	32·9	0 4·5
	Bombay, old - -	B. 0 13	1 11$\frac{1}{2}$	1 13 16	35·	0 4·88
	Pondicherry - - -	B. 0 5$\frac{1}{2}$	1 0$\frac{5}{6}$	1 1 2	22·8	0 3·18
	Ditto, double - -	W. 0 3	1 18$\frac{5}{6}$	1 18 2	39·	0 5·44
	Gulden of the Dutch E. I. Co. (1820)	W. 0 7$\frac{1}{2}$	6 22	6 16 6	148·4	1 8·72

The sterling value of the foreign coins, in the foregoing tables, has been computed from the assays as follows: — Let it be required to assign the value, in sterling, of a French double Louis d'or coined since 1786, the assay master's report being as follows: — "Weight, 9 dwts. 20 grs.; assay W. 1$\frac{1}{2}$ grs.," that is, 0 car. 1$\frac{1}{2}$ grs. worse than the English standard. We proceed as under: —

From 22 car. 0 gr. the fineness of English standard gold,
Take 0 car. 1$\frac{1}{2}$ gr. } There remains 21 car. 2$\frac{1}{2}$ gr.

Then, as 22 car.: 21 car. 2$\frac{1}{2}$ grs. :: 9 dwts. 20 grs.: 9 dwts. 16 grs., the standard gold contained in the Louis d'or; and hence, as 1 oz.: 3*l.* 17*s.* 10$\frac{1}{2}$*d.* :: 9 dwts. 16 grs.: 1*l.* 17*s.* 7$\frac{1}{2}$*d.*, the value of the Louis in sterling money, and so for any of the other coins.

Ancient Coins. — We subjoin, for the convenience of such of our readers as may at any time have occasion to consult works in which reference is made to ancient coins, the following tables of those that were principally current among the Jews, Greeks, and Romans. They were calculated by Dr. Arbuthnot (*Tables of Ancient Coins, Weights, &c.* 4to ed. Lond. 1754), and do not differ materially from the tables of Paucton, whose *Métrologie* (4to. Paris, 1780) is the most complete and elaborate work that has ever been published with respect to ancient monies, weights, and measures. At the same time we confess we should not be disposed to place much reliance on these tables, and we have elsewhere stated our reasons for holding this opinion. — (*Encyc. Britannica*, art. *Money*.)

JEWISH COINS.

Names and Proportions.									Value in Sterling. £ s. d.
Gerah - - - - - - -									0 0 $1\frac{59}{160}$
10	Bekah - - - - - - -								0 1 $1\frac{1}{16}$
20	2	Shekel - - - - - - -							0 2 $3\frac{3}{8}$
1,200	120	50	Manch Mina Hebraica } - - - -						5 14 $0\frac{3}{4}$
60,000	6,000	3,000	60	Talent - - - -					342 3 9
Solidus aureus, or sextula, worth - - - -									0 12 $0\frac{1}{2}$
Siclus aureus, worth - - - -									1 16 [illegible]
A talent of gold, worth - - - -									5,475 0 [illegible]

GRECIAN COINS.

										s. d. grs.
Lepton - - - - - - -										0 0 $\frac{31}{336}$
7	Chalcus - - - - - - -									0 0 $0\frac{31}{48}$
14	2	Dichalcus - - - - - -								0 0 $1\frac{7}{24}$
28	4	2	Hemiobolum - - - - -							0 0 $2\frac{7}{12}$
56	8	4	2	Obolus - - - -						0 1 $1\frac{1}{6}$
112	16	8	4	2	Diobolum - - -					0 2 $2\frac{1}{3}$
224	32	16	8	4	2	Tetrobolum - -				0 5 $0\frac{2}{3}$
336	48	24	12	6	3	$1\frac{1}{2}$	Drachma - -			0 7 3
662	96	48	24	12	6	3	2	Didrachma - -		1 3 2
1,324	112	96	48	24	12	6	4	2	Tetrachma - -	2 7 0
1,660	384	120	60	30	15	$7\frac{1}{2}$	5	$2\frac{1}{2}$	$1\frac{1}{4}$	Pentadrachma - 3 2 3

* The American dollars, and inferior silver pieces of late coinage, vary in fineness from W. 4 dwts. to W. 9$\frac{1}{2}$ dwts.

Of the foregoing Grecian coins, the drachma and didrachma were of silver; the rest, for the most part, of brass.

The drachma is here, with the generality of authors, supposed equal to the denarius: though there is reason to believe that the drachma was somewhat the weightier.

	Value in Sterling. £	s.	d.
The Grecian gold coin was the stater aureus, weighing 2 Attic drachms, or half of the stater argenteus; and exchanging usually for 25 Attic drachmas of silver	0	16	$1\frac{2}{4}$
But according to our proportion of gold to silver it was worth	1	0	9
There were likewise the stater Cyzicenus, exchanging for 28 Attic drachmas, or	0	18	1
The stater Philippicus, and stater Alexandrinus, were of the same value.			
Stater Daricus, according to Josephus, worth 50 Attic drachmas, or	1	12	$3\frac{1}{2}$
Stater Crœsius, of the same value.			

VALUE AND PROPORTION OF THE ROMAN COINS.

					Sterling. s.	d.	grs.
Teruncius					0	0	$0\frac{775}{1000}$
2	Sembella				0	0	$1\frac{55}{100}$
4	2	Libella As			0	0	$3\frac{1}{10}$
10	5	$2\frac{1}{2}$	Sestertius		0	1	$3\frac{3}{4}$
20	10	5	2	Quinarius Victoriatus	0	3	$3\frac{1}{5}$
40	20	10	4	2 Denarius	0	7	3

	£	s.	d.
The Roman gold coin, or aureus, weighed generally double the denarius; its value, according to the proportion of gold to silver, mentioned by Pliny, was	1	4	$3\frac{3}{4}$
According to the proportion that now obtains amongst us	1	0	9
According to the decuple proportion mentioned by Livy and Julius Pollux	0	12	11
According to the proportion mentioned by Tacitus, by which the aureus exchanged for 25 denarii, its value	0	16	$1\frac{2}{4}$

COIR, a species of yarn manufactured out of the husk of cocoa nuts. The husks being steeped in water, the dry dusty substance mixed with the fibres is separated. These are afterwards spun into yarn, and manufactured into cordage, that is deemed by some superior to that made of hemp. The goodness of coir depends on the fineness of the filaments, and on their being of a bright yellow colour. About 3,000,000 lbs. weight are annually exported from Ceylon, principally to Calcutta, and other ports in the East Indies. It is also prepared in the Maldive Islands, and many other places; and is very extensively used throughout the East. — (*Bertolacci's Ceylon; Bell's Commerce of Bengal, &c.*)

COLOCYNTHIS, COLOQUINTIDA, OR BITTER CUCUMBER (Ger. *Koloquinten*; Du. *Bitter-appelen*; Fr. *Coloquintes*; It. *Coloquintida*; Sp. *Coloquintidas*; Arab. and Pers. *Hunzil*), the produce of an annual plant (*Cucumis colocynthis* Lin.) growing in Turkey, Nubia, India, and other places, much resembling the cucumber in herbage. When ripe, the fruit is peeled and dried in a stove; and in this state is brought to England. It is inodorous, but has an extremely nauseous taste. It is an exceedingly powerful drastic cathartic. When it is larger than a St. Michael's orange, and has black acute pointed ends, it is not good. — (*Ainslie's Materia Indica.*)

COLONIES. — COLONY TRADE. — *Colonies* are establishments founded on foreign countries by individuals who either voluntarily emigrate from, or are forcibly sent abroad by, their mother country. The *colony trade* is the trade carried on between colonies and their parent states.

I. ESTABLISHMENT OF COLONIES.
II. INFLUENCE OF THE MONOPOLY OF THE COLONY TRADE.
III. MAGNITUDE, POPULATION, TRADE, &c. OF BRITISH COLONIES. — DISPOSAL OF LAND IN THE COLONIES, &c.
IV. REGULATIONS UNDER WHICH THE COLONY TRADE IS CONDUCTED.
V. FOREIGN COLONIES.

I. ESTABLISHMENT OF COLONIES.

(1.) *Greek Colonies.* — Various motives have, in different countries and ages, led to the formation of colonies.* The Greek colonies of antiquity seem to have been chiefly

* Seneca has given, in a few words, a very clear and accurate statement of the different motives that induced the ancients to found colonies. "*Nec omnibus eadem causa relinquendi quærendique patriam fuit. Alios excidia urbium suarum, hostilibus armis elapsos, in aliena, spoliatos suis, expulerunt: Alios domestica seditio submovit: Alios nimia superfluentis populi frequentia, ad exonerandas vires, emisit: Alios pestilentia, aut frequens terrarum hiatus, aut aliqua intoleranda infelicis soli ejecerunt: Quosdam fertilis oræ, et in majus laudatæ, fama corrupit: Alios alia causa excivit domibus suis.*" — (Consol. ad Helviam, c. 6.)

founded by citizens whom the violence and fury of contending factions forced to leave their native land; but they were sometimes formed for the purpose of relieving the mother country of a redundant population, and sometimes also for the purpose of extending the sphere of commercial transactions, or of providing for their security. The relations between the mother country and the colony depended, in a great measure, on the motives which led to the establishment of the latter. When a colony was founded by fugitives forcibly expelled from their ancient homes; or when it was founded, as was frequently the case, by bodies of voluntary emigrants, who received no assistance from, and were in no respect controlled by, the parent state, it was from the first independent; and even in those rarer cases in which the emigration was conducted under the superintendence of the parent city, and when the colony was protected by her power and influence, the dependence was, mostly, far from being absolute and complete. The great bulk of the Greek colonies were really independent states; and though they commonly regarded the land of their forefathers with filial respect, though they yielded to its citizens the place of distinction at public games and religious solemnities, and were expected to assist them in time of war, they did so as allies only, on fair and equal terms, and never as subjects. Owing to the freedom of their institutions, and their superiority in the arts of civilised life to the native inhabitants of the countries among whom they were generally placed, these colonies rose, in a comparatively short period, to a high pitch of opulence and refinement; and many among them, as Miletus and Ephesus in Asia Minor, Syracuse and Agrigentum in Sicily, and Tarentum and Locri in Italy, not only equalled, but greatly surpassed, their mother cities in wealth and power.

(2.) *Roman Colonies.* — The Roman colonies were, for the most part, founded by and under the authority of government; being intended to serve both as outlets for poor and discontented citizens, and as military stations, or garrisons, to secure the subjection of the conquered provinces over which they were scattered. The most intimate political union was always maintained between them and the mother city. Their internal government was modelled on that of Rome; and, while their superior officers were mostly sent from the capital, they were made to contribute their full quota of troops and taxes, to assist in carrying on the contests in which the Republic was almost constantly engaged.

(3.) *Spanish Colonies.* — The early colonies of most modern nations were founded by private adventurers, influenced either by the hope of gain, or by a desire to escape from religious persecution, without any wish to relieve the mother country of a surplus population, or to bridle subjugated provinces. On their first institution, therefore, the modern colonies approached, though with some essential variations, more nearly to the Grecian than the Roman model — but the period of their freedom was of very limited duration. They were very soon subjected to laws and regulations framed in the metropolis, and calculated, as was to be supposed, rather to promote its interests than those of the colony. At a somewhat later period the foundation of colonial establishments was eagerly patronised by most European governments, in the view of extending commerce, and of enriching the mother country, by securing to her the exclusive possession of the market of distant countries; and where, from the thinness of the aboriginal population, or their inferiority in the arts of civilised life, the colonists were enabled to amass fortunes with comparative rapidity.

The Spaniards who first resorted to America after its discovery, had no intention of settling in the country, or of colonising it. The idea that gold and silver alone constituted wealth was then universally prevalent; and the bold and enterprising companions and followers of Columbus, instead of engaging in industrious undertakings, which they neither understood nor relished, sought only to enrich themselves by plundering the feeble and defenceless natives of the gold and silver in their possession, and of the abundance of which the most exaggerated accounts were immediately spread throughout Europe. When new adventurers arrived on an unknown coast, their single inquiry was, whether it abounded in gold. If it did, they remained, for some time at least, in the country; if not, they immediately set sail for some other quarter. *Auri rabida sitis a cultura Hispanos divertit,* is the expressive statement of a contemporary writer (Petrus Martyrus, in the *Novus Orbis* of Grynæus, p. 511.). The slow progress of the Spanish colonies, after their first discovery, must principally be ascribed to this cause. The gold and silver accumulated by the natives were very soon exhausted; and the skill and energy of the successive swarms of adventurers, who continued to pour into the country, were principally directed to the unproductive and generally ruinous trade of mining. The few large fortunes that were made in this way, like the large prizes in a lottery, inflamed the cupidity of the multitude, and gave an appearance of credibility to the fabulous accounts of the excessive productiveness of the mines. After the gambling spirit which had exclusively actuated the early adventurers had begun to subside, the colonists gradually betook themselves to agricultural and commercial pursuits: and the vast variety of valuable productions with which Mexico and the other Spanish colonies

abound, the extreme richness of the soil, and their advantageous situation, would, had they been only tolerably well governed, have occasioned their rapid increase in wealth and civilisation. But a blind and intolerant despotism paralysed their energies, and fettered and retarded their progress. All the abuses and defects of the government of Old Spain were transferred to, and multiplied in, the colonies. The whole property of those vast regions was considered as vested in the crown of Spain; and every law or regulation, whether of a local or general nature, affecting their government, emanated from the council of the Indies, in which it was supposed the king was always present. We cannot stop to describe the sort of regulations to which the colonists were subjected with any degree of minuteness; but we may notice a few of them, to furnish the means of judging of their general spirit and probable effect. It was, for example, made a *capital* offence to carry on any intercourse with foreigners; and the inhabitants of the different colonies were even forbidden any intercourse with each other, unless under the strictest and most vexatious regulations. There were several articles, such as flax, hemp, and wine, which they were not permitted to cultivate; at the same time that the crown reserved to itself the monopoly of salt, tobacco, gunpowder, and some other less important articles. The alcavala, and other oppressive imposts, which had proved destructive of industry in Old Spain, were rigorously levied as well on the exports as on the imports of the colonies. No situation of power or emolument could be filled except by a native of Old Spain. The Catholic religion was established, to the exclusion of every other; and bishops, tithes, and the inquisition, followed in its train: while, in order still better to consolidate and strengthen the foundations of this monstrous despotism, the government endeavoured to make the colonists insensible of their degradation, by proscribing every species of instruction, and watchfully opposing the introduction and progress of all useful knowledge!

Under such circumstances, we cannot be surprised that the Continental colonists, among whom the monopoly system was maintained in its greatest purity, should have languished for above two centuries in a state of sluggish inactivity. Though surrounded by all the means of producing wealth, they were not generally wealthy. Oppression rendered them indolent; and went far to deprive them not only of the power, but also of the wish, to emerge from poverty. The progress of the colonists who occupied the West India islands was not quite so slow. It is certain, however, that down to the middle of last century, Spain reaped no greater advantage from the possession of Cuba, Hispaniola, and Porto Rico, than England or France from the smallest of its dependencies. In proof of this we may mention, that the noble island of Cuba, which could without difficulty supply all Europe with sugar, did not, in 1750, produce a sufficient quantity even for the consumption of Old Spain. But the combined influence of an arbitrary and intolerant government, and of a degrading superstition, could not balance the means of improvement, which the fertility of the soil, and the command thence arising over most of the necessaries and many of the conveniences of life, gave to the colonists. Owing also to the total incapacity of Old Spain to furnish her transatlantic provinces with a sufficient supply of the articles she had forced them to import from Europe, and the consequent extension of the contraband trade carried on with them by the other European nations, she had been compelled gradually to relax the severity of her commercial monopoly. A new impulse was thus given to the spirit of industry. The colonists began to be more sensible of the natural advantages of their situation, and less inclined to submit to the blind and bigoted policy of the Spanish court. In 1781, a rebellion broke out in Peru, in consequence of an attempt made by the government to establish a new monopoly in that province, which threatened to end in the total dissolution of the connection between Spain and South America, and was not quelled without great difficulty and much bloodshed. But the spirit of liberty, when once excited, could not be suppressed. It continued to gain ground progressively, until the commencement of the late contest between France and Spain interrupted the communication with the mother country, and gave the colonists an opportunity of proclaiming that independence which, after a lengthened and bloody struggle, they happily succeeded in achieving.

(4.) *British Colonies.* — The English, who, like all the other nations of Europe, had been impressed with mingled feelings of admiration and envy by the extent and importance of the acquisitions made by the Spaniards in the New World, speedily entered with enthusiasm and ardour into the career of discovery. Owing, however, to the bull which Ferdinand and Isabella had obtained from the Pope, conveying to them the ample donation of all the countries inhabited by infidels that the Spaniards had discovered, or might discover, the English, to avoid encroaching on the dominions of their rivals, directed their efforts further to the north. Several attempts to found colonies on the coast of America were made in the reign of Elizabeth by Sir Humphrey Gilbert, Sir Richard Grenville, Sir Walter Raleigh, and others. But in consequence of their ignorance of the country, the deficiency of their supplies of provisions,

the loss of time in fruitless searches after gold, and the various difficulties incident to the first settlement of a colony, none of these attempts proved successful: and it was not until 1607, that a small body of adventurers founded the first permanent establishment of the English in America, at James Town in Virginia. Letters patent were granted in 1609, by King James, to the principal persons resident in London, by whom the expense attending the formation of the colony was to be defrayed, incorporating them into a company, and establishing a council in England for the direction of their proceedings, the members of which were to be chosen by, and removeable at the pleasure of, the majority of the partners of the company; permitting whatever was necessary for the support and sustenance of the colony for the first 7 years to be exported free of duty; declaring that the colonists and their descendants were to be secured in all the rights and privileges of Englishmen, the same as if they had remained at home, or been born in England; and reserving only, as the stipulated price of these concessions, and in imitation of the policy of the Spaniards, *one fifth* part of the gold and silver ore to be found in the colonies, which was to be paid to his Majesty and his successors in all time to come. In virtue of these powers, the company issued, in 1621, a charter or ordinance, which gave a legal and permanent form to the constitution of the colony. By this charter the supreme legislative authority was lodged, partly in the governor, who held the place of the sovereign, partly in a council of state, named by the company, and partly in a general council, or assembly composed of the representatives of the people, in which were vested powers and privileges similar to those of the House of Commons. It was not long, however, before the king and the company quarrelled. The latter were in consequence divested of all their rights, partly by open violence, and partly under colour of law, without compensation, after having expended upwards of 150,000*l.* in founding the colony; and a governor and council of state appointed by the king succeeded to the powers of those appointed by the committee. — (*Robertson's History of America*, book ix. *passim*; *Jefferson's Notes on Virginia*, p. 179.)

The founders of the colony in Virginia had been actuated solely by the hopes of gain: but the colonies that were soon after established in New England, were chiefly planted by men who fled from religious and political persecution. The form of government in the New England colonies, though at first modified a good deal by the peculiar religious opinions entertained by the colonists, was in its leading principles essentially free. For a considerable period, the colonists elected their own governors, coined money, and exercised most of the rights of sovereignty; while the English, wholly engrossed with the contest between freedom and prerogative at home, had no leisure to attend to their proceedings. Subsequently to the Restoration, however, the governments of most of the New England states were established nearly on the same footing as that of Virginia; which, indeed, became the favourite model, not only for the constitution of the colonies established on the Continent, with the exception of the proprietary governments of Pennsylvania and Maryland, but also for those that were established in the West India islands. But under every vicissitude of government and fortune, the New England colonists were distinguished by the same ardent and enthusiastic love of liberty that had first induced them to quit their native land. Every thing relating to the internal regulation and administration of the different colonies was determined, in the colonial assemblies, by representatives freely chosen by the settlers. The personal liberty of the citizens was well secured and vigilantly protected. And, if we except the restraints on their commerce, the monopoly of which was jealously guarded by the mother country, the inhabitants of Virginia, Pennsylvania, and New England enjoyed nearly the same degree of freedom, when colonists of England, that they now enjoy as citizens of the powerful republic of North America. Their progress in wealth and population was in consequence quite unprecedented in the history of the world. The white population of the colonies had increased in 1776, at the commencement of the revolutionary war, to above 2,000,000, and the value of the exports from Great Britain to them amounted to about 1,300,000*l.* a year!

It is not difficult to discover the causes of the unexampled prosperity and rapid growth of our North American colonies, and generally of all colonies placed under similar circumstances. The North American colonists carried with them a knowledge of the arts and sciences practised by a civilised and polished people. They had been trained from their infancy to habits of industry and subordination. They were practically acquainted with the best and wisest form of civil polity that had been established in Europe; and they were placed in a situation that enabled them, without difficulty, to remedy its defects, and to try every institution by the test of utility. But the thinness of the aboriginal population, and the consequent facility of obtaining inexhaustible supplies of fertile and unoccupied land, must certainly be placed at the head of all the causes which have promoted the rapid increase of wealth and population in the United States, and in all the other colonies both of North and South America. On the first foundation of a colony, and for long after, each colonist gets an ample supply of land of

the *best quality;* and having no rent, and scarcely any taxes, to pay, his industry necessarily becomes exceedingly productive, and he has every means, and every motive, to amass capital. In consequence, he is eager to collect labourers from all quarters, and is both willing and able to reward them with high wages. But these high wages afford the means of accumulation, and, joined to the plenty and cheapness of the land, speedily change the more industrious labourers into proprietors, and enable them, in their turn, to become the employers of fresh labourers; so that every class participates in the general improvement, and capital and population advance with a rapidity hardly conceivable in old settled and fully peopled countries.

It has been frequently said, that the establishment of our American and West India colonies was a device of the supporters of the exclusive or mercantile system — that they founded them in the view of raising up a vast agricultural population, whose commerce should be confined entirely to an exchange of their raw products for our manufactured goods. There is, however, no truth in these assertions. On the contrary, the charters granted to the founders of the settlement in Virginia distinctly *empower the colonists to carry on a direct intercourse with foreign states.* Nor were they slow to avail themselves of this permission; for they had, so early as 1620, established tobacco warehouses in Middleburg and Flushing — (*Robertson's America*, book ix. p. 104.); and the subsequent proceedings of the British government, depriving them of this freedom of commerce, were the chief cause of those disputes which broke out, in 1676, in an open rebellion of ominous and threatening import. — (*Robertson's America*, p. 147.) It was not until the colonists had surmounted the difficulties and hardships incident to their first establishment, and had begun to increase rapidly in wealth, that their commerce became an object of importance, and that regulations were framed in the view of restricting its freedom, and of rendering it peculiarly advantageous to the mother country. The act of 1650, passed by the republican parliament, laid the first foundations of the monopoly system, by confining the import and export trade of the colonies exclusively to British or colony built ships. But the famous Navigation Act of 1660 (12 Charles 2. c. 18.) went much further. It enacted, that certain specified articles, the produce of the colonies, and since well known in commerce by the name of *enumerated* articles, should not be exported directly from the colonies to any foreign country; but that they should first be sent to Britain, and there unladen (the words of the act are, *laid upon the shore*), before they could be forwarded to their final destination. Sugar, molasses, ginger, fustic, tobacco, cotton, and indigo, were originally enumerated; and the list was subsequently enlarged by the addition of coffee, hides and skins, iron, corn, lumber, &c. In 1739, the monopoly system was so far relaxed, that sugars were permitted to be carried directly from the British plantations to any port or place southward of Cape Finisterre; but the conditions under which this indulgence was granted, continued so strict and numerous down to 1803, when they were a good deal simplified, as to render it in a great degree nugatory — (*Edwards's West Indies*, vol. ii. p. 452. ed. 1819.); and with this exception, the oppressive and vexatious restrictions on their direct exportation to foreign countries were maintained on most of the other *enumerated* commodities of any importance, down to a late period.

But besides compelling the colonists to *sell* their produce exclusively in the English markets, it was next thought advisable to oblige them to *buy* such foreign articles as they might stand in need of entirely from the merchants and manufacturers of England. For this purpose it was enacted, in 1663, that "no commodity of the growth, production, or manufacture of Europe, shall be imported into the British plantations, but such as are laden and put on board in England, Wales, or Berwick-upon-Tweed, and in English-built shipping, whereof the master and three fourths of the crew are English." The preamble to this statute, which effectually excluded the colonists from every market for European produce, except that of England, assigns the motive for this restriction to be, "the maintaining a greater correspondence and kindness between the subjects at home and those in the plantations; keeping the colonies in a firmer dependence on the mother country; making them yet more beneficial to it, in the further employment and increase of English shipping, and the vent of English manufactures and commodities; rendering the navigation to and from them more safe and cheap; and making this kingdom a staple, not only of the commodities of the plantations, but also of the commodities of other countries and places for their supply; it being the usage of other nations to keep their plantation trade exclusively to themselves."

It was also a leading principle in the system of colonial policy, adopted as well by England as by the other European nations, to discourage all attempts to manufacture such articles in the colonies as could be provided for them by the mother country. The history of our colonial system is full of efforts of this sort; and so essential was this principle deemed to the idea of a colony, that Lord Chatham did not hesitate to declare, in his place in parliament, that "the British colonists of North America had *no* RIGHT *to manufacture even a nail for a horseshoe!*" — (*Edwards's West Indies*, vol. ii. p. 566.) And

when such were the enactments made by the legislature, and such the avowed sentiments of a great parliamentary leader and a friend to the colonies, we need not be surprised at a declaration of the late Lord Sheffield, who did no more, indeed, than express the opinion of almost all the merchants and politicians of his time, when he affirmed that "THE ONLY *use of American colonies or West India islands is* THE MONOPOLY *of their consumption, and the carriage of their produce!*"

II. INFLUENCE OF THE MONOPOLY OF THE COLONY TRADE.

(1.) It is not necessary to enter into any lengthened disquisitions with respect to this part of our subject. The rules by which we are to form our judgment upon it, are unfolded in the article COMMERCE. Here it is sufficient to observe, in the first place, that, though it could be shown that restrictions on the colony trade were really advantageous to the mother country, that is not enough to prove that they should be adopted. In dealing with a colony, we are not dealing with a foreign country, but with an integral part of our own empire. And hence, in order to show that restrictions on the colony trade are advantageous, it must not merely be shown that they are beneficial to the mother country, but it must further be shown that they are beneficial, or, at all events, not injurious, to the colony. The advantage of one part of the empire is not to be purchased by the depression of some other part. The duty of government is to promote the prosperity and to maintain the equal rights and privileges of all; not to enrich one class, or one province, at the expense of others.

This principle is decisive of the whole question. Owing to the identity of language, manners, and religion, the merchants of the mother country must always have very great advantages in the colony markets; and if the commodities which they have to sell be about as suitable for them, and as low priced, as those of others, none else will be imported into them; but if they be not, it would plainly be to the injury of the colony to compel her to buy from the mother country what she might procure cheaper from others. It will immediately be seen that such forced sale could be of no real advantage to the mother country; but whether that were so or not, its mischievous influence upon the colony is manifest. Were Jamaica, for example, obliged to import any article from England which cost her 100,000*l.* a year more than she could procure a similar article for elsewhere, she would manifestly lose this amount; and though it were true that every shilling of this sum found its way as *extra profit* into the pockets of the merchants or manufacturers of England, that would be no sufficient justification of the policy of such a system. The protection due by a government to its subjects does not depend on the varying degrees of latitude and longitude under which they happen to live. It would not be more glaringly unjust to lay peculiar burdens on the Lothians for the sake of Middlesex, than it is to lay them on Jamaica for the sake of England.

In point of fact, however, the monopoly of the colony trade is of no real use, but the reverse, to the mother country. If, as has been already observed, she can supply her colonists with goods as cheaply as they can be supplied by others, she will have no competitors in their markets; and if she cannot do this, the monopoly is really hostile to her interests. Each country has some natural or acquired capabilities that enable her to carry on certain branches of industry more advantageously than any one else. But the fact of a country being liable to be undersold in the markets of her colonies, shows conclusively, that instead of having any superiority, she labours under a disadvantage, as compared with others, in the production of the peculiar articles in demand in them. And hence, in providing a forced market in the colonies for articles that we should not otherwise be able to dispose of, we really engage a portion of the capital and labour of the country in a less advantageous channel than that into which it would naturally have flowed. We impress upon it an artificial direction; and withdraw it from those secure and really beneficial businesses in which it would have been employed, to engage it in businesses the existence of which depends only on the continuance of oppressive regulations, and in which we are surpassed by foreigners.

Even were it conceded that the possession of an outlet in the colonies for goods that could not otherwise be disposed of, was an advantage, it is one that can exist in theory only. Practically it can never be realised. The interests of the colonists, and the dexterity and devices of the smuggler, are too much for Custom-house regulations. Cheap goods never fail of making their way through every obstacle. All the tyrannical laws and *guarda costas* of Old Spain did not hinder her colonies from being glutted with prohibited commodities. And we may be assured that the moment a competitor appears in the field capable of supplying the Canadians and people of Jamaica with cottons, woollens, hardware, &c. cheaper than we can supply them, that moment will they cease to be our customers. All the revenue officers, and all the ships of England, supposing them to be employed for that purpose, would be unable to avert this result.

The consequences of the American war should have led to sounder opinions than those that are still current as to the value of the monopoly of the colony trade. Has

the independence of the United States been in any respect injurious to us? So far from this, it is certain that it has redounded materially to our advantage. We have been relieved from the expense and trouble of governing extensive countries at a great distance from our shores, at the same time that we have continued to reap all the advantage that we previously reaped from our intercourse with them. It is visionary to imagine that we could have succeeded either in preventing them from establishing manufactories at home, or from importing products from abroad, had any one been able to undersell us. Our command of the American market depends, at this moment, on the very same principle—the comparative cheapness of our goods—on which it depended when we had a governor in every state. So long as we preserve this advantage, we preserve the only means by which the monopoly of any distant market can be maintained, and the only means by which such monopoly is rendered of the least advantage.

Being integral parts of the empire, the trade with the colonies should, as far as circumstances will permit, be conducted on the footing of a coasting trade. The state of the revenue requires that moderate duties should be laid on sugar, coffee, and rum, when imported into Great Britain or Ireland; but the duties on cotton, cocoa, and most other colonial products, might be repealed without injury to the revenue, and with advantage to all parties. Unfortunately, however, the system we pursued down to a late period was in most respects the reverse of what it should have been. By excluding the colonists from the cheapest markets for their food and lumber, we artificially raised the cost of their produce; and then, to protect them from the consequences of such short-sighted policy, we gave them a monopoly of the British market! It is thus that one unjust and vicious regulation is sure to give birth to others; and that those who depart from sound principle have nothing left but to endeavour to bolster up one absurdity by another. It is time, surely, that an end were put to every vestige of so ruinous a system. It is as much for the interest as it is the *duty* of England, to remove all restrictions from the colonists, not essential for the sake of revenue: for this is the only means by which she can provide for their real prosperity, by turning their industry into those departments for the prosecution of which they are naturally fitted, and rid herself of those monopolies that form the heaviest clog upon her industry.

We could not, however anxious, exclude manufactured articles, and such foreign goods as are valuable without being very bulky, from our West India islands, provided they were offered cheaper by others. But such is not the case with lumber, provisions, &c. They are too bulky to be easily smuggled; and may be, and indeed were, very much raised in price by restrictions on their importation. For many years, all direct intercourse between our West India colonies and the United States was interdicted; and, in consequence, the planters were compelled either to supply themselves with lumber, staves, &c. by a distant voyage from Canada, or, which was by far the most common practice, from the United States, through the circuitous and expensive channel of St. Thomas and other neutral islands! In papers laid by the West India merchants and planters before the House of Commons (No. 120. Session 1831), they estimated the increased expense they thus incurred on lumber, staves, flour, shingles, fish, &c. at 15 per cent. of the entire value of these articles, or at 187,576*l.* a year. And it will be observed, that no part of this sum went into the pockets of any British merchant. It went wholly to indemnify the Americans and others for being obliged to bring their products round about by St. Thomas, instead of direct from the States.

This system grew out of the American war; but it is due to Mr. Pitt to state that it received no countenance from him. On the contrary, he introduced a bill, in 1785, for reviving the beneficial intercourse that existed previously to the war, between the United States and the West India islands. But being opposed by a powerful party in parliament, and by the ship owners and Canada merchants, he was obliged reluctantly to withdraw the bill. The following remarks of Mr. Bryan Edwards on this subject, written in 1794, are too interesting to be omitted.

"This," says he, "is not a business of selfishness or faction; nor (like many of those questions which are daily moved in parliament merely to agitate and perplex government) can it be dismissed by a vote. It will come forward again and again, and haunt administration in a thousand hideous shapes, until a more liberal policy shall take place; for no folly can possibly exceed the notion that any measures pursued by Great Britain will prevent the American states from having, some time or other, a commercial intercourse with our West Indian territories on their own terms. With a chain of coast of 20° of latitude, possessing the finest harbours for the purpose in the world, all lying so near the sugar colonies and the track to Europe, with a country abounding in every thing the islands have occasion for, and which they can obtain no where else; all these circumstances necessarily and naturally lead to a commercial intercourse between our islands and the United States. It is true we may ruin our sugar colonies, and ourselves also, in the attempt to prevent it; but it is an experiment which God and nature have marked out as impossible to succeed. The present restraining system is forbidding men

to help each other; men who, by their necessities, their climate, and their productions, are standing in perpetual need of mutual assistance, and able to supply it."—(*Hist. West Indies*, Preface to 2d ed.)

We have also thought fit to interdict the West Indians from the refining, or, as it is technically termed, the *claying* of sugars. This is one of the few manufactures that might be advantageously set up in the islands. The process adds considerably to the value of sugar; and it might be carried on in the buildings, and by the hands, that are required to boil the cane, or to prepare the raw or muscovado sugar. Instead, however, of being allowed to refine their sugars on the spot, and where it might be done for a third part of the expense that is required in England, the planters have been prohibited from engaging in this branch of industry; and have been obliged to export all their sugars, either raw or crushed, to England. Nothing can exceed the oppressiveness of such a regulation; and what is most singular, it has not been enforced, like most regulations of the sort, in order to bolster up any of the leading interests of the country, but merely to give a factitious employment to a very small class,—that of the sugar refiners, whose natural residence is in the West Indies. The planters and merchants estimated (in 1830) the loss caused by this preposterous regulation at 75,550*l.* a year; and we regret to say that it is still enforced.

The distillation of spirits from sugar has only been occasionally allowed; but provided the duties were so adjusted as to give no advantage to the planters over the growers of barley, or to the latter over the former, we think the distillers should be, at all times, allowed to distil indiscriminately from sugar, molasses, or grain. It is the business of government to take care that the duties be so arranged as to give no unfair advantage to one party over another; but, having done this, it should do nothing more. To prohibit distillation from sugar, that a forced market may be opened for grain; or distillation from grain, that a forced market may be opened for sugar; are interferences with the freedom of industry, for which no good reason has been, nor, we believe, can be assigned.

(2.) *Relaxation of the Monopoly.* — But though a good deal remains to be done, it is not to be denied that a very material progress has been made towards the adoption of a sound system of colonial policy since 1822, when measures for the relaxation of the monopoly were introduced by Mr. Robinson (now Lord Ripon). These measures were farther followed up by Mr. Huskisson in 1825, by the act 6 Geo. 4. cap. 114.; and since his time by the 3 & 4 Will. 4. cap. 59. and more recently by the 5 & 6 Vict. cap. 49., which came into operation in the West Indies on the 5th of April last (1843). These acts have repealed several of the prohibitions that formerly existed against the importation of certain articles into the West Indian colonies and the Mauritius, and they have also either repealed or very materially reduced the duties that were previously laid on others. For example, the barrel of American or other foreign flour, that down to the present year paid a duty of 5*s.*, may now be imported on paying a duty of 2*s.* Most other duties on articles of food have been reduced in the same proportion; and rice, wood, and lumber, articles of great importance in the colonies, which formerly paid high duties, may now be imported duty free. — (See *post.*) We believe, indeed, that it would be sound policy to carry still farther this liberal system, by entirely repealing the duties on flour, salt meat, and all other articles of provision. Jamaica and our other West Indian colonies, may be viewed as immense sugar, rum, and coffee manufactories, which, though situated at a distance from England, belong to Englishmen, and are carried on by English capital. But to promote the prosperity of any manufacture, without injury to others, there are no means, at once so obvious and effectual, as to give those engaged in it the means of carrying it on with the least outlay, and to keep the duties on its produce as low as possible. And, how much soever we may fail in the last of these necessary conditions, we have now but little to reproach ourselves with in regard to the former. It were better certainly that the duties on necessaries imported into the colonies should be wholly repealed; but if they are to be retained, those imposed by the late act are as moderate as can well be desired.

Formerly, though American and other foreign flour could not be imported from a foreign country into the West India islands without paying a duty of 5*s.* a barrel, it might be imported free of duty into Canada and our other possessions on the continent of N. America, and be thence exported in British ships to the islands free of duty. In consequence of this regulation a large proportion of the flour, lumber, and other articles required for the supply of the islands, instead of being shipped direct for them from New Orleans, Baltimore, and other American ports, was sent in the first instance to Canada, whence it was conveyed in British ships to its final destination. So that the influence of the duty was not so much to raise a revenue, or to open a market for the flour, provisions, and lumber of Canada, as to make the flour and other necessaries supplied to the colonists by the United States be carried, at a heavy expense, a roundabout voyage of some 2,000 miles and transhipped, that employment might be found for a few

thousand tons of British and colonial shipping! But this preposterous system is happily at an end. American flour is now charged with a duty of 3*s.* a barrel in Canada; and, independently of this, the duties on foreign articles directly imported into the colonies are too low to give any encouragement to their indirect conveyance.

It is, however, not a little singular, that while the imperial legislature has thus endeavoured, by repealing and lowering the duties on most articles of foreign produce, to provide for the future prosperity of the colonies, the legislature of Jamaica should have passed an act imposing heavy duties on the same articles. Luckily, however, this most impolitic act expires on the 31st of December 1843 and government has most properly directed the governor to refuse his assent should it be attempted to renew it, or to propose any similar measure.—(*Parl. Paper* No. 292. Sess. 1843.)

Hitherto, however, concession has been all on the one side; and while we have all but emancipated the trade of the colonies, and allowed them to resort to all the markets of the world, we confine our demand for colonial produce exclusively to their markets. So long, indeed, as the colonists were compelled to take all that they wanted from us, it was but fair that we should be compelled to take the sugar and other articles with which they could supply us exclusively from them. But having liberated them from this obligation, and permitted them to resort to whatever markets they think most advantageous, where is the justice or policy of continuing to confine the people of the U. Kingdom to their markets? This, of all possible cases, is that in which reciprocity would seem to be most desirable. If it be right, as no doubt it is, that the planters of Jamaica should, if they deem it most for their interest, be allowed to draw supplies of flour, provisions, and manufactured goods from New Orleans or Baltimore, on what pretence is the British manufacturer or merchant to be prevented from importing sugar from Rio, the Havannah, or Batavia?

Having done so much to abolish prohibitions on one side, we are bound to do as much for their abolition on the other. Having deprived the merchants and manufacturers of the U. Kingdom of the monopoly of the colony market, we cannot, without violating every principle of consistency and justice, refuse to deprive the colonists of the monopoly of the British markets. Indeed the ablest and most zealous defenders of the colony system have admitted that one part of it could not be supported independently of the rest, that it is of a piece, and must either stand or fall together. "The British dominions," says Lord Sheffield, "*are as much entitled to the markets of the British West Indies, as the latter are entitled to those of the former, and whenever that monopoly is given up it* WILL BE THE HIGHEST ABSURDITY NOT TO OPEN ALL THE BRITISH PORTS TO FOREIGN RAW SUGARS."—(*Observations on the Commerce of the American States*, p. 288.) Inasmuch, indeed, as the well-being and prosperity of the people of the U. Kingdom is of incomparably more importance than that of the West Indian colonists, every argument that has been or that may be brought forward to show the impolicy of the restraints on the trade of the latter, applies with tenfold force to those laid on the trade of the former.

Influence of the Monopoly on the Sugar, Timber, &c. imported into the U. Kingdom. — It appears from the official returns given in the Parl. Paper No. 226. Sess. 1843, that during the three years ending with 1842, 3,840,309½ cwts. sugar were annually retained for home consumption in the U. Kingdom; and it farther appears, from the same return, that while the average price of British muscovado sugar during that period was 41*s.* 10½*d.* a cwt., the average price of Brazil sugar was only 20*s.* 2*d.* a cwt. Hence it follows that if the present prohibitory duty of 63*s.* a cwt. on foreign sugar had been reduced to the same level (24*s.*) as that on British colonial sugar, we might have purchased the same supply of sugar for 20*s.* 2*d.* a cwt. that cost us 41*s.* 10½*d.*, which, on the average quantity consumed during the last three years, would have been a total saving in this single article of no less than 4,168,335*l.* a year! But it may, perhaps, be said, that, had our ports been open to the free importation of Brazil and other foreign sugars, the price of the latter would have been raised; and so, probably, it would; though, considering the vast extent and productiveness of the field from which sugar may now be brought, we doubt whether this effect would be very sensible. But supposing that the opening of our ports had raised the price of foreign sugar from 20*s.* 2*d.* to 25*s.* a cwt., still the saving would have amounted to 3,240,260*l.* 6*s.* a year!—(See art. SUGAR.)

This is bad enough, certainly: but this is not all. Not only do we force the people of the U. Kingdom to pay the planters of the West India islands and the Mauritius twice the price for their sugar for which they could supply themselves with equally good foreign sugar, but, in order to force a trade with Canada, we admit its inferior timber at a duty of 1*s.* a load, while we impose a duty of 25*s.* a load on the superior timber brought from the Baltic and other foreign countries.—(See art. TIMBER.) It is needless to dwell on the glaring impolicy of such *felo de se* regulations. In Great Britain sugar is no longer a luxury but a necessary; and the largest supply of the best and cheapest timber is of the last importance to a manufacturing nation possessed of a great mercantile and warlike navy. And yet we load these indispensable articles with

oppressive duties, not for the sake of revenue, but merely that we may consume the produce of Jamaica and Canada rather than of Brazil or Prussia. It is surely impossible that we should continue to subject ourselves to such burdens for such an object. If sugar cannot be as cheaply produced in Jamaica and our other islands as in Brazil and Cuba, its culture must be a public loss, and should be abandoned for the culture of other articles more suitable to their peculiar capacities. It might, no doubt, be wrong at once to reduce the duty on foreign sugar to the same level as that on the sugar brought from our colonies. But the duties on the former should be progressively, and not very slowly, lowered, till they are reduced to the same level as those on the latter. The monopoly against the colonies having been abandoned, it is not to be endured that the monopoly against the mother country should be indefinitely prolonged.

The expense of the colonies is, also, a very heavy item in the national expenditure — far more so than is generally supposed. Not only are we subjected to oppressive discriminating duties on foreign articles, that similar articles from the colonies may enjoy the monopoly of our markets, but we have to defray a very large sum on account of their military and naval expenditure. There are no means by which to estimate the precise amount of this expense; but it is, notwithstanding, abundantly certain, that Canada and the islands in the West Indies cost us annually, in military and naval outlays, upwards of a *million and a half in time of peace, exclusive of the revenue collected in them.* And if to this heavy expense be added the vast additional sums their defence costs during war, the debtor side of a fairly drawn up colonial budget would attain to a very formidable magnitude; and one which we apprehend could not possibly be balanced.

With the exception of the outlet which they afford to emigrants (which, however, is not so great as that afforded by the U. States), we have yet to learn what are the advantages we derive from our colonies in N. America. They do not, we are bold to say, furnish a single article which we might not import at a less cost from elsewhere; and if we said that their occupation costs us directly and indirectly (through the unjust preference given to their products in our markets) the sum of 3,500,000*l.* a year, over and above every countervailing advantage, we are pretty confident we should be considerably within the mark. Some, if not all, of our West India colonies are in the same, or nearly the same predicament. And on the whole, it is all but certain that we should be considerable gainers by providing, under judicious regulations, for the independence of our transatlantic dominions.

In entertaining this opinion we are not singular. "If," said Lord Sheffield, "we have not purchased our experience sufficiently dear, let us derive a lesson of wisdom from the misfortunes of other nations, who, like us, pursued the phantom of foreign conquest and distant colonisation; and who, in the end, found themselves less populous, opulent, and powerful. By the war of 1739, which may be truly called an American contest, we incurred a debt of upwards of 31,000,000*l.*; by the war of 1755 we incurred a further debt of 71,500,000*l.*; and by the war of the revolt we have added to both these debts nearly 100,000,000*l.* more! And thus we have expended a far larger sum in defending and retaining our colonies, than the value of all the merchandise we have ever sent them. So egregious has our impolicy been, in rearing colonists for the sake of their custom!" — (*On the Commerce of the American States*, p. 240.)

We hope it will not be supposed, from any thing now stated, that we consider the foundation of colonial establishments as, generally speaking, inexpedient. We entertain no such opinion. We do not object to the establishment of colonies, provided they be placed in advantageous situations, but we do object to the trammels that have been laid on their industry, the interference exercised by the mother countries in their domestic concerns, and the attempts to govern and coerce them after they have attained to maturity. Every individual should have full liberty to leave his native country; and occasions very frequently occur, when governments may advantageously interfere to settle emigrants in foreign countries, and when the soundest policy dictates the propriety of their supporting and protecting them until they are in a situation to support and protect themselves. There can be no question that Europe has been prodigiously benefited by the colonisation of America. The colonists carried the arts, the sciences, the language, and the religion of the most civilised communities of the Old World to regions of vast extent and great natural fertility, occupied only by a few miserable savages. The empire of civilisation has in consequence been immeasurably extended: and while the experience afforded by the rise and progress of communities placed under such novel circumstances, has served to elucidate and establish many most important and fundamental principles in government and legislation, Europe has been enriched by the vast variety of new products America has afforded to stimulate the inventive powers of genius, and to reward the patient hand of industry.

But whatever may have been the advantages hitherto derived from the colonisation of America, they are trifling compared to what they would have been, had the European

powers left the colonists at liberty to avail themselves of all the advantages of their situation, and avoided encumbering themselves with the government of extensive territories 3,000 miles distant. Fortunately, however, a new æra has begun — *Novus sæclorum nascitur ordo!* The monopoly of the trade of America is destroyed, and her independence achieved. From Canada to Cape Horn, every port is ready to receive adventurers from Europe; and a boundless field has, in consequence, been opened for the reception of our surplus population, and for the advantageous employment of European arts, capital, and skill. The few remains of the old colonial system which still exist, cannot be of long duration. Their mischievous operation is no longer doubtful, and they will disappear according as the knowledge of sound commercial principles is more generally diffused.

The colonisation of Australia will also contribute in no ordinary degree to extend the blessings of civilisation; and there can be no doubt that this newly discovered quarter of the globe, the native inhabitants of which were still fewer in number and more barbarous than those of America, is destined, at no very remote period, to be the seat of flourishing communities: and while they preserve the language and literature, it is to be hoped that they may also pursue the mild, liberal, and tolerant policy, of the illustrious people from whom it should ever be their proudest boast to have descended.

(3.) *Slavery.* — Since the publication of the first edition of this work, a vast change has been effected in the condition of society in our West India colonies and the Mauritius, by the abolition of slavery, under the provisions of the act 3 & 4 Will. 4. cap. 73. (See art. SLAVES AND SLAVE TRADE.)

In the second edition of this work, published soon after the act for the abolition of slavery had been passed, and before its provisions had been carried into effect, we ventured to speculate as follows on its probable results: —

"Nothing but vague conjectures can, of course, be indulged in as to the future working of this measure in the colonies. We believe, however, that those who have contended that it will not be productive of any falling off in the industry of the blacks will be found to have taken a very erroneous view of the matter. Field labour in the West Indies has hitherto been always associated with slavery and degradation, and been enforced by the lash. The fair inference, consequently, is, that when the fetters are struck off the slave, and he is left to follow his own inclinations, he will be desirous of escaping from what he cannot fail to consider an ignominious occupation. Necessity, no doubt, will prevent him from becoming altogether indolent; but the effect will in this, as in other instances, be proportioned to its cause: and necessity in the West Indies is very different from necessity in Europe. Most articles that are here deemed indispensable, would there be positive incumbrances; and those essential to subsistence may be procured with less, certainly, than half the labour hitherto exacted from the slaves. At some future period, perhaps, when the recollection of their degradation has begun to fade, and a taste for conveniences and gratifications has been introduced amongst them, they may become more industrious; but this is a distant and a very uncertain prospect. We therefore look, at first, for a very considerable decline in the industry of the slaves, and a proportional falling off in the exports from the islands."

It will be seen, from the returns given in a subsequent part of this article, that these anticipations have been more than realised, and that there has been a most extraordinary falling off in the imports from the colonies. We confess, also, that we are a good deal more sceptical than formerly in our anticipations of their future increase. Industry, when carried on by free labourers, is prosecuted only as a means by which they may acquire an adequate supply of necessaries and conveniences. And it is all but contradictory and absurd to suppose that a population with few wants, occupying a soil of great natural fertility, lying under a burning sun which unfits for exertion, should voluntarily engage in severe, and, to them, useless labour. We believe, indeed, that it will be found wholly impossible, except under peculiar circumstances, to carry on the culture of sugar on its present plan, in tropical countries, by the agency of *really* free labourers. Hayti, formerly the most important and productive of all the sugar colonies, does not now produce a single cwt. of sugar. Mexico is, also, fast relapsing into the most deplorable barbarism (see *Geog. Dict.*, art. *Mexico*); and experience seems to show that some sort of modified slavery, or, which is the same thing, of compulsory labour, is indispensable to the successful prosecution of industry in tropical countries. It is to this that the extraordinary increase of produce in Java is to be ascribed; and, how much soever we may cry out against the slavery of the U. States, there cannot, we apprehend, be a doubt that its existence, how objectionable soever in many respects, is necessary to the advantageous cultivation of the Southern states. It is the same in Cuba and Brazil. Were their slaves emancipated, may it not be fairly presumed that they would gradually, and not very slowly, sink into the state of Mexico and Hayti? and that instead of an extensive culture of sugar and other articles for foreign demand, the bulk of the population would be satisfied if they supplied themselves with those

necessary for their subsistence? We need not, therefore, wonder that the projects for slave emancipation should make but little progress among the Americans, Brazilians, and Cubans. Whether the West India colonies cease to produce sugar and cotton is a matter of excessively little importance to the people of Britain; but it is a matter of the very last importance to the white people of the Southern states of America, of Brazil, and of Cuba; and they will be much to blame if they do not exercise extreme caution in legislating upon this most delicate matter. Perhaps the better policy will be for them gradually to relax the rigours of servitude, and to endeavour to improve the character and condition of the slaves, so as to fit them the better for emancipation, which may, probably, in the end be forced upon them: but they should carefully eschew all rash or precipitate measures.

III. Magnitude, Population, Trade, etc. of the British Colonies.

Notwithstanding the loss of the U. States, the colonies of Great Britain, exclusive of India, exceed in number, extent, and value, those of every other country. Previously, indeed, to the breaking out of the late contests, the colonial dominions of Spain far exceeded in extent and importance those of any other power. But Cuba, Porto Rico, and the Philippine Islands are now all that remain to her. These, indeed, are very valuable possessions, though inferior to those of England.

(1.) *North American Colonies.* — In N. America we possess the provinces of Lower and Upper, or of East and West Canada, Nova Scotia, New Brunswick, Prince Edward's Island, and their dependencies. The situation and boundaries of these provinces will be more easily learned from the inspection of the accompanying map, than they could be from any description. The shores of Nova Scotia and New Brunswick are washed by the Atlantic Ocean; and the noble river St. Lawrence, by its communication with the great American lakes, gives to Canada all the benefits of a most extensive inland navigation, and forms a natural outlet for her surplus produce, as well as for the surplus produce of that part of the U. States which is washed by the lakes. There is every variety in the soil and climate of these regions. In Lower Canada, the winter is very severe. The surface of the country is covered with snow for nearly half the year. From the beginning of December to the middle of April, the St. Lawrence is frozen over, and affords a smooth and convenient passage for the sledges by which it is then covered. But though severe, the climate is far from being unhealthy or disagreeable. The weather is generally clear and bracing; and the labour of artisans, at their out-door employments, is rarely suspended for many days in succession. On the breaking up of the ice in the latter end of April, or the beginning of May, the powers of vegetation almost immediately resume their activity, and bring on the fine season with a rapidity that is astonishing to a stranger. The highest temperature in Lower Canada varies from 96° to 102° of Fahrenheit; but the purity of the atmosphere abates the oppressive heat that is felt in most countries where the mercury ranges so high; and the weather is, on the whole, decidedly pleasant.

That part of the province of Upper or West Canada, which stretches from Lake Simcoe and the rivers Trent and Severn, westward to Lake Huron and the St. Clair River, and southward to Lake Erie, and part of Lake Ontario, has a soil of extraordinary fertility, capable of producing luxuriant crops of wheat, and every sort of grain. "The climate," says Mr. Bouchette, late surveyor-general of Lower Canada, "is so particularly salubrious, that epidemic diseases, either among men or cattle, are almost entirely unknown. Its influence on the fertility of the soil is more generally perceptible than it is in Lower Canada, and is supposed to be congenial to vegetation in a much superior degree. The winters are shorter, and not always marked with such rigour as in the latter. The duration of frost is always accompanied with a fine clear sky and a dry atmosphere. The spring opens, and the resumption of agricultural labours takes place, from 6 weeks to 2 months earlier than in the neighbourhood of Quebec. The summer heats rarely prevail to excess, and the autumns are usually very friendly to the harvests, and favourable for securing all the late crops." — (*Bouchette's Topographical Description of Canada*, p. 595.) The ground on the shores of Lake Ontario and Lake Erie, as far west as the junction of the Thames with the St. Clair Lake, is laid out in townships, and partly settled. But the population is still very thin. To the north of the river Thames, along the banks of the St. Clair, and the shores of Lake Huron, round to the River Severn, and thence to the river that joins Lake Nippissing and Lake Huron, is a boundless extent of country that is almost entirely unoccupied. The interior of this space has hitherto been but imperfectly explored; but the banks of the St. Clair and the shores of Lake Huron afford the finest situations for settlements. The soil is in many places of the greatest fertility, the river and lake teem with fish, and every variety of the best timber is found in the greatest profusion.

The winters in the provinces of Nova Scotia, Prince Edward's Island, and New Brunswick are more severe than in Upper Canada, and they are a good deal infested

with fogs and mists. But their proximity to England, and their favourable situation for the fishing business, give them considerable advantages.

In addition to the above, we possess the Hudson's Bay territory, a tract of vast extent, but situated in an inhospitable climate, and worth very little except as hunting grounds. We also possess the large islands of Newfoundland and Cape Breton, the latter being a dependency of Nova Scotia; but their soil is barren, and the climate severe and foggy; so that they are valuable principally as fishing stations.

The following table exhibits the population, area, and surveyed and unsurveyed lands in the different N. American colonies in 1842:—

Colony.	Population (and date of census.)	Area.	Surveyed or granted.	Unsurveyed or ungranted.	Available for Settlement.
		Acres.	Acres.	Acres.	Acres.
Eastern (Lower) Canada - -	(1842) 700,000 ?	132,000,000	2,734,735 sd.	118,980,000 uns.	5 to 6,000,000
Western (Upper) Canada - -	(1842) 600,000 ?	64,000,000	1,326,343 sd.	3,180,000 uns.	3,754,000
New Brunswick - -	(1840) 156,162	16,500,000	No Return.	13,817,573 ung.	11,000,000
Prince Edward's Island - -	(1842) 47,000 ?	1,360,000	No Return.	6,000 ung.	No Return.
Newfoundland - - -	(1836) 75,094	23,000,000	23,000 sd.	No Return.	No Return.
Nova Scotia - - -	(1838) 142,543	8,000,000	5,750,000 gr.	2,225,000 ung.	280,000

Number of Emigrants. — There emigrated to the British colonies in North America in

Years.	Individuals.	Years.	Individuals.	Years.	Individuals.	Years.	Individuals.
1825	8,741	1830	30,574	1835	15,573	1839	12,658
1826	12,818	1831	58,067	1836	34,226	1840	32,293
1827	12,648	1832	66,339	1837	29,884	1841	38,164
1828	12,084	1833	28,808	1838	4,577	1842	54,123
1829	15,307	1834	40,060				
Total emigration of the 18 years - 504,944							

Of these, the great majority have been destined for Upper Canada. — (For the total emigration from the U. Kingdom, see PASSENGERS.)

Information for Emigrants to British North America. — In January 1840 a board of "Colonial Land and Emigration Commissioners" was appointed. It consists of three commissioners, whose proceedings are guided by instructions from the secretary of state for the colonies, and their practical duties may be divided under three heads:—

The sale of colonial lands.

Superintendence of emigration.

Diffusion of information in respect of the colonies.

1. The functions of the commissioners under the first head do not extend to the North American colonies. The crown having placed the revenue derived from the sale of their waste lands at the disposal of the local legislatures, these lands are, of course, disposed of by the authorities on the spot.

2. The board endeavours, in as far as possible, to protect poor emigrants from imposition, and from the effects of improvident arrangements on their parts, and takes care that the provisions of the Passengers Act, 5 & 6 Vict. c. 107., are duly carried out and enforced.

3. The board publishes from time to time such authentic information as they may receive on matters connected with the settlement of waste lands in the colonies, the prices of the principal articles of colonial produce, the wages of labour, and such other matters as may appear to be useful to persons who propose to settle in the colonies. They likewise answer all applications from individuals, and afford them, so far as may be in their power, such information as may be adapted to their particular cases.*

No pecuniary assistance is afforded by government to parties desirous of proceeding to the N. American colonies; and emigrants after their arrival no longer receive grants of land, that being now wholly disposed of in the way stated below.

But though government makes no gifts at the public expense to emigrants to N. America, it maintains agents at the principal colonial ports, whose business is to protect emigrants from imposition upon their first landing, to acquaint them with the demand for labour in different districts, to point out the most advantageous routes, and to furnish them with useful advice upon the objects which they have had in view in emigrating, without making any charge for the same. Persons newly arrived should not omit to consult these agents, and should avoid detention in the ports, where they are exposed to all kinds of imposition, and pretences for keeping them at taverns till any money they may possess has been expended.

Passage. — Emigrants intending to settle in Canada will find it in all respects more advantageous to proceed by Quebec.

The cost of a steerage passage to Quebec, including provisions during the voyage, varies from 5*l.* to 6*l.*; and without provisions, beyond the legal allowance, from 3*l.* to 3*l.* 15*s.*, according to the port from which the party sails.

The usual length of the voyage is about 46 days.

The prices to New Brunswick are about the same as to Quebec; those to Halifax in Nova Scotia are rather higher.

The cost of a cabin passage to the above-mentioned colonies depends upon the accommodation required, and the port at which the emigrant embarks. It varies from 12*l.* to 20*l.*, being cheaper from Irish than English ports.

Half these prices are generally charged for children between 1 and 14 years of age; and for children under 1 no charge is made.

The best months for leaving England are March and April; the later emigrants do not find employment so abundant, and have less time in the colony before the commencement of winter.

For information respecting the cost of passage and probable opportunities of sailing, application should be made to the government emigration agents at the various ports at which they are stationed; but no party need apply who does not intend to pay his own passage. The following are the ports at which agents are established:—London, Liverpool, Leith, Greenock, Belfast, Londonderry, Sligo, Limerick, and Cork.

The following notification was put forth in 1843 by Messrs. Carter and Bonus, eminent shipping agents:—

"Ships will be despatched from London to Quebec and Montreal at short intervals during the ensuing season, by which steerage passengers may be conveyed at the following *reduced* rates:—

	To Quebec.	To Montreal.
For each person 14 years of age and upwards - - -	5*l.* 7*s.* 6*d.*	5*l.* 15*s.* 0*d.*
For each child of 1 and under 14 years of age - - -	2 13 9	2 17 6

Infants under 1 year old free of charge.

In these rates are included provisions on an ample *and much improved* scale, as below; medicines, medical comforts, sleeping-berths, cooking-hearth and fuel, mess-bowls, plates, and hook-pots, and emigrant tax in Canada.

The passengers must provide themselves with bedding, small casks or metal bottles for containing water, knives and forks, and spoons.

Luggage will be taken free of charge in the proportion of ten cubic feet for each adult, and five cubic feet for each child between 1 and 14 years old; and any further quantity will be subject to a charge of 6*d.* per cubic foot for freight.

Half passage money is required to be paid when berths are engaged, and the remainder at or before embarkation; and parties who engage passage for themselves or others, who shall fail to embark on the day appointed, will be required to forfeit and pay half the passage money, whether their places shall be filled by others or not.

A properly qualified surgeon will be appointed to each ship carrying passengers equal to 100 adults or upwards.

Ships will be sent to any good and safe out-ports at which sufficient numbers of emigrants may be collected.

These ships will be despatched on fixed days, with STRICT PUNCTUALITY.

* The office of the commissioners is at No. 9, Park Street, Westminster.—Secretary, Stephen Walcott, Esq.

Scale of Allowance of Provisions for each Person, Male and Female, above 14 Years of Age.

Days.	Preserved Meat.	Pork.	Beef.	Rice.	2nd Cabin Bread.	Potatoes.	Flour.	Split Peas.	Suet.	Sugar.	Tea.	Cheese.	Oatmeal.	Vinegar.	Water.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	pt.	oz.	oz.	oz.	lb.	pt.	pt.	qts.
Sunday	½	-	-	-	½	1	½	-	1	1	½				3
Monday	-	½	1	-	½	1	½	¼	1	1	½				3
Tuesday	-	-	-	¼	½	1	½	-	1	1	½				3
Wednesday	½	-	-	-	½	1	½	-	1	1	½				3
Thursday	-	½	-	-	½	1	½	¼	1	1	½	½ Weekly.	1 Weekly.	½ Weekly.	3
Friday	-	-	-	1	½	1	½	-	1	2	½				3
Saturday	-	-	½	-	½	1	½	-	1	1	½				3
	1	1	1	1	3½	7	3	½	6	8	1¾	½	1	½	21

For each child, male and female, from 1 to 14 years of age, one half the above allowances.

When the potatoes are expended, ½ lb. of rice to be issued daily in lieu of 1 lb. of potatoes.

In case of the occasional substitution of any of the following articles —

½ lb. raisins, or ½ lb. currants, is considered equal to - - - - - 1 lb. beef or pork.
¼ suet - - - - - 1 do. do.
1¼ fish - - - - - 1 do. do.
1 flour - - - - - 1 bread.
1 rice, or 1 pint oatmeal - - - 1 bread or flour.
5 potatoes - - - - - 1 do. do.

N. B. Passengers have the option of agreeing upon the above terms, or of being supplied by the ship with those provisions only *which are required by the Passengers Act*, viz. for each adult, 7 pounds of bread, biscuit, flour, oatmeal, or rice per week, of which at least one half must be bread or biscuit, and potatoes may be employed for the remainder, in the proportion of 5 pounds of potatoes to 1 pound of the other articles enumerated. Half allowance for each child between 1 and 14 years old. The charge in this case, including water as above, medicines, medical comforts, sleeping-berths, cooking-hearth, fuel, and emigrant tax, is 3*l.* 15*s.* to Quebec, and 4*l.* 2*s.* 6*d.* to Montreal, for each adult, and half price for children between 1 and 14 years of age. Such passengers are allowed to take any reasonable quantity of provisions for their own use in addition to the breadstuffs above stated, but no person will be permitted on any account to bring intoxicating liquors on board."

The conveyance of passengers to foreign parts is regulated by the 5 & 6 Vic. cap. 107., of which the following are the principal regulations respecting voyages to North America.

No vessel proceeding to any place out of Europe, not being within the Mediterranean Sea, to carry more than 3 persons (master and crew included) to every 5 tons' burden; nor, whatever be the tonnage, more than 1 passenger to every 10 clear superficial feet of the space appropriated for the use of the passengers, under a penalty not exceeding 5*l.* for every passenger in excess. The lower deck must be not less than 1¼ inch in thickness, and laid and secured in a certain manner. The height between decks is to be 6 feet at least. There must not be more than 2 tiers of berths; the bottom of the lower tier to be 6 inches above the deck. The berths not to be less than after the rate of 6 feet in length and 18 inches in width for each passenger, and to be securely constructed. At least 3 quarts of water per diem to be issued to each passenger, and a supply of provisions not less often than twice a week, at the rate of 7 lbs. of breadstuffs per week; half at least to be bread or biscuit, the other half may be potatoes, of which 5 lbs. are to be reckoned as equal to 1 lb. of breadstuffs. The water to be taken in tanks or sweet casks, none exceeding 500 gallons in capacity.

The length of the voyage to N. America to be computed at 10 weeks. 2 children under 14 to be reckoned equal to 1 passenger. Children under 1 not to count. Provisions and water to be inspected and surveyed by the government emigration agents, or, in their absence, by the officers of customs Seaworthiness of vessels to be ascertained by those officers, who may order a survey if necessary. Sufficient boats to be taken. Two copies of the act to be kept on board, to be produced to the passengers on demand. A proper supply of medicines, &c., with directions for their use, to be provided for the voyage. The sale of spirits prohibited under a penalty not exceeding 100*l.* Lists of passengers to be delivered by the master to proper officers previous to clearance, and counterparts to be deposited with officers of customs or consuls at final port of discharge. Same regulations in respect to additional passengers taken on board after clearance.

Parties contracting to find passages to North America to give written receipts in a prescribed form for money received, under a penalty not exceeding 10*l.*, and forfeiture of licence if a passage broker. No person, except owner or master of the ship, to act as a passage broker or dealer, unless licensed by magistrates at the petty or quarter sessions, under a penalty of 10*l.* for each offence. Brokers liable to a penalty of 10*l.* and forfeiture of licence if they receive passage money as agents for others without written authority from their principals, or if they fraudulently induce persons to engage passages. In case the contract for a passage is not performed on the shippers' part, the aggrieved parties, unless maintained at the contractors' expense, and provided within a reasonable time with a passage to the same place, may recover by summary process, before 2 justices of the peace, any passage money they may have paid, with a sum not exceeding 10*l.* as compensation. Passengers to be victualled during detention of ships; but if detention (except caused by wind or weather) exceed two clear working days, to receive instead 1*s.* per diem, unless suitably lodged and maintained with their own consent by the contractor. Passengers not to be landed against their consent at any place but the one contracted for, and to be maintained on board for 48 hours after arrival, unless the ship, in the prosecution of her voyage, quits the port sooner. The master is to afford every facility to the proper officers for inspecting the ship, communicating with the passengers, and ascertaining that the act has been duly observed. The owners and charterers, or, in their absence, some approved person on their behalf, and the master of vessels carrying more than 50 passengers, must, before clearance, give bond, without stamp, to the Crown, for the due performance of the act. Passengers suing under the act for monies made recoverable due to their use not to be deemed on that account incompetent witnesses. The act extends to foreign as well as British ships; but not to vessels carrying fewer than 30 passengers, nor to cabin passengers. It reserves to passengers their right to proceed at law for any breach of contract; and imposes a penalty not exceeding 50*l.* for the breach of any of its provisions, except in the 5 cases where specific penalties are affixed.

The enforcement of this law rests with the government emigration agents, and the officers of H. M. customs. Persons, therefore, having complaints to make of its infraction, should apply to these officers, who alone can enforce the various *penalties*.

Besides the sea voyage from England, persons proceeding to Canada should be provided with the means of paying for the journey which they may have to make after their arrival at Quebec. The cost of this journey must, of course, depend upon the situation of the place where the individual may find employment, or where he may have previously formed a wish to settle; but to all it will probably be useful to have the following hints and report of the prices of conveyance during the season of 1841, on the route from Quebec to Toronto, the capital of Upper Canada.

	Currency. £	s.	d.
On the arrival of the emigrant vessel at Quebec, the emigrant, if he intend to proceed to Upper Canada, should on no account leave the vessel, except it be to go with the long-boat direct with his luggage to the steamer for Montreal; and not unfrequently the steamer comes alongside the emigrant ship, and thus facilitates the re-embarkation of the emigrant. The captain of the ship can easily arrange this with the steamer. Very little difficulty is experienced by the emigrant at Quebec; a few hours suffice to provide his family with the necessaries of life, if his supplies are run out. The steamboat goes up the river to Montreal, in about 24 hours, a distance of 180 miles. The charge for deck passengers is 7*s.* 6*d.*, and no charge is made for luggage - - - -	0	7	6
The fare is reduced, when there is any competition, to 5*s.* and less. Next year (1842) it may be reduced much more, as new steamers are preparing for this route. The emigrant, before going on board the steamer, should boil as much pork or beef as will serve him for a day or two, which he can do before leaving the ship; in a few minutes he can procure fresh bread; and if he has a large tin tea-pot, with a few tins, he can with ease get hot water in the steamer to make some tea, to refresh the members of his family on the way up. On his arrival at Montreal, he should, with as little delay as possible, get his luggage transported to the barges of the forwarding company. He will find many carters in readiness for this purpose, and must take care not to be imposed upon by them; 1*s.* 6*d.* should be sufficient to take all his things to the	0	1	6

	Currency. £	s.	d.
station of the barges. Here the fare is, from Montreal to Bytown, per adult, 8*s.* Allowance for luggage, 1 cwt. or 1¼ cwt. free; and for any quantity over and above this, 2*s.* per cwt. The barges arrive at Bytown about 72 hours after leaving Montreal. The same barges continue through to Kingston. The fare from Bytown to Kingston is, per adult, 10*s.*; same allowance of luggage as above, and 2*s.* 6*d.* for each cwt. extra; and 1*s.* per day for meals from Quebec to Bytown, say 8 days - - - -	0	10	0
When the emigrant gets on board the barge at Montreal, his luggage need not be moved until he reaches Kingston. He will find utensils for cooking, and the female part of his family will find shelter in the cabin of the barge. In case of foul weather, he can get his family on board of the steamer at Lachine, 7 miles from Montreal,) where the barges are taken in tow to Carillon, about 40 miles from Lachine. The barges there take 7 or 8 hours in getting through the locks, and getting up to Grenville. On the way, the emigrant can buy a few potatoes from the farmers on the canal. The prices of provisions do not vary from Montreal to Kingston; potatoes 1*s.* 6*d.* and 2*s.* per bushel; pork 5*d.* to 7*d.* per lb; butter 8*d.* to 10*d.*; flour 5 dollars to 6 dollars per barrel; tea 3*s.* to 4*s.* per lb.; sugar 6*d.* per lb.; eggs 8*d.* to 10*d.* per dozen; butcher's meat 3½*d.* to 5*d.* per lb., according to the quality. All these articles are easily procured on the way. From Grenville to Bytown is about 65 miles, and the barges are towed by a steamer, and reach in about 15 or 16 hours. On their arrival at Bytown the	0	8	0

barges have again to pass through locks, which causes a detention of some hours. The passage from Bytown to Kingston is rather tedious; but as it affords to the emigrant various opportunities of seeing the country, and many of engaging as a farm servant, he should not look upon it as altogether lost time.

A great error is committed by the emigrant in asking exorbitant wages on his arrival; he should content himself at first with 3s. or 4s., and take the first employment that offers. Many emigrants on arrival at Quebec and Montreal have not the means to carry them forward; but they find no difficulty in getting work about the coves at Quebec, and are very soon enabled to lay up sufficient to carry them up the country. They should on no account remain in Quebec or Montreal during winter, as they will assuredly have much privation and hardship to contend with. However high the wages may be in the busy season, the winter presents to them a barren field.

	Currency. £	s.	d.

At Kingston there are steamers for Toronto, distant 170 miles, and for Hamilton, at the head of Lake Ontario, distant from Kingston 210 miles. The time occupied at Toronto is 24 hours; the deck fare is usually 7s. 6d. Last season it was only 5s. for each adult, exclusive of provisions. Two children under 14 years of age are charged as one passenger. The distance from Quebec to Toronto is 606 miles; time occupied in performing it last season about 10 days; and the total expense for each adult, including provisions, is, including 2 days' provisions from Kingston to Toronto - - - - - - -

	Currency. £	s.	d.
	0	7	
	0	2	
	£2	4	

It must be observed, that the prices of conveyance are necessarily fluctuating, and that the foregoing account is only presented as sufficiently accurate for purposes of information in this country, leaving it to the government agent at Quebec to supply emigrants with more exact particulars, according to the circumstances of the time at which they may arrive. According to some statements, the journey from Quebec to Toronto may be accomplished for less than 40s; but a good deal depends on the season of the year, and other accidental circumstances.

Trade or Calling.	LOWER CANADA. Average Wages per Diem. Without Board and Lodging.		With Board and Lodging.		Average Wages per Annum. With Board and Lodging.			UPPER CANADA. Average Wages per Diem. Without Board and Lodging.		With Board and Lodging.		Average Wages per Annum. With Board and Lodging.		
	Halifax Currency.													
	s.	d.	s.	d.	£	s.	d.	s.	d.	s.	d.	£	s.	d.
Bread and biscuit bakers	4	0	-	-	40	0	0	5	0	4	0	35	0	0
Butchers	Per month, 4l.		By the month 3l.		By the month, 3l.			5	6	4	0	40	0	0
Brickmakers	5	0	3	0	Only employed in summer			5	6	4	3	48	10	0*
Bricklayers	7	0	6	0	Not hired by the year			7	6	6	0	97	0	0
Curriers	6	0	4	0	-		-	7	0	5	6	54	0	0
Carpenters and joiners	6	0	5	0	-		-	6	10	5	6	61	0	0
Cabinet makers	7	0	6	0	-		-	7	6	6	0	61	0	0
Coopers	5	0	4	0	45	0	0	6	6	5	0	54	0	0
Carters	3	6	2	0	25	0	0	4	6	2	9	28	0	0
Cooks (women)	2	0	1	0	18	0	0	-	-	-	-	15	0	0
Dairywomen	1	6	0	10	15	0	0	-	-	-	-	12	10	0
Dressmakers and milliners	1	3	0	9	15	0	0	2	6	1	3	19	10	0
Farm labourers	3	0	2	0	25	0	0	3	9	2	6	27	10	0
Gardeners	3	4	2	6	36	0	0	5	0	4	0	40	10	0
Grooms	3	0	2	0	30	0	0	4	0	2	9	29	0	0
Millwrights	7	0	6	0	80	0	0	9	0	7	0	93	10	0
Millers	6	6	5	6	70	0	0	8	3	4	0	58	0	0
Blacksmiths	6	0	4	0	-		-	6	0	4	8	55	0	0
Painters	6	3	5	3	-		-	7	6	5	6	78	0	0
Plasterers	6	8	5	6	-		-	7	6	5	6	78	0	0
Plumbers and glaziers	7	0	6	0	-		-	7	0	5	6	78	0	0
Quarrymen	3	6	3	0	-		-	4	3	3	0	34	0	0
Ropemakers	5	0	4	0	-		-	5	0	3	9			
Shoemakers	4	0	3	0	-		-	5	3	4	0	54	0	0
Sawyers	5	0	4	0	-		-	6	0	4	8	62	0	0
Shipwrights and boatbuilders	6	6	-	-	-		-	7	6	6	3	78	0	0
Stonemasons	6	0	5	0	-		-	7	6	6	0	78	0	0
Sailmakers	5	0	4	0	-		-	7	0	5	0			
Slaters and shinglers	5	0	4	0	-		-	6	3	4	6			
Shepherds	None in Eastern (Lower) Canada.				-		-	7	6	3	9	30	0	0
Tanners	4	0	3	0	-		-	5	9	4	6	44	10	0
Tailors	6	0	5	0	-		-	6	3	5	0	57	0	0
Wheelwrights	6	6	5	6	-		-	6	6	5	0	69	0	0
Whitesmiths	5	6	4	6	-		-	7	0	5	0	60	15	0

Retail Price of Provisions and Clothing in Canada.

Articles.	Lower Canada. Sterling. s.	d.	Upper Canada. Sterling. s.	d.	Articles.	Lower Canada. Sterling. s.	d.	Upper Canada. Sterling. s.	d.
Provisions.					Provisions.				
Salt beef, per lb.	0	3½	0	3½	Coffee, green	1	0	0	10
Fresh, ditto	0	3	0	4	Rice	0	3	0	5
Mutton	0	4	0	4	Sugar, brown	0	5	0	6
Lamb	0	5	0	4	Ditto, white	0	8	0	9
Veal	0	4	0	5	Salt, per bushel	3	0	3	4
Fresh pork	0	5	0	4	Pepper, per lb.	0	9	1	0
Salt, ditto	0	3½	0	4	Salt fish (the cheapest kinds) per cwt.	12	0	12	6
Fowls, per pair	2	2	1	6	Fresh, ditto, ditto, per lb.	0	3	0	4
Bacon, per lb.	0	6	0	4½	Beer, per gallon	1	6	1	0
Salt butter	0	7	0	7½	Porter, per bottle	1	0	1	6
Fresh ditto	0	10	0	7	Clothing.				
Fresh milk, per quart	0	3	0	3	Men's stout shoes, per pair	10	0	10	0
Cheese, per lb.	0	6	0	5	Women's, ditto	8	0	7	6
Eggs, per dozen	0	8	0	9	Snow over-shoes	12	0	6	3
Potatoes, per bushel	1	0	1	0				15	0
Bread, best wheaten, per 4 lb. loaf	0	9	0	6	Men's shirts, cotton	3	0	2	9
Seconds	0	7						5	0
Best wheat flour, per barrel (196 lbs.)	28	0	20	0	Men's smockfrocks	4	0	6	0
Seconds	25	0	15	0	Flannel, per yard	2	6		
Oatmeal, per cwt.	12	6	18	9	Cloth, for coats	7	6	10	0
Barley meal	12	6			Cotton, for gowns	0	9		
Coals, per chaldron	25	0			Fustian, per yard	2	0		
Candles, per lb.	0	9	0	9	Velveteen	2	6	3	0
Fire-wood, per "cord" of 128 cubic feet	15	0	11	3	The above-mentioned articles of clothing are supposed to be of the average quality generally used by persons of the labouring classes.				
Common soap, per lb.	0	4	0	5					
Tea	2	6	3	9					

islands, occasioned an extraordinary extension of cultivation. So powerful in this respect was its influence, that Jamaica, which, at an average of the 6 years preceding 1799, had produced only 83,000 hogsheads, exported, in 1801 and 1802, upwards of 286,000 hogsheads, or 143,000 a year!

The same rise of price, which had operated so powerfully in Jamaica, occasioned a similar though less rapid extension of cultivation in our other islands, and in Cuba, Porto Rico, and the foreign colonies generally. The vacuum caused by the cessation of the supplies from St. Domingo being thus more than filled up, a reaction commenced. The price of sugar rapidly declined; and, notwithstanding a forced market was for a while opened to it, by substituting it for malt in the distillery, prices did not attain to their former elevation. On the opening of the Continental ports, in 1813 and 1814, they, indeed, rose, for a short time, to an extravagant height; but they very soon fell, involving in ruin many of the speculators upon an advance. Prices, however, continued at a pretty high level down to 1818; but they sustained a material fall in the course of the following year, and were comparatively low from that period down to 1835, when the extraordinary falling off in the supplies of sugar consequent to the measures connected with the emancipation of the slaves, again occasioned a considerable rise of price. But, as already seen, this high price is entirely factitious, being wholly caused by our excluding foreign sugar from our market. Were the sugar of Brazil, Cuba, and Java admitted on paying the same duty as British colonial sugar, there can be no doubt that the price of the latter would be diminished a half or more. And from the extraordinary facility with which sugar may be raised in the countries referred to and elsewhere, we have no idea, provided they adopt no rash or ill-advised measures in relation to slaves, that the price of sugar in their markets would be at all likely to sustain any material increase, even though the demand for it were doubled or more. The imports of sugar from our West India colonies, which amounted to 4,103,800 cwts. in 1831, had sunk, in 1841, to 2,151,217 cwts.!

The devastation of St. Domingo gave the same powerful stimulus to the growth of coffee in the other West Indian colonies, that it did to the growth of sugar; and owing to the extraordinary increase in the demand for coffee in this and other European countries, the supply went on increasing till it was checked by the influence of the measures relating to slavery. In 1752, for example, only 60,000 lbs. of coffee were exported from Jamaica; in 1775 the export amounted to 440,000 lbs.; in 1797 it had increased to 7,931,621 lbs.; and in 1832, when it had attained its maximum, the exports to England only amounted to 19,405,933 lbs. Such, however, and so rapid has been their subsequent decline, that in 1841 the exports to England had fallen off to 7,618,890 lbs.! (See opposite.)

We have already seen, that when Jamaica was taken from the Spaniards, it only contained 1,500 white inhabitants. In 1673, the population amounted to 7,768 whites and 9,504 slaves. It would have been well for the island had the races continued to preserve this relation to each other; but, unfortunately, the black population has increased more than *five* times as rapidly as the white; the latter having only increased from 7,768 to about 30,000, while the former has increased from 9,504 to about 310,000, exclusive of persons of colour.

The real value of the exports to Jamaica amounts to about 1,500,000*l.* a year, being more than half the amount of the exports to the West Indian colonies. It should, however, be observed, that a considerable portion of the articles sent to Jamaica, and some of the other colonies, are only sent there as to an *entrepôt*, being subsequently exported to the Spanish main. During the ascendancy of the Spanish dominion in Mexico and South America, this trade, which was then contraband, was carried on to a very great extent. It is now much fallen off; but the central situation of Jamaica will always secure to her a considerable share of this sort of transit trade.

Barbadoes was the earliest of our possessions in the West Indies. It is the most easterly of the Caribbee islands; Bridge Town, the capital, being in long. 59° 41′ W. Barbadoes is by far the best cultivated of all the West India islands. It contains about 105,000 acres, having a population of about 13,000 whites, 6,600 people of colour, and 83,000 blacks. Of late years it has exported from 250,000 to 470,000 cwts. of sugar. Barbadoes had attained the acme of its prosperity in the latter part of the seventeenth century, when the white population is said to have amounted to about 50,000, though this is probably an exaggeration. But it is only as compared with itself that it can be considered as having fallen off; for, compared with the other West India islands, its superiority is manifest. It raises nearly as much food as is adequate for its supply.

The islands next in importance are St. Vincent, Grenada, Trinidad, Antigua, &c. It is unnecessary to enter into any special details with respect to them; their population and trade being exhibited in the annexed Tables.

During the late war, we took from the Dutch the settlements of Demerara, Berbice, and Essequibo, in Guiana, which were definitively ceded to us in 1814. The soil of

Account of the Quantities of Sugar, Molasses, Rum, and Coffee, imported into the United Kingdom from the West Indies and British Guiana, during each of the 10 Years ending with 1841.—(*Parl. Paper* No. 293. Sess. 1842).

Colonies from which imported.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
SUGAR (Unrefined).	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Antigua	143,336	129,519	257,177	174,818	135,482	62,170	203,043	222,689	203,071	144,103
Barbadoes	266,465	384,971	391,527	341,689	373,128	415,713	473,587	395,109	207,484	257,108
Dominica	58,270	47,372	51,876	25,014	35,213	33,724	48,290	29,385	34,673	42,542
Grenada	188,231	204,071	194,542	170,280	156,311	161,922	156,798	117,260	88,982	84,270
Jamaica	1,431,689	1,256,991	1,256,253	1,148,760	1,054,042	904,299	1,033,181	765,078	518,541	528,585
Montserrat	20,856	15,507	26,631	16,261	11,760	5,695	10,413	13,443	12,205	10,939
Nevis	39,813	42,287	50,748	39,637	21,723	21,269	25,410	36,731	27,857	12,124
St. Christopher	80,602	80,390	105,555	87,614	64,810	73,270	93,597	135,548	94,390	63,936
St. Lucia	47,966	46,548	63,306	54,741	38,084	51,430	61,691	50,215	37,667	51,115
St. Vincent	186,812	194,889	213,017	195,057	186,482	201,191	194,182	151,899	101,020	110,205
Tobago	111,522	86,527	79,018	77,260	117,643	90,803	71,621	68,244	51,548	48,164
Tortola	14,999	14,969	21,926	13,821	13,510	13,534	7,979	5,249	7,366	8,397
Trinidad	312,266	286,303	339,615	289,593	312,141	295,367	286,217	268,669	245,778	284,605
Bahamas	—	—	4	—	314	—	36	—	202	100
Bermudas	1	—	—	—	—	—	1	1	4,336	—
Demerara	736,562	751,122	687,282	760,376	864,134	792,852	669,571	410,132	486,487	415,261
Berbice	134,036	101,736	90,696	126,485	213,714	150,536	165,726	126,720	93,157	90,063
Total	3,773,456	3,646,205	3,843,976	3,524,209	3,601,791	3,306,775	3,520,676	2,824,372	2,211,764	2,151,217
MOLASSES.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Antigua	57,889	67,181	87,882	75,985	54,370	26,993	97,614	101,034	96,117	75,551
Barbadoes	7,081	47,246	55,553	58,125	47,558	70,293	98,683	76,444	35,959	27,475
Dominica	5,382	5,473	2,550	2,700	3,371	3,961	7,893	6,720	5,423	8,347
Grenada	20,635	32,608	23,219	8,747	10,306	11,457	18,359	10,845	7,485	9,406
Jamaica	991	3,665	2,809	982	1,000	83	221	52	129	544
Montserrat	1,881	1,950	4,779	1,848	2,694	1,558	2,513	4,448	2,985	4,043
Nevis	357	1,591	5,466	161	314	970	2,971	3,501	5,727	3,471
St. Christopher	4,048	14,592	17,397	7,526	10,492	11,895	19,346	18,596	23,932	14,999
St. Lucia	4,196	4,595	2,811	6,057	5,253	6,980	4,786	11,029	7,460	11,129
St. Vincent	28,228	48,650	33,091	26,155	37,967	31,564	45,667	34,051	16,529	31,587
Tobago	14,270	15,070	11,646	5,986	11,778	8,277	7,181	4,012	11,151	4,660
Tortola	—	837	—	1,408	1,899	3,208	906	1,021	717	1,876
Trinidad	92,177	91,344	99,491	84,508	75,176	92,794	78,587	82,313	69,608	78,090
Bahamas	—	—	—	—	160	—	—	—	—	—
Bermudas	—	—	—	—	—	—	—	—	—	—
Demerara	305,859	310,502	282,967	221,782	256,920	285,278	239,984	105,726	132,363	142,614
Berbice	10,666	11,577	20,699	5,225	7,286	14,546	13,493	11,512	5,276	16,229
Total	553,663	686,791	650,366	507,495	526,535	575,657	638,007	474,307	424,141	430,221
RUM.	*Gallons (including overproof).*									
Antigua	29,173	31,032	71,415	67,051	7,731	11,538	29,171	55,058	75,592	14,906
Barbadoes	5,739	696	2,170	1,798	738	914	455	502	778	249
Dominica	31,599	30,310	27,764	7,508	16,147	9,543	17,010	9,792	14,077	8,011
Grenada	103,654	185,969	217,949	248,524	177,720	199,711	231,919	179,161	159,747	83,704
Jamaica	2,757,051	3,219,783	3,924,067	2,450,272	2,116,994	2,049,461	2,303,790	1,651,232	1,291,337	1,276,551
Montserrat	11,501	11,273	20,380	26,492	16,256	4,804	8,936	29,460	22,806	9,281
Nevis	3,066	6,312	23,286	39,566	5,491	4,793	10,867	39,252	24,819	2,956
St. Christopher	29,950	42,217	79,080	107,101	26,870	87,380	65,677	139,014	131,984	55,118
St. Lucia	6,544	10,774	4,707	10,972	22	7,991	7,193	14,051	11,930	13,037
St. Vincent	29,732	89,206	93,397	189,154	112,183	200,025	181,562	189,607	145,909	88,999
Tobago	281,651	252,622	272,787	299,705	372,965	351,779	252,414	249,515	229,582	153,614
Tortola	108	—	3,478	5,220	2,080	7,531	3,088	7,935	6,671	834
Trinidad	5,556	225	7,714	9,586	7,456	741	3,530	10,668	20,559	2,237
Bahamas	—	—	—	59	—	—	13,352	1	15	4,566
Bermudas	30	4,279	2	55	19	14	—	2	13	22
Demerara	1,293,255	1,202,391	1,273,693	1,875,245	1,879,357	1,389,880	1,384,282	1,245,509	1,464,970	935,735
Berbice	122,191	38,986	61,277	115,411	125,231	92,241	121,664	197,041	177,210	120,501
Honduras	—	—	4	18	—	3	—	—	—	—
Total	4,713,809	5,109,975	5,112,400	5,453,317	4,868,168	4,418,349	4,641,210	4,021,820	3,780,979	2,770,161
COFFEE.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Antigua	49,888	283	224	580	1,010	213	21	53,174	4,401	7,818
Barbadoes	158,198	48,371	77,868	57,825	33,593	24,619	37,569	20,884	74,167	1,515
Dominica	1,350,401	891,817	893,192	112,557	309,284	218,175	383,023	100,239	283,593	127,669
Grenada	8,749	15,621	10,332	8,236	8,590	5,551	21,647	7,560	15,741	133
Jamaica	19,405,933	11,348,506	18,268,883	11,154,507	11,831,856	9,950,679	12,593,746	9,423,197	8,646,016	7,618,890
Montserrat	164	—	—	—	—	—	—	—	—	—
Nevis	112	21	—	—	—	—	—	—	—	—
St. Christopher	1,071	217	185	40	—	605	80,839	—	—	12
St. Lucia	84,512	62,595	96,004	53,582	33,708	8,500	143,266	84,000	292,583	18,287
St. Vincent	—	132	197	118	—	5,335	79	35	699	—
Tobago	—	—	—	—	—	—	—	20	2,103	76
Tortola	—	—	—	28	—	70	—	—	—	—
Trinidad	91,532	168,170	160,915	21,950	163,539	114,865	425,341	109,611	253,183	38,622
Bahamas	31,036	46,842	45,579	280,156	51,337	100,581	103,677	13,222	14,901	5,150
Bermudas	33	—	—	—	157	50	13	397	72	—
Demerara	1,200,791	4,619,067	1,481,080	1,139,054	1,853,063	2,099,941	2,350,818	780,866	1,622,036	745,631
Berbice	2,291,497	1,806,702	1,045,668	2,027,037	1,614,379	3,018,701	1,448,480	892,440	1,587,538	1,363,938
Honduras	—	—	163	—	—	—	153	—	—	—
Total	24,673,920	19,008,375	22,081,490	14,855,470	18,903,426	15,577,888	17,588,655	11,485,675	12,797,039	9,927,689
COCOA.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Antigua	—	—	—	—	336	—	2,587	213	3,406	—
Barbadoes	2,468	8,403	72	77	4	7,155	2,652	6	31,016	—
Dominica	—	8,808	4,767	685	279	1,896	1,054	1,127	2,366	4,014
Grenada	196,195	312,446	349,797	276,359	307,256	351,613	426,626	327,497	269,680	372,00
Jamaica	3,988	2,355	1,795	407	3,047	546	18,385	—	42	1
Montserrat	—	—	—	—	—	—	—	—	—	—
Nevis	—	—	—	—	—	—	—	—	—	—
St. Christopher	61	—	—	904	—	—	4	—	—	—
St. Lucia	—	28,622	—	—	5,036	10,686	16,225	35	51,479	49,086
St. Vincent	242	2,713	4,279	272	1,350	2,525	3,191	760	6,442	1,758
Tobago	—	—	—	—	—	10,226	—	—	—	—
Tortola	—	—	—	—	—	—	—	—	—	—
Trinidad	415,039	1,760,258	999,816	160,617	1,292,595	1,461,976	1,678,913	629,945	2,007,494	2,493,202
Bahamas	—	—	—	—	825	—	—	—	—	—
Bermudas	—	—	143	—	—	—	—	—	—	—
Demerara	97	1,575	75	126	522	398	—	58	2,376	129
Berbice	—	476	11	—	599	124	—	—	—	—
Honduras	125	—	—	—	475	—	—	—	—	—
Total from the above Colonies	618,215	2,125,656	1,360,325	439,447	1,612,304	1,847,145	2,149,637	959,641	2,374,301	2,920,298

these settlements is naturally very rich; and they have, in this respect, a decided advantage over most of the West India islands. Their advance, since they came into our possession, was for a while very great; but recently their progress has been checked, and their exports have declined most materially. This, however, is entirely a consequence of the want of labour; for, in other respects, these colonies have every facility of production. Various schemes have been suggested for supplying this want; but none of them, unless they involve the principle of compulsory service, will, we apprehend, be successful. The rum of Demerara enjoys a high reputation. The best samples of Berbice coffee are very superior, and it is extensively cultivated both in that colony and in Demerara. In 1832, the exports amounted, from both colonies, to 3,492,288 lbs., whereas in 1841 they only amounted to 2,109,569 lbs. Considerable quantities of cotton were formerly exported from Guiana; but the Americans having superior facilities for its production, its culture has nearly ceased. Cocoa, annotto, &c. are produced, but not abundantly.

Exclusive of the above, we possess the settlement of Balize on the Bay of Honduras. This is of importance, as affording a means of obtaining abundant supplies of mahogany; but it is of more importance as an *entrepôt* for the supply of Guatemala and central America with English manufactured goods.

The exports from this country to our West India colonies consist of coarse cottons, linens, checks, hats, and other articles of negro clothing; hardware and earthenware; staves, hoops, coal, lime, paint, lead; Irish provisions, herrings, and other salt fish; along with furniture, wine, beer, medicines, and, indeed, almost every article which a great manufacturing country can supply to one, situated in a tropical climate, which has very few mechanics, and hardly any manufactures. Since the opening of the ports on the Spanish main to ships from England, the exports to the West Indies have decreased both in quantity and value; this decrease being, however, more than balanced by the shipments to Mexico, Columbia, &c. The declared or real value of the exports amounted, as appears from the following account, in 1841, to 2,504,004*l.*; but this was fully 1,000,000*l.* below their usual value.

Account of the Declared Value of the Exports of British and Irish Produce to the West India Colonies in each Year from 1814 to 1841, both inclusive.

Years.	Declared Value of British and Irish Products exported to the British West Indies.	Years.	Declared Value of British and Irish Products exported to the British West Indies.	Years.	Declared Value of British and Irish Products exported to the British West Indies.	Years.	Declared Value of British and Irish Products exported to the British West Indies.
	£		£		£		£
1814	7,019,938	1821	4,320,581	1828	3,289,704	1835	3,187,540
1815	7,218,057	1822	3,139,818	1829	3,612,085	1836	3,786,153
1816	4,537,056	1823	3,676,780	1830	2,838,448	1837	3,456,745
1817	5,590,199	1824	3,827,189	1831	2,581,919	1838	3,393,441
1818	6,021,627	1825	3,866,834	1832	2,439,807	1839	3,986,598
1819	4,841,253	1826	3,199,265	1833	2,597,591	1840	3,574,970
1820	4,197,761	1827	3,683,222	1834	2,680,022	1841	2,504,004

Account of the Quantities and Values of the principal Articles of British Produce and Manufacture exported to the West India Colonies during each of the 5 Years ending with 1841.

Principal Articles.	1837.		1838.		1839.		1840.		1841.	
	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.
		£		£		£		£		£
Apparel, slops, & haberdashery £	-	269,159	-	256,086	-	296,056	-	231,908	-	209,680
Beef and pork - - bar.	33,648	114,763	27,526	97,817	47,921	163,259	31,171	104,618	11,929	41,754
Butter and cheese - - cwts.	25,404	106,436	26,519	108,114	31,104	122,045	26,851	111,808	22,957	94,653
Coals, culm, and cinders - tons.	69,080	51,508	65,438	48,767	64,078	43,640	82,564	52,807	71,311	43,394
Cotton manufactures entered by the yard - - yds.	37,693,944	883,029	43,496,642	943,228	58,961,887	1,267,850	58,327,100	1,162,887	31,206,154	590,941
Hosiery, lace, and small wares £	-	43,812	-	46,446	-	73,828	-	61,762	-	42,901
Twist and yarn - - lbs.	55,549	4,487	56,532	3,609	152,450	10,305	176,933	10,038	123,188	7,741
Earthenware of all sorts - ps.	3,246,858	40,195	2,247,948	27,727	3,631,732	41,799	2,829,641	33,134	2,056,369	26,523
Glass entered by weight - cwts.	37,469	61,155	44,641	60,100	44,415	58,585	49,506	60,708	42,488	44,655
Hardware and cutlery - —	25,350	117,762	20,568	85,169	23,008	92,913	19,091	70,878	16,908	68,642
Iron and steel, wrought and unwrought - - tons.	6,821	148,963	6,223	131,377	5,481	118,510	5,796	122,289	5,165	106,886
Leather, wrought and unwrought - - - lbs.	567,417	100,193	681,775	114,167	919,602	171,005	755,546	121,133	718,415	102,834
Linen manufactures entered by the yard - - yds.	12,391,446	370,114	11,775,148	348,105	11,529,110	342,274	11,936,657	328,369	8,147,430	228,865
Machinery and mill-work - £	-	57,892	-	42,858	-	33,353	-	44,588	-	37,989
Painters' colours - - £	-	25,153	-	23,971	-	30,384	-	24,041	-	18,918
Plate, plated ware, jewellery, and watches - - £	-	40,416	-	35,265	-	33,381	-	23,223	-	21,069
Silk manufactures - - £	-	36,916	-	36,548	-	38,467	-	56,230	-	25,155
Soap and candles - - lbs.	5,134,900	104,168	7,279,715	140,562	9,716,295	190,267	9,360,757	174,270	7,139,450	132,452
Stationery of all sorts - £	-	27,650	-	27,228	-	33,581	-	34,080	-	23,669
Sugar, refined - - cwts.	6,359	16,061	8,511	19,114	8,579	19,927	20,038	37,492	14,554	26,051
Tin and pewter wares and tin plates - - - £	-	15,684	-	13,237	-	15,849	-	13,727	-	12,069
Woollen manufactures entered by the yard - - yds.	269,157	19,541	263,330	15,717	159,312	12,398	223,844	15,892	176,395	10,879
Ditto by the piece - - ps.	32,856	98,160	24,115	68,865	19,745	58,474	29,590	64,098	17,644	41,938
Hosiery and small wares - £	-	11,001	-	10,832	-	14,031	-	10,857	-	10,102
All other articles - -	-	695,597	-	688,534	-	702,484	-	604,333	-	536,646
Total - - -	-	3,456,745	-	3,393,441	-	3,986,598	-	3,574,970	-	2,504,004

Money.—What used to be called West India currency was an imaginary money, and had a different value in different colonies. The value it bore, as compared with sterling money, was supposed to represent the corresponding value of the coins in circulation in the different islands at the time the proportion was fixed: these coins being for the most part mutilated, and otherwise worn and defaced, currency was in all cases less valuable than sterling. The following are the old values of 100*l.* sterling, and of a dollar, in the currencies of the different islands:—

	Sterl.		Curr.	Dol.		Curr.
Jamaica	100*l.*	=	140*l.*	1	=	6*s.* 8*d.*
Barbadoes	100*l.*	=	135*l.*	1	=	6*s.* 3*d.*
Windward Islands (except Barbadoes)	100*l.*	=	175*l.*	1	=	8*s.* 3*d.*
Leeward Islands	100*l.*	=	200*l.*	1	=	9*s.* 0*d.*

But latterly these currencies have been in a great measure superseded by the introduction of sterling money, current at the same rates as in England, and of the Spanish dollar.

By an order in council of the 23d of March 1825, British silver money was made legal tender throughout all British colonial possessions, at the same nominal value as in England; and bills for the same are given on the Treasury of London, of 100*l.* each bill for 103*l.* such silver money. By this order, also, the value of the Spanish dollar was fixed at 4*s.* 4*d.* British silver money throughout all the colonies where it is current; but this value was farther reduced on the 21st of September, 1838, to 4*s.* 2*d.* The value of the doubloon was then, also, fixed at 64*s.*

(3.) *Australian Colonies.*—This group of colonies, though founded in a very distant part of the world, and at a comparatively recent epoch, promises, at no very remote period, to equal or surpass the others in magnitude and importance. The countries in which they are situated, including the great Australian continent, formerly called New Holland, with Van Diemen's Land or Tasmania, New Zealand, &c., are of vast extent, and differ in many respects from each other. Hitherto, also, by far the larger portion of the continent is wholly unexplored; and even the islands are but very imperfectly known. Enough, however, has transpired to show that this great division of the globe differs in some most important respects from most or all countries with which we were previously acquainted; and that it is, in fact, full of anomalies. The interior of the continent has not been sufficiently explored to enable any distinct opinion to be formed as to the height of the mountain chains; but it appears to be pretty well established, that it has no great rivers, or, at least, none that reach the sea. Indeed it seems, speaking generally, to be a law in this new world, that rivers are largest near their source; and that they gradually diminish as they proceed, and most commonly dwindle into insignificance, or lose themselves in marshes, before they reach the ocean!

In consequence, perhaps, of this singular constitution of its river system, it is found that in Australia the best land is not at the mouths, but towards the sources, of the rivers. There are, no doubt, exceptions to this rule; but it appears to hold in by far the greater number of instances. Generally, also, the extent of fine land appears to be comparatively limited; and, in so far as the continental portion of the country has been explored, it appears to be much better adapted for pasturage than for tillage.

The northern portion of Australia, including, perhaps, about a third part of the entire continent, lies between the tropics; the other portion of the continent, with the adjacent islands of Van Diemen's Land and New Zealand being in the south temperate zone. The climate of the different parts of the continent must, therefore, it is obvious, differ very widely. We, however, know but little of the climate of inter-tropical Australia, except that it is within the range of the Indian monsoon; that the temperature along the coast is rapidly raised by a wind from the south, which has been supposed to afford a strong presumption of the existence of sandy deserts in the interior; and that the air is so very moist that during the season of the dry monsoon iron articles are with the utmost difficulty preserved from rusting.

It is commonly said that the climate of extra-tropical Australia, and especially of New South Wales, assimilates closely to that of Southern Italy. But this statement must be taken with considerable limitation; for, 1st, the atmosphere is very decidedly denser; 2nd, the extremes of temperature are greater; 3rd, the average heat is rather less; and 4th, the temperature appears to decline more rapidly by increase of elevation. The grand defect in the climate of extra-tropical Australia, which would otherwise be excellent, appears to consist in the periodical recurrence of wet and dry seasons. Sometimes hardly a single drop of rain falls for an entire year or more; and though, happily, dews are in such seasons peculiarly abundant, they form no adequate substitute for rain. During long continued droughts crops of all kinds are destroyed; and herbage, except in a few favoured spots, suffers severely.

Hence, as already stated, all the eastern parts of extra-tropical Australia, and perhaps, also, the southern, would seem to be much better fitted for pasturage than for husbandry. The droughts are exceedingly injurious to the latter, and they would necessarily involve any large population that depended principally on the indigenous products of the soil in extreme privations. Certainly, however, no country seems to be better fitted for grazing, or rather for the growth of sheep and wool. A dry climate is especially suitable to the latter; and though the pastures be far from luxuriant, their boundless extent compensates for every other deficiency. Sheep are not native to the country, a small flock of 29 head having been introduced for the first time by the original English settlers in 1788. For a while, however, their value was not appreciated; but the importance of sheep-farming, and its suitableness to the country, having been demonstrated by John M'Arthur, Esq. (to whom the colony is under the greatest obligations), it has since increased with unprecedented rapidity. In proof of this, it is only necessary to mention that while the export of wool from New South Wales amounted, in 1822, to only 152,880 lbs., it had increased, in 1825, to 411,600 lbs., in 1830 to 899,750 lbs., and in 1840 to the enormous amount of 7,668,960 lbs.—(See SYDNEY.)

Van Diemen's Land being less subject to droughts than New South Wales, husbandry is carried on in it to a greater extent, and with more advantage; but there also sheep-farming is the principal and most advantageous employment.—(See VAN DIEMEN'S LAND.)

New Zealand, which has only been very recently resorted to by regular colonists, will, no doubt, from its situation, be better fitted for agriculture than either Australia or Van Diemen's Land. The ground in it is, however, very difficult to clear; the natives are also much more formidable, and it is not nearly so suitable for sheep-farming.

In 1842 the imports of wool into the U. Kingdom from the Australian colonies were —

New South Wales	8,725,973 lbs.	Swan River	51,617 lbs.
Van Diemen's Land	3,491,685	South Australia	690,396

Making a grand total of 12,959,671 lbs.

The first of the Australian colonies, that in New South Wales, founded so late as 1788, and that in Van Diemen's Land, founded in 1808, were originally intended to serve as penal settlements; and great numbers of convicts have since been carried to them. Latterly, however, these colonies, notwithstanding their distance, have been a favourite resort of free settlers, consisting partly of voluntary emigrants, and partly of emigrants carried out at the public expense. The settlement at Swan River, on the western coast of Australia, founded in 1829, and that on the south coast of Australia, founded in 1834, have been wholly formed of free settlers. New Zealand was not constituted a colony till 1840; but various establishments, chiefly consisting of adventurers from New South Wales and Van Diemen's Land, had previously been formed on different parts of its coasts.

Population. — The European population of the Australian colonies is believed to have been in 1842 nearly as follows: —

New South Wales, including Port Philip	155,222
Van Diemen's Land	48,963
South Australia	15,029
Western Australia	3,274
New Zealand	12,664
Total	235,152

Passage. — The cost of a passage to the Australian colonies, including provisions, is for the

Cabin, from 60*l.* to 100*l.*
Intermediate, from 35*l.* to 40*l.*
Steerage, about 20*l.*

The average length of the voyage is about four months; and at whatever season of the year it may be made, the passengers have to pass through both very hot and very cold weather, and should, therefore, be prepared accordingly with suitable clothing.

The prices of cabin and intermediate passages to New Zealand are about the same as to the Australian colonies; a steerage passage, however, is rather higher, the passage being somewhat longer.

Emigration. — We subjoin a return of the number of individuals that have emigrated from the United Kingdom to the Australian colonies, from 1825 down to 1842, both inclusive.

Years.	Emigrants.	Years.	Emigrants.
1825	485	1834	2,800
1826	903	1835	1,866
1827	715	1836	3,124
1828	1,056	1837	5,054
1829	2,016	1838	14,021
1830	1,242	1839	15,786
1831	1,561	1840	15,850
1832	3,733	1841	32,625
1833	4,093	1842	8,554

Making a grand total of 115,458.

Account of the Quantities and Values of the principal Articles of British Produce and Manufacture exported to the British Australian Colonies during each of the 5 Years ending with 1841.

Principal Articles.	1837.		1838.		1839.		1840.		1841.	
	Quantity.	Decl. Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.
		£		£		£		£		£
Apparel, slops, and haberdashery £	-	173,512	-	225,775	-	272,432	-	270,176	-	200,540
Beef and pork - - bar.	6,301	22,207	7,136	27,279	5,854	21,213	18,575	66,488	6,357	21,869
Beer and ale - - tuns	2,440	42,603	3,828	65,057	5,414	89,865	51,735	124,519	32,862	81,163
Cotton manufactures entered by the yard - - yds.	2,610,673	81,450	5,689,982	167,269	9,052,155	254,490	5,070,819	141,113	2,607,815	64,492
Hosiery, lace, and small wares £	-	15,809	-	27,218	-	38,344	-	37,073	-	19,686
Earthenware of all sorts - ps.	614,950	6,689	1,256,162	13,621	1,885,623	24,494	2,112,380	27,383	1,148,531	16,175
Glass entered by weight - cwts.	15,874	31,876	24,953	38,084	37,035	51,749	61,160	83,571	44,876	65,579
Hardware and cuttery - —	6,410	30,994	9,761	44,722	15,490	64,373	24,286	100,816	13,699	60,126
Iron and steel, wrought and unwrought - - tons	3,593	50,131	5,077	71,350	5,818	90,420	9,158	132,574	6,847	84,487
Leather, wrought and unwrought - - lbs.	97,484	21,403	127,251	23,212	173,186	28,865	209,426	39,463	249,779	45,407
Linen manufactures entered by the yard - - yds.	1,023,839	43,098	1,752,410	82,378	2,166,625	86,549	2,097,716	83,677	971,585	40,132
Machinery and mill-work - £	-	8,923	-	5,091	-	14,112	-	17,021	-	15,071
Plate, plated ware, jewellery, and watches - - £	-	20,331	-	23,411	-	17,962	-	23,263	-	26,553
Silk manufactures - - £	-	42,097	-	55,459	-	44,784	-	57,845	-	30,577
Soap and candles - - lbs.	761,770	14,803	1,252,729	22,694	2,207,901	38,098	4,284,533	70,737	1,907,010	33,846
Stationery of all sorts - £	-	17,536	-	19,066	-	24,698	-	50,662	-	40,383
Sugar, refined - - cwts.	2,650	5,286	9,025	21,719	7,116	15,082	12,267	23,502	4,772	7,682
Woollen manufactures entered by the piece - - ps.	9,260	44,799	16,014	64,639	19,088	72,401	20,227	79,214	15,873	55,571
Ditto by the yard - - yds.	270,205	23,804	379,183	27,161	517,329	40,092	668,432	47,719	395,238	27,743
Hosiery and small wares - £	-	7,057	-	12,320	-	17,629	-	18,129	-	8,537
All other articles - - -	-	217,160	-	301,107	-	368,898	-	509,410	-	325,632
Totals - - -	-	921,568	-	1,336,662	-	1,679,390	-	2,004,385	-	1,269,351

(4.) *Disposal of Land in the Colonies.*—The question as to the best method of disposing of the unoccupied lands in colonies planted in unsettled countries is one of considerable nicety and difficulty. Land in old settled and fully occupied countries being, for the most part, very valuable, and its possession bringing along with it great consideration and influence, and frequently, also, great wealth, colonists are very apt, wherever they have the opportunity, to appropriate a much larger extent of land than they have the means of cultivating, or of turning to any useful account. Not only, however, are settlers disposed to act in this way, but speculators, who have no thought of emigrating, and

persons having influence with government, endeavour to obtain large tracts of land, in the view of holding them till, in consequence of the increase of population in the vicinity, they acquire a considerable value. It has been usual, also, to reserve large tracts for ecclesiastical and other public purposes. And these extensive tracts of unoccupied and reserved lands being interposed between the settled parts of a colony, render it in all cases more difficult, and sometimes all but impossible, to form roads and other means of communication; so that the settlers are thus frequently cut off from a market for their produce; and are less able to combine for municipal or such like purposes, and for the establishment of schools and churches, and the undertaking of such public works as require co-operation.

The improvident manner in which large tracts of land have been granted in Canada, and the great extent of the clergy and other reserves in that colony, have materially retarded its prosperity; and the same circumstances have had a similar operation in our other North American possessions, in Western Australia, and elsewhere. But there are various ways in which an abuse of this sort might be prevented. One of the most obvious of these is to impose such a moderate price on the land as might, without crippling the means of the settlers, hinder them from seeking unduly to extend their possessions; and making all the land held by individuals, whether occupied or not, contribute according to its extent to the construction of roads and other public works. Perhaps, however, the better plan would be to apportion the land according to the available capital of the settlers, it being stipulated that no individual should secure above a certain number of acres; and that it should revert back to the public unless certain improvements were effected upon it within a specified time after the grant was made.

But, not satisfied with attempting to prevent abuses like those noticed above, we are now told that all the difficulties incident to colonisation have originated in the too great dispersion of the colonists, and that to obviate them, and to insure to all new colonies the acme of prosperity, we have merely to compel the colonists to keep close together by exacting a high price for the surrounding waste or unoccupied land — in other words, by making the colony as like an old settled country as possible! And this precious project has been trumpeted forth as a great discovery. It is obvious, however, that if, on the one hand, the price set on waste land were inconsiderable, it would not (without a limitation of quantity) prevent the purchase of large tracts of land on speculation, and the entailing on the colony all the disadvantages that have resulted from the making of injudicious grants; and if, on the other hand, the price demanded for the land were pretty high, it would go far to oppose an insuperable obstacle to the progress of the colony, at least if it were to be founded by voluntary emigrants. Rich men do not leave their native country to expose themselves to the inconveniences and hardships attending the establishment of new settlements in the wilderness. This, if it be done at all, must be done in time to come, as in time past, by individuals in straitened circumstances, and anxious to improve their fortunes. But to exact a high or considerable price for land from such persons would, by sweeping away the whole, or a considerable portion of their capital, deprive them of the means of clearing and cultivating the land, and proportionally retard their progress and that of the colony. The plan of letting lands by fine is admitted by every one who knows any thing of agriculture to be one of the worst that can be devised: and this colonisation project is bottomed on the same principle, and will, no doubt, be as pernicious.

It is said that, in consequence of the exacting of a price for the land, and the concentration of the colonists, their employments, being more combined and divided, will be prosecuted with a great deal more success than at present. All this, however, proceeds on the false and exploded assumption that the colonists are not, like other individuals, the best judges of what is for their own advantage. Dr. Smith says truly, that it is the highest impertinence for kings and ministers to attempt to direct private people *how* they should employ their capitals. But it is, if possible, a still greater impertinence, to attempt to direct them *where* they shall employ them. A regard to their own interest will draw people sufficiently together. And to enact regulations in the view of concentrating them still more, is in every respect as contradictory and absurd as it would be to set about increasing the public wealth by regulating the sort of employments to be carried on, and the countries with which, and the commodities in which, to deal.

Latterly the English government has adopted the plan of disposing of all ungranted colonial lands by sale; and though we incline to think, as already stated, that the preferable plan would be to distribute them according to the capital or means of the settlers, still, if the price at which land is sold be reasonable, and the quantity that may be held by individuals be limited, we do not know that the plan is open to any very good objection. But the price charged for land in most of our colonies, and especially in Australia, where the minimum is 20*s.* an acre, appears to be a great deal too high. At the same time, however, we must bear in mind the distinction between founding a

colony, with a view principally to the interests of the colonists; and founding it not only with a view to their interests, but in an especial degree for the relief of the mother country. For it is not to be denied that the plan of exacting a pretty high price for colonial lands, and applying that price to defray the cost of carrying out emigrants, may (how injurious soever to voluntary emigrants) be made to assist in relieving the mother country of those who might otherwise have had to be supported at the public expense. Inasmuch, too, as an extraordinary quantity of labour is thus supplied to the colony, the injury done to the capitalists by making land artificially dear, is partially, or it may be wholly, compensated by its making labour artificially cheap. The immense emigration to the Australian colonies since 1837 has been principally a consequence of the principle now stated, a very large proportion of the emigrants having been carried out at the public expense.

It would obviously, however, be the extreme of folly for any one intending to emigrate, who has a little, but not a great deal of capital, to think of establishing himself in a colony where a high price is set upon land. At all events, such person must not expect in such a colony to become a landowner, or to be independent, but must make up his mind to be a hired labourer; whereas, if he emigrate to a colony where land is sold at a low price, or given away on condition of certain improvements being effected upon it within a given time, he may at once acquire an estate, and exchange the condition of hired servant for that of landowner.

Seeing that the Americans sell the best lands in the valley of the Mississippi at less than a dollar an acre, it is not easy to discover the principle on which we proceed in exacting 6*s.* 7*d.* an acre for the worst land in Upper Canada. If this regulation were meant to divert the current of voluntary emigration from Canada to the U. States, nothing could be found to say against it; but otherwise it seems alike contradictory and absurd. Notwithstanding the facilities of getting out to Quebec in timber ships, the direct emigration to the U. States generally exceeds that to British N. America, the emigrants to the former being also of a superior description, and having a greater command of capital. And there can be no doubt that the U. States are in no inconsiderable degree indebted for this influx of comparatively valuable immigrants to the fact of their public lands being sold at a less price than ours. "It is population alone which imparts value to land, and a more effectual method could not be devised for preventing an influx of inhabitants into Upper Canada, and drawing away many of those already settled, than government adhering to the present prices of land."—(See Shireff's valuable *Agricultural Tour through N. America*, p. 365.)

Regulations for the Disposal of Lands in British North America.

Canada.—By an act of the local legislature, passed in September, 1841, the waste lands of the Crown are to be sold at a price to be fixed from time to time by the governor in council. The prices fixed for the present are as follows:—For Upper Canada, 8*s.* currency (about 6*s.* 7*d.* sterling) per acre; for Lower Canada, in the county of Ottawa, and South of the river St. Lawrence, west of the Chaudiere road, 6*s.* currency (about 4*s.* 11*d.* sterling); and elsewhere in that division of the province, 4*s.* currency (about 3*s.* 3½*d.* sterling) per acre.

These prices do not apply to lands resumed by government for nonperformance of the conditions of settlement on which they were granted under a former system now abolished, nor to lands called Indian reserves, and clergy reserves; which three classes are, as well as town and village lots, subject to special valuation.

The size of the lots of country lands is usually 200 acres; but they are sold as frequently by half as whole lots.

The following are the conditions of sale at present in force, as published by the local government in its official gazette:—

1. The lots are to be taken at the contents in acres marked in the public documents, without guarantee as to the actual quantity contained in them.

2. No payment of purchase money will be received by instalments, but *the whole purchase money, either in money or land scrip*, must be paid at the time of sale.*

3. On the payment of the purchase money, the purchaser will receive a receipt which will entitle him to enter on the land which he has purchased, and arrangements will be made for issuing to him the patent without delay.

The receipt thus given not only authorises the purchaser to take immediate possession, but enables him, under the provisions of the Land Act, to maintain legal proceedings against any wrongful possessor or trespasser, as effectually as if the patent deed had issued on the day the receipt is dated.

For the convenience of the public generally, district agents are appointed under the Provincial Land Act in each municipal district, with full power to sell to the first applicant any of the advertised lands which by the return open to public inspection may be vacant within his district.

New Brunswick.—The mode of sale in this province is by auction. The upset price is generally about 2*s.* 8*d.* sterling (3*s.* currency), but varies according to situation, &c. The average price actually fetched by ordinary country lands has been from 4*s.* 6*d.* to 9*s.* sterling (5*s.* to 10*s.* currency) per acre, according to situation, &c. Fifty acres is the smallest quantity usually sold.

Nova Scotia.—The public lands are here also sold by auction, at an upset price, which is at present 2*s.* 6*d.* sterling (about 3*s.* currency) per acre. The smallest quantity of country land usually sold is 100 acres.

Prince Edward's Island.—In this colony the Crown has at its disposal only about 8,400 acres. Sale by auction prevails, and the average price realised for ordinary country lands has been from 10*s.* to 14*s.* currency per acre.

Newfoundland.—There exists no official return of the surveyed and accessible land at the disposal of the Crown in this colony. The area as been estimated at about 2,300,000 acres, of which about 23,000 have been appropriated. In 1841 the number of acres sold was 311, at an average price of 2*s.* per acre. Although the agriculture of the province is progressively increasing, *there are yet comparatively few persons exclusively employed in it*, the population being nearly all engaged in the fisheries.

The Canada Company having acquired an extensive tract of land in Upper Canada, dispose of it as follows:—

The Canada Company, desirous of affording every facility to parties wishing to settle in the Huron district in Canada West, and who may not have the means of paying the usual sum down in cash, will grant leases of their lands for twelve years, at small annual rents, commencing one year from the date of the lease, at the expiration of which lease and the punctual payment of the yearly rents, the settler will receive a deed for the freehold of the land he occupies without further charge. The rents are so proportioned that an industrious man may pay them, and maintain his family from the produce of the land.

Under these leases no money is required to be paid down.

The rents payable annually for a lot of 100 acres are as follow, and they are required to be punctually discharged.

		£	s.	d.
At the end of the first year	Currency	2	0	0
At the end of the 2nd year	—	3	0	0
At the end of the 3rd year	—	4	0	0
At the end of the 4th year	—	6	5	0
At the end of the 5th year	—	8	0	0
At the end of the 6th year	—	9	5	0
At the end of the 7th year	—	10	5	0
At the end of the 8th year	—	11	0	0
At the end of the 9th year	—	12	0	0
At the end of the 10th year	—	13	10	0
At the end of the 11th year	—	14	10	0
At the end of the 12th year	—	16	10	0

Settlers desirous of obtaining lands of the Canada Company upon the foregoing terms are requested to apply on their arrival in Canada to the Company's Commissioners, at Toronto and

* This is scrip issued by the local government in satisfaction of certain old militia claims which have been recently adjusted by this means.

Goderich. Any further information may be obtained at the Company's House, 13. St. Helen's Place, London.

London, 2 February, 1843.

Regulations for the Disposal of Land in the Australian Colonies and New Zealand, issued in 1842.

1. All lands are disposed of by sale only, and must be once at least exposed to public auction.

2. The lowest upset price is not less than 1*l.* per acre; but government may raise the same by proclamation, but cannot again reduce it.

3. The lands are distinguished into three different classes; viz. town lots, suburban lots, and country lots.

4. Upon town and suburban lots, as well as upon a proportion not exceeding one tenth of the whole of the country lots, offered for sale at any auction, the governor has the power of naming a higher than the general or lowest upset price; the country lots on which such power is exercised to be designated "special country lots."

5. Town and suburban lots will in no case be disposed of except by public auction, but country lots which have already been put up to public auction and not sold, may be disposed of by private contract at the upset price.

6. No lands will be sold by private contract except for ready money. When sold by public auction, one tenth at least of the whole purchase money must be paid down, and the remainder within one calendar month, else the deposit is forfeited.

7. Lands are put up for sale in lots not exceeding one square mile, or 640 acres, in extent.

8. As an exception to the general regulations, and subject to certain restrictions laid down in the Australian Land Act, the governor has it in his discretion to dispose, by private contract, at a price not less than the lowest upset price for the district, of blocks comprising 20,000 acres or more.

9. Persons may make payments for colonial lands in this country, for which payment or deposit they will receive an order for credit to the same amount in any purchase of land they may effect in the colony, and will have the privilege of naming a proportionate number of emigrants for a free passage, as explained below. The deposits must be made in one or more sums of 100*l.* each at the bank of England, to the account of the agent general for crown colonies, and the depositor must state at the time the colony in which the land is to be selected, and give notice to the agent and to the land and colonial commissioners, of the deposit. Upon receiving the agent's certificate that the money has been duly paid in, the colonial land and emigration commissioners will furnish the depositor with a certificate, stating the amount he has paid, and entitling him to obtain credit for that sum in any purchase which he may effect in the colony, subject to all rules and regulations then in force.

10. For every sum of 100*l.* deposited as above, the depositor will be entitled, for six months from the date of payment, to name a number of properly qualified emigrants, equal to four adults, for a free passage. Two children between 1 and 14 are to be reckoned as equal to one adult. The emigrants are required to be chosen from the class of mechanics and handicraftsmen, agricultural labourers, or domestic servants, and must be going out with the intention to work for wages. They are to be subject to the approval of the commissioners, and must, in all respects, fall within their general regulations on the selection of labourers. The purchaser and his family cannot receive a free passage under this privilege.

Summary of Modes of Sale, and Prices of Land, in the different Colonies.

Colony.	Mode of Sale.	Price per Acre.
North American Colonies:		
Canada (West)	Fixed price	8*s.* Currency.
Canada (East)	Ditto	6*s.* and 4*s.* do. according to situation.
New Brunswick	Auction	3*s.* currency upset price.
Nova Scotia	Ditto	3*s.* 1*d.* ditto.
Prince Edward's Island	Ditto	10*s.* to 20*s.* ditto.
Australian Colonies:		
Sydney Port Phillip Van Diemen's Land Western Australia South Australia New Zealand	By Auction. Country lands not sold at the public sales may afterwards be bought at the upset price as a fixed price	Lowest upset price 1*l.* sterling.
Falklands	Auction. Ditto Ditto	Lowest upset price 8*s.*
Cape of Good Hope	Ditto	No fixed upset price. Average price realised about 2*s.* per acre.
Ceylon	Ditto	5*s.* sterling.

Statement of the Names, Dates of Acquisition, Government, Area, Population, Trade, &c. of the British European, African, Asiatic, and Australian Colonies.

Colonies.	Date of Capture, Cession, or Settlement.	Whether having Legislative Assemblies or governed by Orders in Council.	Area.	Population.	Exports from		Imports into from U. K. in 1841.	Shipping belonging to the Colonies, 1841.		Shipping entered Inwards from U. K. 1841.		Shipping Outwards from U. K. 1841.	
					To all Places.	To U. K.							
EUROPEAN.			*Sq. miles.*				£	Sh.	*Tons.*	Sh.	*ons.*	Sh.	*Tons.*
Gibraltar	Capture, 1704	Under home government	-	1834. 15,008	-	-	1,053,367	-	-	100	23,314	260	46,663
Malta & Gozo	Ditto, 1800	Ditto	98	1839. 121,928	-	-	223,734	81	14,601	76	10,628	257	48,454
Ionian Islands	Cession, 1814	Legislative bodies	1,097	1840. 223,349	-	-	119,523	-	-	42	5,687	41	6,432
Heligoland	Ditto, 1814	Under home government	5½	1842. 2,000?									
		Totals		362,285									
AFRICAN.													
Settlements on W. Coast	1631, 1661 1787, & 1827	Under home government and executive and legislative council	-	1839. 43,628	1839. 211,652	121,413	410,798	39	2,202	164	41,211	181	47,901
C. of G. Hope	Capitulation 1810	Ditto	121,489½	1842. 171,519	1842. 371,921*	-	384,574	24	2,848	37	7,758	50	11,594
Mauritius	Ditto, 1806	Ditto	781	1839. 135,197	1839. 780,042	601,003	340,140	118	11,287	99	28,026	80	22,313
St. Helena	- -	- -	47	1841. 5,000?	-	-	7,921	-	- -	1	350	7	1,732
		Totals		355,344						301	77,345	318	83,540
ASIATIC.													
Ceylon	Capitulation 1796	Under home government	24,500	1842. 1,337,032	1842. 463,445*	327,285	162,574	603	28,379				
Hong Kong	Cession, 1842	Ditto											
		Totals											
AUSTRALIAN.													
N. S. Wales	Settlement, 1787	Governor and legislative council	-	1842. 155,222	1839. 849,268	995,572	1,269,351	328	33,178	94	27,948	275	110,053
V. D. Land	Ditto, 1803	Ditto	27,000	1842. 48,963	— 500,701								
W. Australia	Ditto, 1829	Ditto	-	- 1842. 3,274	-	-	-	-	-				
S. Australia	Ditto, 1836	Ditto	-	- 1840. 15,040	-	-	-	-	-				
New Zealand	Ditto, 1839	-	86,000	1842. 13,000	-	-	67,275	-	-	4	1,584	38	15,556
		Totals		235,499									

* These statements are taken from almanacs published at Cape Town and Colombo for 1843. The imports into Ceylon include £172,311 of specie and the exports £13,026 ditto, and £29,007 of foreign products.

Statement of the Names, Dates of Acquisition, Government, Area, Population, Trade, &c. of the American and West Indian Colonies.

Colonies.	Date of Capture, Cession or Settlement.	Whether having Legislative Assemblies or governed by Orders in Council.	Area.	Population.	Value of Imports from all Places in 1839.	Value of Exports to all Places in 1839.	Shipping belonging to the Colonies in 1841.		Shipping Inwards and Outwards from United Kingdom in 1841.	Emigrants left United Kingdom for North American Colonies in the following Years.	Declared Value of Exports from United Kingdom to Colonies.
BRITISH N. AMERICAN.											
Lower Canada	Capitulation 18th Sept. 1759	Governor, Council, and Assembly.	*Sq. miles.*		£	£	*Ships*	*Tons.*	*Ships. Tons.*	1837 - 29,884	Declared Value of Exports to North American Colonies.
Upper Canada	Ditto 8th Sept. 1760 and cession by treaty, 1763.	Ditto	141,000	1842. 600,000‡	2,137,374	1,099,337	482	53,112	Inwards 2,461 841,348	1838 - 4,577	1839 - £5,047,671
New Brunswick		Ditto	25,951	1840. 156,162	1,011,546	690,386	696	116,240	Outwards 1,937 652,725	1839 - 12,658	1840 - 2,847,913
Nova Scotia	Fisheries and settlements established soon after their discovery in 1497.	Ditto	19,500	1838. 142,543	1,221,011	685,708	2,166	124,536		1840 - 32,293	1841 - 2,947,061
Newfoundland		Ditto	57,000	1836. 75,094	624,166	818,110	725	44,776		1841 - 38,164	
Prince Edward Island		Ditto	2,150	1842. 47,000	1,626	13,628	192	16,073		1842 - 54,123	
		Totals	451,441	1,720,799	4,995,725 §	3,307,169¶	4,261	354,337	- -	- 171,699	- -

Colonies.	Date of Capture, Cession or Settlement.	Whether having Legislative Assemblies or governed by Orders in Council.	Area.	Population.	Value of Imports from all Places in 1839.	Value of Exports to all Places in 1839.	Shipping belonging to the Colonies in 1841.		Shipping Inwards and Outwards from United Kingdom in 1841.	Imports into United Kingdom in 1841.		Declared Value of Exports from United Kingdom to Colonies.
										Sugar.	Coffee.	
BRITISH WEST INDIAN.										*Cwt.*	*Lbs.*	
Antigua	Settlement, 1632.	Governor, Council, and Assembly.	108	1832. 35,412	233,336	353,709	60	1,228		144,103	7,848	
Barbadoes	Ditto 1605.	Ditto.	166	1829. 102,605*	783,775	686,702	37	1,977		257,108	1,513	
Dominica	Ceded by France, 1763.	Ditto.	291	1833. 18,660	44,275	87,466	14	579		42,342	127,609	
Grenada	Ditto 1763.	Ditto.	125	1837. 20,934	99,505	201,132	39	1,112		84,270	133	
Jamaica	Capitulation, 1655.	Ditto.	6,250	1824. 373,405†	2,244,480	2,484,735	128	4,790		528,585	7,618,890	
Montserrat	Settlement, 1632.	Ditto.	47	1836. 7,119	9,356	21,312	6	226		10,839		
Nevis	Ditto 1628.	Ditto.	20	1838. 7,434	31,757	52,835	9	155		12,124		
St. Kitts	Ditto 1623.	Ditto.	68	1838. 22,482	143,867	185,626	33	438		63,936	12	
St. Lucia	Capitulation, 22d June, 1803.	Governor and Council and orders of the Queen in Council.	300	1839. 14,179	77,507	76,184	24	88		51,115	18,287	Declared value of Exports to British West Indian Colonies.
St. Vincent	Ceded by France, 1763.	Governor, Council, and Assembly.	132	1831. 27,122	189,246	299,325	33	1,314	*Ships. Tons.*	110,205		1839 - £3,986,598
Tobago	Ditto 1763.	Ditto.	89	1839. 11,748	72,418	150,557	7	222	Inwards - 677 174,975	48,164	76	1840 - 3,574,970
Tortola	Settlement, 1666.	Ditto.	24	1835. 7,751	6,200	15,029	49	305	Outwards 805 211,536	8,597		1841 - 2,504,004
Trinidad	Capitulation, 18th February, 1797.	Governor and Council and orders of the Queen in Council.	2,000	1837. 39,328	465,824	358,945	59	2,009		284,605	38,622	
Bahamas	Settlement, 1629.	Governor, Council, and Assembly.	5,500	1839. 23,048	132,906	93,844	54	3,535		100	5,130	
Bermudas	Ditto 1609.	Ditto.	20	1839. 8,935	124,884	21,258	54	4,155				
Demerara	Capitulation, 18th September, 1803.	Governor and Council and orders of the Queen in Council.	- -	1833. 96,424‡	1,029,830	1,091,582	55	2,700		415,261	745,631	
Essequibo	Ditto 23d Ditto	Ditto.	- -	- -	178,684	256,122	18	860		90,063	1,363,938	
Berbice												
Anguilla	Settlement, 1666.	Governor, Council, and Assembly.	- -	1824. 3,666								
Honduras	Treaty, 1670.	Superintendant and magistrates.	- -	1839. 7,935								
		Totals	- -	828,225	5,867,820¶	6,436,363**	779	26,413	- -	2,151,217	9,927,689	- -

* Whereof blacks, 83,140.
† In 1835, blacks, 311,692.
‡ Whereof blacks, 84,915.
§ Whereof from the U.K. £3,513,276.
¶ Whereof from the U. K. £3,970,972.
¶ Whereof from the U. K. £2,070,537.
** Whereof from the U. K. £5,728,283.

IV. Regulations under which Colony Trade is conducted.

These are embodied in the act 3 & 4 Will. 4. c. 59., and 5 & 6 Victoria c. 49., the last having come into operation in 1843.

Importation and Exportation of Goods confined to free Ports. — No goods shall be imported into, nor shall any goods, except the produce of the fisheries in British ships, be exported from, any of the British possessions in America by sea, from or to any place other than the U. Kingdom, or some other of such possessions, except into or from the several ports in such possessions, called "Free Ports," enumerated or described in the table following; (that is to say,)

Table of free Ports. — Kingston, Savannah Le Mar, Montego Bay, Santa Lucia, Antonio, Saint Ann, Falmouth, Maria, Morant Bay, Annotto Bay, Black River, Rio Bueno, Port Morant, Jamaica; Saint George, Grenada; Roseau, Dominica; Saint John's, Antigua; San Josef, Trinidad: Scarborough, Tobago; Road Harbour, Tortola; Nassau, New Providence; Pitt's Town, Crooked Island; Kingston, Saint Vincent; Port Saint George and Port Hamilton, Bermuda; any port where there is a Custom-house, Bahamas; Bridgetown, Barbadoes; Saint John's, Saint Andrew's, New Brunswick; Halifax, Pictou, Nova Scotia; Quebec, Canada; Saint John's, Newfoundland; George Town, Demerara; New Amsterdam, Berbice; Castries, Saint Lucia; Basseterre, Saint Kitt's; Charles Town, Nevis; Plymouth, Montserrat; Sydney, Cape Breton; Charlotte Town, Prince Edward's Island; Anguilla, Anguilla; and if any goods shall be imported into any port or place in any of the said possessions contrary hereto, such goods shall be forfeited. — (3 & 4 *Will.* 4. c. 59. § 2.)

His Majesty may appoint other Ports to be free Ports. — Provided always, that if his Majesty deem it expedient to extend the provisions of this act to any port or ports not enumerated in the said table, it shall be lawful for his Majesty, by order in council, to do so; and from the day mentioned in such order in council, all the privileges and advantages of this act, and all the provisions, penalties, and forfeitures therein contained, shall extend, and be deemed and construed to extend, to any such port or ports, as fully as if the same had been inserted and enumerated in the above table: provided also, that nothing hereinbefore contained shall extend to prohibit the importation or exportation of goods into or from any ports or places in Newfoundland or Labrador in British ships. — § 3.

His Majesty may appoint Ports for limited Purposes. — And whereas there are in the said possessions many places situated in rivers and in bays at which it may be necessary to establish ports for particular and limited purposes only; be it therefore enacted, that it shall be lawful for his Majesty, in any order in council made for the appointment of any free port, to limit and confine such appointments respectively to any and such purposes only as shall be expressed in such order. — § 4.

Privileges granted to Foreign Ships limited to the Ships of those Countries granting the like Privileges to British Ships, &c. — And whereas by the law of navigation foreign ships are permitted to import into any of the British possessions abroad, from the countries to which they belong, goods the produce of those countries, and to export goods from such possessions to be carried to any foreign country whatever; be it therefore enacted, that the privileges thereby granted to foreign ships shall be limited to the ships of those countries which, having colonial possessions, shall grant the like privileges of trading with those possessions to British ships, or which, not having colonial possessions, shall place the commerce and navigation of this country, and of its possessions abroad, upon the footing of the most favoured nation, unless his Majesty by order in council shall in any case deem it expedient to grant the whole or any of such privileges to the ships of any foreign country, although these conditions be not in all respects fulfilled by such foreign country; provided, that no foreign country shall be deemed to have fulfilled the before-mentioned conditions, or to be entitled to these privileges, unless his Majesty shall, by his order or orders, have declared that such foreign country hath so fulfilled the said conditions, and is entitled to the said privileges: provided also, that every order in council in force at the time of the commencement of this act, whereby declaration is made of the countries entitled in whole or in part to the privileges of the law of navigation, shall continue in force as effectually as if the same had been made under the authority of this act. — § 5.

This Act not to affect certain Acts. — Nothing contained in this act, or any other act passed in the present session of parliament, shall extend to repeal or in any way alter or affect an act (4 *Geo.* 4. c. 77.) intituled "An Act to authorize his Majesty, under certain Circumstances, to regulate the Duties and Drawbacks on Goods imported or exported in foreign Vessels, and to exempt certain foreign Vessels from Pilotage," nor to repeal or in any way alter or affect an act (5 *Geo.* 4. c. 50.) to amend the last-mentioned act; and that all trade and intercourse between the British possessions and all foreign countries shall be subject to the powers granted to his Majesty by those acts. — § 6.

Goods prohibited or restricted to be imported into Colonies. — The several sorts of goods enumerated or described in the table following, denominated "A Table of Prohibitions and Restrictions," are hereby prohibited to be imported or brought, either by sea or by inland carriage or navigation, into the British possessions in America, or shall be so imported or brought only under the restrictions mentioned in such table, according as the several sorts of such goods are set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions.

Gunpowder, ammunitions, arms, or utensils of war, prohibited to be imported, except from the United Kingdom, or from some other British possession.

Coffee, sugar, not being refined, in bond in the United Kingdom; molasses, rum, being the produce or manufacture of any British possession within the limits of the East India Company's charter, except and subject as hereinafter is provided, or being of foreign produce or manufacture, prohibited to be imported into any of the British possessions on the continent of South America or in the West Indies (the Bahama and Bermuda Islands not included), or into the Mauritius, except to be warehoused for exportation only, and may also be prohibited to be imported into the Bahama or Bermuda Islands by her Majesty's order in council.

Base or counterfeit coin.

Books, such as are prohibited to be imported into the United Kingdom, prohibited to be imported.

And if any goods shall be imported or brought into any of the British possessions in America contrary to any of the prohibitions or restrictions mentioned in such table in respect of such goods, the same shall be forfeited; and if the ship or vessel in which such goods shall be imported be of less burden than 70 tons, such ship or vessel shall also be forfeited. — (5 & 6 *Victoria*, c. 49. § 4.)

Coffee, Sugar, and Rum may be imported into British Possessions. — It shall be lawful to import into any British possession in the West Indies and S. America, and into the Mauritius, any coffee the produce of any British possession within the limits of the East India Company's charter, and also any sugar the produce of any British possession within the limits of the East India Company's charter into which the importation of sugar the produce of any foreign country or of any British possession into which foreign sugar may be legally imported has been prohibited, and also any rum the produce of any British possession within the limits of the East India Company's charter into which the importation of rum the produce of any foreign country or of any British possession into which foreign sugar or rum may be legally imported has been prohibited. But no such coffee, sugar, or rum shall be entered in any British possession in the West Indies or S. America, or the Mauritius, as being the produce of any British possession within the limits of the East India Company's charter from which the same may be legally imported under last proviso, unless the master of the ship importing the same shall have delivered to the collector or principal officer of the customs at the port of importation, a certificate of origin as hereinafter mentioned, under the hand and seal of the proper officer at the place where the same shall have been taken on board; and such master shall also make and subscribe a declaration before the proper officer of the customs that such certificate was received by him at the place where such coffee, sugar, or rum was taken on board, and that the coffee, sugar, or rum so imported is the same as is

mentioned therein; and such certificate of origin shall, as regards coffee, certify that a declaration in writing had been made and signed before the officer giving such certificate, the contents of which he believed to be true, by the shipper of such coffee, that the same was really and *bonâ fide* the produce of some British possession; and such certificate of origin shall, as respects sugar, state the name of the district in which such sugar was produced, the quantity and quality thereof, the number and denomination of the packages containing the same, and the name of the ship in which they were laden and the master thereof, to the officer giving the same, by the shipper of such sugar, and shall likewise certify that there had been produced a certificate under the hand and seal of the collector or assistant collector of the land or customs revenue of the district within which such sugar was produced, that such sugar was the produce of the district, and that the importation into such district of foreign sugar, or sugar the growth of any British possession into which foreign sugar can be legally imported, is prohibited; and such certificate of origin shall, as respects rum, state the name of the district in which such rum was produced, the quantity and strength thereof, the number and denomination of the packages containing the same, the name of the ship in which they were laden and of the master thereof, and shall also testify that there had been produced to the party giving such certificates, by the shipper of such rum, a certificate under the hand and seal of the collector or assistant collector of the land or customs revenue of the district within which such rum was produced, that the same was the production of such district.—(5 & 6 *Victoria*, c. 49. § 5.)

Duties on Importation. — There shall be raised, levied, collected, the several duties of customs set forth in the subjoined table of duties, upon goods, wares, and merchandise, not being the growth, production, or manufacture of the U. Kingdom, or of any British possession in America, or of the Mauritius, or of any British possession within the limits of the East India Company's charter, or the produce of any British fishery, imported or brought into any British possession in America or the Mauritius by sea or inland carriage or navigation.

Table of Dutics.

			£.	d.
Wheat flour	barr. of 196 lbs.		2	0
Fish of foreign taking dried or salted	- -	cwt.	2	0
or curing pickled	- -	barr.	4	0
Meat, salted or cured	- -	cwt.	3	0
Butter	- -	—	8	0
Cheese	- -	—	5	0
Coffee	- -	—	5	0
Cocoa	- -	—	1	0
Molasses	- -	—	3	0
Sugar, unrefined	- -	—	5	0
Refined sugar, the produce of and refined in foreign countries	20 per centum ad valorem.			
Tea, unless imported direct from China, or unless imported from the U. Kingdom, or from any of the British possessions	- -	lb.	0	1
Spirits: —				
Rum	- -	gall.	0	6
Other spirits and cordials	- -	—	1	0
Glass manufactures	15 per centum ad valorem.			
Silk manufactures				
Spermaceti				
Wine, whether bottled or not				
Cotton manufactures				
Linen ditto				
Woollen ditto				
Leather ditto				
Paper ditto	7 per centum ad valorem.			
Hardware				
Clocks and watches				
Manufactured tobacco				
Soap				
Candles, other than spermaceti				
Corks, cordage, and oakum				
Oil, blubber, fins, and skins, the produce of fish and creatures living in the sea, of foreign fishing, 15 per centum ad valorem.				
Articles not enumerated, except such as are comprised or referred to in the subjoined Table of Exemptions	4 per centum ad valorem.			

And if any of the goods hereinbefore proposed to be charged with duty, except sugar and tea, shall be imported through the U. Kingdom (having been warehoused therein, and being exported from the warehouse), or the duties thereon, if there paid, having been drawn back	Such goods shall only be charged with three-fourths of the duties hereinbefore proposed.

Table of Exemptions.

Coin, bullion, and diamonds.
Horses, mules, asses, neat cattle, and all other live stock.
Hay and straw.
Tallow and raw hides.
Salt.
Rice.
Corn and grain, unground.
Biscuit or bread.
Meal or flour, except wheat flour.
Fresh meat.
Fresh fish.
Fruit and vegetables, fresh.
Carriages of travellers.
Wood and lumber.
Cotton wool.
Hemp, flax, and tow.
Drugs.
Gums and resins.
Tortoise-shell.
Manures of all kinds.
Herrings, taken and cured by the inhabitants of the Isle of Man, and imported from thence.
Provisions and stores of every description, imported or supplied for the use of her Majesty's land and sea forces.
All goods imported from the U. Kingdom after having there paid the duties of consumption, and imported from thence without drawback. — § 7.

Exemptions from Duty.—The articles enumerated or mentioned in the above table of exemptions, shall be imported without payment of any duty under this act, and also such of the following articles, namely,

Salted or cured meat,	Oakum,
Flour,	Pitch,
Butter,	Tar,
Cheese,	Turpentine,
Molasses,	Leather and leather ware,
Cork-wood,	Fishermen's clothing and hosiery,
Cordage,	Fishing craft, utensils, instruments, and bait,

as shall be imported for the use of the British fisheries in America, into any place at or from whence any such fishery is carried on, subject to such regulations as the commissioners of customs, or the principal officer of customs at such place, shall make for the purpose of ascertaining that such articles are *bonâ fide* intended to be applied to the use of such fisheries, or that such provisions and stores as aforesaid are *bonâ fide* imported or supplied for the use of her Majesty's land and sea forces. —§ 8.

Import Duty on Sugar refined in Bond. — There shall be raised, levied, and collected, a duty of 10*l.* for every 100*l.* of the value upon sugar refined in bond in the U. Kingdom, not being of the growth of any British possession in America, or of the Mauritius, or of any British possession within the East India Company's charter, imported or brought into any British possession in America, or into the Mauritius, by sea or by inland carriage or navigation. —§ 9.

Duties imposed by this Act to be increased in certain Cases.— If in any British possession in America or the Mauritius any duty be chargeable by any colonial law upon any articles, the growth, produce, or manufacture of the U. Kingdom, or of the British possessions in America, or the British possessions within the East India Company's charter, or the produce of the British fisheries, beyond the duty (if any) chargeable by such colonial law upon similar foreign articles, the imperial duty hereby imposed upon such foreign articles shall be increased by such excess or amount (as the case may be) of the duties so chargeable by such colonial law upon similar British articles; and if in any British possession in America or the Mauritius any duty be chargeable by any colonial law upon tea imported direct from China, or imported from the U. Kingdom or any British possession, beyond the duty (if any) chargeable by such colonial law upon tea not so imported, the imperial duty hereby imposed upon tea not so imported shall be increased by such excess or amount (as the case may be) of the duties so chargeable by such colonial law upon tea imported direct from China, or imported from the U. Kingdom or from any of the British possessions. — § 10.

Power to Her Majesty by Order in Council to exempt certain Articles from Duty.—It shall and may be

lawful for her Majesty, with the advice of her privy council, by an order or orders in council to be issued from time to time, to direct that any article chargeable under this act as an unenumerated article with a duty of four per centum ad valorem, shall be added to the previous list of exemptions, and be free from such duty, from and after the time mentioned in such order; and any such order may at any time be suspended or revoked by her Majesty, with advice of her privy council, by any order in council. — § 11.

Currency, Weights, and Measures. — All sums of money granted or payable as duties, penalties, or forfeitures, in the British possessions in America or the Mauritius, shall be deemed and are hereby declared to be sterling money of Great Britain, and shall be collected, recovered, and paid to the amount of the value which such nominal sums bear in Great Britain; and such monies may be received and taken in sterling money of Great Britain, or in foreign coins at such rates as shall be equivalent to sterling money of Great Britain, and shall have been fixed by any proclamation issued by her Majesty; and all duties shall be paid and received in every part of the British possessions in America and in the Mauritius according to the imperial weights and measures now by law established; and in all cases where such duties are imposed according to any specific quantity or any specific value, the same shall be deemed to apply in the same proportion to any greater or less quantity or value; and all such duties shall be under the management of the commissioners of the customs. — § 13.

Net produce of Duties how to be applied. — The net produce of the duties so received under this act shall be paid by the collector of the customs into the hands of the treasurer or receiver general of the colony, or other proper officer authorised to receive the same in the colony in which the same are levied, to be applied to such uses as shall be directed by the local legislatures of such colonies; and the produce of such duties so received in colonies which have no local legislature shall be applied in such manner as shall be directed by the commissioners of her Majesty's treasury. — § 14.

Goods from the Channel Islands. — Goods the produce or manufacture of the islands of Guernsey, Jersey, Alderney, or Sark, when imported from such islands into the British possessions in America or the Mauritius, shall be admitted to entry upon payment of the same duties as are payable upon like goods the produce or manufacture of the U. Kingdom or of any of said possessions, upon production to the principal officer of customs at the port of importation of the proofs now required by law that such goods are the production or manufacture of the islands aforesaid. — § 15.

All British Vessels shall be subject to equal Duties, except coasting Vessels. — Whereas in some of his Majesty's possessions abroad, certain duties of tonnage are, by acts of the local legislatures of such possessions, levied upon British vessels, to which duties the like vessels built within such possessions, or owned by persons resident there, are not subject; be it further enacted, that there shall be levied and paid at the several British possessions abroad, upon all vessels built in any such possessions, or owned by any person or persons there resident, other than coasting or drogueing vessels employed in coasting or drogueing, all such and the like duties of tonnage and shipping dues as are or shall be payable in any such possessions upon the like British vessels built in other parts of his Majesty's dominions, or owned by persons not resident in such possessions. — (3 & 4 *Will.* 4. c. 59. § 14.)

Drawback on Rum, &c. — There shall be allowed upon the exportation from Newfoundland to Canada of rum or other spirits, the produce of the British possessions in S. America or the West Indies, a drawback of the full duties of customs paid upon the importation thereof from any of the said places into Newfoundland, provided proof on oath be made to the satisfaction of the collector and comptroller of the customs at the port whence such rum or other spirits is exported, that the full duties on the importation of such rum or other spirits at the said port had been paid, and that a certificate be produced under the hands and seals of the collector and comptroller of the customs at Quebec, that such rum or other spirits had been duly landed in Canada: provided that no drawback shall be allowed upon any such rum or other spirits unless the same shall be shipped within 1 year from the day of importation of the same, nor unless such drawback shall be duly claimed within 1 year from the day of such shipment. — § 15.

Ship and Cargo to be reported on Arrival. — The master of every ship arriving in any of the British possessions in America, or the islands of Guernsey, Jersey, Alderney, or Sark, whether laden or in ballast, shall come directly, and before bulk be broken, to the Custom-house for the port or district where he arrives, and there make a report in writing to the collector or comptroller, or other proper officer, of the arrival and voyage of such ship, stating her name, country, and tonnage, and if British the port of registry, the name and country of the master, the country of the owners, the number of the crew, and how many are of the country of such ship, and whether she be laden or in ballast, and if laden, the marks, numbers, and contents of every package and parcel of goods on board, and where the same was laden, and where and to whom consigned, and where any and what goods, if any, had been unladen during the voyage, as far as any of such particulars can be known to him; and the master shall further answer all such questions concerning the ship, and the cargo, and the crew, and the voyage, as shall be demanded of him by such officer; and if any goods be unladen from any ship before such report be made, or if the master fail to make such report, or make an untrue report, or do not truly answer the questions demanded of him, he shall forfeit the sum of 100*l.*; and if any goods be not reported, they shall be forfeited. — § 16.

Entry outwards of Ship for Cargo. — The master of every ship bound from any British possession in America, or the islands of Guernsey, Jersey, Alderney, or Sark, shall, before any goods be laden therein, deliver to the collector or comptroller, or other proper officer, an entry outwards under his hand of the destination of such ship, stating her name, country, and tonnage, and if British the port of registry, the name and country of the master, the country of the owners, the number of the crew, and how many are of the country of such ship; and if any goods be laden on board any ship before such entry be made, the master of such ship shall forfeit the sum of 50*l.*; and before such ship depart, the master shall bring and deliver to the collector or comptroller, or other officer, a content in writing under his hand of the goods laden, and the names of the respective shippers and consignees of the goods, with the marks and numbers of the packages or parcels of the same, and shall make and subscribe a declaration to the truth of such content as far as any of such particulars can be known to him; and the master of every ship bound from any British possession in America, or from the islands of Guernsey, Jersey, Alderney, or Sark, whether in ballast or laden, shall before departure come before the collector or comptroller, or other proper officer, and answer upon oath all such questions concerning the ship, and the cargo, if any, and the crew and the voyage, as shall be demanded of him by such officer; and thereupon the collector and comptroller, or other proper officer, if such ship be laden, shall make out and give to the master a certificate of the clearance of such ship for her intended voyage, containing an account of the total quantities of the several sorts of goods laden therein, or a certificate of her clearance in ballast, as the case may be; and if the ship depart without such clearance, or if the master deliver a false content, or shall not truly answer the questions demanded of him, he shall forfeit the sum of 100*l.* — § 17.

N. B. The act 5 & 6 Victoria, c. 47. § 57. extends to all goods entered for exportation in every British possession abroad, except the presidencies of Bengal, Madras, and Bombay.

Goods not stated in Certificate to be Produce of British Possessions to be deemed of Foreign Production. — No goods shall be stated in such certificate of clearance to be the produce of British possessions in America, unless such goods have been expressly stated so to be in the entry outwards of the same; and all goods not expressly stated in such certificate of clearance to be the produce of the British possessions in America shall, at the place of importation in any other such possessions, or in the U. Kingdom, be deemed to be of foreign production. — § 18.

Newfoundland Fishing Certificates in lieu of Clearance. — Whenever any ship shall be cleared out from Newfoundland, or any other part of his Majesty's dominions, for the fisheries on the banks or coasts

of Newfoundland or Labrador or their dependencies, without having on board any article of traffic, (except only the provisions, nets, tackle, and other things usually employed in and about the said fishery,) the master of such ship shall be entitled to demand from the collector or other principal officer of the customs at such port a certificate under his hand that such ship hath been specially cleared out for the Newfoundland fishery; and such certificate shall be in force for the fishing season for the year in which the same may be granted, and no longer; and upon the first arrival in any port in Newfoundland, &c. of any ship having on board such certificate, a report thereof shall be made by the master of such ship to the principal officer of the customs; and all ships having such certificate so reported, and being actually engaged in the said fishery, or in carrying coastwise to be landed or put on board any other ships engaged in the said fishery any fish, oil, salt, provisions, or other necessaries for the use and purposes thereof, shall be exempt from all obligation to make an entry at or obtain any clearance from any Custom-house at Newfoundland upon arrival at or departure from any of the ports or harbours of the said colony, &c. during the fishing season, for which such certificate may be granted; and previously to obtaining a clearance at the end of such season for any other voyage at any of such ports, the master of such ship shall deliver up the before-mentioned certificate to the officer of the customs: provided always, that in case any such ship shall have on board, during the time the same may be engaged in the said fishery, any goods or merchandises whatsoever other than fish, seals, oil made of fish or seals, salt, provisions, and other things, being the produce of or usually employed in the said fishery, such ship shall forfeit the said fishing certificate, and shall thenceforth be subject and liable to the same rules, regulations, &c. as ships in general are subject or liable to. — § 19.

Entry of Goods to be laden or unladen. — No goods shall be laden, or water-borne to be laden, on board any ship, or unladen from any ship, in any of the British possessions in America, or the island of Guernsey, Jersey, Alderney, or Sark, until due entry be made of such goods, and warrant granted for the lading or unlading of the same; and no goods shall be so laden or water-borne, or so unladen, except at some place at which an officer of the customs is appointed to attend the lading and unlading of goods, or at some place for which a sufferance shall be granted by the collector and comptroller; and no goods shall be so laden or unladen except in the presence or with the permission in writing of the proper officer: provided always, that it shall be lawful for the commissioners of customs to make and appoint such other regulations for the carrying coastwise, or for the removing of any goods for shipment, as shall appear expedient; and that all goods laden, water-borne, or unladen contrary to the regulations of this act, or contrary to any regulations so made, be forfeited. — § 20.

Particulars of Entry of Goods inwards and outwards. — The person entering any such goods shall deliver to the collector or comptroller, or other proper officer, a bill of the entry thereof, fairly written in words at length, containing the name of the exporter or importer, and of the ship, and of the master and of the place to or from which bound, and of the place within the port where the goods are to be laden or unladen, and the particulars of the quality and quantity of the goods, and the packages containing the same, and the marks and numbers on the packages, and setting forth whether such goods be the produce of the British possessions in America or not; and such person shall at the same time pay down all duties due upon the goods; and the collector and comptroller, or other proper officer, shall thereupon grant their warrant for the lading or unlading of such goods. — § 21.

Entry inwards by Bill of Sight. — If the importer of any goods make and subscribe a declaration before the collector or comptroller, or other proper officer, that he cannot, for want of full information, make perfect entry thereof, it shall be lawful for the collector and comptroller to receive an entry by bill of sight for the packages or parcels of such goods by the best description which can be given, and to grant a warrant thereupon, in order that the same may be landed and secured to the satisfaction of the officer of the customs, and at the expense of the importer, and may be seen and examined by such importer in the presence of the proper officers; and within 3 days after the goods shall have been so landed, the importer shall make a perfect entry thereof, and pay down all duties due thereon; and in default of such entry such goods shall be taken to the Queen's warehouse, and if the importer shall not, within 1 month after such landing, make perfect entry of such goods and pay the duties due thereon, together with charges of removal and warehouse rent, such goods shall be sold for the payment thereof, and the overplus, if any, shall be paid to the proprietor of the goods. — § 22.

Goods subject to ad Valorem Duty. — In all cases where the duties imposed by this act upon the importation of articles into her Majesty's possessions in America are charged, not according to the weight, tale, gauge, or measure, but according to the value thereof, such value shall be ascertained by the declaration of the importer of such articles, or his known agent, in manner and form following; (that is to say,)

'I *A. B.* do hereby declare, that the articles mentioned in the entry, and contained in the packages '[*here specifying the several packages, and describing the several marks and numbers, as the case may* '*be*] are of the value of . Witness my hand the day of *A. B.*

'The above declaration, signed the day of in the presence of *C. D.* collector [*or* '*other principal officer*].

Which declaration shall be written on the bill of entry of such articles, and shall be subscribed by the importer thereof, or his known agent, in the presence of the collector or other principal officer of the customs at the port of importation: provided, that if upon view and examination of such articles by the proper officer of the customs it shall appear to him that the said articles are not valued according to the true price or value thereof, and according to the true intent and meaning of this act, in such case the importer or his known agent shall be required to declare on oath before the collector or comptroller what is the invoice price of such articles, and that he verily believes such invoice price is the current value of the articles at the place from whence the said articles were imported; and such invoice price, with the addition of 10*l. per centum* thereon, shall be deemed to be the value of the articles in lieu of the value so declared by the importer or his known agent, and upon which the duties imposed by this act shall be charged and paid: provided also, that if it shall appear to the collector and comptroller, or other proper officer, that such articles have been invoiced below the real and true value thereof, at the place from whence the same were imported, or if the invoice price is not known, the articles shall in such case be examined by two competent persons, to be nominated and appointed by the governor or commander-in-chief of the colony, plantation, or island into which the said articles are imported, and such persons shall declare on oath before the collector or comptroller, or other proper officer, what is the true and real value of such articles in such colony, plantation, or island; and the value so declared on the oaths of such persons shall be deemed to be the true and real value of such articles, and upon which the duties imposed by this act shall be charged and paid. — § 23.

If Importer refuse to pay such Duty, the Goods may be sold. — If the importer of such articles shall refuse to pay the duties hereby imposed thereon, it shall be lawful for the collector or other chief officer of the customs where such articles shall be imported, to take and secure the same, with the casks or other package thereof, and to cause the same to be publicly sold within the space of 20 days at the most after such refusal made, and at such time and place as such officer shall, by 4 or more days' public notice, appoint for that purpose: which articles shall be sold to the best bidder; and the money arising from the sale thereof shall be applied in the first place in payment of the said duties, together with the charges that shall have been occasioned by the said sale, and the overplus, if any, shall be paid to such importer or proprietor, or any other person authorised to receive the same. — § 24.

If Goods be not entered in 20 Days, the Officer may land and secure them. — Every importer of any goods shall, within 20 days after the arrival of the importing ship, make due entry inwards of such goods, and land the same; and in default of such entry and landing it shall be lawful for the officers of the

customs to convey such goods to the king's warehouse; and if the duties due upon such goods be not paid within 3 months after such 20 days shall have expired, together with all charges of removal and warehouse rent, the same shall be sold, and the produce thereof applied first to the payment of freight and charges, next of duties, and the overplus, if any, shall be paid to the proprietor of the goods. — § 25.

Goods imported from U Kingdom or British Possessions must appear in Cocket, &c. — No goods shall be imported into any British possession as being imported from the U. Kingdom, or from any other British possession (if any advantage attach to such distinction), unless such goods appear upon the cockets or other proper documents for the same to have been duly cleared outwards at the port of exportation in the U. Kingdom, or in such other British possession, nor unless the ground upon which such advantage be claimed be stated in such cocket or document. — § 26.

Goods imported from, to be deemed of the growth of, U. Kingdom. — No goods shall, upon importation into any of the British possessions in America, be deemed to be of the growth, production, or manufacture of the U. Kingdom, or of any British possession in America, unless imported from the U. Kingdom, or from some British possession in America. — § 27.

Entry not to be valid, if goods be not properly described in it. — No entry, nor any warrant for the landing of any goods, or for the taking of any goods out of any warehouse, shall be deemed valid, unless the particulars of the goods and packages in such entry correspond with the particulars of the goods and packages in the report of the ship, or in the certificate or other document, where any is required, by which the importation or entry of such goods is authorised, nor unless the goods shall have been properly described in such entry by the denominations and with the characters and circumstances according to which such goods are charged with duty or may be imported; and any goods taken or delivered out of any ship or out of any warehouse by virtue of any entry or warrant not corresponding or agreeing in all such respects, or not properly describing the same, shall be deemed to be goods landed or taken without due entry thereof, and shall be forfeited. — § 28.

Certificate of Production for Sugar, Coffee, Cocoa, or Spirits. — Before any sugar, coffee, cocoa, or spirits shall be shipped for exportation in any British possession in America or in the island of Mauritius, as being the produce of such possession or of such island, the proprietor of the estate on which such goods were produced, or his known agent, shall make and sign an affidavit in writing before the collector or comptroller at the port of exportation, or before a justice of the peace, or other officer duly authorised to administer such oath, declaring that such goods are the produce of such estate; and such affidavit shall set forth the name of the estate, and the description and quantity of the goods, and the packages containing the same, with the marks and numbers thereon, and the name of the person to whose charge at the place of shipment they are to be sent; and if any justice or other officer shall subscribe his name to any writing purporting to be such affidavit, unless the person making it shall actually appear before him and be sworn to the truth of the same, such justice of the peace or officer shall forfeit and pay for any such offence the sum of 50*l.*; and the person entering and shipping such goods shall deliver such affidavit to the collector or comptroller, or other proper officer, and shall make and subscribe a declaration before him that the goods which are to be shipped by virtue of such entry are those mentioned in such affidavit; and the master of the ship in which such goods shall be laden shall, before clearance, make and subscribe a declaration before the collector or comptroller that the goods shipped by virtue of such entry are the same as are mentioned and intended in such affidavit, to the best of his knowledge and belief; and thereupon the collector and comptroller, or other proper officer, shall sign and give to the master a certificate of production, stating that proof has been made, in manner required by law, that such goods (describing the same) are the produce of such British possession or of such island, and setting forth in such certificate the name of the exporter and of the exporting ship, and of the master thereof, and the destination of the goods; and if any sugar, coffee, cocoa, or spirits be imported into any British possession in America, as being the produce of some other such possession or of such island, without such certificate of production, the same shall be forfeited. — § 29.

Certificate of Production on Re-exportation from another Colony. — Before any sugar, coffee, cocoa, or spirits shall be shipped for exportation in any British possession in America, as being the produce of some other such possession, the person exporting the same shall in the entry outwards state the place of the production, and refer to the entry inwards and landing of such goods, and shall make and subscribe a declaration before the collector or comptroller to the identity of the same; and thereupon, if such goods shall have been duly imported with a certificate of production within 12 months prior to the shipping for exportation, the collector and comptroller shall sign and give to the master a certificate of production, referring to the certificate of production under which such goods had been so imported, and containing the like particulars with the date of such importation. — § 30.

Goods brought over Land, or by Inland Navigation. — It shall be lawful to bring or import by land or by inland navigation into any of the British possessions in America from any adjoining foreign country any goods which might be lawfully imported by sea into such possession from such country, and so to bring or import such goods in the vessels, boats, or carriages of such country, as well as in British vessels, boats, or carriages. — § 31.

What Vessels shall be deemed British on the Lakes in America. — No vesse. or boat shall be admitted to be a British vessel or boat on any of the inland waters or lakes in America, except such as have been built within the British dominions, and shall be wholly owned by British subjects, and shall not have been repaired at any foreign place to a greater extent than in the proportion of 10*s.* for every ton of such vessel or boat at any one time: provided always, that nothing herein-before contained shall extend to prevent the employment of any vessel or boat as a British vessel or boat on such inland waters or lakes, which shall have wholly belonged to British subjects before the 5th day of July, 1825, and which shall not have been since that day repaired as aforesaid in any foreign place. — § 32.

Goods must be brought to a Place where there is a Custom-house. — It shall not be lawful so to bring or import any goods except into some port or place of entry at which a Custom-house now is or hereafter may be lawfully established: provided also, that it shall be lawful for the governor, lieutenant-governor, or person administering the government of any of the said possessions respectively, by and with the advice of the executive council thereof, from time to time to diminish or increase, by proclamation, the number of ports or places of entry. — § 33.

Duties to be collected in same Manner as on Goods imported by Sea. — The duties imposed by this act shall be ascertained, levied, and recovered upon all goods so brought or imported in the same manner, and by the same means, rules, regulations, penalties, &c. as the duties on the like goods imported by sea; and if any goods shall be brought or imported contrary hereto, or if any goods so brought or imported shall be removed from the station or place appointed for the examination of such goods before all duties payable thereon shall have been paid or satisfied, such goods shall be forfeited, together with the vessel, boat, or carriage, and the horses or other cattle, in or by which such goods shall have been so imported or brought, or so removed. — § 34.

Duties in Canada on American Boats, as in America on British Boats. — The same tonnage duties shall be paid upon all vessels or boats of the U. States of America importing any goods into Canada as are or may be payable in the U. States of America on British vessels or boats entering the harbours whence such goods have been imported. — § 35.

CONDITIONS WITH RESPECT TO WAREHOUSING IN THE COLONIES.

Ports herein mentioned to be free warehousing Ports. — The several ports herein-after mentioned, (that to say,) Bridgetown in Barbadoes, Quebec in Canada, Sydney in Cape Breton, Roseau in Dominica,

St. George in Grenada, Kingston and Montego Bay in Jamaica, Charlestown in Nevis, Saint John's and Saint Andrew's in New Brunswick, Saint John's in Newfoundland, Nassau in New Providence, Halifax and Pictou in Nova Scotia, Basseterre in Saint Kitt's, Kingston in Saint Vincent, Road Harbour in Tortola, San Joseph in Trinidad, shall be *free warehousing ports* for all the purposes of this act; and Kingston and Montreal in the Canadas, and Liverpool and Yarmouth in Nova Scotia, shall be *warehousing ports* for the warehousing of goods brought by land or by inland navigation, or imported in British ships; and it shall be lawful for the several collectors and comptrollers of the said ports respectively, by notice in writing under their hands, to appoint from time to time such warehouses at such ports as shall be approved of by them for the free warehousing and securing of goods, and also in such notice to declare what sorts of goods may be so warehoused, and also by like notice to revoke or alter any such appointment or declaration: provided always, that every such notice shall be transmitted to the governor of the place, and shall be published in such manner as he shall direct. — § 36.

Goods may be warehoused without Payment of Duty. — It shall be lawful for the importer of any such goods into the said ports to warehouse them in the warehouses so appointed, without payment of any duty on the first entry thereof, subject nevertheless to the rules, regulations, &c. herein-after contained. — § 37.

Regulation as to warehousing of Goods on Arrival in Canada. — Upon the arrival of any goods at any frontier port in the Canadas, such goods may be entered with the proper officer of the customs at such port to be warehoused at some warehousing port in the Canadas, and may be delivered by such officer to be passed on to such warehousing port, under bond, to the satisfaction of such officer, for the due arrival and warehousing of such goods at such port. — § 38.

Stowage of Goods in Warehouse. — All goods so warehoused shall be stowed in such parts or divisions of the warehouse and in such manner as the collector and comptroller shall direct; and the warehouse shall be locked and secured in such manner, and shall be opened and visited only at such times, and in the presence of such officers, and under such rules and regulations, as the collector and comptroller shall direct; and all such goods shall, after being landed upon importation, be carried to the warehouse, or shall, after being taken out of the warehouse for exportation, be carried to be shipped, under such rules and regulations as the collector and comptroller shall direct. — § 39.

Bond upon Entry of Goods to be warehoused. — Upon the entry of any goods to be warehoused, the importer of such goods, instead of paying down the duties due thereon, shall give bond with two sufficient sureties, to be approved of by the collector or comptroller, in treble the duties payable on such goods, with condition for the safe depositing of such goods in the warehouse mentioned in such entry, and for the payment of all duties due upon such goods, or for the exportation thereof, according to the first account taken of such goods upon the landing of the same; and with further condition, that no part thereof shall be taken out of such warehouse until cleared from thence upon due entry and payment of duty, or upon due entry for exportation; and with further condition, that the whole of such goods shall be so cleared from such warehouse, and the duties, upon any deficiency of the quantity according to such first account, shall be paid, within 2 years from the date of the first entry thereof; and if after such bond shall have been given, the goods or any part thereof shall be sold or disposed of, so that the original bonder shall be no longer interested in or have any control over the same, it shall be lawful for the collector and comptroller to admit fresh security to be given by the bond of the new proprietor or other person having control over such goods, with his sufficient sureties, and to cancel the bond given by the original bonder of such goods, or to exonerate him to the extent of the fresh security so given. — § 40.

Goods not duly warehoused, &c. to be forfeited. — If any goods which have been entered to be warehoused shall not be duly carried and deposited in the warehouse, or shall afterwards be taken out of it without due entry and clearance, or having been entered and cleared for exportation shall not be duly carried and shipped, or shall afterwards be relanded, except with permission of the customs, such goods shall be forfeited. — § 41.

Account of Goods to be taken on landing. — Upon the entry and landing of any goods to be warehoused, the proper officer shall take a particular account of the same, and shall mark the contents on each package, and shall enter the same in a book to be kept for that purpose; and no goods which have been so warehoused shall be taken or delivered from the warehouse except upon due entry, and under care of the proper officers for exportation, or upon due entry and payment of duty for home use; and whenever the whole of the goods warehoused under any entry shall be cleared from the warehouse, or whenever further time shall be granted for any such goods to remain warehoused, an account shall be made out of the quantity upon which the duties have been paid, and of the quantity exported, and of the quantity (to be then ascertained) of the goods still remaining in the warehouse, as the case may be, deducting from the whole the quantity contained in any whole packages (if any) which may have been abandoned for the duties; and if upon such account there shall in either case appear to be any deficiency of the original quantity, the duty payable upon the amount of such deficiency shall then be paid. — § 42.

Samples may be taken. — It shall be lawful for the collector and comptroller, under such regulations as they shall see fit, to permit moderate samples to be taken of any goods so warehoused, without entry, and without payment of duty, except as the same shall eventually become payable, as on a deficiency of the original quantity. — § 43.

Goods may be sorted and repacked. — It shall be lawful for the collector and comptroller, under such regulations as they shall see fit, to permit the proprietor or other person having control over any warehoused goods to sort, separate, and pack and repack any such goods, and to make such lawful alterations therein, or arrangements and assortments thereof, as may be necessary for the preservation of such goods, or in order to the sale, shipment, or legal disposal of the same; and also to permit any parts of such goods so separated to be destroyed, but without prejudice to the claim for duty upon the whole original quantity of such goods: provided always, that it shall be lawful for any person to abandon any whole packages to the officers of the customs for the duties, without being liable to any duty upon the same. — § 44.

Goods warehoused may be delivered for Removal without payment of Duty. — Goods warehoused at any warehousing port in any of the British possessions in America, being first duly entered, may be delivered, under the authority of the proper officer of the customs, without payment of duty, except for any deficiency thereof, for the purpose of removal to another warehousing port in the same possession, under bond, to the satisfaction of such officer, for the due arrival and rewarehousing of such goods at such other port. — § 45.

All Goods to be cleared within 2 Years, or sold. — All goods which have been so warehoused or rewarehoused shall be duly cleared, either for exportation or for home consumption, within 2 years from the day of first entry for warehousing: and if any such goods be not so cleared, it shall be lawful for the collector and comptroller to cause the same to be sold, and the produce shall be applied, first to the payment of the duties, next of warehouse rent and other charges, and the overplus (if any) shall be paid to the proprietor: provided always, that it shall be lawful for the collector and comptroller to grant further time for any such goods to remain warehoused, if they shall see fit. — § 46.

Bond on Entry for Exportation. — Upon the entry outwards of any goods to be exported from the warehouse, the person entering the same shall give security by bond in treble the duties of importation on such goods, with two sufficient sureties, to be approved by the collector or comptroller, that the same shall be landed at the place for which they be entered outwards, or be otherwise accounted for. — § 47.

Power to appoint other Ports. — It shall be lawful for his Majesty, by order in council, from time to time to appoint any port in his Majesty's possessions in America to be a free warehousing port for all or any of the purposes of this act; and every such port so appointed by his Majesty shall be, for all the purposes expressed in such order, a free warehousing port under this act, as if appointed by the same. — § 48.

Goods from Mauritius liable to same Duties and Regulations as West India Goods. — § 49. — (See PORT LOUIS.)

Cape of Good Hope within Limits of the Company's Charter. — In all trade with the British possessions in America, the Cape of Good Hope, and the territories and dependencies thereof, shall be deemed to be within the limits of the East India Company's charter. — § 50.

DUTCH PROPRIETORS, &c.

Dutch Proprietors in Demerara, Essequibo, and Berbice, may supply their Estates from Holland. — It shall be lawful for any of the subjects of the King of the Netherlands, being Dutch proprietors in the colonies of Demerara, Essequibo, and Berbice, to import in Dutch ships from the Netherlands into the said colonies all the usual articles of supply for their estates therein, and also wine imported for the purposes of medicine only, and which shall be liable to a duty of 10*s.* per ton, and no more; and in case seizure be made of any articles so imported, upon the ground that they are not such supplies, or are for the purpose of trade, the proof to the contrary shall lie on the Dutch proprietor importing the same, and not on the seizing officer: provided always, that if sufficient security by bond be given in court to abide the decison of the commissioners of customs upon such seizure, the goods so seized shall be admitted to entry and released. — § 51.

Dutch Proprietors may not export to United Kingdom. — It shall not be lawful for such Dutch proprietors to export the produce of their estates to the United Kingdom, or to any of his Majesty's sugar colonies in America, except under the conditions herein-after provided. — § 52.

What Persons shall be deemed Dutch Proprietors. — All subjects of his Majesty the King of the Netherlands resident in his said Majesty's European dominions, who were at the date of the convention between his Majesty George III. and the King of the Netherlands, dated the 12th day of August, 1815, proprietors of estates in the said colonies, and all subjects of his said Majesty who may hereafter become possessed of estates then belonging to Dutch proprietors therein, and all such proprietors as being then resident in the said colonies, and being natives of his said Majesty's dominions in the Netherlands, may have declared, within 3 months after the publication of the aforesaid convention in the said colonies, that they wish to continue to be considered as such, and all subjects of his said Majesty the King of the Netherlands who may be the holders of mortgages of estates in the said colonies made prior to the date of the convention, and who may under their mortgage deeds have the right of exporting from the said colonies to the Netherlands the produce of such estates, shall be deemed Dutch proprietors under the provisions of this act: provided, that where both Dutch and British subjects have mortgages upon the same property in the said colonies, the produce to be consigned to the different mortgagees shall be in proportion to the debts respectively due to them. — § 53.

Persons not wishing to be considered Dutch proprietors to sign a Declaration to that Effect. — Whereas it is expedient to permit any of such persons, at their option, to relinquish such character of Dutch proprietor; be it therefore enacted, that if any such person shall make and sign a declaration in writing, attested by two credible witnesses, setting forth that he is desirous and has elected not to be deemed to be a Dutch proprietor within the meaning of the said act in respect of any such estate or mortgage to be mentioned and named in such declaration, and shall cause such declaration to be delivered to the commissioners of his Majesty's customs, such person shall thenceforth be no longer deemed a Dutch proprietor within the meaning of the said act in respect of the estate or mortgage so mentioned in such declaration as aforesaid, and such declaration shall have effect in respect of any goods the produce of any such estate of which such person so far as relates to those goods was a Dutch proprietor, although such goods may have been exported from the colony before the delivering of such declaration as aforesaid. — § 54.

Colonial Laws repugnant to any Act of Parliament to be null and void. — All laws, by-laws, usages, or customs at this time or which hereafter shall be in practice, or pretended to be in practice, in any of the British possessions in America, in anywise repugnant to this act, or to any other act of parliament so far as such act relates to the said possessions, shall be null and void to all intents and purposes. — § 56.

Exemption from Duties to extend only to Duties by Act of Parliament. — Provided always, that no exemption from duty in any of the British possessions abroad, contained in any act of parliament, extends to any duty not imposed by act of parliament, unless and so far only as any duty not so imposed is expressly mentioned in such exemption. — § 57.

Officers may board Ships hovering on the Coasts. — It shall be lawful for the officers of customs to go on board any ship in any British possession in America, and to rummage and search all parts of such ship for prohibited and uncustomed goods, and also to go on board any ship hovering within 1 league of the coasts thereof, and in either case freely to stay on board such ship so long as she shall remain in such port or within such distance; and if any such ship be bound elsewhere, and shall continue so hovering for the space of 24 hours after the master shall have been required to depart, it shall be lawful for the officer of the customs to bring such ship into port, and to examine her cargo, and to examine the master upon oath touching the cargo and voyage: and if there be any goods on board prohibited to be imported, such ship and cargo shall be forfeited; and if the master shall not truly answer the questions demanded of him, he shall forfeit 100*l.* — § 58.

Forfeiture of Vessels, Carriages, &c. removing Goods liable to Forfeiture. — All vessels, boats, carriages, and cattle made use of in the removal of any goods liable to forfeiture under this act shall be forfeited, and every person who shall assist or be otherwise concerned in the unshipping, landing, or removal, harbouring, &c. of such goods, or into whose possession the same shall knowingly come, shall forfeit the treble value thereof, or the penalty of 100*l.*, at the election of the officers of the customs. — § 59.

Goods, Vessels, &c. liable to Forfeiture may be seized by Officers. — All goods, ships, vessels, boats, carriages, and cattle, liable to forfeiture under this act, may be seized and secured by any officer of the customs or navy, or by any person employed for that purpose with the concurrence of the commissioners of his Majesty's customs; and every person who shall in any way hinder or obstruct such officers or persons employed as aforesaid, or any person aiding him, shall for every such offence forfeit the sum of 200*l.* — § 60.

Writ of Assistance to search for and seize Goods liable to Forfeiture. — Under authority of a writ of assistance granted by the supreme court of justice or court of vice admiralty having jurisdiction in the place, it shall be lawful for any officer of the customs, taking with him a peace officer, to enter any building or other place in the daytime, and to search for, seize, and secure any goods liable to forfeiture under this act, and, in case of necessity, to break open any doors and any chests or other packages for that purpose; and such writ of assistance, when issued, shall be deemed to be in force during the whole of the reign in which the same shall have been granted, and for 12 months from the conclusion of such reign. — § 61.

Obstruction of Officers by Force. — If any person shall, by force or violent assault, molest, hinder, or obstruct any officer of the customs or navy, or other person employed as aforesaid, or any person acting in his aid, such person upon conviction shall be adjudged a felon, and punished at the discretion of the court. — § 62.

Goods seized to be secured at the next Custom-house, and sold by Auction. — All things seized as liable to forfeiture under this act, or under any act made for the prevention of smuggling, or relating to the customs, or to trade or navigation, shall be delivered to the collector and comptroller of the customs next to the place where the same were seized; and after condemnation they shall cause the same to be sold by public auction to the best bidder: provided always, that it shall be lawful for the commissioners of the customs to direct in what manner the produce of such sale shall be applied, or, in lieu of such sale, to direct what things shall be destroyed or be reserved for the public service. — § 63.

The next 17 clauses relate to the mode of proceeding in actions as to seizures before the courts, the application and recovery of penalties, &c. It seems unnecessary to insert these in this place.

The King may regulate the Trade of certain Colonies. — It shall be lawful for his Majesty, by any order or orders in council to be issued from time to time, to give such directions and make such regulations touching the trade and commerce to and from any British possessions on or near the continent of Europe, or within the Mediterranean Sea, or in Africa, or within the limits of the East India Company's charter (excepting the possessions of the said Company), as to his Majesty in council shall appear expedient; and if any goods shall be imported or exported in any manner contrary to any such order, the same shall be forfeited, together with the ship importing or exporting the same. — § 81.

East India Company may carry Goods from India to Colonies. — It shall be lawful for the East India Company, during the continuance of their exclusive privileges of trade, to export from any place within the limits of their charter any goods for the purpose of being carried to some of his Majesty's possessions in America, and so to carry and to import the same into any of such possessions, and also to carry return cargoes from such possessions to any place within the limits of their charter, or to the U. Kingdom; and it shall be lawful for any of his Majesty's subjects, with the licence or under the authority of the said Company, to lade in and export from any of the dominions of the Emperor of China any goods, and to lade in and export from any place within the limits of the said Company's charter any tea, for the purpose of being carried to some of his Majesty's possessions in America, and also so to carry and to import the same into any of such possessions. — § 82.

Certificate of Production of East India Sugar. — It shall be lawful for any shipper of sugar the produce of some British possession within the limits of the East India Company's charter, to be exported from such possession, to go before the collector, comptroller, &c. of the customs at such place, or, if there be none such, to go before the principal officer of such place, or the judge or commercial resident, and make an affidavit that such sugar was really and *bonâ fide* the produce of such British possession, to the best of his knowledge and belief; and such officer, &c. is to grant a certificate thereof, setting forth the name of the ship in which the sugar is to be exported, and her destination.—§ 83.

Ships built prior to the 1st of January, 1816, deemed British Ships within certain Limits.—All ships built within the limits of the East India Company's charter prior to the 1st day of January, 1816, and which were then and have continued since to be solely the property of his Majesty's subjects, shall be deemed to be British ships for all the purposes of trade within the said limits, including the Cape of Good Hope. — § 84.

Certificate of Production of Cape Wine.— It shall be lawful for the shipper of wine the produce of the Cape of Good Hope, or of its dependencies, which is to be exported from thence, to go before the chief officer of the customs, and make an affidavit that such wine was really and *bonâ fide* the produce of the Cape or its dependencies; and such officer is required to administer such affidavit, and to grant a certificate thereof stating the name of the ship in which the wine is exported, and her destination.— § 85.

Certificate of Production of Goods in Guernsey, &c.—It shall be lawful for any person who is about to export from Guernsey, Jersey, Alderney, or Sark, to the U. Kingdom, or any British possession in America, any goods the growth or produce of any of those islands, or any goods manufactured from materials the growth or produce thereof, or of the U. Kingdom, to go before a magistrate of the island from which the goods are to be exported, and sign a declaration that such goods are of such growth, produce, or manufacture, and such magistrate shall administer and sign such declaration; and thereupon the governor, lieutenant-governor, &c. of the island shall, upon the delivery to him of such declaration, grant a certificate under his hand of the proof contained in such declaration, stating the ship by, and the port in the U. Kingdom, or in such possession, to which the goods are to be exported; and such certificate shall be produced at such ports, in proof that the goods mentioned therein are of the growth, produce, &c. of such islands.— § 86.

The next section relates to the importation of tea into Guernsey, &c. during the exclusive trading privileges enjoyed by the East India Company.

Guernsey, &c. Tonnage of Ships and Size of Packages for Spirits.—No brandy, geneva, or other spirits (except rum of the British plantations) shall be imported into or exported from the islands of Jersey, Guernsey, Alderney, or Sark, or removed from any one to any other of the said islands, or coastwise from any one part to any other part of either of the said islands, or be shipped to be so removed or carried, or be waterborne for the purpose of being so shipped in any ship, vessel, or boat of less burden than 100 tons (except when imported from the U. Kingdom in ships of the burden of 70 tons at least), nor in any cask or package of less size or content than 40 gallons (except when in bottles, and carried in a square-rigged ship), nor any tobacco or snuff in any ship, vessel, or boat of less burden than 100 tons (except when imported from the U. Kingdom in ships of the burden of 70 tons at least), nor in any cask or package containing less than 450 lbs. weight (save and except any such spirits or loose tobacco as shall be for the use of the seamen belonging to and on board any such ship, vessel, or boat, not exceeding 2 gallons of the former, and 5 lbs. weight of the latter, for each seaman, and also except such manufactured tobacco or snuff as shall have been duly exported as merchandise from Great Britain or Ireland), on pain of forfeiture of all such foreign brandy, geneva, or other spirits, tobacco or snuff respectively, together with the casks or packages containing the same. and also of every such ship, vessel, or boat, together with all her guns, furniture, &c. — § 88.

Not to extend to Vessels of 10 Tons supplying Island of Sark, having Licence so to do. — Nothing herein contained shall extend, or be construed to extend, to any boat not exceeding the burden of 10 tons, for having on board at any one time any foreign spirits of the quantity of 10 gallons or under, in casks or packages of less size or content than 40 gallons, or any tobacco, snuff, or tea, not exceeding 50 lbs. weight of each, for the supply of the said island of Sark, such boat having a licence from the officer of customs at either of the islands of Guernsey or Jersey, for the purpose of being employed in carrying commodities for the supply of the said island of Sark; provided that every such boat having on board at any one time any greater quantity of spirits than 10 gallons, or any greater quantity of tobacco or snuff than 50 lbs. weight of each of the said articles, unless such greater quantity of spirits, tobacco, or snuff shall be in casks or packages of the size, content, or weight herein-before required, or having on board at any one time any greater quantity of tea than 50 lbs. weight, shall be forfeited.— § 89.

Penalty on Persons found on board Vessels liable to Forfeiture within 1 League of Guernsey, &c.—Every person found or discovered to have been on board any vessel or boat liable to forfeiture, for being found within 1 league of the islands of Guernsey, Jersey, Alderney, or Sark, having on board or in any manner attached or affixed thereto, or conveying or having conveyed, in any manner, such goods or other things as subject such vessel or boat to forfeiture, or who shall be found or discovered to have been on board any vessel or boat from which any part of the cargo shall have been thrown overboard during chace, or staved or destroyed, shall forfeit the sum of 100*l*. — § 90.

British Coals not to be re-exported from British Possessions without Duty.—It shall not be lawful to re-export from any of his Majesty's possessions abroad to any foreign place any coals the produce of the U. Kingdom, except upon payment of the duty to which such coals would be liable upon exportation from the U. Kingdom to such foreign place; and no such coals shall be shipped at any of such possessions, to be exported to any British place, until the exporter or the master of the exporting vessel shall have given bond, with one sufficient surety, in double the value of the coals, that such coals shall not be landed at any foreign place.—§ 91.

Penalty for using Documents counterfeited or falsified.— If any person shall, in any of his Majesty's possessions abroad, counterfeit or falsify, or wilfully use when counterfeited or falsified, any entry, warrant, cocket, &c. for the unlading, lading, entering, reporting, or clearing any ship or vessel, or for

the landing, shipping, or removing of any goods, stores, baggage, or article whatever, or shall by any false statement procure any writing or document to be made for any such purposes, or shall falsely make any oath or affirmation required by any act for regulating the trade of the British possessions abroad, or shall forge or counterfeit a certificate of the said oath or affirmation, or shall knowingly publish such certificate, he shall for every such offence forfeit the sum of 200*l.* — § 92.

Connection of the Planter and Home Merchant. Mode of transacting Business in England. — The mode of transacting West India business is as follows: — A sugar planter forms a connection with a mercantile house in London, Bristol, Liverpool, or Glasgow; stipulates for an advance of money on their part; grants them a mortgage on his estate; and binds himself to send them annually his crop, allowing them the full rate of mercantile commissions. These commissions are $2\frac{1}{2}$ per cent. on the amount of sugar sold, and of plantation stores sent out; along with $\frac{1}{2}$ per cent. on all insurances effected. During the war, when prices were high, the amount of those commissions was large; but, like other high charges, the result has, in nine cases in ten, been to the injury of those who received them; they led the merchants to undertake too much, and to make too large advances to the planters, for the sake of obtaining their business. At that time it was usual to allow a permanent loan at the rate of 3,000*l.* for the assured consignment of 100 hogsheads of sugar; but that *ratio* was very often exceeded by the planter, the 3,000*l.* becoming 4,000*l.*, 5,000*l.*, 6,000*l.*, and, in very many cases, still more, in consequence of unforeseen wants and too sanguine calculations on his part.

Persons resident in the West Indies are almost always bare of capital, and for obvious reasons. A climate of such extreme heat, and a state of society possessing so few attractions to persons of education, offer no inducement to men of substance in Europe to go thither. Those who do go, must trust to their personal exertion and the support of others; and when, after a continued residence in the West Indies, they have made some progress in acquiring a competency, and have become accustomed to the climate, they hardly ever consider themselves as settled there for life; their wish and hope is, to carry their acquisitions so far as to be enabled to pass the remainder of their days comfortably at home. The readiest means, in the view of the planter, of accomplishing this, is the extension of his undertakings; which he can do only by borrowing money. Hence a continued demand on his mercantile correspondents at home for fresh advances: the consuming effect of heavy commissions, and of the interest on borrowed money, is, or rather was, overlooked in his ardent speculations. But when prices unfortunately fall, he finds himself 10,000*l.* or 20,000*l.* in debt, with a reduced income. The merchants at home become equally embarrassed, because the case of one is the case of three fourths of their correspondents; and the capital of the merchants, large as it may be, is absorbed and placed beyond their control. The mortgages they hold are of value only in an ultimate sense: to foreclose them, and to take possession of the estates, is, in general, a very hazardous course.

Such has been for a number of years the state of our West India trade. Perhaps it is impossible to point out any means of effectual relief: our planters must not build expectations on such doubtful, or rather improbable, events as the stoppage of distillation from malt, or an insurrection or emancipation of the negroes in rival countries, such as Cuba or Brazil. Of a bounty on exportation it is idle to speak: so that their only rational and substantial ground of hope seems to be in a further reduction of the duties on sugar, coffee, and rum; and a farther reduction of the duties on imports, with the abolition of the remaining restrictions on their trade.

The sale of West India articles takes place through the medium of produce brokers, who in London reside chiefly in Mincing Lane and Tower Street. Samples of sugar and rum are on show in their respective sale rooms during four days of the week, viz. Tuesday, Wednesday, Thursday, and Friday, from 11 to 1 o'clock; during which time the sugar refiners, wholesale grocers, and other dealers in produce, call in, observe the state of the market, and buy what they require. The term of credit is short; only 1 month for coffee and rum, and 2 months for sugar. Coffee is generally sold by public auction, sugar and rum by private contract. The broker's commission is usually $\frac{1}{2}$ per cent. on the amount; but in the case of coffee, as they guarantee the buyers, their charge amounts to 1 per cent. The brokers have no correspondence or connection with the planters; they are employed by the merchants; and their sales, though for large amounts, being very simple, a brokerage house of consequence generally does the business of a number of merchants. Neither merchant nor broker see, or are in the least under the necessity of seeing, the bulky packages containing the different articles of produce of which they effect the sales: all is done by sample; the packages remaining in the bonded warehouse from the time of landing till they are sold; after which they pass to the premises of the refiner, wholesale grocer, or whoever may be the purchaser.

The allowances made to the buyer in respect of weight, consist, first of the tare, which

is the exact weight of the cask; and, in the second place, of a fixed allowance of 5 lbs. per cask in the case of coffee, called trett, and of 2 lbs. per cask on sugar, under the name of draft. —(See *Account Sales* of both, in p. 146.)

The shipping of stores from England to the plantations is also a very simple transaction. West India merchants in London, Liverpool, or Bristol, receive from the planters, in the autumn of each year, a list of the articles required for the respective estates: these lists they divide, arrange, and distribute among different wholesale dealers in the course of September and October, with instructions to get them ready to ship in a few weeks. November and December are the chief months for the despatch of outward-bound West Indiamen, as the plantation stores ought, by rights, to arrive about the end of December, or in the course of January. That is a season of activity, and generally of health, in the West Indies; the comparatively cool months of November and December having cleared the air, and the produce of the fields having become ripe and ready to carry. Crop time lasts from January to the end of July, after which the heavy rains put a stop to field work in the islands. Demerara, being so near the line, experiences less difference in the seasons, and it is customary there to continue making sugar all the year round.

The arrivals of West Indiamen in England with homeward cargoes begin in April and continue till October; after which, with the exception of occasional vessels from Demerara and Berbice, they cease till the succeeding April. This corresponds with the time of carrying and loading the crops: for it would be quite unadvisable, on the score of health, as well as of the interruptions to work from the heavy rains, to attempt loading vessels in the sugar islands during the autumnal months.

The unloading of West Indiamen in London usually takes place at the West India docks; and did so uniformly from the autumn of 1802, when the docks were first opened, till August, 1823, when the dock monopoly expired. The delays in discharging occasionally complained of during the war, arose from two causes; from the vessels arriving in fleets (in consequence of sailing with convoy), and from the imperfections inseparable from a new establishment. The latter have been long remedied; and as to the former, though at particular seasons, and after a change of wind, the vessels still come close on each other, the crowding in the docks is by no means to be compared to that arising from the arrival of a convoy. Cargoes are discharged very speedily, the time seldom exceeding 3 days. The dock dues have also been materially reduced since the peace: and the whole exhibits a striking example of the advantage attendant on transacting a mass of business on one spot; an advantage which can be enjoyed only in great sea-ports, such as London, Liverpool, or Amsterdam. —(See Docks.)

The rates of freight during the war were, on sugar from 7*s.* to 8*s.* per cwt., and on coffee from 10*s.* to 11*s.*; whereas they now amount, the former to 4*s.* and 4*s.* 6*d.*, and the latter to 6*s.* The ship owners complain that these freights leave them very little profit; but in consequence of the speeed with which vessels may now be unloaded and cleared at London, it is probable that the practice of making *two* voyages in the season will become general.

Selection of Sites for Colonial Establishments. — Nothing can be more unwise than the plan, if so we may call it, hitherto followed in the selection of places at which to found colonies. The captain of a ship, without any knowledge whatever of the nature of soils or the capacities of a country in an agricultural point of view, falls in after a long cruise with a river or bay, abounding with fish and fresh water, and surrounded with land that *looks* fertile and is covered with herbage. He forthwith reports all these circumstances, duly embellished, to the Admiralty, strongly recommending the situation as an admirable one at which to found a colony; and, in nine cases out of ten, *this* is all the information that is required in taking a step of such infinite importance! No wonder, therefore, that many fine schemes of colonisation should have ended only in loss and disappointment; and that situations which the colonists were taught to look upon as a species of paradise, have proved to be any thing but what they were represented. Botany Bay, though described by Captain Cook as one of the finest places in the world, had to be abandoned by the colonists that were sent out to it; as the country round it, instead of being favourable for cultivation, is a mere sandy swamp. Is it possible to suppose, had the proper inquiries been entered into, that any attempt would have been made to establish a colony in so pestilential a climate as that of Sierra Leone? The colony on Swan River may be adduced as another instance of misplaced or premature confidence in the reports of those who were really without the means of forming a correct estimate of the various circumstances necessary to be attended to in forming a colony.

We, therefore, hope than an end may be put to this system, —a system which is in no common degree injurious to the public interests, and is highly criminal towards those who embark as colonists. The founding of a colony should be looked upon in its true point of view — as a great national enterprise. It is not an adventure to be intrusted to presumptuous ignorance; but should be maturely weighed, and every circumstance

connected with it carefully investigated. Above all, the situation in which it is proposed to found the colony should be minutely surveyed; and its climate, soil, and capacities of production deliberately inquired into by competent persons employed for the purpose. Were this done, government and the public would have the best attainable grounds upon which to proceed; and neither party would have much reason to fear those disappointments, which have hitherto so often followed the exaggerated representations of those to whom the important and difficult task of selecting situations for colonies has been delegated.

V. Foreign Colonies.

1. *Spanish Colonies.* — Spain, whose colonial possessions extended a few years ago from the frontiers of the U. States to the Straits of Magellan, is not, at present, possessed of a foot of ground in the whole American continent. Still, however, her colonial possessions are of great value and importance. In the West Indies, she is mistress of Cuba and Porto Rico; — the former by far the largest and finest of the West India islands; and the latter also a very valuable possession. In the East, Spain is mistress of the Philippine Islands, which, were they in the hands of an enterprising people, would speedily become of very great commercial importance. — (See the articles Havannah, Manilla, Porto Rico.)

2. *Dutch Colonies.* — Java is the principal Dutch colonial possession, and it is one of which it is not easy to exaggerate the value and importance. — (See Batavia.) In the East the Dutch also possess the Moluccas, Bencoolen on the coast of Sumatra, Macassar, and the eastern coast of Celebes, Banda, &c. They have several forts on the Gold Coast in Africa; and in the West Indies, they possess the islands of Curaçao and St. Eustatius, Saba, and part of St. Martin; and on the continent of South America, they are masters of Dutch Surinam. Curaçao and St. Eustatius are naturally barren, but they have been both highly improved. From its being very conveniently situated for maintaining a contraband traffic with the Caraccas and other districts in South America, Curaçao was formerly a place of great trade, particularly during war. But since the independence of South America, Curaçao has ceased in a great measure to be an *entrepôt;* the goods destined for the continent being now, for the most part, forwarded direct to the places of their destination.

That district of Surinam ceded to the British in 1814, comprising the settlements of Demerara, Berbice, and Essequibo (see *ante*, p. 332.), formed the most valuable portion of Surinam, or Dutch Guiana. The district which still belongs to the Dutch lies to the south of Berbice. It contains about 38,000 square miles, and a population of about 65,000. It is daily becoming of more value and importance. The exports of sugar may amount to about 25,000,000 lbs., and those of coffee to about 4,000,000 lbs.

3. *French Colonies.* — Previously to the negro insurrection that broke out in 1792, St. Domingo was by far the most valuable colony in the West Indies. But this disastrous event, having first devastated the island, terminated in the establishment of the independent black republic of Hayti. — (See Port au Prince.) Having also sold Louisiana to the Americans, and ceded the Mauritius to the English, without making any new acquisitions, the colonial dominions of France are, at this moment, of very limited extent. They consist of Gaudeloupe and Martinique, and the small islands of Marie-Galante and Deseada, in the West Indies; Cayenne, in South America; Senegal and Goree, in Africa; the Isle de Bourbon, in the Eastern Ocean; St. Marie, in Madagascar; and Pondicherry and Chandernagor, with a very small surrounding territory, in the East Indies. The annexed tabular statements show the population, trade, &c. of the French colonies.

Account of the Population of the French Colonies, and of their Commerce with France, in 1836.

Colonies.	Population on the 1st Jan. 1837.			Commerce with France. Real Value, 1836.		Navigation, 1836. Entered.		Cleared out.	
	Free.	Slave.	Total.	Imp. into France.	Exp. from France.	Ships.	Tonnage.	Ships.	Tonnage.
	No.	*No.*	*No.*	*Francs.*	*Francs.*	*No.*	*No.*	*No.*	*No.*
North America.									
The Antilles.									
Saint Pierre and Miquelon	1,400	- -	1,400	2,424,244	760,536	144	23,926	143	23,305
Martinique	40,013	77,459	117,502	16,423,138	17,062,292	358	48,861	353	122,214
Guadaloupe	32,059	95,609	127,668	24,575,141	22,119,158	518	70,027	543	69,656
South America.									
Cayenne	5,056	16,592	21,648	3,121,752	2,693,166	42	6,792	45	7,950
Africa.									
Bourbon	36,803	69,296	106,099	16,713,899	9,804,940	156	43,850	149	43,483
Senegal	18,040	- -	18,040 (1 Jan. 1836.)	3,374,724	5,466,923	36	4,791	52	6,963
Asia.									
French factories in India (1835)	167,736	- -	167,736	4,323,023	411,326	76	11,098	84	16,592
Totals	301,137	258,956	560,093	70,986,221	58,348,121	1,330	209,325	1,369	290,163

Account of the Quantities of the principal Articles produced in the French Colonies in 1836.

Colonies and Establishments.	Sugars of all Qualities.	Coffee.	Cocoa.	Cotton.	Cloves and Spices.	Annotto.	Tobacco.	Gum.	Wax.	Skins.	Wood.
	Kilog.	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*	*Kilog.*
Martinique - -	34,159,580	692,807	125,610	18,705							
Guadaloupe - -	34,836,744	471,685	10,501	68,194	239	- -	54,047				
Bourbon - -	23,584,116	928,200	10,000	- -	193,500	- -	82,000				
Cayenne - - -	2,422,796	42,000	25,200	280,000	107,080	313,000					
Senegal - - -	- -	1,122	1,447	- -	- -	- -	- -	1,791,510	45,134	227,728	40,509
Factories in India (1835)	- -	52,084	- -	6,720	- -	- -	- -	- -	- -	{ Cent. 396 Paq. 38 }	13,636
St. Pierre and fisheries of Miguelon - -											
Totals -	94,803,214	2,188,198	172,758	373,619	300,819	313,000	116,047	1,791,510	45,134	227,728 Cent. 396 Paq. 38	54,145

4. *Danish Colonies.* — In the West Indies, these consist of the islands of St. Croix, St. Thomas, and St. John. St. Croix contains about 100 square miles, and has about 32,000 inhabitants, of whom 27,000 are slaves. The soil is fertile, and it is well cultivated. The principal productions are sugar, rum, and coffee. St. Thomas has long been, and still continues to be, one of the principal emporiums in the West Indies. It owes this distinction partly to its convenient situation, partly to its spacious and safe harbour at St. Thomas, on the S. side of the island, and partly and principally to the moderation of the import duties, which vary from 1 to 1¼ per cent. St. Thomas has, in consequence, become as it were a depôt for the supply of the neighbouring islands; goods being sent to it to be warehoused till opportunity offers for conveying them to their final destination. The great articles of importation are manufactured goods, principally from England, but partly, also, from other countries of Europe, with provisions, lumber, &c. from the United States. We subjoin an

Account of the Import Trade of St. Thomas in 1840.

	Vessels entered.	Tonnage.	First Cost Value of Imports.
			Dollars.
From Great Britain - - - - - -	42	9,208	2,100,000
France - - - - - -	38	6,944	640,000
Spain - - - - - -	7	520	25,000
Italy - - - - - -	9	1,288	53,000
Hamburg and Altona - - - - -	32	5,890	960,000
Flensburg - - - - - -	12	2,265	41,000
Bremen - - - - - -	9	1,432	199,000
Holland - - - - - -	2	306	13,000
U. States of America and British America -	217	30,279	968,000
Totals - -	368	58,132	4,997,000

In India, the Danes possess Tranquebar, near Madras; and Serampoor, near Calcutta. The former contains about 20,000 inhabitants, and has greatly improved since the peace, both in commerce and population. Serampoor is a neat but not very considerable place. It serves as an asylum for the debtors of Calcutta, and is the capital station of the missionaries. The Danes have a few forts on the coast of Guinea.

5. *Swedish Colonies.* — The Swedes possess one colony — the small island of St. Bartholomew, in the West Indies. It is only about 25 square miles in extent, but is very fertile. It has no springs, nor fresh water of any sort, except such as is supplied by the rain. Population between 8,000 and 9,000.

COLUMBO, the modern capital of Ceylon, on the south-west coast of the island; lat. 6° 56′ 6″ N., lon. 79° 49′ 48″ E. It is defended by a very strong fort, nearly surrounded by the sea, in which is a light-house 97 feet high. Population of the town and fort, in 1831, 31,549. The houses, generally only one story high, are of stone, clay, and lime; and the town has more of a European appearance than any other in India. The inhabitants are principally Cingalese. The temperature is remarkable for its equality; and though very humid, the climate may, on the whole, be esteemed salubrious and temperate. There is no harbour at Columbo for large vessels, but only an open roadstead. A projecting rock, on which two batteries are erected, affords shelter to a small semicircular bay on the north side of the fort, having a wooden quay to facilitate the loading and unloading of boats. The depth of water is not sufficient to allow sloops or large dhonies to come alongside the quay; those exceeding 100 tons burden lying at about a cable's length from it. A bar of sand, on some parts of which the water is not more than 7 feet deep, extends from the projecting rock across this bay. The channel where it may be crossed by the larger class of ships is liable to shift; and it is only in the fine weather of the safe season that they venture within the bar. The outer road affords secure anchorage for half the year, from she beginning of October to the end of March, during the prevalence of the N. E. monsoon, when the wind blows off the land: during the other, or S. W. monsoon, when the wind blows from the sea on shore, the road is very far from safe; and the ships that

frequent it are sometimes obliged to slip their cables and stand out to sea. — (*Milburn's Orient. Comm.; Hamilton's Gazetteer, &c.*)

As respects its harbour, Columbo is, therefore, very inferior to Trincomalee, the harbour of which is accessible at all times, and is one of the best in India: but the country in the vicinity of Columbo is more fertile; and it has the command of an internal navigation, stretching in a lateral direction along the coast, from Putlam, to the north of the city, to Caltura on the south, a distance of about 100 miles, partly obtained by rivers, and partly by canals. Many flat-bottomed boats are employed in this navigation, the families dependent on which reside mostly on board. Nearly all the foreign trade of Ceylon is carried on from Columbo; and it has also a large proportion of the coasting traffic.

Moneys. — The rix dollar = 1*s.* 6*d.*; but accounts are kept in pounds, shillings, and pence, as in England.

The Bank of Ceylon, established in 1840, has its head office in London, its principal office in the island being in Columbo. It transacts all sorts of banking business, remitting money to and from the island, granting cash credits on the Scotch system, discounting bills, &c.

Weights, Measures, &c. — The weights are divided into ounces, pounds, &c., and are the same as in Great Britain. The candy or bahar = 500 lbs. avoirdupois, or 461 lbs. Dutch Troy weight. The principal dry measures are *seers* or *parrahs*. The former is a perfect cylinder, of the depth and diameter under-mentioned: —

	Depth.	Diameter.
Seer - - -	4·35 inches.	4·35 inches.

The parrah is a perfect cube, its internal dimensions being every way 11·57 inches.

The liquid measure consists of gallons, and their multiples and sub-multiples. 150 gallons = 1 leaguer or legger.

The bale of cinnamon consists of 92½ lbs. very nearly.

The great articles of export from Ceylon are coffee, cocoa nut oil, areca nuts, cinnamon, chanks, coir, tobacco, pearls, &c. The island is peculiarly suitable for the culture of coffee, the growth of which has rapidly increased since the reduction, in 1835, of the duty on coffee from Ceylon to the same level as that on coffee from the West Indies, the imports into the U. Kingdom from Ceylon in the former year having been only 1,870,143 lbs., whereas in 1841 they amounted to 7,098,543 lbs., and the supply appears to be susceptible of an indefinite increase.—(*Porter's Progress of the Nation*, iii. 357.) The exports of cocoa nut oil, coir, and tobacco might, also, be greatly increased; and it will be seen, in the art. CINNAMON, how the growth of that important staple has been restricted by the enormous duty laid on its exportation.

Sailing Directions and Remarks on the Port of Columbo, by James Steuart, Esq., Master Attendant.

The land about Columbo is low near the sea, with some hills to the eastward at a distance in the country. The high mountain having on it a sharp cone, called Adam's Peak, bears from Columbo E. 7° S., distant 12½ leagues; its height above the level of the sea is estimated at about 7,000 feet, according to a rough trigonometrical measurement by Colonel Willerman. When the atmosphere is clear, it may be seen 30 leagues. During the prevalence of the N. E. monsoon, Adam's Peak is generally visible in the morning, and frequently the whole of the day; but it is rarely seen in the S. W. monsoon, dense vapours generally prevailing over the island at this season.

Ships approaching Columbo in the night have a brilliant light to direct them, which is exhibited every night from a light-house in the fort; the height of the light above the level of the sea is 97 feet, and may be seen in clear weather as far as the light appears above the horizon.

A steep bank of coral, about ½ a mile broad, with 15 fathoms water on it, lies 7 miles W. from Columbo, extending northward towards Negombo (where its surface is sand), and a few miles to the southward of Columbo; outside the bank the water deepens at once to 23 fathoms, and in 2 miles to 28 fathoms, greenish sand, which is not far from the edge of soundings. Within the bank there are 25 fathoms gradually shoaling towards the shore.

A bed of sunken rocks, called the Drunken Sailor, lies S. W. by W. ½ W. from Columbo Light-house, distant 1,000 yards. The length of the ledge may be estimated at 100 yards, and the breadth 20 yards; on its N. end a small spot, about the size of the hull of a 20 ton boat, is said to have only 3 feet water on it at low water; but during several recent visits, when some of the coral from its surface was brought up, there did not appear to be less than 7 feet 6 inches water on the shallowest part: on the other parts of the ledge there is 4, 5, and 6 fathoms. The sea breaks on the shallow part of these rocks almost constantly during the S. W. monsoon, but this is very seldom the case during the N. E. monsoon.

The Drunken Sailor should not be approached under 9 fathoms during the night, as there are 8 fathoms very near to it, and in its stream to the southward.

The passage within the Drunken Sailor is clear, and some ships have sailed through; but no advantage can be gained by approaching the shore so very near at this point.

The Drunken Sailor lies so near the land, and so far to the southward of the anchorage in Colombo road, as scarcely to form any impediment to ships bound to or from Columbo.

The currents off Columbo are subject to considerable variation; but they are never so strong as to cause inconvenience to ships which may have to communicate with the shore in either monsoon without coming to anchor.

Columbo road affords good anchorage, free from foul ground; and is frequented at all seasons of the year.

The best anchorage during the prevalence of S. W. winds from April to October, is in from 7 to 8 fathoms, with the light-house bearing S. by E. ¼ E., Dutch church E. by S. In the N. E. monsoon from November to April, it is more convenient to anchor in 6½ fathoms, with the light-house bearing S. or S. ½ E., and the Dutch church E. S. E.

Ships requiring pilots to conduct them to the anchorage should make the usual signal; the charge for pilotage is 15*s.*

The bar is a bank of sand with 7 feet water on its shallowest part, the northern extremity being about 400 yards N. W. of the Custom-house Point; small vessels that draw less than 10 feet water, ride within the bar protected from the S. W. wind and sea.

When the sea is high, it breaks with great force on the bar, and renders the passage from the shipping in the outer road dangerous for small boats: the native boats generally pass out and in to the southward of the bar, close to the breakers on the rocky point of the Custom-house; but as the passage is narrow, it should not be attempted by strangers: when the sea breaks on the bar, it is better to proceed round to the northward of the bar, which may be easily distinguished by the breakers.

What is strictly understood by a gale of wind, is a rare occurrence at Columbo: this may be owing to the vicinity of the equator. The strong gales which blow on the Malabar coast are felt in small squalls, and a high sea, but there is scarcely wind to endanger vessels properly found in ground tackling; it is true, ships have sometimes required the aid of a second anchor, but in most cases the cause has been attributable to some defect in the first anchor or cable, a light anchor, an anchor breaking, a short chain, or the chain coming unshackled: an instance occurred in Columbo road, of two ships receiving cargo during the S. W. monsoon, whose chain cables came unshackled twice; twice did it occur to each ship.

CUSTOMS DUTIES. — Account of the Customs Duties payable on goods, wares, and merchandise imported into and exported from the island of Ceylon.

	£ *s. d.*
Inwards. — Ale, porter, and other malt liquors in casks - - - - - imp. gall.	0 0 2½
Ditto in bottles - - - - doz. quarts	0 0 6
Books (printed)	
Bullion, coin, pearls, and precious stones	
Coal and coke	- - Free.
Copperah	
Garden seeds and plants	
Gunpowder - - - - - lb.	0 0 3
Horses, mules, asses, neat cattle, and other live stock	
Instruments (musical and scientific)	
Iron tanks, casks, staves, headings, and hoops	
Machinery, implements and tools for agriculture, and for any kind of manufacture	Free.
Maps	
Opium - - - - - - lb.	0 1 0
Paddy - - - - - - bush.	0 0 3
Regimental clothing and accoutrements - -	Free.
Rice - - - - - - bush.	0 0 7
Specimens illustrative of natural history - -	Free.
Spirits and liquors - - - imp. gall.	0 4 6
Tea - - - - - - lb.	0 0 6
Timber	
Wearing apparel and personal baggage	- - Free.
Wheat, grain, pease, and beans - - bush.	0 0 7
Wine in bottles	imp. gall. 0 2 0
Ditto not in bottles	— 0 1 0
Ditto the produce of any British possessions	0 0 6
Goods, wares, and merchandise, not otherwise charged with duty, being the growth, produce, or manufacture of the United Kingdom, or of any British possession abroad, for every 100*l.* of the value thereof in this market - - - - -	5 0 0
Ditto, being the growth, produce, or manufacture of any foreign state, for every 100*l.* of the value thereof in this market - - - - - -	10 0 0
Outwards. — Books (printed)	- - Free.
Bullion, coin, pearls, and precious stones	
Cinnamon - - - - - lb.	0 2 0
Ditto (from 1 May, 1843) - - - - —	0 1 0
Ditto oil - - - - - - oz.	0 0 4
Horses, asses, mules, neat cattle, and all other live stock	
Implements (musical)	
Iron tanks, casks, staves, headings, and hoops	Free.
Plants and seeds	
Specimens illustrative of natural history	
Wearing apparel, and personal baggage	
Goods, wares, and merchandise, of the growth, produce, or manufacture of this island, not being subject to other export duty, not particularly exempted from export duty, for every 100*l.* of the value thereof	2 10 0

Prohibitions and Restrictions inwards. — Arms, ammunition, and utensils of war, except under special authority of the governor.

Cinnamon, cinnamon oil, cassia, or cassia buds.

Coffee, except to be warehoused for exportation.

Coin, viz.: — false money, or counterfeit sterling.

Ditto, silver of the realm, or any money purporting to be such, not being of the established standard in weight or fineness.

Gunpowder, except under special authority of the governor.

Rum, and rum shrub, the produce of any foreign country, or of any British possession into which foreign sugar, or rum, or rum shrub, can be legally imported.

Salt, except under authority of the governor.

Sugar (foreign), and sugar the growth of any British possession into which foreign sugar can be legally imported, except to be warehoused for exportion.

COLUMBO.

Account of the Value of the principal Articles produced in and exported from Ceylon during the Years ended the 30th of September 1841 and 1842.

Articles.	Values. 1841.			1842.		
	£	s.	d.	£	s.	d.
Arrack	14,675	12	8	8,042	2	8
Areca nuts	22,428	2	9	29,222	5	5
Chanks	9,538	6	11	7,805	8	8
Cinnamon	24,857	5	7	15,207	10	9
Cocoa nuts, kernels, and shells	7,350	1	2½	10,577	0	2
Coffee	196,048	8	11½	269,763	17	7
Coir	7,146	6	5½	10,162	1	7
Ivory	212	8	6	269	7	6
Oils, cinnamon and clove, and citronella	430	14	6	514	10	8
Cocoa nut	24,061	16	3½	34,242	11	7
Plumbago	268	9	4	1,231	14	4
Tobacco	12,922	15	5	10,947	4	1½
Wood, various	10,053	0	7½	9,583	15	8½
Other articles	14,721	18	11	13,863	11	8
Total	344,715	5	11¾	421,413	0	5
Add specie	2,690	2	6	13,025	16	0
Imports re exported	20,977	14	8	29,006	11	5½
Total exports	£368,383	3	1¾	£463,445	7	10½

Imports — The total imports into Ceylon in 1842 amounted, including 172,311*l.* of specie, to 794,758*l.*, whereof rice and other grain, principally brought from India, amounted to 255,691*l.*, cotton goods, nearly in equal proportions from England and India, 175,335*l.*, machinery and tools, principally from England, 10,600*l.*, with iron, earthenware, malt liquor, &c.

Values of Exports and Imports to and from Ceylon from the Year 1830 to 1842 inclusive, distinguishing the Trade with Great Britain from that with other Parts of the World. — *N. B.* The valuation is made by the officers of customs.

Years.	Exports. To Great Britain.	Exports. Elsewhere.	Exports. Total.	Imports. From Great Britain.	Imports. Elsewhere.	Imports. Total.
	£	£	£	£	£	£
1830	168,576	106,234	274,810	40,777	308,804	349,581
1831	59,905	92,390	152,295	28,550	354,428	382,987
1832	98,526	62,061	160,587	47,792	303,430	351,222
1833	42,103	90,127	132,230	60,813	260,067	320,891
1834	76,989	68,844	145,833	71,075	301,650	372,725
1835	79,595	119,672	199,267	69,997	282,079	352,076
1836	228,501	106,018	334,519	93,268	317,909	411,167
1837	191,583	104,449	296,032	166,468	384,771	541,239
1838	169,526	89,085	258,411	97,283	392,800	490,083
1839	212,980	118,716	331,696	131,616	379,048	510,664
1840	286,638	100,141	386,779	115,522	438,455	553,977
Year ended 30th Sept.						
1841	247,065	97,650	344,715	162,574	401,904	564,478
1842	327,285	94,128	421,413	204,986	417,461	622,447

Rates of Warehouse Rent chargeable upon all Goods imported, and remaining in any Queen's Warehouse.

	Per week £ s. d.
For every tun butt	0 0 9
Leaguer cask	0 0 6
Half ditto	0 0 3
Pipe or puncheon	0 0 3
Hogshead	0 0 2
Barrel	0 0 1½
Cask or keg of smaller size	0 0 1
Case containing one dozen of liquor	0 0 0½
Crate, cask, or case of hardware, earthenware, or ironmongery	0 0 4
Bale of cloth, Indian	0 0 4
Half ditto ditto	0 0 2
Quarter ditto ditto	0 0 1
Bale, case, or box, not exceeding half a ton measurement	0 0 4
Ditto, exceeding half a ton	0 0 8
Bag rice, sugar, or coffee	0 0 1
Small package not otherwise enumerated	0 0 1
Ton of heavy goods ditto	0 1 0

N. B. — A week's rent chargeable for all fractions of a week.

Port Dues. — 4*d.* per ton of the registered tonnage of any ship or vessel anchoring in any port of the island, excepting chartered transports, and vessels belonging to this government.

Vessels employed between one port and another of the island are allowed to compound for port dues for 12 months at 1*s.* per ton.

No coasting vessel is liable to pay port dues within 30 days from the date of the last payment thereof.

Pilotage. — Rates of Pilotage payable by all Square-Rigged Vessels, Sloops, or Schooners, at the Ports of Colombo, Trincomalee, and Galle.

	Back Bay. £ s. d.	Inner Harbour. £ s. d.
Colombo		0 15 0
Trincomalee —		
Vessels of 600 tons and upwards	2 0 0	4 0 0
400 tons and under 600	1 10 0	3 0 0
200 tons and under 400	1 1 0	2 2 0
100 tons and under 200	0 10 6	1 1 0
under 100	0 6 0	0 15 0
Galle —		
Vessels of 600 tons and upwards		3 0 0
400 tons and under 600		2 5 0
200 tons and under 400		1 10 0
100 tons and under 200		1 2 6
under 100		0 15 0

The above rates of pilotage are charged to all vessels going into the Inner Harbour of Trincomalee and the harbour of Galle, whether they make a signal for a pilot or not. In Colombo and the Back Bay at Trincomalee, the charge is only made if the vessel make the signal, and a pilot actually repair on board.

General Rates of Agency Commission and Godown Rent, agreed upon by the Chamber of Commerce of Ceylon, on the 29th April, 15th May, and 12th June, 1839, and recommended for general adoption, viz. —

	Per cent
1. On all sales, purchases, and shipments	5
With the following exceptions, viz —	
On all purchases of government cinnamon, on the purchase money, and duty included	2½
On returns made with the proceeds of goods on which commission has been previously charged, if in coffee or cocoa-nut oil	5
in every description of produce	2½
On diamonds, pearls, precious stones, and jewellery	2½
On treasure and bullion	1
On all property withdrawn, shipped, or delivered to order	2½
2. On guaranteeing sales, bills, bonds, contracts, or other engagements	2½
3. On ships' disbursements	5
4. On advertising for freight and passengers, on the amount of freight or passage money, whether the same pass through the agent's hands or not	5
5. On effecting insurance, or writing orders for insurance	½
6. On settling losses, partial and general, and returns of premium	1
7. On procuring money on respondentia	2½
8. On attending the delivery of contract goods, or receiving and delivering private commissions of wines, cattle, and merchandise	2½
9. On the total sum of the debit or credit side of an account at the option of the agent, excepting items on which a commission of 5 per cent. is chargeable	1
10. On effecting remittances, or on purchasing, selling, or negotiating bills of exchange	1
11. On subscriptions to government loans, selling, transferring, or exchanging public securities	1
12. On delivering up public securities, or lodging them in any of the public offices	½
13. On the sale of lottery tickets from the other settlements	5
14. On the purchase of lottery tickets, and amount of prizes	1
15. On letters of credit granted	2½
16. On the management of estates as executors, administrators, or attornies	5
17. On debts, when a process at law or arbitration is necessary	2½
And if recovered by such means	5
18. On bills of exchange, notes, &c. dishonoured	1
19. On overdue debts collected for absentees	5

Rates of Godown Rent per Month.

	£ s. d.
Coffee, rice, sugar, pepper, and saltpetre — bag	0 0 3
Cinnamon — bale	0 1 0
Piece goods — bale or case	0 1 0
Cotton, screwed — bale	0 0 6
Ditto, raw	0 1 0
Coir, rope, or junk — cwt.	0 0 1
Wine, spirits, beer, oil, &c. — leaguer or pipe	0 2 0
Wine in 6 dozen chests	0 0 6
Rough goods, such as earthenware, in crates, per 50 cubic ft.	0 2 0

All other articles in proportion to the above.

COMMERCE.

Extent, Population, Revenue, &c. of Ceylon.—The area of Ceylon is estimated at 24,448 sq. miles. Its population, according to a census taken in 1831, amounted to 950,000, of whom about 6,600 were whites. And if this statement may be depended upon, it would seem that the population has increased very rapidly in the interim, for it is said to have amounted in 1842 to 1,337,032, of whom 7,500 were whites. It appears, from a statement in the *Ceylon Almanac* (p. 205.), that during the 5 years ending with 1842, the colonial expenditure exceeded the colonial income about 20,000*l.* a year. In fact the whole income of the island, including land rent, customs, cinnamon duty, and everything else, amounted in 1841 to only 341,937*l.* But looking at the extent of the island, its fertility, its favourable situation for commerce, and the advantage it enjoys in the possession of cinnamon, can any one doubt that its trade and revenue should be far greater than they really are? The rapid extension of the culture of coffee will, no doubt, contribute in no ordinary degree to introduce a better state of things; but we incline to think that nothing would do so much to increase the wealth and importance of the island, as the reduction of the export duty on cinnamon to 3*d.* or 4*d.* per lb. (See CINNAMON.)

COLUMBO ROOT (Du. *Columbo wortel*; Fr. *Racine de Colombo*; Ger. *Columbo-wurzel*; It. *Radice di Columbo*; Port. *Raiz de Columba*; Sp. *Raiz de Columbo*; Mosamb. *Kalumb*), the root of the plant of that name. It is a staple export of the Portuguese from Mosambique. It is not cultivated, but grows naturally in great abundance. It is imported in circular pieces, from ½ an inch to 3 inches in diameter, generally from ¼ to ¾ of an inch thick; the bark is wrinkled and thick, of a brownish colour without, and a brightish yellow within; the pith is spongy, yellowish, and slightly striped: when fresh, its smell is rather aromatic; it is disagreeably bitter, and slightly pungent to the taste, somewhat resembling mustard that has been too long kept. Choose the largest pieces, fresh, and of a good colour, as free from worms as possible, rejecting that which is small and broken. The freight is calculated at 16 cwt. to a ton. —(*Milburn's Orient. Com.*)

COMMERCE, from *commutatio mercium*, is simply, as its name imports, the exchange of commodities for commodities.

I. ORIGIN OF COMMERCE. — MERCANTILE CLASSES.
II. HOME TRADE.
III. FOREIGN TRADE.
VI. RESTRICTIONS ON COMMERCE.

I. ORIGIN OF COMMERCE. — MERCANTILE CLASSES.

(1.) *The Origin of Commerce* is coeval with the first dawn of civilisation. The moment that individuals ceased to supply themselves directly with the various articles and accommodations they made use of, that moment must a commercial intercourse have begun to grow up amongst them. For it is only by exchanging that portion of the produce raised by ourselves that exceeds our own consumption, for portions of the surplus produce raised by others, that the division of employments can be introduced, or that different individuals can apply themselves in preference to different pursuits.

Not only, however, does commerce enable the inhabitants of the same village or parish to combine their separate efforts to accomplish some common object, but it also enables those of different provinces and kingdoms to apply themselves in an especial manner to those callings, for the successful prosecution of which the district or country which they occupy gives them some peculiar advantage. This *territorial division of labour* has contributed more, perhaps, than anything else to increase the wealth and accelerate the civilisation of mankind. Were it not for it, we should be destitute of a vast number of the necessaries, comforts, and enjoyments which we now possess; while the price of the few that would remain would, in most instances, be very greatly increased. But whatever advantages may be derived — and it is hardly possible to exaggerate either their magnitude or importance — from availing ourselves of the peculiar capacities of production enjoyed by others, are wholly to be ascribed to commerce as their real source and origin.

We do not mean to say any thing in this article with respect to the practical details connected with the different departments of commerce. These will be found under the various titles to which they refer. Our object, at present, is merely to show the nature and influence of commerce in general, and of the restrictions that have sometimes been imposed upon it. We shall begin by endeavouring, first of all, to give some account of the nature of the services performed by the individuals by whom commercial undertakings are usually carried on. In the second place, we shall consider the influence of the *home* trade, or of the intercourse subsisting amongst individuals of the same country. In the third place, we shall consider the influence of *foreign* trade, or of that intercourse which subsists amongst individuals belonging to different countries. After these topics have been discussed, we shall offer a few remarks on what has been termed the restrictive system; or on the principles involved in the regulations enacted at different times, in this and other countries, for the government and direction of commerce.

(2.) *Mercantile Classes.* — While the exchange of different products is carried on by the producers themselves, they must unavoidably lose a great deal of time, and experience many inconveniences. Were there no merchants, a farmer wishing to sell his

crop would be obliged, in the first place, to seek for customers, and to dispose of his corn as nearly as possible in such quantities as might suit the demands of the various individuals inclined to buy it; and after getting its price, he would next be obliged to send to 10 or 20 different and, perhaps, remote places, for the commodities he wanted to get in its stead. So that, besides being exposed to a world of trouble and inconvenience, his attention would be continually diverted from the labours of his farm. Under such a state of things, the work of production, in every different employment, would be meeting with perpetual interruptions, and many branches of industry that are successfully carried on in a commercial country would not be undertaken.

The establishment of a distinct mercantile class effectually obviates these inconveniences. When a set of dealers erect warehouses and shops for the purchase and sale of all descriptions of commodities, every producer, relieved from the necessity of seeking customers, and knowing beforehand where he may at all times be supplied with such products as he requires, devotes his whole time and energies to his proper business. The intervention of merchants gives a continuous and uninterrupted motion to the plough and the loom. Were the class of traders annihilated, all the springs of industry would be paralysed. The numberless difficulties that would then occur in effecting exchanges would lead each particular family to endeavour to produce all the articles they had occasion for: society would thus be thrown back into primæval barbarism and ignorance; the divisions of labour would be relinquished; and the desire to rise in the world and improve our condition would decline, according as it became more difficult to gratify it. What sort of agricultural management could be expected from farmers who had to manufacture their own wool, and make their own shoes? And what sort of manufacturers would those be, who were every now and then obliged to leave the shuttle for the plough, or the needle for the anvil? A society, without that distinction of employments and professions resulting from the division of labour, that is, *without commerce*, would be totally destitute of arts or sciences of any sort. It is by the assistance each individual renders to and receives from his neighbours, by every one applying himself in preference to some peculiar task, and combining, though probably without intending it, his efforts with those of others, that civilised man becomes equal to the most gigantic efforts, and appears endowed with almost omnipotent power

The mercantile class has generally been divided into two subordinate classes — the wholesale dealers, and the retail dealers. The former purchase the various products of art and industry in the places where they are produced, or are least valuable, and carry them to those where they are more valuable, or where they are more in demand; and the latter, having purchased the commodities of the wholesale dealers, or the producers, collect them in shops, and sell them in such quantities and at such times as may best suit the public demand. These classes of dealers are alike useful; and the separation that has been effected between their employments is one of the most advantageous divisions of labour. The operations of the wholesale merchant are analagous to those of the miner. Neither the one nor the other makes any change on the bodies which he carries from place to place. All the difference between them consists in this, — that the miner carries them from below ground to the surface of the earth, while the merchant carries them from one point to another on its surface. Hence it follows that the value given to commodities by the operations of the wholesale merchant may frequently exceed that given to them by the producers. The labour or expense required to dig a quantity of coal from the mine, does not exceed what is required for its conveyance from Newcastle to London; and it is a far more difficult and costly affair to fetch a piece of timber from Canada to England, than to cut down the tree. In this respect there is no difference between commerce and agriculture and manufactures. The latter give utility to matter, by bestowing on it such a shape as may best fit it for ministering to our wants and comforts; and the former gives additional utility to the products of the agriculturist and manufacturer, by bringing them from where they are of comparatively little use, or are in excess, to where they are of comparatively great use, or are deficient.

If the wholesale merchant were himself to retail the goods he has brought from different places, he would require a proportional increase of capital; and it would be impossible for him to give that exclusive attention to any department of his business, which is indispensable to its being carried on in the best manner. It is for the interest of each dealer, as of each workman, to confine himself to some one business. By this means each trade is better understood, better cultivated, and carried on in the cheapest possible manner, But whether carried on by a separate class of individuals or not, it is obvious that the retailing of commodities is indispensable. It is not enough that a cargo of tea should be imported from China, or a cargo of sugar from Jamaica. Most individuals have some demand for these articles; but there is not, perhaps, a single private person, even in London, requiring so large a supply for his own consumption. It is clear, therefore, that they must be *retailed*; that is, they must be sold in such quanti-

ties and at such times as may be most suitable for all classes of consumers. And since it is admitted, on all hands, that this necessary business will be best conducted by a class of traders distinct from the wholesale dealers, it is impossible to doubt that their employment is equally conducive as that of the others to the public interest, or that it tends equally to augment national wealth and comfort.

II. Home Trade.

The observations already made serve to show the influence of the home trade in allowing individuals to confine their attention to some one employment, and to prosecute it without interruption. But it is not in this respect only that the establishment of the home trade is advantageous. It is so in a still greater degree, by its allowing the inhabitants of the different districts of the empire to turn their labour into those channels in which it will be most productive. The different soils, different minerals, and different climates of different districts, fit them for being appropriated, in preference, to certain species of industry. A district, like Lancashire, where coal is abundant, which has an easy access to the ocean, and a considerable command of internal navigation, is the natural seat of manufactures. Wheat and other species of grain are the natural products of rich arable soils; and cattle, after being reared in mountainous districts, are most advantageously fattened in meadows and low grounds. Hence it follows, that the inhabitants of different districts, by confining themselves to those branches of industry for the successful prosecution of which they have some peculiar capability, and exchanging their surplus produce for that of others, will obtain an incomparably larger supply of all sorts of useful and desirable products, than they could do, were they to apply themselves indiscriminately to every different business. The territorial division of labour is, if possible, even more advantageous than its division among individuals. A person may be what is commonly called *Jack of all trades*; and though it is next to certain that he will not be well acquainted with any one of them, he may nevertheless make some sort of rude efforts in them all. But it is not possible to apply the same soils or the same minerals to every different purpose. Hence it is, that the inhabitants of the richest and most extensive country, provided it were divided into small districts without any intercourse with each other, or with foreigners, could not, how well soever labour might be divided among themselves, be otherwise than poor and miserable. Some of them might have a superabundance of corn, at the same time that they were wholly destitute of wine, coal, and iron: while others might have the largest supplies of the latter articles, with but very little grain. But in commercial countries no such anomalies can exist. Opulence and comfort are there universally diffused. The labours of the mercantile classes enable the inhabitants of each district to apply themselves principally to those employments that are naturally best suited to them. This superadding of the division of labour among different provinces to its division among different individuals, renders the productive powers of industry immeasurably greater; and augments the mass of necessaries, conveniences, and enjoyments, in a degree that could not previously have been conceived possible, and which cannot be exceeded except by the introduction of foreign commerce.

"With the benefit of commerce," says an eloquent and philosophical writer, "or a ready exchange of commodities, every individual is enabled to avail himself, to the utmost, of the peculiar advantage of his place; to work on the peculiar materials with which nature has furnished him; to humour his genius or disposition, and betake himself to the task in which he is peculiarly qualified to succeed. The inhabitant of the mountain may betake himself to the culture of his woods and the manufacture of his timber; the owner of pasture lands may betake himself to the care of his herds; the owner of the clay-pit to the manufacture of his pottery; and the husbandman to the culture of his fields, or the rearing of his cattle. And any one commodity, however it may form but a small part in the accommodations of human life, may, under the facility of commerce, find a market in which it may be exchanged for what will procure any other part, or the whole: so that the owner of the clay-pit, or the industrious potter, without producing any one article immediately fit to supply his own necessities, may obtain possession of all that he wants. And commerce, in which it appears that commodities are merely exchanged, and nothing produced, is, nevertheless, in its effects, very productive, because it ministers a facility and an encouragement to every artist in multiplying the productions of his own art; thus adding greatly to the mass of wealth in the world, in being the occasion that much is produced." — (*Ferguson's Principles of Moral Science*, vol. ii. p. 424.)

The roads and canals that intersect a country, and open an easy communication between its remotest extremities, render the greatest service to internal commerce, and also to agriculture and manufactures. A diminution of the expense of carriage has, in fact, the same effect as a diminution of the direct cost of production. If the coals brought into a city sell at 20*s.* a ton, of which the carriage amounts to a half, or 10*s.*, it is plain

that in the event of an improved communication, such as a more level or direct road, a railway, or a canal, being opened for the conveyance of the coals, and that they can, by its means, be imported for half the previous expense, their price will immediately fall to 15*s.* a ton; just as it would have done, had the expense of extracting them from the mine been reduced a half.

Every one acquainted with the merest elements of political science is aware that employments are more and more subdivided, that more powerful machinery is introduced, and the productive powers of labour increased, according as larger masses of the population congregate together. In a great town like London, Glasgow, or Manchester, the same number of hands will perform much more work than in a small village, where each individual has to perform several operations, and where the scale of employment is not sufficiently large to admit of the introduction of extensive and complicated machinery. But the great towns with which England is studded could not exist without our improved means of communication. These, however, enable their inhabitants to supply themselves with the bulky products of the soil and of the mines almost as cheaply as if they lived in country villages; securing to them all the advantages of concentration, with but few of its inconveniences. Roads and canals are thus productive of a double benefit; for while. by affording comparatively cheap raw materials to the manufacturers, they give them the means of perfecting the divisions of labour, and of supplying proportionally cheap manufactured goods; the latter are conveyed by their means, and at an extremely small expense, to the remotest parts of the country. The direct advantages which they confer on agriculture are not less important. Without them it would not be possible to carry to a distance sufficient supplies of lime, marl, shells, and other bulky and heavy articles necessary to give luxuriance to the crops of rich soils, and to render those that are poor productive. Good roads and canals, therefore, by furnishing the agriculturists with cheap and abundant supplies of manure, reduce, at one and the same time, the *cost of producing* the necessaries of life, and the cost of bringing them to market.

In other respects, the advantages resulting from improved communications are probably even more striking. They give the same common interest to every different part of the most widely extended empire; and put down, or rather prevent, any attempt at monopoly on the part of the dealers of particular districts, by bringing them into competition with those of all the others. Nothing in a state enjoying great facilities of communication is separate and unconnected. All is mutual, reciprocal, and dependent. Every man naturally gets into the precise situation that he is best fitted to fill; and each, cooperating with every one else, contributes to the utmost of his power to extend the limits of production and civilisation. — (See Roads.)

Such being the nature and vast extent of the advantages derived from the home trade, it is obviously the duty of the legislature to give it every proper encouragement and protection. It will be found, however, on a little consideration, that this duty is rather negative than positive — that it consists less in the framing of regulations, than in the removal of obstacles. The error of governments in matters of trade has not been that they have done too little, but that they have attempted too much. It will be afterwards shown that the encouragement which has been afforded to the producers of certain species of articles in preference to others, has uniformly been productive of disadvantage. In the mean time it is sufficient to observe, that the encouragement which a prudent and enlightened government bestows on industry, will equally extend to all its branches; and will be especially directed to the removal of every thing that may in any respect fetter the freedom of commerce, and the power of individuals to engage in different employments. All regulations, whatever be their object, that operate either to prevent the circulation of commodities from one part of the empire to another, or the free circulation of labour, necessarily tend to check the division of employments and the spirit of competition and emulation, and must, in consequence, lessen the amount of produce. The same principle that prompts to open roads, to construct bridges and canals, should lead every people to erase from the statute book every regulation which either prevents or fetters the operations of the merchant, and the free disposal of capital and labour. Whether the freedom of internal commerce and industry be interrupted by impassable mountains and swamps, or by oppressive tolls or restrictive regulations, the effect is equally pernicious.

The common law and the ancient statute law of England are decidedly hostile to monopolies, or to the granting of powers to any particular class of individuals to furnish the market with commodities. Lord Coke distinctly states, "that all monopolies concerning trade and traffic are against the liberty and freedom granted by the great charter, and divers other acts of parliament which are good commentaries upon that charter." — (2 *Inst.* 63.) And he affirms, in another place, that, "*Commercium jure gentium commune esse debet, et non in monopolium et privatum paulorum quæstum convertendum. Iniquum est aliis permittere, aliis inhibere mercaturam.*"

But, notwithstanding this concurrence of the common and statute law of the country in favour of the freedom of industry, during the arbitrary reigns of the princes of the house of Tudor, the notion that the crown was by its prerogative entitled to dispense with any law to the contrary, and to establish monopolies, became fashionable among the court lawyers, and was acted upon to a very great extent. Few things, indeed, occasioned so much dissatisfaction in the reign of Elizabeth as the multiplication of monopolies; and notwithstanding the opposition made by the crown, and the court party in parliament, the grievance became at length so intolerable as to give rise to the famous statute of 1624 (21 James 1. c. 3.), by which all monopolies, grants, letters patent, and licences, for the sole buying, selling, and making of goods and manufactures, not given by an act of the legislature, are declared to be "*altogether contrary to the laws of this realm, void, and of none effect.*" This statute has been productive of the greatest advantage; and has, perhaps, contributed more than any other to the development of industry, and the accumulation of wealth. With the exception of the monopoly of printing Bibles, and the restraints imposed by the charters of bodies legally incorporated, the freedom of internal industry has ever since been vigilantly protected; full scope has been given to the principle of competition; the whole kingdom has been subjected to the same equal law; no obstacles have been thrown in the way of the freest transfer of commodities from one country or place to another; the home trade has been perfectly unfettered; and though the public have not been supplied with commodities at so low a price as they might have obtained them for, had there been no restrictions on foreign commerce, they have obtained them at the lowest price that would suffice to pay the *home producers* the cost of producing and bringing them to market. It is to this freedom that the comparatively flourishing state of industry in Great Britain is mainly to be ascribed.

III. Foreign Trade.

What the home trade is to the different provinces of the same country, foreign trade is to all the countries of the world. Particular countries produce only particular commodities, and, were it not for foreign commerce, would be entirely destitute of all but such are indigenous to their own soil. It is difficult for those who have not reflected on the subject, to imagine what a vast deduction would be made, not only from the comforts, but even from the necessaries, of every commercial people, were its intercourse with strangers put an end to. It is not, perhaps, too much to say that in Great Britain we owe to our intercourse with others a full half or more of all that we enjoy. We are not only indebted to it for the cotton and silk manufactures, and for supplies of wine, tea, coffee, sugar, the precious metals, &c.; but we are also indebted to it for most of the fruits and vegetables that we now cultivate. At the same time, too, that foreign commerce supplies us with an immense variety of most important articles, of which we must otherwise have been wholly ignorant, it enables us to employ our industry in the mode in which it is sure to be most productive, and reduces the price of almost every article. We do not misemploy our labour in raising sugar from the beet-root, in cultivating tobacco, or in forcing vines; but we employ ourselves in those departments of manufacturing industry in which our command of coal, of capital, and of improved machinery give us an advantage; and obtain the articles produced more cheaply by foreigners, in exchange for the surplus produce of those branches in which we have a superiority over them. A commercial nation like England avails herself of all the peculiar facilities of production given by Providence to different countries. To produce claret here is perhaps impossible; and at all events it could not be accomplished, unless at more than 100 times the expense required for its production in France. We do not, however, deny ourselves the gratification derivable from its use; and to obtain it, we have only to send to France, or to some country indebted to France, some articles in the production of which we have an advantage, and we get claret in exchange at the price which it takes to raise it under the most favourable circumstances. One country has peculiar capacities for raising corn, but is at the same time destitute of wine, silk, and tea; another, again, has peculiar facilities for raising the latter, but is destitute of the former; and it is impossible to point out a single country which is abundantly supplied with any considerable variety of commodities of domestic growth. *Non omnis fert omnia tellus.* Providence, by giving to each particular nation something which the others want, has evidently intended that they should be mutually dependent upon one another. And it is not difficult to see that, *cæteris paribus*, those must be the richest and most abundantly supplied with every sort of useful and desirable accommodation, who cultivate the arts of peace with the greatest success, and deal with all the world on fair and liberal principles.

"The commerce of one country with another is, in fact," to use the words of an able and profound writer, "merely an extension of that division of labour by which so many benefits are conferred upon the human race. As the same country is rendered the richer by the trade of one province with another; as its labour becomes thus infinitely

more divided and more productive than it could otherwise have been; and as the mutual supply to each other of all the accommodations which one province has, and another wants, multiplies the accommodations of the whole, and the country becomes thus in a wonderful degree more opulent and happy; the same beautiful train of consequences is observable in the world at large, — that great empire of which the different kingdoms and tribes of men may be regarded as the provinces. In this magnificent empire, too, one province is favourable to the production of one species of accommodation, and another province to another: by their mutual intercourse they are enabled to sort and distribute their labour as most peculiarly suits the genius of each particular spot. The labour of the human race thus becomes much more productive, and every species of accommodation is afforded in much greater abundance. The same number of labourers, whose efforts might have been expended in producing a very insignificant quantity of home-made luxuries, may thus, in Great Britain, produce a quantity of articles for exportation, accommodated to the wants of other places, and peculiarly suited to the genius of Britain to furnish, which will purchase for her an accumulation of the luxuries of every quarter of the globe. There is not a greater proportion of her population employed in administering to her luxuries, in consequence of her commerce; there is probably a good deal less; but their labour is infinitely more productive: the portion of commodities which the people of Great Britain acquire by means of the same labour, is vastly greater." — (*Mill's Commerce defended*, p. 38.)

What has been already stated is sufficient to expose the utter fallacy of the opinion that has sometimes been maintained, that whatever one nation may gain by her foreign commerce, must be lost by some one else. It is singular, indeed, how such a notion should ever have originated. Commerce *is not directly productive*, nor is the good derived from it to be estimated by its immediate effects. What commercial nations give is uniformly the fair equivalent of what they get. In their dealings they do not prey upon each other, but are benefited alike. The advantage of commerce consists in its enabling labour to be divided, and giving each people the power of supplying themselves with the various articles for which they have a demand, at the lowest price required for their production in those countries and places where they are raised with the greatest facility. We import wine from Portugal, and cotton from America, sending in exchange cloth and other species of manufactured goods. By this means we obtain two very important articles, which it would be all but impossible to produce at home, and which we could not, certainly, produce, except at an infinitely greater cost. But our gain is no loss to the foreigners. They derive precisely the same sort of advantage from the transaction that we do. We have very superior facilities for manufacturing, and they get from us cloth, hardware, and other important articles, at the price at which they can be produced in this country, and consequently for far less than their direct production would have cost them. The benefits resulting from an intercourse of this sort are plainly mutual and reciprocal. Commerce gives no advantage to any one people over any other people; but it increases the wealth and enjoyments of *all* in a degree that could not previously have been conceived possible.

But the influence of foreign commerce in multiplying and cheapening conveniences and enjoyments, vast as it most certainly is, is perhaps inferior to its indirect influence — that is, to its influence on industry, by adding immeasurably to the mass of desirable articles, by inspiring new tastes, and stimulating enterprise and invention by bringing each people into competition with foreigners, and making them acquainted with their arts and institutions.

The apathy and languor that exist in a rude state of society have been universally remarked. But these uniformly give place to activity and enterprise, according as man is rendered familiar with new objects, and is inspired with a desire to obtain them. An individual might, with comparatively little exertion, furnish himself with an abundant supply of the commodities essential to his subsistence; and if he had no desire to obtain others, or if that desire, however strong, could not be gratified, it would be folly to suppose that he should be laborious, inventive, or enterprising. But, when once excited, the wants and desires of man become altogether illimitable; and to excite them, no more is necessary than to bring new products and new modes of enjoyment within his reach. Now, the sure way to do this is to give every facility to the most extensive intercourse with foreigners. The markets of a commercial nation being filled with the various commodities of every country and every climate, the motives and gratifications which stimulate and reward the efforts of the industrious are proportionally augmented. The husbandman and manufacturer exert themselves to increase their supplies of raw and manufactured produce, that they may exchange the surplus for the products imported from abroad. And the merchant, finding a ready demand for such products, is prompted to import a greater variety, to find out cheaper markets, and thus constantly to afford new incentives to the vanity and ambition, and consequently to the enterprise and industry, of his customers. The whole powers of the mind and the body are thus

called into action; and the passion for foreign commodities — a passion which has sometimes been ignorantly censured — becomes one of the most efficient causes of wealth and civilisation.

Not only, however, does foreign commerce excite industry, distribute the gifts of nature, and enable them to be turned to the best account, but it also distributes the gifts of science and of art, and gives to each particular country the means of profiting by the inventions and discoveries of others as much as by those of her own citizens. The ingenious machine invented by Mr. Whitney, of the United States, for separating cotton wool from the pod, by reducing the cost of the raw material of one of our principal manufactures, has been quite as advantageous to us as to his own countrymen. And the discoveries and inventions of Watt, Arkwright, and Wedgwood, by reducing the cost of the articles we send abroad, have been as advantageous to our foreign customers as to ourselves. Commerce has caused the blessings of civilisation to be universally diffused, and the treasures of knowledge and science to be conveyed to the remotest corners. Its humanising influence is, in this respect, most important; while, by making each country depend for the means of supplying a considerable portion of its wants on the assistance of others, it has done more than any thing else to remove a host of the most baleful prejudices, and to make mankind regard each other as friends and brothers, and not as enemies. The dread, once so prevalent, of the progress of other nations in wealth and civilisation, is now universally admitted to be as absurd as it is illiberal. While every people ought always to be prepared to resist and avenge any attack upon their independence or their honour, it is not to be doubted that their real prosperity will be best secured by their endeavouring to live at peace. "A commercial war, whether crowned with victory or branded with defeat, can never prevent another nation from becoming more industrious than you are; and if they are more industrious they will sell cheaper; and consequently your customers will forsake your shop and go to theirs. This will happen, though you covered the ocean with fleets, and the land with armies. The soldier may lay waste; the privateer, whether successful or unsuccessful, will make poor; but it is the eternal law of Providence that '*the hand of the diligent can alone make rich.*'" — (*Tucker's Four Tracts*, p. 41. 3d ed.)

Mr. Hume has beautifully illustrated the powerful and salutary influence of that spirit of industry and enterprise resulting from the eager prosecution of commerce and the arts. "Men," says he, "are then kept in perpetual occupation, and enjoy, as their reward, the occupation itself, as well as those pleasures which are the fruits of their labour. The mind acquires new vigour; enlarges its powers and faculties; and, by an assiduity in honest industry, both satisfies its natural appetites, and prevents the growth of unnatural ones, which commonly spring up when nourished with ease and idleness. Banish those arts from society, you deprive men both of action and of pleasure; and, leaving nothing but indolence in their place, you even destroy the relish of indolence, which never is agreeable but when it succeeds to labour, and recruits the spirits, exhausted by too much application and fatigue.

"Another advantage of industry and of refinements in the mechanical arts is, that they commonly produce some refinements in the liberal; nor can the one be carried to perfection, without being accompanied in some degree with the other. The same age which produces great philosophers and politicians, renowned generals and poets, usually abounds with skilful weavers and ship-carpenters. We cannot reasonably expect that a piece of woollen cloth will be wrought to perfection in a nation which is ignorant of astronomy, or where ethics are neglected. The spirit of the age affects all the arts; and the minds of men, being once roused from their lethargy, and put into a fermentation, turn themselves on all sides, and carry improvements into every art and science. Profound ignorance is totally banished; and men enjoy the privilege of rational creatures, to think as well as to act, to cultivate the pleasures of the mind as well as those of the body.

"The more these refined arts advance, the more sociable do men become; nor is it possible that, when enriched with science, and possessed of a fund of conversation, they should be contented to remain in solitude, or live with their fellow citizens in that distant manner which is peculiar to ignorant and barbarous nations. They flock into cities; love to receive and communicate knowledge; to show their wit or their breeding; their taste in conversation or living, in clothes or furniture. Curiosity allures the wise, vanity the foolish, and pleasure both. Particular clubs and societies are every where formed; both sexes meet in an easy and sociable manner; and the tempers of men, as well as their behaviour, refine apace. So that beside the improvements they receive from knowledge and the liberal arts, it is impossible but they must feel an increase of humanity from the very habit of conversing together, and contributing to each other's pleasure and entertainment. Thus *industry*, *knowledge*, and *humanity* are linked together by an indissoluble chain; and are found, from experience as well as reason, to be peculiar to the

more polished, and what are commonly denominated the more luxurious ages."—(*Essay of Refinement in the Arts.*)

Most commercial treatises, and most books on political economy, contain lengthened statements as to the comparative advantages derived from the home and foreign trade. But these statements are almost always bottomed on the most erroneous principles. The quantity and value of the commodities which the inhabitants of an extensive country exchange with each other, is far greater than the quantity and value of those they exchange with foreigners: but this is not, as is commonly supposed, enough to show that the home trade is proportionally more advantageous. Commerce, it must be borne in mind, is not a direct but an indirect source of wealth. The mere exchange of commodities adds nothing to the riches of society. The influence of commerce on wealth consists in its allowing employments to be separated and prosecuted without interruption. It gives the means of pushing the divisions of labour to the furthest extent; and supplies mankind with an infinitely greater quantity of necessaries and accommodations of all sorts, than could have been produced, had individuals and nations been forced to depend upon their own comparatively feeble efforts for the supply of their wants. And hence, in estimating the comparative advantageousness of the home and foreign trades, the real questions to be decided are, which of them contributes most to the division of labour? and which of them gives the greatest stimulus to invention and industry? These questions do not, perhaps, admit of any very satisfactory answer. The truth is, that both home trade and foreign trade are most prolific sources of wealth. Without the former, no division of labour could be established, and man would for ever remain in a barbarous state. Hence, perhaps, we may say that it is the most indispensable; but the length to which it could carry any particular country in the career of civilisation, would be limited indeed. Had Great Britain been cut off from all intercourse with strangers, there is no reason for thinking that we should have been at this day advanced beyond the point to which our ancestors had attained during the Heptarchy! It is to the products and the arts derived from others, and to the emulation inspired by their competition and example, that we are mainly indebted for the extraordinary progress we have already made, as well as for that we are yet destined to make.

Dr. Smith, though he has satisfactorily demonstrated the impolicy of all restrictions on the freedom of commerce, has, notwithstanding, endeavoured to show that it is more for the public advantage that capital should be employed in the home trade than in foreign trade, on the ground that the capitals employed in the former are more frequently returned, and that they set a greater quantity of labour in motion than those employed in the latter. But we have elsewhere endeavoured to show that the rate of profit which different businesses yield is the only test of their respective advantageousness. —(*Principles of Political Economy*, 3d ed. pp. 165—181.) Now, it is quite evident that capital will not be employed in foreign trade, unless it yield as much profit as could be made by employing it at home. No merchant sends a ship to China, if it be in his power to realise a larger profit by sending her to Dublin or Newcastle; nor would any one build a ship, unless he expected that the capital so laid out would be as productive as if it were employed in agriculture or manufactures. The more or less rapid return of capital is a matter of very little importance. If the average rate of profit be 10 per cent., an individual who turns over his capital 10 times a year, will make *one* per cent. of profit each time; whereas if he turns it only once a year, he will get the whole 10 per cent. at once. Competition reduces the rate of nett profit to about the same level in all businesses; and we may be quite certain that those who employ themselves in the departments in which capital is most rapidly returned, do not, at an average, gain more than those who employ themselves in the departments in which the returns are most distant. No one is a foreign merchant because he would rather deal with foreigners than with his own countrymen, but because he believes he will be able to employ his capital more advantageously in foreign trade than in any other business: and while he does this, he is following that employment which is most beneficial for the public as well as for himself.

IV. Restrictions on Commerce.

The statements already made, by explaining the nature and principles of commercial transactions, are sufficient to evince the inexpediency of subjecting them to any species of restraint. It is obvious, indeed, that restrictions are founded on false principles. When individuals are left to pursue their own interest in their own way, they naturally resort to those branches of industry which they reckon most advantageous for themselves; and, as we have just seen, these are the very branches in which it is most for the public interest that they should be employed. Unless, therefore, it could be shown that a government can judge better as to what sort of transactions are profitable or otherwise than private individuals, its regulations cannot be of the smallest use, and may be exceedingly injurious. But any such pretension on the part of government would be

universally scouted. It is undeniably certain that a regard to our own interest is, if not an unerring guide to direct us in such matters, at least incomparably better than any other. If the trade with a particular country or in a particular commodity be a losing one, or merely a less profitable one than others, it is quite as unnecessary to pass an act to prevent it from being carried on, as it would be to interfere to prevent individuals from selling their labour or their commodities below the market price. It appears, therefore, that all regulations affecting the freedom of commerce, or of any branch of industry, are either useless or pernicious. They are useless, when they are intended to protect the interest of individuals by preventing them from engaging in disadvantageous businesses; and pernicious, when they prevent them from engaging in those that are advantageous. The self-interest of the parties concerned is the only safe principle to go by in such matters. When the acts of the legislature are in unison with it, there is nothing to object to in them, save only that they might as well not exist; but whenever they are inconsistent with it, — that is, whenever they tend to divert capital and industry into channels into which individuals, if left to their own discretion, would not have carried them, — they are decidedly injurious.

No one denies that it is possible to confer, by means of a restrictive regulation, an advantage on a greater or less number of individuals. This, however, is no proof that it is advantageous in a public point of view; and it is by its influence in this respect that we are to decide concerning it. If the exclusion of an article imported from abroad, in order to encourage its manufacture at home, raise its price in the home market, that circumstance will, for a while at least, be advantageous to those engaged in its production. But is it not clear that all that is thus gained by them is *lost by those who purchase the article?* To suppose, indeed, that the exclusion of commodities that are comparatively cheap, to make room for those that are comparatively dear, can be a means of enriching a country, is equivalent to supposing that a people's wealth might be increased by destroying their most powerful machines, and throwing their best soils out of cultivation.

But it is contended, that though this might be the case in the instance of commodities produced at home, it is materially different when the commodity excluded came to us from abroad. It is said, that in this case the exclusion of foreign produce increases the demand for that produced at home, and consequently contributes to increase the demand for labour; so that the rise of price it occasions is, in this way, more than balanced by the other advantages which it brings along with it. But the fact is, that though the demand for one species of produce may be increased by a prohibition of importation, the demand for some other species is sure to be at the same time equally diminished. There is no jugglery in commerce. Whether it be carried on between individuals of the same country, or of different countries, it is in all cases bottomed on a fair principle of reciprocity. Those who will not buy need not expect to sell, and conversely. It is impossible to export without making a corresponding importation. We get nothing from the foreigner gratuitously: and hence, when we prevent the importation of produce from abroad, we prevent, by the very same act, the exportation of an equal amount of British produce. All that the exclusion of foreign commodities ever effects, is the substitution of one sort of demand for another. It has been said, that "when we drink beer and porter we consume the produce of English industry, whereas when we drink port or claret we consume the produce of the industry of the Portuguese and French, to the obvious advantage of the latter, and the prejudice of our countrymen!" But, how paradoxical soever the assertion may at first sight appear, there is not at bottom any real distinction between the two cases. What is it that induces foreigners to supply us with port and claret? The answer is obvious: — We either send directly to Portugal and France an *equivalent in British produce*, or we send such equivalent, in the first place to South America for bullion, and then send that bullion to the Continent to pay for the wine. And hence it is as clear as the sun at noon-day, that the Englishman who drinks only French wine, who eats only bread made of Polish wheat, and who wears only Saxon cloth, gives, by occasioning the exportation of a corresponding amount of British cotton, hardware, leather, or other produce, the same encouragement to the industry of his countrymen, that he would give were he to consume nothing not immediately produced at home. A quantity of port wine and a quantity of Birmingham goods are respectively of the same value; so that whether we directly consume the hardware, or, having exchanged it for the wine, consume the latter, must plainly, in so far as the employment of British labour is concerned, be altogether indifferent.

It is absolutely nugatory, therefore, to attempt to encourage industry at home by restraining importation from abroad. We might as well try to promote it by interdicting the exchange of shoes for hats. We only resort to foreign markets, that we may supply ourselves with articles that cannot be produced at home, or that require more labour to produce them here than is required to produce the equivalent exported to pay for them. It is, if any thing can be, an obvious contradiction and absurdity to attempt

to promote wealth or industry by prohibiting an intercourse of this sort. Such prohibition, even when least injurious, is sure to force capital and labour into less productive channels; and cannot fail to diminish the foreign demand for one species of produce, quite as much as it extends the home demand for another.

It is but seldom, however, that a restriction on importation from abroad does no more than substitute one sort of employment for another. Its usual effect is both to alter the distribution of capital and to increase the price of commodities. A country rarely imports any commodity from abroad that may be as cheaply produced at home. In the vast majority of instances, the articles bought of the foreigner could not be directly produced at home, without a much greater outlay of capital. Suppose that we import 1,000,000*l.* worth of any commodity, that its importation is prohibited, and that the same quantity of produce cannot be raised in this country for less than 1,200,000*l.* or 1,500,000*l.*: in a case of this sort, — and this is actually the case in 99 out of every 100 instances in which prohibitions are enacted, — the prohibition has the same effect on the consumers of the commodity, as if, supposing it not to have existed, they had been burdened with a peculiar tax of 200,000*l.* or 500,000*l.* a year. But, had such been the case, what the consumers lost would have gone into the coffers of the treasury, and would have afforded the means of repealing an equal amount of other taxes; whereas, under the prohibitory system, the high price, being occasioned by an increased difficulty of production, is of no advantage to any one. So that, instead of gaining any thing by such a measure, the public incurs a dead loss of 200,000*l.* or 500,000*l.* a year.

We have said that a prohibition of importation may be productive of immediate advantage to the home producers of the prohibited article. It is essential, however, to remark that this advantage cannot continue for any considerable time, and that it *must* be followed by a period of distress. Were the importation of foreign silks put an end to, that circumstance, by narrowing the supply of silk goods, and raising their prices, would, no doubt, be, in the first instance, advantageous to the manufacturers, by elevating their profits above the common level. But the consequence would be, that those already engaged in the trade would immediately set about extending their concerns; at the same time that not a few of those engaged in other employments would enter a business which presented such a favourable prospect: nor would this transference of capital to the silk manufacture be stopped, till such an increased supply of silks had been brought to market as to occasion a glut. This reasoning is not founded upon hypothesis, but upon the widest experience. When a business is carried on under the protection of a restriction on importation, it is limited by the extent of the home market, and is incapable of further extension. It is, in consequence, particularly subject to that fluctuation which is the bane of industry. If, owing to a change of fashion, or any other cause, the demand be increased, then, as no supplies can be brought from abroad, prices suddenly rise, and the manufacture is rapidly extended, until a reaction takes place, and prices sink below their usual level: and if the demand decline, then, as there is no outlet abroad for the superfluous goods, their price is ruinously depressed, and the producers are involved in inextricable difficulties. The businesses deepest entrenched behind ramparts of prohibitions and restrictions, such as the silk trade previously to 1825, the West India trade, and agriculture since 1815, have undergone the most extraordinary vicissitudes; and have been at once more hazardous and less profitable than the businesses carried on under a system of fair and free competition.

A prohibition against buying in the cheapest markets is really, also, a prohibition against selling in the dearest markets. There is no test of high or low price, except the quantity of other produce for which an article exchanges. Suppose that, by sending a certain quantity of cottons or hardware to Brazil, we might get in exchange 150 hhds. of sugar, and that the same quantity, if sent to Jamaica, would only fetch 100 hhds; is it not obvious, that by preventing the importation of the former, we force our goods to be sold for *two thirds* of the price they would otherwise have brought? To suppose that a system productive of such results can be a means of increasing wealth, is to suppose what is evidently absurd. It is certainly true that a restrictive regulation, which has been long acted upon, and under which a large amount of capital is employed, should not be rashly or capriciously repealed. Every change in the public economy of a great nation ought to be gone about cautiously and gradually. Adequate time should be given to those who carry on businesses that have been protected, either to withdraw from them altogether, or to prepare to withstand the fair competition of foreigners. But this is *all* that such persons can justly claim. To persevere in an erroneous and oppressive system, merely because its abandonment might be productive of inconvenience to individuals, would be a proceeding inconsistent with every object for which society is formed, and subversive of all improvement.

It may, perhaps, be supposed that in the event of commodities being imported from abroad, after the abolition of a protecting regulation, that were previously produced

at home, the workmen and those engaged in their production would be thrown upon the parish. Such, however, is not the case. We may, by giving freedom to commerce, change the *species* of labour in demand, but it is not possible that we should thereby change its *quantity*. If, in consequence of the abolition of restrictions, our imports were increased 4,000,000*l.* or 5,000,000*l.*, our exports, it is certain, must be augmented to the same extent: so that whatever diminution of the demand for labour might be experienced in certain departments would be balanced by a corresponding increase in others.

The pressure of taxation has often been alleged as an excuse for restrictions on commerce; but it is not more valid than the rest. Taxation may be heavy, and even oppressive; but so long as it is impartially and fairly assessed, it equally effects *all* branches of industry carried on at home, and consequently affords no ground whatever for the enactment of regulations intended to protect any particular business. And to propose to protect *all* branches of industry from foreign competition, is, in effect, to propose to put a total stop to commerce; for if nothing is to be imported, nothing can be exported. The imposition of moderate duties on foreign commodities, for the sake of revenue, is quite another thing. Several of these commodities are among the very best subjects of taxation; and when the duties on them are confined within proper bounds, — that is, when they are not so high as to exert any injurious influence over trade, or to occasion smuggling and fraud, — they cannot fairly be objected to.

It is sometimes contended, by those who assert, on general grounds, that restrictions are inexpedient, that it would be unwise, on the part of any country, to abolish them until she had obtained a security that those imposed by her neighbours would also be abolished. But the reasons that have been alleged in favour of this statement are not entitled to the least weight. It is our business to buy in the cheapest and sell in the dearest markets, without being, in any degree, influenced by the conduct of others. If they consent to repeal the restrictions they have laid on commerce, so much the better. But whatever others may do, the line of policy *we* ought to follow is clear and well defined. To refuse, for example, to buy claret, brandy, &c. from the French, because they lay restrictions on the importation of British hardware, cottons, &c., is not to retaliate upon them, but upon ourselves. The fact that we *do* import French wine and brandy shows that we do export to France, or to some other country to which France is indebted, an equivalent, in some sort, of British produce. The fear of being glutted with foreign products, unless we secure beforehand a certain outlet for our own, is the most unfounded that can be imagined. The foreigner who will take nothing of ours, can send us nothing of his. Though our ports were open to the merchants of all the countries of the world, the exports of British produce must always be equal to the imports of foreign produce; and none but those who receive our commodities, either at first or second hand, could continue to send any thing to us.

"Les étrangers ne peuvent demander ni désirer rien mieux, que la liberté de vous acheter et de vous vendre chez vous et dans vos colonies. Il faut la leur accorder, non par foiblesse et par impuissance, mais parcequ'elle est juste en elle-même, et qu'elle vous est utile. Ils ont tort sans doute de la refuser chez eux: mais cette faute d'ignorance, dont, sans le savoir, ils sont punis les premiers, n'est pas un raison qui doive vous porter à vous nuire à vous-même en suivant cet exemple, et à vous exposer aux suites et aux dépenses d'une guerre pour avoir la vaine satisfaction d'user des représailles, dont l'effet ne peut manquer de retomber sur vous, et de rendre votre commerce plus désavantageux." — (*Le Trosne de l' Ordre Social*, p. 416.)

There are some, however, who contend, that though restrictions on importation from abroad be unfavourable to opulence, and the advancement of individuals and nations in arts and civilisation, they may, notwithstanding, be vindicated on other grounds, as contributing essentially to independence and security. The short and decisive answer to this is to be found in the reciprocity of commerce. It does not enrich one individual or nation at the expense of others, but confers its favours equally on all. We are under no obligations to the Portuguese, the Russians, or any other people with whom we carry on trade. It is not *our* advantage, but *their own*, that they have in view in dealing with us. We give them the full value of all that we import; and they would suffer quite as much inconvenience as we should do were this intercourse put an end to. The independence at which those aspire who would promote it by laying restrictions on commerce, is the independence of the solitary and unsocial savage; it is not an independence productive of strength, but of weakness. "The most flourishing states, at the moment of their highest elevation, when they were closely connected with every part of the civilised world by the golden chains of successful commercial enterprise, were, according to this doctrine, in the most perfect state of absolute dependence. It was not till all these connections were dissolved, and they had sunk in the scale of nations, that their true independence commenced! Such statements carry with them their own refutation. There is a natural dependence of nations upon each other, as there is a natural dependence of

individuals upon each other. Heaven has so ordered it. Some soils, some climates, some situations, are productive exclusively of some peculiar fruits, which cannot elsewhere be profitably produced. Let nations follow this as their guide. In a rich and rising community, the opulent capitalists may be as dependent upon the poor labourers, as the poor labourers upon the opulent capitalists. So it is with nations. The mutual dependence of individuals upon each other knits and binds society together, and leads to the most rapid advancement in wealth, in intelligence, and in every kind of improvement. It is the same, but on a far larger scale, with the mutual dependence of nations. To this alone do we owe all the mighty efforts of commerce: and what lights, what generous feelings, and multiplied means of human happiness, has it not every where spread!" — (*North American Review*, No. 57.)

The principles of commercial freedom, and the injurious influence of restrictive regulations, were set in a very striking point of view by Dr. Smith, in his great work; and they have been since repeatedly explained and elucidated. Perhaps, however, the true doctrines upon this subject have nowhere been better stated than in the petition presented by the merchants of London to the House of Commons on the 8th of May, 1820. This document is one of the most gratifying proofs of the progress of liberal and enlarged views. It was subscribed by all the principal merchants of the metropolis, who did not scruple to express their conviction, that the repeal of every *protective regulation* would be for the public advantage. Such an address, confirming, as it did, the conclusions of science, by the approval of the best informed and most extensive merchants of the world, had a powerful influence over the legislature. During the last 20 years several most important reforms have been made in our commercial system; so that, besides being the first to promulgate the true theory of commerce, we are now entitled to the praise of being the first to carry it into effect. No doubt our trade is still fettered by many vexatious restraints; but these will gradually disappear, according as experience serves to disclose the benefits resulting from the changes already made, and the pernicious operation of the restrictions that are still allowed to continue.

The petition now referred to is too important to be omitted in a work of this sort. It is as follows: —

"To the Honourable the Commons, &c. The Petition of the Merchants of the City of London,

"Sheweth,

"That foreign commerce is eminently conducive to the wealth and prosperity of a country, by enabling it to import the commodities for the production of which the soil, climate, capital, and industry of other countries are best calculated, and to export, in payment, those articles for which its own situation is better adapted.

"That freedom from restraint is calculated to give the utmost extension to foreign trade, and the best direction to the capital and industry of the country.

"That the maxim of buying in the cheapest market, and selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable, as the best rule for the trade of the whole nation.

"That a policy founded on these principles would render the commerce of the world an interchange of mutual advantages, and diffuse an increase of wealth and enjoyments among the inhabitants of each state.

"That, unfortunately, a policy the very reverse of this has been and is more or less adopted and acted upon by the government of this and every other country; each trying to exclude the productions of other countries, with the specious and well-meant design of encouraging its own productions: thus inflicting on the bulk of its subjects, who are consumers, the necessity of submitting to privations in the quantity or quality of commodities; and thus rendering what ought to be the source of mutual benefit and of harmony among states, a constantly recurring occasion of jealousy and hostility.

"That the prevailing prejudices in favour of the protective or restrictive system may be traced to the erroneous supposition that every importation of foreign commodities occasions a diminution or discouragement of our own productions to the same extent: whereas it may be clearly shown, that although the particular description of production which could not stand against unrestrained foreign competition would be discouraged, yet, as no importation could be continued for any length of time without a corresponding exportation, direct or indirect, there would be an encouragement, for the purpose of that exportation, of some other production to which our situation might be better suited; thus affording at least an equal, and probably a greater, and certainly a more beneficial, employment to our own capital and labour.

"That of the numerous protective and prohibitory duties of our commercial code, it may be proved that, while all operate as a very heavy tax on the community at large, very few are of any ultimate benefit to the classes in whose favour they were originally instituted, and none to the extent of the loss occasioned by them to other classes.

"That among the other evils of the restrictive or protective system, not the least is, that the artificial protection of one branch of industry or source of production against foreign competition, is set up as a ground of claim by other branches for similar protection; so that if the reasoning upon which these restrictive or prohibitory regulations are founded were followed out consistently, it would not stop short of excluding us from all foreign commerce whatsoever. And the same train of argument, which, with corresponding prohibitions and protective duties, should exclude us from foreign trade, might be brought forward to justify the re-enactment of restrictions upon the interchange of productions (unconnected with public revenue) among the kingdoms composing the union, or among the counties of the same kingdom.

"That an investigation of the effects of the restrictive system at this time is peculiarly called for, as it may, in the opinion of your petitioners, lead to a strong presumption, that the distress, which now so generally prevails, is considerably aggravated by that system; and that some relief may be obtained by the earliest practicable removal of such of the restraints as may be shown to be most injurious to the capital and industry of the community, and to be attended with no compensating benefit to the public revenue.

"That a declaration against the anti-commercial principles of our restrictive system is of the more importance at the present juncture; inasmuch as, in several instances of recent occurrence, the merchants and manufacturers of foreign countries have assailed their respective governments with applications for further protective or prohibitory duties and regulations, urging the example and authority of this country, against which they are almost exclusively directed, as a sanction for the policy of such

measures. And certainly, if the reasoning upon which our restrictions have been defended is worth any thing, it will apply in behalf of the regulations of foreign states against us. They insist upon our superiority in capital and machinery, as we do upon their comparative exemption from taxation, and with equal foundation.

"That nothing would tend more to counteract the commercial hostility of foreign states, than the adoption of a more enlightened and more conciliatory policy on the part of this country.

"That although, as a matter of mere diplomacy, it may sometimes answer to hold the removal of particular prohibitions, or high duties, as depending upon corresponding concessions by other states in our favour, it does not follow that we should maintain our restrictions in cases where the desired concessions on their part cannot be obtained. Our restrictions would not be the less prejudicial to our own capital and industry, because other governments persisted in preserving impolitic regulations.

"That, upon the whole, the most liberal would prove to be the most politic course on such occasions.

"That independent of the direct benefit to be derived by this country, on every occasion of such concession or relaxation, a great incidental object would be gained, by the recognition of a sound principle or standard, to which all subsequent arrangements might be referred; and by the salutary influence which a promulgation of such just views, by the legislature and by the nation at large, could not fail to have on the policy of other states.

"That in thus declaring, as your petitioners do, their conviction of *the impolicy and injustice of the restrictive system*, and in desiring every practicable relaxation of it, they have in view only such parts of it as are not connected, or are only subordinately so, with the public revenue. As long as the necessity for the present amount of revenue subsists, your petitioners cannot expect so important a branch of it as the customs to be given up, nor to be materially diminished, unless some substitute less objectionable be suggested. But it is *against every restrictive regulation of trade, not essential to the revenue, against all duties merely protective from foreign competition, and against the excess of such duties as are partly for the purpose of revenue, and partly for that of protection*, that the prayer of the present petition is respectfully submitted to the wisdom of parliament.

"May it therefore," &c.

For examples of the practical working and injurious operation of restrictions, see the articles BORDEAUX, CADIZ, CAGLIARI, COLONY TRADE, CORN LAWS AND CORN TRADE, NAPLES, TIMBER, &c., in this Dictionary; the articles on the American Tariff and the French Commercial System in Nos. 96. and 99. of the *Edinburgh Review*; the *petition* and *Memoire a l'Appui*, addressed, in 1828, by the landowners and merchants of the Gironde to the Chamber of Deputies. &c. &c.

For an account of the doctrines with respect to the *balance of trade*, and the importation and exportation of the precious metals, see the articles BALANCE OF TRADE, and EXCHANGE.

For an account of the articles exported from and imported into Great Britain, see IMPORTS AND EXPORTS.

COMPANIES. In commerce or the arts, a company is a number of persons associated for the purpose of carrying on some commercial or industrious undertaking. When there are only a few individuals associated, it is most commonly called a *copartnery*; the term company being usually applied to large associations, like the East India Company, the Bank of England, &c., who conduct their operations by means of agents acting under the orders of a Board of directors.

Companies have generally been divided into two great classes — exclusive or joint stock companies, and open and regulated companies.

1. *Exclusive or Joint Stock Companies.* — By an institution of this sort is meant a company having a certain amount of capital, divided into a greater or smaller number of transferable shares, managed for the common advantage of the shareholders by a body of directors chosen by and responsible to them. After the stock of a company of this sort has been subscribed, no one can enter it without previously purchasing one or more shares belonging to some of the existing members. The partners do nothing individually; all their resolutions are taken in common, and are carried into effect by the directors and those whom they employ.

According to the common law of England, all the partners in a joint stock company are jointly and individually liable, to the whole extent of their fortunes, for the debts of the company. They may make arrangements amongst themselves, limiting their obligations with respect to each other; but unless established by an authority competent to set aside the general rule, they are all indefinitely responsible to the public. Parliament sometimes limits the responsibility of the shareholders in joint stock companies established by statute, to the amount of the shares they respectively hold. Charters of incorporation granted by the Crown were also, until lately, supposed necessarily to have this effect; but by the act 6 Geo. 4. c. 96. the Crown is empowered to grant charters of incorporation by which the members of corporate bodies may be made *individually liable, to such extent, and subject to such regulations and restrictions*, as may be deemed expedient. Hence charters are now frequently granted for the purpose merely of enabling companies to sue and be sued in courts of law, under the names of some of their office-bearers, without in any respect limiting the responsibility of the shareholders to the public. This limitation cannot be implied in a charter any more than in an act of parliament, and will be held not to exist unless it be distinctly set forth.

"In a private copartnery, no partner, without the consent of the company, can transfer his share to another person, or introduce a new member into the company. Each member, however, may, upon proper warning, withdraw from the copartnery, and demand payment from them of his share of the common stock. In a joint stock com-

pany, on the contrary, no member can demand payment of his share from the company; but each member may, without their consent, transfer his share to another person, and thereby introduce a new member. The value of a share in a joint stock is always the price which it will bring in the market; and this may be either greater or less, in any proportion, than the sum which its owner stands credited for in the stock of the company." —(*Wealth of Nations*, p. 333.)

2. *Utility of Joint Stock Companies.* — Whenever the capital required to carry on any undertaking exceeds what may be furnished by an individual, it is indispensable, in order to the prosecution of the undertaking, that an association should be formed. In all those cases, too, in which the chances of success are doubtful, or where a lengthened period must necessarily elapse before an undertaking can be completed, an individual, though ready enough to contribute a small sum in connection with others, would, generally speaking, be very little inclined, even if he had the means, to encounter the whole responsibility of such enterprises. Hence the necessity and advantage of companies or associations. It is to them that we are indebted for those canals and railways by which every part of the country is intersected, for the formation of so many noble docks and warehouses, for the institution of our principal banks and insurance offices, and for many other establishments of great public utility carried on by the combined capital and energies of large bodies and individuals.

3 *Branches of Industry, for the Prosecution of which Joint Stock Companies may be advantageously established.* — In order to ensure a rational prospect of success to a company, the undertaking should admit of being carried on according to a regular systematic plan. The reason of this is sufficiently obvious. The business of a great association must be conducted by factors or agents; and unless it be of such a nature as to admit of their duties being clearly pointed out and defined, the association would cease to have any effectual control over them, and would be, in a great measure, at their mercy. An individual who manages his own affairs reaps all the advantage derivable from superior skill, industry, and economy; but the agents, and even directors of joint stock companies labour, in most cases, entirely or principally for the advantage of others; and cannot therefore, however conscientious, have the same powerful motives to act with energy prudence, and economy. "Like," says Dr. Smith, "the stewards of a rich man, they are apt to consider attention to small matters as not for their masters' honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail more or less in the management of the affairs of such a company." It also not unfrequently happens that they suffer from the bad faith, as well as the carelessness and extravagance of their servants; the latter having in many instances endeavoured to advance their own interests at the expense of their employers. Hence the different success of companies whose business may be conducted according to a nearly uniform system, — such as dock, canal, and insurance companies, railroad companies, &c., — and those whose business does not admit of being reduced to any regular plan, and where much must always be left to the sagacity and enterprise of those employed. All purely commercial companies, trading upon a joint stock, belong to the latter class. Not one of them has ever been able to withstand the competition of private adventurers; they cannot subject the agents they employ to buy and sell commodities in distant countries to any effectual responsibility; and from this circumstance, and the abuses that usually insinuate themselves into every department of their management, no such company has ever succeeded, unless when it has obtained some exclusive privilege, or been protected from competition.

The circumstances now mentioned would seem to oppose the most formidable obstacles to the success of the companies established in this country for the prosecution of mining in America. This business does not admit of being reduced to a regular routine system. Much must always depend on the skill and probity of the agents employed at the mines; and it must plainly be very difficult, if not quite impossible, for directors resident in London to exercise any effectual *surveillance* over the proceedings of those who are at so great a distance. Hence it is not at all likely that these establishments will ever be so productive to the undertakers, as if they had been managed by the parties themselves.

The Abbé Morellet has given, in a tract published in 1769 (*Examen de la Réponse de M. N.*, pp. 35—38.), a list of 55 joint stock companies, for the prosecution of various branches of foreign trade, established in different parts of Europe since 1600, every one of which had failed, though most of them had exclusive privileges. Most of those that have been established since the publication of the Abbé Morellet's tract have had a similar fate.

But notwithstanding both principle and experience concur in showing how very ill fitted a large association is for the purpose of prosecuting commercial undertakings, there are cases in which they cannot be prosecuted except by associations of this sort, and when it may be expedient to grant them certain peculiar privileges. When, owing either to the disinclination or inability of government to afford protection to those engaged in any

particular department of trade, they are obliged to provide for their own defence and security, it is obviously necessary that they should have the power to exclude such individuals as may refuse to submit to the measures or to bear their due share of the expense, required for the common protection of all. The Russian Company, the East India Company, the Levant or Turkey Company, and most of the other great trading companies which have existed in this country, seem principally to have grown out of a real or supposed necessity of this sort. It was not believed that any safe or advantageous intercourse could be carried on with barbarous countries without the aid of ships of war, factories, interpreters, &c. And as government was not always able or willing to afford this assistance, the traders were formed into companies or associations, and vested with such peculiar privileges as appeared to be necessary for enabling them to prosecute the trade without any extrinsic support. "When," says Dr. Smith, "a company of merchants undertake, at their own risk and expense, to establish a new trade with some remote and barbarous nation, it may not be unreasonable to incorporate them into a joint stock company, and to grant them, in case of success, a monopoly of the trade for a certain number of years. It is the easiest and most natural way in which the state can recompense them for hazarding a dangerous and expensive experiment, of which the public is afterwards to reap the benefit. A temporary monopoly of this kind may be vindicated upon the same principles upon which a like monopoly of a new machine is granted to its inventor, and that of a new book to its author. But upon the expiration of the term, the monopoly ought certainly to determine; the forts and garrisons, if it was found necessary to establish any, to be taken into the hands of government, their value to be paid to the company, and the trade to be laid open to all the subjects of the state." — (*Wealth of Nations*, p. 339.)

It may be doubted, however, whether it be really necessary, even in such a case as that now mentioned, to establish *a joint stock company* with peculiar privileges, and whether the same thing might not be more advantageously effected by the establishment of an open or regulated company.

4. *Open or Regulated Companies.* — The affairs of such companies or associations are managed by directors appointed by the members. They do not, however, possess a common or joint stock. Each individual pays a fine upon entering into the company, and most commonly an annual contribution: a duty applicable to the business of the company is also sometimes charged upon the goods imported and exported from and to the countries with which they trade. The sums so collected are applied by the directors to fit out ambassadors, consuls, and such public functionaries as may be required to facilitate commercial dealings, or to build factories, maintain cruisers, &c. The members of such companies trade upon their own stock, and at their own risk. So that when the fine, or the sum payable on admission into a regulated company, is moderate, it is impossible for its members to form any combination that would have the effect of raising their profits above the common level; and there is the same keen and close competition amongst them that there is amongst other classes of traders. A regulated company is, in fact, a device for making those engaged in a particular branch of trade bear the public or political expenses incident to it, at the same time that it leaves them to conduct their own business with their own capital, and in their own way.

Should, therefore, government at any time refuse, or be unable to afford, that protection to those engaged in any branch of trade which is necessary to enable them to carry it on, their formation into a regulated company would seem to be the most judicious measure that could be adopted; inasmuch as it would obtain for them that protection which is indispensable, without encroaching on the freedom of individual enterprise.

The African, the Levant, and some other branches of trade, were for a long time conducted by open or regulated companies. These, however, have been recently abolished: the African Company, by the act 1 & 2 Geo. 4. c. 28.; and the Levant Company, by the act 6 Geo. 4. c. 33. The Russia Company still exists. — (See RUSSIA COMPANY.)

In so far as relates to protection, it may perhaps be thought, for the reasons given by Dr. Smith, that a joint stock company is better calculated to afford it than a regulated company. The directors of the latter having, Dr. Smith alleges, no particular interest in the prosperity of the general trade of the company, for behoof of which, ships of war, factories, or forts have to be maintained, are apt to neglect them, and to apply their whole energies to the care of their own private concerns. But the interest of the directors of a joint stock company are, he contends, in a great measure identified with those of the association. They have no private capital employed in the trade; their profits must depend upon the prudent and profitable management of the common stock; and it may, therefore, it is argued, be fairly presumed that they will be more disposed to attend carefully to all the means by which the prosperity of the association may be best secured. On the other hand, however, it is seldom that the directors of joint stock companies stop at the proper point; having almost invariably attempted to extend their commercial dealings by force, and to become not only merchants but sovereigns. Nor is this any thing but

what might have been expected, seeing that the consideration and extensive patronage accruing from such measures to the directors is generally of far more importance to them than a moderate increase of the dividends on their stock. Whenever they have been able, they have seldom scrupled to employ arms to advance their projects; and instead of contenting themselves with shops and factories, have constructed fortifications, embodied armies, and engaged in war. But such has not been the case with regulated companies. The businesses under their control have uniformly been conducted in a comparatively frugal and parsimonious manner; their establishments have been, for the most part, confined to factories; and they have rarely, if ever, allowed themselves to be seduced by schemes of conquest and dominion.

And hence, considering them as *commercial machines*, it does not really seem that there can be any doubt as to the superiority of a regulated over a joint stock company. The latter has the defect, for which nothing almost can compensate, of *entirely excluding individual enterprise and competition*. When such a company enjoys any peculiar privilege, it naturally, in pursuing its own interest, endeavours to profit by it, how injurious soever it may be to the public. If it have a monopoly of the trade with any particular country, or of any particular commodity, it rarely fails, by understocking the home and foreign markets, to sell the goods which it imports and exports at an artificially enhanced price. It is not its object to employ a comparatively large capital, but to make a large profit on a comparatively small capital. The conduct of the Dutch East India Company, in burning spices, that their price might not be lowered by larger importations, is an example of the mode in which such associations uniformly and, indeed, almost necessarily act. All individuals are desirous of obtaining the highest possible price for what they have to sell: and if they are protected by a monopoly, or an exclusive privilege, from the risk of being undersold by others, they never hesitate about raising the price of their products to the highest elevation that the competition of the buyers will allow them; and thus frequently realise the most exorbitant profits.

And yet, notwithstanding these advantages, such is the negligence, profusion, and peculation, inseparable from the management of great commercial companies, that even those that have had the monopoly of the most advantageous branches of commerce have rarely been able to keep out of debt. It will be shown in the article East India Company, that that association has lost by its trade; and that, had it not been for the aid derived from the revenues of India, it must long since have ceased to exist. To buy in one market; to sell with profit in another; to watch over the perpetually occurring variations in the prices, and in the supply and demand of commodities; to suit with dexterity and judgment the quantity and quality of goods to the wants of each market; and to conduct each operation in the best and cheapest manner; requires a degree of unremitting vigilance and attention, which it would be visionary to expect from the directors or servants of a great joint stock association. Hence it has happened, over and over again, that branches of commerce which proved ruinous to companies, have become exceedingly profitable when carried on by individuals.

5. Constitution of Companies. — When application is made to parliament for an act to incorporate a number of individuals into a joint stock company for the prosecution of any useful undertaking, care should be taken not to concede to them any privileges that may be rendered injurious to the public. If a company be formed for the construction of a dock, a road, or a canal, it may be necessary, in order to stimulate individuals to engage in the undertaking, to give them some peculiar privileges for a certain number of years. But if other persons were to be permanently hindered from constructing new docks, or opening new lines of communication, a lasting injury might be done to the public. It may be highly expedient to incorporate a company for the purpose of bringing water into a city; but supposing there were no springs in the vicinity, other than those to which this company has acquired a right, they might, unless restrained by the act incorporating them, raise the price of water to an exorbitant height; and make large profits for themselves at the expense and to the injury of the public. In all cases of this sort; and in the case, indeed, of all joint stock companies established for the formation of canals, railroads, &c.; it would be sound policy to limit the rates charged for their services, or on account of the water, ships, goods, &c. conveyed by their means, and also to limit the dividends, or to fix a *maximum* beyond which they should not be augmented: enacting, that if the rates charged by the company produce more than sufficient to pay the maximum rate of dividend, and to defray the wear and tear of the aqueduct, canal, &c., they shall be allowed to reduce them till they only yield this much; and, in the event of their declining to do so, that the whole surplus above paying the dividend shall be applied to purchase up the stock of the association, so that ultimately the charges on account of dividends may be entirely abolished. Had this principle been acted upon when canals first began to be formed in England, the carriage of goods conveyed by some of the most important lines of communication would now have cost almost nothing; and this desirable result might have been accomplished in the way now suggested, with-

out, we believe, diminishing in any degree the number of those undertakings. Probably, however, the better way, in such cases, would be for the legislature to reserve to itself, where it institutes such companies, power periodically to revise these rates of charges. There are few who, at the time they engage in such enterprises, suppose that they will yield more than 10 or 12 per cent.; and vast numbers will always be disposed to engage in them, if there be any reasonable prospect of their yielding this much. Now, when such is the case, is it not the duty of government to provide, in the event of the undertaking becoming in an *unexpected* and *unusual degree profitable*, that the public should derive some advantage from it? This is not a case in which competition can reduce profits to the common level. The best, perhaps the only practicable, line for a canal or railroad between any two places will be appropriated by those who are first in the field; who thus, in fact, obtain a natural monopoly of which they cannot be deprived: and hence the advantage of limiting the charges and dividends: without discouraging enterprise, it affords a security that private individuals shall not reap an unusual and unlooked-for profit at the expense of the public.

In all those cases in which companies are formed for the prosecution of undertakings that may be carried on, with equal advantage to the public, by individuals; or where there are no very considerable difficulties to overcome, or risks to encounter; they ought to enjoy no privilege whatever, but should be regarded, in every point of view, as if they were mere individuals.

For accounts of the principal joint stock and regulated companies established in this country, see the articles BANK OF ENGLAND, DOCKS, EAST INDIA COMPANY, INSURANCE, RUSSIA COMPANY, &c. &c.

6. *Companies en Commandite.* — In France there is a sort of companies denominated *sociétés en commandite*. A society of this description consists of one or more partners liable, without limitation, for the debts of the company; and one or more partners, or *commanditaires*, liable only to the extent of the funds they have subscribed. A *commanditaire* must not, however, take any part in the business of the company; if he do this, he loses his inviolability, and makes himself responsible for the debts of the association. The names of the partners in such societies must be published, and the amount of the sums contributed by the *commanditaires*.

It has been proposed to introduce partnerships of this sort into this country; but it seems very doubtful whether any thing would be gained by such a measure. Partnerships *en commandite* may be very easily abused, or rendered a means of defrauding the public. It is quite visionary to imagine that the *commanditaires* can be prevented from indirectly influencing the other partners; and supposing a collusion to exist amongst them, it might be possible for them to divide large sums as profit, when, perhaps, they had really sustained a loss; and to have the books of the association so contrived, that it might be very difficult to detect the fraud. This, it is alleged, is by no means a rare occurrence in France.

7. *Civic Companies, or Corporations.* — Exclusive of the companies previously mentioned, a number of ancient companies or corporations exist in this and most other European countries, the members of which enjoy certain political as well as commercial privileges. When the feudal system began to be subverted by the establishment of good order and regular government in the towns, the inhabitants were divided into certain trades or corporations, by which the magistrates and other functionaries were chosen. The members of these trades, or corporations, partly to enhance the value of their privileges, and partly to provide a resource, in case of adversity, for themselves, acquired or usurped the power of enacting by-laws regulating the admission of new members, and at the same time set about providing a fund for the support of such as accident or misfortune might reduce to a state of indigence. Hence the origin of apprenticeships, the refusal to allow any one not a member of a corporation to carry on any business within the precincts of any town corporate, and the various regulations that had to be submitted to, and the fees that had to be paid by the claimants for inrolment in corporations. For a lengthened period these privileges and regulations were very oppressive. Within the last century, however, their influence has been progressively diminishing. In France, where the abuses inseparable from the system had attained to a very great height, it was entirely swept off by the Revolution: and though corporations still exist in this country, they have been stripped of several of their peculiar franchises; and should now, for the most part, be regarded more, perhaps, in the light of charitable than of political institutions. It would be well, however, were they reduced entirely to the former character; and were the few political and commercial privileges, which they still enjoy, communicated to the rest of the citizens. At their first institution, and for some time after, corporations, considered as political bodies, were probably useful: but such is no longer the case; and in so far as they now possess any special immunities, they tend to obstruct that free competition that is so advantageous.

The following extract from a *Report on the Commerce and Manufactures of the United*

States, drawn up by Albert Gallatin, Esq., then secretary to the Treasury, and laid before Congress in 1816, sets the superior advantages resulting from the unrestricted freedom of industry in a very striking point of view. "No cause," says he, "has, perhaps, more promoted in every respect the general improvement of the United States, than the absence of those systems of internal restriction and monopoly which continue to disfigure the state of society in other countries. No laws exist here, directly or indirectly, confining men to a particular occupation or place, or excluding any citizen from any branch he may, at any time, think proper to pursue. Industry is, in every respect, free and unfettered; every species of trade, commerce, and profession, and manufacture, being equally open to all, *without requiring any regular apprenticeship, admission, or licence*. Hence the improvement of America has not been confined to the improvement of her agriculture, and to the rapid formation and settlement of new states in the wilderness; but her citizens have extended their commerce to every part of the globe, and carry on with complete success even those branches for which a monopoly had heretofore been considered essentially necessary."

There is in *Rees's Cyclopædia*, article *Company*, a list of the different Civic Companies belonging to the City of London, in which the periods of their incorporation, and various other important particulars with respect to several of them, are specified.

COMPASS (Ger. *Ein Kompass*; Du. *Zeekompass*; Da. *Söekompass*; Sp. *Sjöcompass*; Fr. *Boussole, Compas de mer*; It. *Bussola*; Sp. *Aguja de marear*; Port. *Compasso de marear*; Rus. *Kompass korabelnüi*), or mariner's compass, an instrument composed of a needle and card, by which the ship's course is directed. The needle, with little variation, always points towards the north; and hence the mode of steering by the compass.

The common opinion is that the compass was invented by Flavio Gioia, a citizen of the once famous republic of Amalphi, very near the beginning of the fourteenth century. Dr. Robertson has adopted this opinion, and regrets that contemporary historians furnish no details as to the life of a man to whose genius society is so deeply indebted.—(*Hist. of America*, vol. i. p. 47. 8vo ed.) But though Gioia may have made improvements on the compass, it has been shown that he has no claim to be considered as its discoverer. Passages have been produced from writers who flourished more than a century before Gioia, in which the polarity of the needle, when touched by the magnet, is distinctly pointed out. Not only, however, had this singular property been discovered, but also its application to the purposes of navigation, long previously to the fourteenth century. Old French writers have been quoted (*Macpherson's Annals of Commerce*, anno 1200; *Rees's Cyclopædia*), that seem fully to establish this fact. But whatever doubts may exist with respect to them, cannot affect the passages which the learned Spanish antiquary, Don Antonio de Capmany (*Questiones Criticas*, p. 73—132.) has given from a work of the famous Raymond Lully (*De Contemplatione*) published in 1272. In one place Lully says, "as the needle, when touched by the magnet, naturally turns to the north" (*sicut acus per naturam vertitur ad septentrionem dum sit tacta à magnete*). This is conclusive as to the author's acquaintance with the polarity of the needle; and the following passage from the same work—"as the nautical needle directs mariners in their navigation" (*sicut acus nautica dirigit marinarios in sua navigatione, &c.*) is no less conclusive as to its being used by sailors in regulating their course. There are no means of ascertaining the mode in which the needle Raymond Lully had in view was made use of. It has been sufficiently established—(see the authorities already referred to, and *Azuni, Dissertation sur l' Origine de la Boussole,*)—that it was usual to float the needle, by means of a straw, on the surface of a basin of water; and Capmany contends that we are indebted to Gioia for the card and the method now followed of suspending the needle; improvements which have given to the compass all its convenience, and a very large portion of its utility. But this part of his *Dissertation*, though equally learned and ingenious, is by no means so satisfactory as the other. It is difficult to conceive how mariners at sea could have availed themselves of a floating needle; but, however this may be, it seems most probable that Gioia had considerably improved the construction of the compass; and that, the Amalphitans having been the first to introduce it to general use, he was, with excusable partiality, represented by them, and subsequently regarded by others, as its inventor.

The reader will not consider these details out of place in a work on commerce, which the compass has done so much to extend. "Its discovery," to borrow the language of Mr. Macpherson, "has given birth to a new æra in the history of commerce and navigation. The former it has extended to every shore of the globe, and increased and multiplied its operations and beneficial effects in a degree which was not conceivable by those who lived in the earlier ages. The latter it has rendered expeditious, and comparatively safe, by enabling the navigator to launch out upon the ocean free from the danger of rocks and shoals. By the use of this noble instrument, the whole world has become one vast commercial commonwealth, the most distant inhabitants of the earth

are brought together for their mutual advantage, ancient prejudices are obliterated, and mankind are civilised and enlightened." — (Vol. i. p. 366.)

COMPOSITION, in commerce, commonly implies the dividend or sum paid by an insolvent debtor to his creditors, and accepted by them in payment for their debts.

CONEY WOOL (Ger. *Kaninchenwolle*; Du. *Konynhair*; Fr. *Poil de lapin*; It. *Pelo di Caniglio*; Sp. *Conejuna*), the fur of rabbits. This article is extensively used in the hat manufacture; and besides the large supplies raised at home, a great deal is imported. The imports usually range from about 300,000 to about 500,000 skins a year.

CONSTANTINOPLE, a famous city of South-eastern Europe, formerly the metropolis of the Eastern, as it still is of the Turkish Empire, on a triangular point or land, on the European side of the Sea of Marmara (Propontis), at the point where it unites with the Bosphorus, or channel leading to the Black Sea, lat. 41° 0′ 12″ N., lon. 28° 59′ 2″ E. Population variously estimated at from 300,000 to 600,000, but believed, by the best authorities, to be about 450,000. The situation of this renowned city is, in a commercial point of view, one of the finest imaginable. Standing on the narrow straits uniting the Mediterranean and Euxine Seas, she at once commands, and is the *entrepôt* for, the commerce between them. The harbour is most excellent. It consists of an extensive inlet, or arm of the sea, stretching along the north-east side of the city, which it divides from the suburbs of Galata and Pera. It has sufficient depth of water to float the largest ships, and can accommodate more than 1,000 sail. The strong current that sets through the Bosphorus into the sea of Marmara strikes against Seraglio Point — (see Plan); a part of the water, being in consequence forced into the harbour, runs along its south-western side in the direction marked by the arrows — (see Plan), till, arriving at its extremity, it escapes by the opposite side. In the middle the water is still. On leaving the port, it is necessary to keep well over to the northern side; for otherwise the ship might be taken by the current, and driven on Seraglio Point. It may be worth while, however, to remark, that, notwithstanding this inconvenience, the current has been of signal service to the city, by scouring the harbour, and carrying away the filth and ballast by which it must otherwise have been long since choked up. The distance across from Seraglio Point to the opposite suburb of Scutari, on the Asiatic coast, is rather more than an English mile. Within less than ¼ of a mile of the latter is a rocky islet, upon which is a tower and light-house, known by the name of the Tower of Leander. Foreigners reside in Galata, Pera, and the suburbs on the eastern side of the harbour; and it is there, consequently, that the principal trade of the place is carried on. The quays are good, and ships lie close alongside.

The Bosphorus, or channel of Constantinople, runs in a N. E. by N. direction about 15 miles, varying in breadth from 1¼ to ½ a mile. It is swept by a rapid current, which it requires a brisk gale to stem, and has throughout a great depth of water. The Hellespont, or strait of the Dardanelles, leading from the Archipelago to the Sea of Marmara, is about 13 leagues in length. Its direction is nearly N. E. Where narrowest, it is little more than a mile across. It also is swept by a strong current, and has deep water throughout.

The subjoined plan of part of Constantinople and its port is copied, without reduction, from the beautiul plan of the city and Bosphorus, drawn and engraved by M. Merzoff Robert of Munich, and published by Mr. Wilde, of this city.

Nothing can be more imposing than the appearance of the city when seen from the sea, but on landing the illusion vanishes. The streets are narrow, dark, ill-paved, and irregular. Owing to the want of any effective system of police, and of the most ordinary attention to cleanliness, they are extremely filthy; and are infested with herds of dogs, and also with rats, which perform the functions of scavengers. The houses are mostly built of wood, and fires are very frequent. Most of these happen designedly; the burning of a few hundred houses being deemed the readiest and most effectual means of making the government aware of the public dissatisfaction, and of procuring a redress of grievances!

Money. — Accounts are kept in piastres of 40 paras, or 120 aspers. The Turkish coin has been so much degraded, that the piastre, which a few years ago was worth 2*s.* sterling, is now worth little more than 4*d.* A bag of silver (*kefer*) = 500 piastres, and a bag of gold (*kise*) = 30,000 piastres.

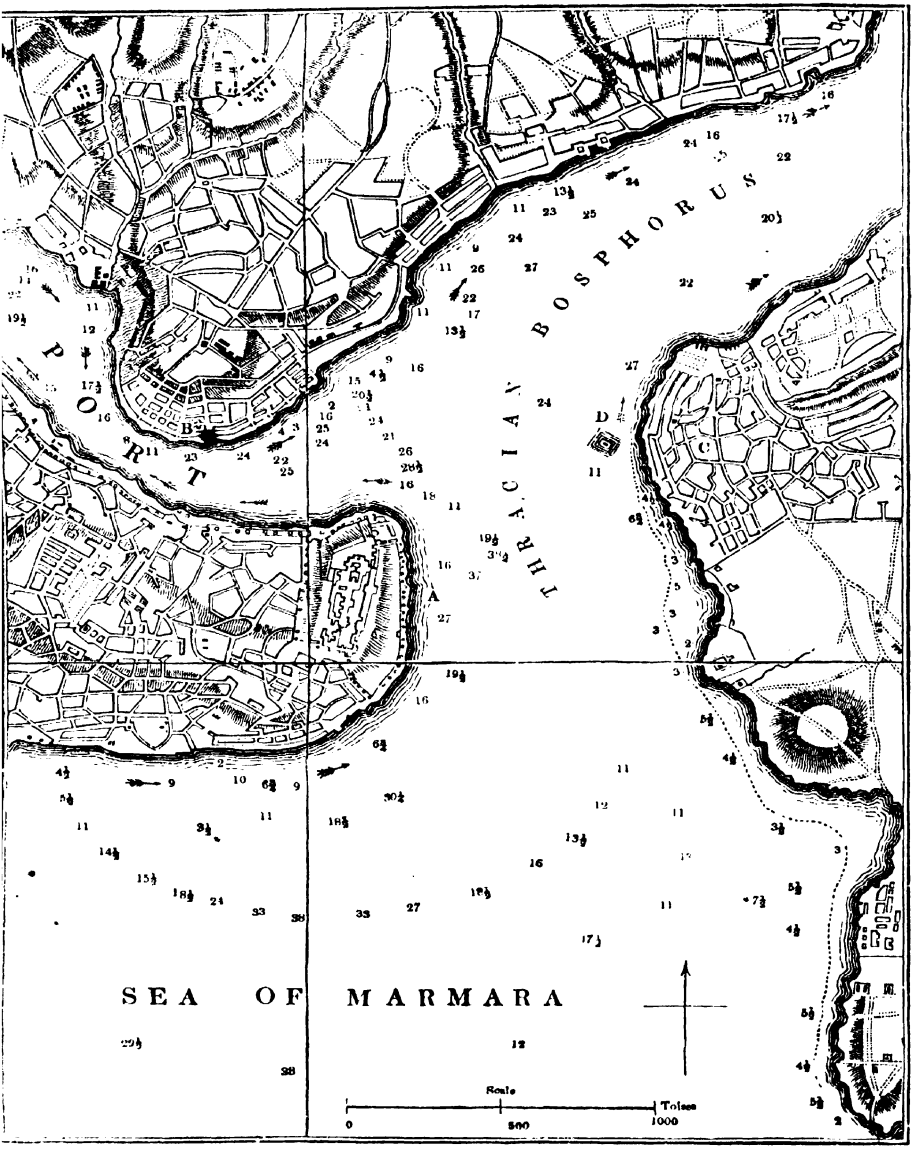
Weights and Measures. — The commercial weights are — 176 drams = 1 rottolo; 2·272 rottoli = 1 oke; 6 okes = 1 batman; 7½ batmans = 1 quintal or cantaro = 124·457 (124½ very nearly) lbs. avoirdupois = 56·437 kilogrammes = 116·527 lbs. of Hamburg. The quintal of cotton is 45 okes = 127·2 lbs. avoirdupois.

The pik, or pike, is of two sorts, the greater and the less. The greater, called *halebi* or *arschim*, used in the measurement of silks and woollens, is very near 28 inches (27·9). The lesser, called *endese*, used in the measuring of cottons, carpets, &c. = 27 inches. Hence 100 long piks = 77·498 English yards, and 100 short piks = 75·154 do. But in ordinary commercial affairs, the pik is estimated at ¾ of an English yard.

Corn is measured by the *kisloz* or *killow* = 0·941 of a Winchester bushel; 8½ kisloz = 1 quarter. The *fortin* = 4 kisloz.

Oil and other liquids are sold by the *alma* or *meter* = 1 gallon 3 pints English wine measure. The alma of oil should weigh 8 okes. — (*Nelkenbrecher* and *Dr. Kelly.*)

The *Port Charges* on account of English vessels in the harbours of the Ottoman empire are fixed by treaty at 300 aspers, neither more nor less.



References to Plan. — A, Seraglio Point; B, Galata; C, Scutari; D, Tower and light-house of Leander. The arrows show the direction of the currents. The soundings are in fathoms.

Trade, &c. — Owing to the vicious institutions of the Turks, and the disorganised state of the empire, the trade of Constantinople is very far from being so extensive as might be supposed from its situation and population. The imports consist of corn, iron, timber, tallow, and furs, principally from the Black Sea; and of cotton stuffs and yarn, coal, tin, tin plates, woollens, silks, cutlery, watches and jewellery, paper, glass, furniture, indigo, cochineal, &c. from England and other European countries. Corn and coffee are imported from Alexandria; but considerable quantities of Brazil and West India coffee are also imported, particularly in British and American bottoms. Sugar is partly imported from the East, but principally from the West Indies. The exports consist of silk, which is by far the most important article, carpets, hides, wool, Angola goats' hair, yellow berries, boxwood, opium, galls, bullion and diamonds, and a few

other articles. But the exports are always very much less than the imports; and ships carrying goods to Constantinople, either return in ballast, or get return cargoes at Smyrna, Odessa, Salonica, &c., on which places they frequently procure bills at Constantinople. Trade is chiefly in the hands of English, French, and other European merchants (denominated Franks), and of Armenians and Greeks. Bargains are negotiated on their account by Jew brokers, some of whom are rich.

If we formed an estimate of the trade of Constantinople from the number of vessels by which its port is visited, it would appear to be much greater than it really is. This arises from the circumstance of almost all the vessels passing from the Mediterranean to the Black Sea, and from the latter to the former, calling here, where they frequently discharge and take on board part of their cargoes. In 1842 the port was visited by 250 ships from the U. Kingdom, respecting which the consul has supplied the following details.

Vessels.		*Tons.*		
69	of the burden of	12,394	arrived from	Liverpool.
27	—	5,880	—	London.
95	—	21,450	—	England with coals.
1	—	166	—	Bristol.
1	—	161	—	Newport.
11	—	2,047	—	Cardiff.
11	—	2,756	—	Malta.
35	—	7,251	—	Foreign.
250		55,105		

The articles imported in the Liverpool vessels were principally British cotton manufactured goods, some woollen goods, colonial produce, and a little iron and tin. In the London vessels East and West India produce, and various descriptions of articles of British manufacture.

Of the 69 vessels from Liverpool —
1 touched at Syra, and delivered a part of her cargo.
1 — Smyrna, — —
1 — Athens, — —
2 — Syra, — nearly all their cargoes.

Of the remaining 64 vessels —
8 took on a part of their cargoes to Odessa.
3 — Trebizond.
1 — Galacz.
3 took on the whole of their cargoes to Galacz.

Of the 27 vessels from London —
3 touched at Syra, and delivered a part of their cargoes.
1 — Pirœus, and delivered a part of her cargo.

Of the remaining 23 vessels —
18 took on a part of their cargoes to Odessa.
1 took on a part of her cargo to Trebizond.

The quantity of coals brought to this port amounted to 32,360 tons, of which 3,300 were taken on to Trebizond and Sinope, and 1,460 tons to Galacz.

The quantity of iron imported amounted to 3,550 tons.

The cargoes from Liverpool may be estimated at an average value of about 18,000*l.* each. Those from London may be estimated at about 10,000*l.* According to this calculation the value of the importation by the preceding vessels would be as follows: —

	£	£	£	£
69 vessels from Liverpool @ 18,000			1,242,000	
Deduct ¼ of 3 cargoes landed at Syra, Smyrna, and Athens	-	13,500		
Deduct ½ of 2 cargoes landed at Syra		31,500		
Deduct ⅛ of 8 cargoes taken on to Odessa, and 3 to Trebizond	-	24,750		
Deduct ½ of 1 cargo taken on to Galacz	-	9,000		
Deduct 3 whole cargoes taken on to Galacz	-	54,000		
			132,750	
				1,109,250
27 vessels from London @ 10,000*l.*	-	-	270,000	
Deduct ⅓ of 2 cargoes and ⅛ of 1 cargo landed at Syra	-	13,333		
Deduct ½ of 1 cargo landed at the Pirœus	-	5,000		
Deduct ¼ of 19 cargoes taken on to Odessa and Taganrog	-	47,500		
			65,833	
				204,167
1 vessel from Bristol	-	-	10,000	
Deduct ½ of the cargo landed at Smyrna	-	-	5,000	
				5,000

	£	£
32,360 tons of coals @ 10*s.* ℔ ton	-	16,180
Deduct 3,300 tons taken to Trebizond and Sinope - -	1,650	
Deduct 1,460 tons taken to Galacz	730	
		2,380
		13,800
3,550 tons of iron @ 7*l.* ℔ ton	- -	24,850
Total	-	£1,357,067

35 vessels arrived from foreign ports, some with cargoes, others with parts of cargoes, and some in ballast; the value of the merchandise brought by them is not noticed, not being the produce of Great Britain or the colonies, and only affording employment to British shipping.

19 vessels were loaded in this port during the year for Great Britain; the articles of Turkish produce known to have been exported in them were as follows: — (It is possible that more may have been exported than what has been declared, but it is not believed to have been of any great amount.)

Silk	- - -	bales and cases	2,877
Opium	- - -	cases	65
Brass	- - -	—	3
Tobacco	- - -	—	10
Pipe bowls	- - -	—	4
Angola goats' wool	- -	bales	5,469
Sheep's wool	- - -	—	614
Mohair yarn	- - -	—	173
Refuse silk	- - -	—	12
Hare skins	- - -	—	51
Ox hides	- - -	—	10
Yellow berries	- - -	sacks	568
Galls	- - -	—	554
Linseed	- - -	—	90
Madder roots	- - -	—	18
Boxwood (about)	- - -	tons	750
Valonea	- - -	casks	17
Mastic	- - -	—	12
Salep	- - -	—	66
Copper	- - -	pieces	19
Wheat	- - -	kilos	48,235

The following goods were also taken to Smyrna by British vessels: —

Boxwood (about)	-	tons	200
Wool	- - -	bales	141
Ditto	- - -	kintals	200
Sheep skins	- -	bales	75
Lamb ditto	- -	—	37
Pipe sticks	- -	case	1
Hazel nuts (from Trebizond)		kintals	1,709

1 vessel loaded valonea at Pandermus, and another bones at Rodosto, both for England.

5 vessels loaded at Galacz and Ibraila the following articles for England: —

Wheat (Galacz measure)	-	kilos	734
Linseed	- - -	sacks	346
Yellow berries	- -	—	104
Tallow	- - -	hhds. and casks	1,335
Salt beef	- - -	casks	52
Wool	- - -	bales	156
Silk	- - -	—	7

5 vessels loaded full cargoes of bones at Galacz, and 2 at Sulina, for England.

Steam Navigation. — Constantinople is now visited by steamers from Trieste, Odessa, the Danube, Smyrna, and other places; and its commerce, as well as that of the empire, has, in consequence, been materially promoted. These steamers principally belong to the *Lloyd-Austriaco* at Trieste, and the Danube Steam Company; on which they are said to reflect the greatest credit.

Commercial Policy of the Turks. — It is singular that as respects commerce, the policy of the Turkish government, whether originating in design or carelessness, is entitled to the highest praise. "No restrictions," says Mr. Thornton, "are laid on commerce, except in the instance of a general prohibition of exporting the articles necessary for the support of human life to foreign countries, especially from the capital, where alone it is rigorously enforced; and this impolitic restraint will no doubt be removed when the Turkish government shall become sensible, that what is intended as the means of securing abundance, is, in fact, the sole cause of that scarcity which is sometimes experienced. With this one exception, commerce is perfectly free and unfettered. Every article of foreign or domestic growth or manufacture is conveyed into every port, and over every province, without any interference on the part of the magistrates, after payment of the duties. On this subject I speak from actual experience, and may appeal

to every foreign or native merchant in Turkey for its general truth." — (*Present State of Turkey*, vol. i. p. 82.)

The duties, too, are extremely moderate, being only *three* per cent. on imports, and as much on exports; so that, in almost all that relates to her commercial regulations, Turkey is entitled to read a lesson to the most civilised European powers; and this she has done in a very able manner, in an official paper published in the *Moniteur Ottoman*, in September, 1832. We extract a few paragraphs from this interesting document.

"It is recognised throughout Europe that it would be useful to the great majority to substitute, for the system of prohibitions, that of liberty, which theoretical men advocate; the difficulty is, to find means to separate the future from the past without a violent rupture. Hence the difficulties of government in satisfying all the exigencies of agriculture, industry, and commerce, driven in a circle where every measure in favour of one acts immediately in an inverse sense on the other. The endeavour is vain to establish, between so many crossing interests, a factitious equilibrium which absolute liberty of exchange alone can give.

"Thus, one of the most important questions which occupies the meditation of statesmen in Europe, is, to discover how the palings which pen commerce up in narrow spaces may be thrown down without shocks that might endanger public order.

"Good sense, tolerance, and hospitality have long ago done for the Ottoman empire, what the other states of Europe are endeavouring to effect by more or less happy political combinations. Since the throne of the sultans has been elevated at Constantinople, commercial prohibitions have been unknown; they opened all the ports of their empire to the commerce, to the manufactures, to the territorial produce of the Occident, or, to say better, of the whole world. Liberty of commerce has reigned here without limits, as large, as extended as it was possible to be.

"Never has the divan dreamed, under any pretext of national interest, or even of reciprocity, of restricting that faculty which has been exercised, and is to this day, in the most unlimited sense, by all the nations who wish to furnish a portion of the consumption of this vast empire, and to share in the produce of its territory.

"Here every object of exchange is admitted, and circulates without meeting any obstacle other than the payment of an infinitely small portion of the value to the Custom-house. The chimera of a balance of trade never entered into heads sensible enough not to dream of calculating whether there was most profit in buying or selling. Thus the markets of Turkey, supplied from all countries, refusing no objects which mercantile spirit puts in circulation, and imposing no charge on the vessels that transport them, are seldom or never the scenes of those disordered movements occasioned by the sudden deficiency of such or such merchandise, which, exorbitantly raising prices, are the scourges of the lower orders, by unsettling their habits, and by inflicting privations. From the system of restrictions and prohibitions arise those devouring tides and ebbs which sweep away in a day the labour of years, and convert commerce into a career of alarms and perpetual dangers. In Turkey, where this system does not exist, these disastrous effects are unknown.

"The extreme moderation of the duties is the complement of this régime of commercial liberty: and in no portion of the globe are the officers charged with the collection, of more confiding facility for the valuations, and of so decidedly conciliatory a spirit in every transaction regarding commerce.

"Away with the supposition that these facilities granted to strangers are concessions extorted from weakness! The dates of the contracts termed capitulations, which establish the rights actually enjoyed by foreign merchants, recall periods at which the Mussulman power was altogether predominant in Europe. The first capitulation which France obtained was in 1535 from Soliman the Canonist (the Magnificent). The dispositions of these contracts have become antiquated, the fundamental principles remain. Thus, 300 years ago, the sultans, by an act of munificence and of reason, anticipated the most ardent desires of civilised Europe, and proclaimed unlimited freedom of commerce."

Did the policy of Turkey in other respects harmonise with this, she would be one of the most civilised and powerful of nations, instead of being one of the most abject and degraded. Unfortunately, however, this is very far from being the case. Tyranny, corruption, and insecurity universally prevail. "The cultivator of the soil," says one of her eulogists, "is ever a helpless prey to injustice and oppression. The government agents have to suffer in their turn from the cruelty and rapacity of which they themselves have been guilty; and the manufacturer has to bear his full share of the common insecurity; he is fixed to the spot, and cannot escape the grasp of the local governor. The raw material monopolised by a bey or ayan, may be forced upon him at a higher price than he could purchase it himself, and perhaps of inferior quality; fines may be imposed upon him, he may be taken for forced labour, or troops may be quartered on his workshop." — (*Urquhart on Turkey and its Resources*, p. 139.)

This miserable system has overspread some of the fairest provinces of Europe and Asia with barbarism — turned their cities into villages, and their palaces into cottages; but the degradation in which they are involved would have been still more complete, but for the freedom of commerce they have always enjoyed. This has tended to keep alive the seeds of industry, and to counteract the destructive influence of oppression and insecurity. Had their intercourse with foreigners been either prohibited, or placed under oppressive restrictions, the barbarism of Turkey would have been completed, and it is difficult to suppose that there could have been either wealth or industry in the empire.

Trade of Turkey with England. — The trade between this country and Turkey is of much greater value and importance than is generally supposed. Cotton stuffs and twist are the great articles of export from Great Britain to Turkey; and notwithstanding the convulsed and distracted state of the latter, she has continued to take off a rapidly increasing amount of these staple articles. In 1825, for example, we exported direct for Turkey, (including what is now the kingdom of Greece), 13,674,000 yards of cotton cloth, and 446,462 lbs. of cotton twist; in 1831, we exported to Turkey (exclusive of the Morea),

24,565,000 yards of cloth, and 1,735,760 lbs. of twist. And in 1840, we exported to Turkey, exclusive of the Morea and of Syria and Palestine, no fewer than 45,000,000 yards cotton cloth, and 3,272,805 lbs. twist and yarn, being an increase in the course of 15 years of nearly 400 per cent. in the exports of stuffs, and of more than 600 per cent. in those of twist and yarn. In consequence, most of the Turkish establishments for the manufacture of cottons, except a few which use English yarn, have been given up. But the great consumption of Turkey consists of home-made fabrics, and hitherto these have been but little interfered with. Most part of the stuffs we send out are what are called plain goods; and if our coarser fabrics should once begin to supersede those made by the Turkish peasantry, it is not easy to say to what degree the demand for them might be extended.

Of the European states, Austria and Switzerland have been our most formidable rivals in the supply of Turkey with cottons. The stuffs were, in several respects, well fitted for the Eastern markets; but owing to the difficulty they lay under of getting returns, and the continued and rapid reduction in the price of English cottons, we seem to have gained a decided advantage over them, and are now nearly in the exclusive possession of the market. Cheapness is every where the grand desideratum. Though our muslins and chintzes be inferior in fineness to those of the East, and our red dye (a colour in great esteem in Turkey, Persia, &c.) be inferior in brilliancy, these defects are more than balanced by the greater cheapness of our goods; and from Smyrna to Canton, from Madras to Samareand, we are every where supplanting the native fabrics; and laying the foundations of a commerce that will be eminently beneficial to all parties.

Our commerce with Turkey would be considerably facilitated by the farther reduction of the duties on figs, currants, and oil. Nothing, however, would contribute so much to its extension, as the establishment of order and tranquillity throughout the country. But this, we fear, is beyond the ability of the Ottoman government. The abuses which have reduced the empire to its present state of degradation seem to be inherent in the structure of Turkish society, and to be in harmony with the habits and prejudices of the people. If such be the case, reform must come from without, and not from within. But of whatever other advantages a revolution might be productive, it is difficult to believe that it would bring along with it a more liberal system of commercial policy than that which at present exists.

Account of the Quantities of the principal Articles of Foreign and Colonial Produce imported into the United Kingdom from Turkey, including Continental Greece, but excluding Syria and Palestine, in 1840 and 1841; and of the Quantities and Values of the principal Articles of British and Irish Produce exported to the same in 1839 and 1840.

Principal Articles of Import.	1840. Quantities.	1841. Quantities.	Principal Articles of Export.	1839. Quantities.	1839. Value.	1840. Quantities.	1840. Value.
Figs - - cwts.	17,863	16,293	Coals, culm, and cinders - tons	27,707	£11,222	27,537	£11,047
Madder root - —	66,529	54,952	Cotton manufac. entd. by yd. - yds.	45,167,755	833,577	45,000,000	741,880
Olive oil - - gal.	24,936	43,358	twist and yarn - - lbs.	2,390,616	108,912	3,272,805	152,774
Opium - - lbs.	50,746	150,906	Earthenware of all sorts pieces	418,428	6,113	652,315	8,180
Raisins - - cwts.	54,333	52,979	Iron & steel, wrought & unw. - tons	6,105	59,720	7,011	56,646
Flaxseed & linseed - - bush.	16,408	287	Linen manufac. entd. by yd. - yds.	79,342	5,226	49,089	2,852
Silk, raw & waste lbs.	725,189	732,626	Machinery and mill-work -	-	10,686	-	12,252
Lamb skins - no.	163,354	117,759	Plate, plated ware, jewellery and watches - - -	-	-	-	9,223
Valonia - - cwts.	143,095	113,326	Sugar, refined - - - cwts.	10,585	19,730	33,376	63,609
Wool, cotton - lbs.	463,078	163,354	Woollen manufac. entd. by piece pcs.	10,965	18,535	13,401	20,786
sheep's - —	655,964	447,563	All other articles - -	-	92,211	-	59,310
					£ 1,178,712		£ 1,138,559

CONSUL, in commerce, an officer appointed by competent authority to reside in foreign countries, in the view of facilitating and extending the commerce carried on between the subjects of the country which appoints him, and those of the country or place in which he is to reside.

Origin and Appointment of Consuls. — The office of consul appears to have originated in Italy, about the middle of the twelfth century. Soon after this, the French and other Christian nations trading to the Levant began to stipulate for liberty to appoint consuls to reside in the ports frequented by their ships, that they might watch over the interests of their subjects, and judge and determine such differences with respect to commercial affairs as arose amongst them. The practice was gradually extended to other countries; and in the sixteenth century was generally established all over Europe. — (*Martens, Précis du Droit des Gens*, § 147.)

British consuls were formerly appointed by the Crown, upon the recommendation of great trading companies, or of the merchants engaged in the trade with a particular country or place; but they are now directly appointed by government, without requiring any such recommendation, though it, of course, is always attended to when made.

The right of sending consuls to reside in foreign countries depends either upon a

tacit or express convention. Hence their powers differ very widely in different states. In some they exercise a very extensive jurisdiction over the subjects of the state which appoints them; but the extent of this jurisdiction is not discretionary, and must, in all cases, be regulated either by an express convention between the state appointing and the state receiving the consul, or by custom. Consuls established in England have no judicial power; and the British government has rarely stipulated with other powers for much judicial authority for its consuls. Turkey, however, is an exception to this remark. English consuls enjoy in that country several peculiar privileges conferred by ancient treaties, and confirmed by that signed at the Dardanelles in 1809. It is there stipulated and agreed upon —

"That if there happen any suit, or other difference or dispute, among the English themselves, *the decision thereof shall be left to their own ambassador or consul*, according to their custom, without the judge or other governors, our slaves, intermeddling therein.

"That if an Englishman, or other subject of that nation, shall be involved in any lawsuit, or other affair connected with law, (with a Turk,) the judge shall not hear nor decide thereon, until the ambassador, consul, or interpreter shall be present; and all suits exceeding the value of 4,000 aspers shall be heard at the Sublime Porte, and nowhere else.

"That the consuls appointed by the English ambassadors in our sacred dominions, for the protection of their merchants, shall never, under any pretence, be imprisoned, nor their houses sealed up, nor themselves sent away; but all suits or differences in which they may be involved, shall be represented to our Sublime Porte, where their ambassador will answer for them.

"That in case any Englishman, or other person subject to that nation, or navigating under its flag, should happen to die in our sacred dominions, our fiscal and other officers shall not, upon pretence of its not being known to whom the property belongs, interpose any opposition or violence, by taking or seizing the effects that may be found at his death, but they shall be delivered up to such Englishman, whoever he may be, to whom the deceased may have left them by his will; and should he have died intestate, then the property shall be delivered up to the English consul, or his representative who may be then present; and in case there be no consul, or consular representative, they shall be registered by the judge, in order to his delivering up the whole thereof, whenever any ship shall be sent by the ambassador to receive the same."

Conformably to these capitulations, and the by-laws of the Levant Company, Nos. 39, 40, and 41., the consuls were authorised to administer justice in all cases of contention amongst British subjects within the Turkish dominions; and they were further authorised to send to England, in safe custody, any British subject resident in Turkey, who should decline their jurisdiction, or appeal from them to the courts of the Grand Signior, or of any other potentate. And the act 6 Geo. 4. c. 33. § 4., for the abolition of the Levant Company, expressly provides for the continuance to the consuls appointed by his Majesty, of the same rights and duties of jurisdiction over British subjects in Turkey, that were enjoyed by the consuls appointed by the Company.

At present, therefore, consuls in Turkey enjoy extensive judicial powers; but owing to the freedom of Turkish commerce, and the simplicity of the regulations under which it is carried on, their other functions, with the exception of furnishing statistical details, Mr. Urquhart, whose opinion as to all that respects Turkey is deservedly of considerable weight, seems to think that the judicial powers enjoyed by the European consuls in that country have been productive of much mischief. Still, however, we doubt whether they could be entirely dispensed with in a country so peculiarly situated. But there can be no doubt that it is highly necessary that the greatest care should be taken in the selection of the individuals to whom such powers are intrusted.

Other states have occasionally given to consuls similar powers to those conceded to them in Turkey. Thus, in the treaty between Sweden and the United States of America, ratified on the 24th of July, 1818, it is stipulated that the consuls appointed by either government to reside within the dominions of the other, or their substitutes, "shall, as such, have the right of acting as judges or arbiters in all cases of differences which may arise between the captains and crews of the vessels of the nation whose affairs are intrusted to their care. The respective governments shall have no right to interfere in these sort of affairs, except in the case of the conduct of the crews disturbing public order and tranquillity in the country in which the vessel may happen to be, or in which the consul of the place may be obliged to call for the intervention and support of the executive power, in order to cause his decision to be respected; it being, however, well understood, that this sort of judgment or arbitration cannot deprive the contending parties of their rights of appealing on their return to the judicial authorities of their country."

Duties of Consuls. — The duties of a consul, even in the confined sense in which they are commonly understood, are important and multifarious. It is his business to be always on the spot, to watch over the commercial interests of the subjects of the state whose servant he is; to be ready to assist them with advice on all doubtful occasions; to see that the conditions in commercial treaties are properly observed; that those he is appointed to protect are subjected to no unnecessary or unjustifiable demands in conducting their business; to represent their grievances to the authorities at the place where they reside, or to the ambassador of the sovereign appointing him at the court on which the consulship depends, or to the government at home; in a word, to exert himself to render the condition of the subjects of the country employing him, within the

limits of his consulship, as comfortable, and their transactions as advantageous and secure, as possible.

The following more detailed exposition of the *general* duties of a British consul, is taken from Mr. Chitty's work on *Commercial Law* : —

" A British consul, in order to be properly qualified for his employment, should take care to make himself master of the language used by the court and the magistracy of the country where he resides, so as to converse with ease upon subjects relating to his duties. If the common people of the port use another, he must acquire that also, that he may be able to settle little differences without troubling the magistracy of the place for the interposition of their authority ; such as accidents happening in the harbour, by the ships of his nation running foul of and doing damage to each other.

" He is to make himself acquainted, if he be not already, with the law of nations and treaties, with the tariff or specification of duties on articles imported or exported, and with all the municipal ordinances and laws.

" He must take especial notice of all prohibitions to prevent the export or import of any articles, as well on the part of the state wherein he resides, as of the government employing him ; so that he may admonish all British subjects against carrying on an illicit commerce, to the detriment of the revenues, and in violation of the laws, of either. And it is his duty to attend diligently to this part of his office, in order to prevent smuggling, and consequent hazard of confiscation or detention of ships, and imprisonment of the masters and mariners. — (*Beawes, Lex Merc.* vol. ii. p. 42.)

" It is also his duty to protect from insult or imposition British subjects of every description within his jurisdiction. If redress for injury suffered is not obtained, he is to carry his complaint by memorial to the British minister residing at the court on which the consulship depends. If there be none, he is to address himself directly to the court ; and if, in an important case, his complaint be not answered, he is to transmit the memorial to his Majesty's secretary of state. — (*Beawes, Warden, &c.*)

" When insult or outrage is offered by a British subject to a native of the place, and the magistrate thereof complains to the consul, he should summon, and in case of disobedience may by armed force bring before him the offender, and order him to give immediate satisfaction ; and if he refuse, he resigns him to the civil jurisdiction of the magistrate, or to the military law of the garrison ; nevertheless *always acting as counsellor or advocate at his trial*, when there is question of life or property.

" But if a British subject be accused of an offence alleged to have been committed at sea, within the dominion or jurisdiction of his sovereign, it is then the duty of the consul to claim cognizance of the cause for his sovereign, and to require the release of the parties, if detained in prison by the magistracy of the place on any such accusation brought before them, and that all judicial proceedings against them do instantly cease ; and he may demand the aid of the power of the country, civil and military, to enable him to secure and put the accused parties on board such British ship as he shall think fit, that they may be conveyed to Great Britain, to be tried by their proper judges. If, contrary to this requisition, the magistrates of the country persist in proceeding to try the offence, the consul should then draw up and transmit a memorial to the British minister at the court of that country ; and if that court give an evasive answer, the consul should, if it be a sea offence, apply to the Board of Admiralty at London, stating the case ; and upon their representation, the secretary for the proper department will lay the matter before the king, who will cause the ambassador of the foreign state, resident in England, to write to his court abroad, desiring that orders may immediately be given by that government, that all judicial proceedings against the prisoner be stayed, and that he be released. — (See *Case of Horseman and his Crew, Beawes*, vol. ii. p. 422.)

" It is the duty also of a British consul to relieve all distressed British mariners, to allow them 6*d.* daily for their support, to send them home in the first British vessels that sail for England, and to keep a regular account of his disbursements, which he is to transmit yearly, or oftener if required, to the Navy Office, attested by two British merchants of the place : this is provided for by positive enactment. — (1 *Geo.* 2. s. 2. c. 14. § 12.) He is also to give free passes to all poor British subjects wishing to return home, directed to the captains of the king's packet boats, or ships of war, requiring them to take them on board. — (See SEAMEN.)

" The consul is not to permit a British merchant ship to leave the port where he resides without his passport, which he is not to grant until the master and crew thereof have satisfied all just demands upon them ; and for this purpose he ought to see the governor's pass of a garrisoned town, or the burgomaster's ; unless the merchant or factor to whom the ship was consigned will make himself responsible. — (*Beawes, Lex Merc.* vol. ii. p. 423.)

" It is also his duty to claim and recover all wrecks, cables and anchors, belonging to British ships, found at sea by fishermen or other persons, to pay the usual salvage, and to communicate a report thereof to the Navy Board.

"The consuls and vice-consuls of his Majesty are, by express enactment (46 Geo. 3 c. 98. § 9.), empowered to administer oaths in all cases respecting quarantine, in like manner as if they were magistrates of the several towns or places where they respectively reside. It is also laid down, that a consul is to attend, if requested, all arbitrations where property is concerned between masters of British ships and the freighters, being inhabitants of the place where he resides." — (*Chitty on Commercial Law*, vol. i. pp. 58—61., and the numerous authorities there quoted.)

Any individual, whether he be a subject of the state by which he is appointed, or of another, may be selected to fill the office of consul, provided he be approved and admitted by the government in whose territory he is to reside. In most instances, however, but not always, consuls are the subjects of the state appointing them.

Much, however, of the peculiar duties of a consul must always depend on the nature of the intercourse with the country to which he is sent, and of the instructions given him. British consuls are regularly supplied with copies of all acts relating to trade and navigation, quarantine, slave trade suppression, emigration, &c., and with the treaties between this and other countries, and must, of course, shape their conduct accordingly. They are strictly forbidden from corresponding with private parties on public matters. We subjoin an extract from the *General Instructions for British Consuls.*

"He will bear in mind that it is his principal duty to protect and promote the lawful trade and trading interests of Great Britain, by every fair and proper means, taking care to conform to the laws and regulations in question; and whilst he is supporting the lawful trade of Great Britain, he will take special notice of all prohibitions with respect to the export or import of specified articles, as well on the part of the state in which he resides, as of the government of Great Britain, so that he may caution all British subjects against carrying on an illicit commerce to the detriment of the revenue, and in violation of the laws and regulations, of either country; and he will not fail to give to this department immediate notice of any attempt to contravene those laws and regulations.

"The consul will give his best advice and assistance, when called upon, to his Majesty's trading subjects, quieting their differences, promoting peace, harmony, and good-will amongst them, and conciliating as much as possible the subjects of the two countries, upon all points of difference which may fall under his cognizance. In the event of any attempt being made to injure British subjects, either in their persons or property, he will uphold their rightful interests, and the privileges secured to them by treaty, by due representation in the proper official quarter. He will, at the same time, be careful to conduct himself with mildness and moderation in all his transactions with the public authorities, and he will not upon any account urge claims, on behalf of his Majesty's subjects, to which they are not justly and fairly entitled. If redress cannot be obtained from the local administration, or if the matter of complaint be not within their jurisdiction, the consul will apply to his Majesty's consul-general, or to his Majesty's minister, if there be no consul-general in the country wherein he resides, in order that he may make a representation to the higher authorities, or take such other steps in the case as he may think proper; and the consul will pay strict attention to the instructions which he may receive from the minister or consul-general."

Emoluments of Consuls. Prohibition of Trading, &c. — The emoluments of our consuls were, until these few years, principally derived from certain fees, depending on the tonnage, length of the voyages, &c. of the British ships entering and clearing out of the limits of their consulships. But this mode of remunerating them was materially changed by the act of 6 Geo. 4. c. 87. The fees payable under this act — (see *post*) — are but inconsiderable: but the deficiency has been, partly at least, compensated by salaries allowed by government.

At present British consuls are, in some instances, permitted to carry on trade, while in others they are interdicted from having any thing to do with it. The principle on which the distinction is made does not seem very obvious. We observe, for example, that the consul at Petersburg, who must have a great deal to do, is allowed to trade; while the consul at Odessa, whose duties must be much lighter, is denied this privilege. There is the same distinction between the consuls at Venice and Trieste; the latter, whose duties must be the heavier of the two, being allowed to act as a merchant, while the other is not. If this distinction must be kept up, the preferable plan would seem to be to interdict all consuls resident at the great ports, and those resident at other ports, principally in the character of political agents, from trading; and to permit it to others. The public duties of the former are either quite sufficient wholly to engross their attention, or they are of such a kind as would make it very inexpedient for those employed in them to be occupied in mercantile pursuits; in the case of the smaller class of ports, but little frequented by British ships, and where the consuls have no peculiar political functions to discharge, there is a less urgent necessity for prohibiting them from carrying on business on their own account. At the same time, however, we are clearly of opinion that it would in *all* cases be better not to allow consuls to engage, either directly or indirectly, in any sort of industrious undertaking. The main end and purpose of their institution is the facilitating of commerce with the nation in which they reside; and in furtherance of such object they ought, on all occasions, to communicate the fullest and earliest information in their power touching commercial matters, not only to the government that appoints them, but to such of its subjects as may apply for their advice and assistance. But, however advantageous publicity may be to others, it may in various ways be extremely hostile to the interests of the consul considered in his capacity of a merchant; and, when his own advantage and his public duty are set in opposition, it requires little sagacity to discover

which will have the ascendancy. Hence the fair presumption is, that a trading consul will rather endeavour to profit by the peculiar information his situation may enable him to obtain, than to communicate it to others. His interests as a merchant must frequently, also, even when such is not really the case, appear to be in opposition to those of the parties for whose behoof he is said to be appointed; and under such circumstances, his proceedings, however fair, will always be liable to the suspicion of partiality. It is material, also, to observe that mercantile consuls labour under peculiar disadvantages in the obtaining of information. If a consul, not engaged in business, make a proper application to a public functionary, or merchant, for information as to any subject with which they may be acquainted, he will, in most instances, learn all that they know. But it is obvious, on general principles, and we have been assured of the fact by some of the most intelligent officers of the class, that if a trading consul make the same application, the chances are 10 to 1 he will either learn nothing, or nothing that is not false or misleading. The inquiries of the former excite no jealousy, those of the latter invariably do. The former is known to be actuated only by a feeling of liberal curiosity, or by a wish properly to discharge his public duties; but the latter, being engaged in business, gets credit only for selfish and interested motives, and is believed to be seeking the information merely that he may turn it to his own account. A mercantile consul is, therefore, uniformly the object of the suspicions of all parties, both of his countrymen, and of the foreigners amongst whom he resides. Instead of being, as he ought to be, an independent public functionary, he necessarily gets entangled in the cabals and intrigues of those whose differences it is his province to conciliate. He is tempted, also, to engage in smuggling adventures, contrary to his duty, and highly injurious to the character of his nation. And though he should be proof against temptations of this sort, he is, like all other individuals, subject to misfortune and bankruptcy; and may, in this way, bring discredit and embarrassment on the government that appoints him. These reasons seem to be far more than sufficient to vindicate the policy of interdicting consuls from trading. But were it otherwise, it is enough to decide the question to state, that if they be made properly to perform the functions of their office, it will occupy every moment of their time. To the argument in favour of the existing system derived from economical considerations, we do not attach the smallest weight. To attempt to save a few thousand pounds by allowing an important class of public functionaries to engage in avocations inconsistent with their duty, and destructive of their utility, would be something the very reverse of economy.

Cost of the Establishment. Improvements made in it. — We had occasion, in the former edition of this work, to complain of the cost and inadequacy of our consular establishment. But its expense has since been very much, and, in some instances perhaps, too much, reduced; at the same time that measures have been taken for increasing the duties of the consuls, by making them furnish details as to the trade, manufactures, duties, prices, &c. of the districts in which their consulships are situated. Hitherto this important department of what ought to be the peculiar duty of a consul has been most strangely neglected; but if it be properly attended to, it will occupy a large portion of the consul's time, and will be a field for the display of superior talents. Some of the answers made by the consuls to the *Circular Queries* prepared for the former edition of this work were drawn up with great care and intelligence, and reflected much credit on their authors. There were a good many certainly of a very inferior description; but this is not to be wondered at — it being hardly possible for those who have not given a good deal of their time to such subjects, to make a proper reply to queries relating to them. And if the system is to be perfected to the degree of which it is susceptible, the salaries allowed to the consuls ought to be such as to afford a sufficient remuneration for the services of gentlemen of character, familiar with the principles of public law, commerce, and statistics; and such only ought to be nominated to consular situations. We subjoin that part of the *General Instructions for the Consuls* that has reference to statistical inquiries.

"The consul will forward to the secretary of state, in duplicate, so soon as the information he can collect will enable him so to do, but at any rate within a period of 6 months from the date of his arrival at his residence, a general Report on the trade of the place and district, specifying the commodities, as well of the export as import trade, and the countries which supply the latter, together with the increase or decline in late years, and the probable increase or decline to be expected, and the causes in both cases. He will state the general regulations with respect to trade at the place where he is resident, and their effects. He will give the average market prices within the year of the several articles of export and import; he will particularise what articles, if any, are absolutely prohibited to be imported into the country wherein he resides; what articles are prohibited to be imported from any other places than from the place of their growth or production; whether there be any privileges of importation, and what those privileges are, in favour of ships that are of the built of, or belonging to, the country wherein he resides; whether there be any difference in the duty on goods when imported into that country in a foreign ship, and if so, whether it be general, or applicable only to particular articles; what are the rates of duty payable on goods imported into the said country; whether there be any tonnage duty or other port dues, and what, payable on shipping entering at, or clearing from, the ports

of that country; whether there be any (and, if so, what) ports in that country wherein goods may be warehoused on importation, and afterwards exported with or without payment of any duties, and under what regulations."

He is also to transmit an annual statement of the trade with the principal ports of his consulships; and quarterly returns of the prices of corn, &c. Mr. Macgregor's Tariffs have been mostly compiled from these returns.

The following are the provisions of the act 6 Geo. 4. c. 87. with respect to the salaries and charges of consuls: —

Salaries to Consuls. — "Whereas the provision which hath hitherto been made for the maintenance and support of the consuls general and consuls appointed by his Majesty to reside within the dominions of sovereigns and foreign states in amity with his Majesty, is inadequate to the maintenance and support of such consuls general and consuls, and it is expedient to make further and due provisions for that purpose;" it is therefore enacted, that it shall be lawful for his Majesty, by any orders to be issued by the advice of his privy council, to grant to all or any of the consuls general or consuls appointed by his Majesty to reside within any of the dominions of any sovereign or foreign state or power in amity with his Majesty, such reasonable salaries as to his Majesty shall seem meet, and by such advice from time to time to alter, increase, or diminish any such salaries or salary as occasion may require. — (6 *Geo.* 4. c. 87. § 1.)

Terms on which Salaries shall be granted. Leave of Absence. — Such salaries shall be issued and paid to such consuls general and consuls without fee or deduction; provided that all such salaries be granted during his Majesty's pleasure, and not otherwise, and be held and enjoyed by such consuls general and consuls so long only as they shall be actually resident at the places at which they may be so appointed to reside, and discharging the duties of such their offices: provided nevertheless, that in case his Majesty shall, by any order to be for that purpose issued through one of his principal secretaries of state, grant to any such consul general or consul leave of absence from the place to which he may be so appointed, such consul general or consul shall be entitled to receive the whole, or such part as to his Majesty shall seem meet, of the salary accruing during such period of absence. — § 2.

Salaries in lieu of Fees formerly paid. Consuls not to take other than the Fees hereinafter mentioned. — The salaries so to be granted shall be taken by the consuls general and consuls as a compensation for all salaries heretofore granted, and all fees of office and gratuities heretofore taken by them from the masters or commanders of British vessels, or from any other person, for any duties or services by such consuls general or consuls done or performed for any such persons; and no such consuls general or consuls shall, from the 1st of January, 1826, be entitled, on account of any thing by him done in the execution of such his office, or for any service by him rendered to any masters or commanders of British vessels, or to any other person in the execution of such his office, to ask or take any fees, recompence, gratuity, compensation, or reward, or any sum of money, save as hereinafter is excepted. — § 3.

Certain Fees still allowed to be taken. — It shall be lawful for all consuls general and consuls appointed by his Majesty, and resident within the dominions of any sovereign, or any foreign state or power in amity with his Majesty, to accept the several fees particularly mentioned in the tables to this present act annexed, marked with the letters A and B, for the several things and official acts and deeds particularly mentioned in the said schedules; and it shall be lawful for his Majesty, by any orders to be by him made, by the advice of his privy council, from time to time, as occasion may require, to diminish, or wholly to abolish, all or any of the fees aforesaid, and to establish and authorise the payment of any greater or smaller or new or additional fees for the several things mentioned in the said schedules, or for any other thing to be by any such consul general or consul done in the execution of such his office. — § 4.

Penalty on Consuls demanding more Fees than specified in the Schedule. — In case any consul general or consul appointed by his Majesty as aforesaid shall, by himself or deputy, or by any person authorised thereto in his behalf, ask or accept, for any thing by him done in the execution of such his office, or for any service or duty by him rendered or performed in such his office, for any person whomsoever, any other or greater fee or remuneration than is specified in the schedule, or than shall be sanctioned and specified in or by any such order in council, the person so offending shall forfeit and become liable to pay to his Majesty any sum of sterling British money, not exceeding the amount of the salary of such person for 1 year, nor less than the 12th part of such annual salary, at the discretion of the court in which such penalty may be recovered; and shall moreover upon a second conviction for any such offence forfeit such his office, and for ever after become incapable of serving his Majesty in the same or the like capacity. — § 5.

Table of Fees to be exhibited at Custom-houses. — A printed copy of the tables of fees allowed by this act, or which may be sanctioned or allowed by any order to be made in pursuance of this act by his Majesty in council, shall be exhibited in a conspicuous manner, for the inspection of all persons, in the Custom-house in the port of London, and in all other Custom-houses in the several ports and harbours of the U. Kingdom of Great Britain and Ireland; and printed copies thereof shall, by the collector or other chief officer of customs in all such ports and harbours, be delivered gratuitously, and without fee or reward, to every master of any vessel clearing out of any such port or harbour, and demanding a copy thereof. — § 6.

Table of Fees to be exhibited at Consuls' Offices. — A copy of the schedule or table of fees to this present act annexed, or which may be established and authorised by any such order in council, shall be hung up and exhibited in a conspicuous place in the public offices of all consuls general or consuls appointed by his Majesty, in the foreign places to which they may be so appointed, for the inspection of all persons interested therein; and any consul general or consul omitting or neglecting to exhibit any such copy of the schedules in such his public office, or refusing to permit the same to be inspected by any person interested therein, shall for every such offence forfeit and pay a sum of British sterling money not exceeding one half the amount of the salary of such person for 1 year, nor less than the 12th part of such annual salary, at the discretion of the court in which such penalty may be recovered. — § 7.

Superannuation. — "And whereas it is expedient that his Majesty should be enabled to grant to the said consuls general and consuls, appointed as aforesaid, allowances in the nature of superannuation or reward for meritorious public services;" it is further enacted, that all the regulations contained in 50 Geo. 3. c. 117., 3 Geo. 4. c. 113., 5 Geo. 4 c. 104., respecting superannuation allowances, are hereby extended to the said consuls general and consuls, so far as such regulations can be applied to the cases of such several persons respectively, as fully to all intents and purposes as if the same were repeated and re-enacted in this present act. — § 8.

Allowances during War. — If it shall at any time happen that by reason of any war which may hereafter arise between his Majesty and any sovereign, or foreign state or power, within the dominions of whom any such consul general or consul shall be appointed to reside, he shall be prevented from residing, and shall in fact cease to reside, at the place to which he may be so appointed, it shall be lawful for his Majesty, by any order to be issued by the advice of his privy council, to grant to any such consul general or consul, who may have served his Majesty in that capacity for any period not less than 3 years, nor more than 10 years next preceding the commencement of any such war, a special allowance not exceeding the proportion of their respective salaries to which such consuls general and consuls would be entitled

under the provisions of the said act of 3 Geo. 4., in case the period of their respective service had exceeded 10 years and had not exceeded 15 years: provided that in case any such consul general or consul shall have served in such his office for the space of 10 years and more, it shall be lawful for his Majesty, by any such order in council as aforesaid, to grant to him such a proportion of his salary, which, by the said act is authorised to be granted, as a superannuation allowance, according to the several periods of service exceeding 10 years, in the said act. — § 9.

Commencement. — This act shall take effect from the 1st of January, 1826, except where any other commencement is particularly directed. — § 22.

Tables of Fees allowed to be taken by Consuls General and Consuls, by the preceding Act of 6 *Geo.* 4. c. 87.

Table A. — Certificate of due landing of goods exported from the United Kingdom - - - 2 dollars.
Signature of ship's manifest - - - - 2 do.
Certificate of origin, when required - - 2 do.
Bill of health, when required - - - 2 do.
Signature of muster-roll, when required - 2 do.
Attestation of a signature, when required - 1 do.
Administering an oath, when required - - ½ do.
Seal of office, and signature of any other document not specified herein, when required - - - 1 do.

Table B. — Bottomry or arbitration bond - - 2 do.
Noting a protest - - - - - - 1 do.
Order of survey - - - - - - 2 do.
Extending a protest or survey - - - - 1 do.

Registrations - - - - - - - - 1 dollar.
Visa of passport - - - - - - - ½ do.
Valuation of goods - - - - - - 1 per cent.
Attending sales, ½ per cent. where there has been a charge for valuing; otherwise, 1 per cent.
Attendance out of consular office at a shipwreck, 5 dollars per diem for his personal expenses, over and above his travelling expenses.
Ditto on opening a will - - - - - - 5 dollars.
Management of property of British subjects dying intestate - - - - - 2½ per cent.

The dollars mentioned in the preceding tables are in all cases to be paid by the delivery of dollars, each of which is to be of the value of 4*s.* 6*d.* sterling, and no more, according to the rate of exchange prevailing at the place where such payment is made.

CONTRABAND, in commerce, a commodity prohibited to be exported or imported, bought or sold.

CONTRABAND is also a term applied to designate that class of commodities which neutrals are not allowed to carry during war to a belligerent power.

It is a recognised general principle of the law of nations, that ships may sail to and trade with all kingdoms, countries, and states in peace with the princes or authorities whose flags they bear; and that they are not to be molested by the ships of any other power at war with the country with which they are trading, unless they engage in the conveyance of *contraband* goods. But great difficulty has arisen in deciding as to the goods comprised under this term. The reason of the limitation suggests, however, the species of articles to which it principally applies. It is indispensable that those who profess to act upon a principle of neutrality, should carefully abstain from doing any thing that may discover a bias in favour of either party. But a nation who should furnish one of the belligerents with supplies of warlike stores, or with supplies of any article, without which that belligerent might not be able to carry on the contest, would obviously forfeit her neutral character; and the other belligerent would be warranted in preventing such succours from being sent, and confiscating them as lawful prize. All the best writers on international law admit this principle; which, besides being enforced during every contest, has been sanctioned by repeated treaties. In order to obviate all disputes as to what commodities should be deemed contraband, they have sometimes been specified in treaties or conventions. — (See the references in *Lampredi del Commercio de' Popoli Neutrali*, § 9.) But this classification is not always respected during hostilities; and it is sufficiently evident that an article which might not be contraband at one time, or under certain circumstances, may become contraband at another time, or under different circumstances. It is admitted on all hands, even by M. Hubner, the great advocate for the freedom of neutral commerce — (*De la Saisie des Bâtimens Neutres*, tom. i. p. 193.) — that every thing that may be made *directly available* for hostile purposes is contraband, as arms, ammunition, horses, timber for ship-building, and all sorts of naval stores. The greatest difficulty has occurred in deciding as to provisions, which are sometimes held to be contraband, and sometimes not. Lord Stowell has shown that the *character of the port* to which the provisions are destined, is the principal circumstance to be attended to in deciding whether they are to be looked upon as contraband. A cargo of provisions intended for an enemy's port, in which it was known that a warlike armament was in preparation, would be liable to arrest and confiscation; while, if the same cargo were intended for a port where none but merchantmen were fitted out, the most that could be done would be to detain it, paying the neutral the same price for it he would have got from the enemy.

By the ancient law of Europe, a ship conveying any contraband article was liable to confiscation as well as the article. But in the modern practice of the courts of admiralty of this and other countries, a milder rule has been adopted, and the carriage of contraband articles is attended only with the loss of freight and expenses, unless when the ship belongs to the owner of the contraband cargo, or when the simple misconduct of conveying such a cargo has been connected with other malignant and aggravating circumstances. Of these a false destination and false papers are justly held to be the worst. — (*5 Rob. Adm. Rep.* 275.)

The right of visitation and search is a right inherent in all belligerents; for it would be absurd to allege that they had a right to prevent the conveyance of contraband goods to an enemy, and to deny them the use of the only means by which they can give effect to such right. — (*Vattel*, book iii. c. 7. § 114.) The object of the search is twofold: *first*, to ascertain whether the ship is neutral or an enemy, for the circumstance of its hoisting a neutral flag affords no security that it is really such; and, *secondly*, to ascertain

whether it has contraband articles, or enemies' property, on board. All neutral ships that would navigate securely during war must, consequently, be provided with passports from their government, and with all the papers or documents necessary to prove the property of the ship and cargo — (see SHIP'S PAPERS); and they must carefully avoid taking any contraband articles or belligerent property on board. And hence, as Lampredi has observed, a merchant ship which seeks to avoid a search by crowding sail, or by open force, may justly be captured and subjected to confiscation.— (§ 12.)

It has, indeed, been often contended that *free ships make free goods* (*que le pavillon couvre la marchandise*), and that a belligerent is not warranted in seizing the property of an enemy in a neutral ship, unless it be contraband. The discussion of this important question would lead us into details which do not properly come within the scope of this work. We may, however, shortly observe, that no such privilege could be conceded to neutrals, without taking from belligerents the right, inseparable from a state of war, of seizing an enemy's property if found in places where hostilities may be lawfully carried on, as on the high seas. In fact, were the principle in question admitted, the commerce of a belligerent power with its colonies, or other countries beyond sea, might be prosecuted in neutral ships, with as much security during war as in peace; so that neutrals would, in this way, be authorised to render a belligerent more important assistance than, perhaps, they could have done had they supplied him with troops and ammunition! But it is surely unnecessary to say, that to act in this way is a proceeding altogether at variance with the idea of neutrality. Neutrals are bound to conduct themselves in the *spirit of impartiality*; and must not afford such aid or assistance to one party, as may the better enable him to make head against the other. It is their duty "*non interponere se bello, non hoste imminente hostem eripere.*" And yet it is manifest that the lending of neutral bottoms to carry on a belligerent's trade is in direct contradiction to this rule. The ships or cruisers of a particular power may have swept those of its enemy from the sea, and reduced him to a state of great difficulty, by putting a stop to his commerce with foreigners, or with his own colonies; but of what consequence would this be, if neutrals might step in to rescue him from such difficulties, by carrying on that intercourse for him which he can no longer carry on for himself? It is natural enough that such a privilege should be coveted by neutrals: but, however advantageous to them, it is wholly subversive of the universally admitted rights of belligerent powers, as well as of the principles of neutrality; and cannot, therefore, be truly said to be bottomed on any sound principle.

In the war of 1756, the rule was laid down by Great Britain, that neutrals are not to be allowed to carry on a trade during war, that they were excluded from during peace; so that, supposing a nation at war with Great Britain had, while at peace, prohibited foreigners from engaging in her colonial or coasting trade, we should not have permitted neutrals to engage in it during war. This rule has been much complained of; but the principle on which it is founded seems a sound one, and it may in most cases be safely adopted. The claims of neutrals cannot surely be carried further than that they should be allowed to carry on their trade during war, as they had been *accustomed* to carry it on during peace, except with places under blockade; but it is quite a different thing when they claim to be allowed to employ themselves, during war, in a trade in which they had not previously any right to engage. To grant them this, would not be to preserve to them their former rights, but to give them new ones which may be fairly withheld. Supposing, however, that either of the belligerent powers has *force sufficient to prevent any intercourse between the other and its colonies, or any intercourse between different ports of the other*, she might, in the exercise of the legitimate rights of a belligerent, exclude neutrals from such trade, even though it had formerly been open to them; because otherwise she would be deprived of the advantage of her superior force; and the neutrals would, in fact, when employed in this way, be acting as the most efficient allies of her enemy.

For a full discussion of this important and difficult question, and of the various distinctions to which it gives rise, see the work of Hubner (*De la Saisie des Bâtimens Neutres*, 2 tomes, 12mo. 1757), in which the different arguments in favour of the principle that "the flag covers the cargo," are stated with great perspicuity and talent. The opposite principle has been advocated by Lampredi, in his very able treatise *Del Commercio de' Popoli Neutrali*, § 10.; by Lord Liverpool, in his *Discourse on the Conduct of Great Britain in respect to Neutrals*, written in 1757; and, above all, by Lord Stowell, in his justly celebrated decisions in the Admiralty Court. Martens inclines to Hubner's opinion. — (See *Précis du Droit des Gens*, liv. 8. c. 7.)

CONVOY, in navigation, the term applied to designate a ship or ships of war, appointed by government, or by the commander in chief on a particular station, to escort or protect the merchant ships proceeding to certain ports. Convoys are mostly appointed during war; but they are sometimes, also, appointed during peace, for the security of ships navigating seas infested with pirates.

Individuals have not always been left to themselves to judge as to the expediency of sailing with or without convoy. The governments of most maritime states have thought proper, when they were engaged in hostilities, to oblige their subjects to place themselves under an escort of this sort, that the enemy might not be enriched by their capture. Acts to this effect were passed in this country during the American war and the late French war. The last of these acts (43 Geo. 3. c. 57.) enacted, that it should not be lawful for any ship belonging to any of his Majesty's subjects (except as therein provided) to depart from any port or place whatever, unless under such convoy as should be appointed for that purpose. The master was required to use his utmost endeavours to continue with the convoy during the whole voyage, or such part thereof as it should be directed to accompany his ship; and not to separate therefrom without leave of the commander, under very heavy pecuniary penalties. And in case of any ship departing without convoy contrary to the act, or wilfully separating therefrom, all insurances on the ship, cargo, or freight, belonging to the master, or to any other person directing or privy to such departure or separation, were rendered null and void. The customs officers were directed not to allow any ship that ought to sail with convoy to clear out from any place in the U. Kingdom for foreign parts, without requiring from the master, bond with one surety, with condition that the ship should not depart without convoy, nor afterwards desert or wilfully separate from it. The regulations of this act did not extend to ships not requiring to be registered, nor to those licensed to sail without convoy, nor to those engaged in the coasting trade, nor to those belonging to the East India Company, &c.

It is very common, during periods of war, to make *sailing or departing with convoy* a condition in policies of insurance. This, like other warranties in a policy, must be *strictly* performed. And if a ship warranted to sail with convoy, sail without it, the policy becomes void, whether this be imputable to any negligence on the part of the insured, or the refusal of government to appoint a convoy.

There are five things essential to sailing with convoy: viz. *first*, it must be with a regular convoy under an officer appointed by government; *secondly*, it must be from the place of rendezvous appointed by government; *thirdly*, it must be a convoy for the voyage; *fourthly*, the master of the ship must have sailing instructions from the commanding officer of the convoy; and *fifthly*, the ship must depart and continue with the convoy till the end of the voyage, unless separated by necessity.

With respect to the third of these conditions we may observe, that a warranty to sail with convoy generally means a convoy *for the voyage*; and it is not necessary to add the words "for the voyage" to make it so. Neither will the adding of these words in some instances, make the omission of them, in any case, the ground of a different construction. A warranty to sail with convoy does not, however, uniformly mean a convoy that is to accompany the ship insured the entire way from the port of departure to her port of destination; but such convoy as government may think fit to appoint as a sufficient protection for ships going the voyage insured, whether it be for the whole or only a part of the voyage.

Sailing instructions, referred to in the fourth condition, are written or printed directions delivered by the commanding officer of the convoy to the several masters of the ships under his care, that they may understand and answer signals, and know the place of rendezvous appointed for the fleet in case of dispersion by storm, or by an enemy, &c. These sailing instructions are so very indispensable, that no vessel can have the full protection and benefit of convoy without them: hence, when, through the negligence of the master, they are not obtained, the ship is not said to have sailed with convoy; and a warranty in a policy of insurance to that effect is held not to be complied with. If, however, the master do all in his power to obtain sailing instructions, but is prevented from obtaining them by any insuperable obstacle, as the badness of the weather; or if they be refused by the commander of the convoy; the warranty in the policy is held to be complied with.

For further information as to convoy, see *Abbot on the Law of Shipping*, part iii. c. 3.; *Marshall on Insurance*, book i. c. 9. § 5., and the *Act* 43 *Geo.* 3. c. 57, &c.

COPAIVA. See BALSAM.

COPAL, improperly called gum copal, is a valuable and singular kind of resin, that naturally exudes from different large trees, and is imported partly from America, and partly from the East Indies. The best copal is hard and brittle, in rounded lumps of a moderate size, easily reducible to a fine powder, of a light lemon yellow colour, beautifully transparent, but often, like amber, containing parts of insects and other small extraneous bodies in its substance. Its specific gravity varies from 1·045 to 1·139. It has neither the solubility in water common to gums, nor the solubility in alcohol common to resins, at least in any considerable degree. It may be dissolved by digestion in drying linseed oil, and other volatile menstrua. This solution forms a beautiful transparent varnish, which, when, properly applied, and slowly dried, is very hard and very durable.

Copal varnish was first discovered in France, and was long known by the name of *vernis martin*. It is applied to snuff-boxes, tea-boards, and other utensils. It preserves and gives lustre to paintings; and contributes to restore the decayed colours of old pictures, by filling up cracks, and rendering the surface capable of reflecting light more uniformly. Copal is liable to be confounded with *gum animé*, when the latter is very clear and good. But it is of importance to distinguish between them, as the animé, though valuable as a varnish, is much less so than the finest copal; the varnish with the former being darker coloured, and not so hard. Besides the external appearance of each, which is pretty distinct to a practised eye, the solubility in alcohol furnishes a useful test, — the animé being readily soluble in this fluid, while the copal is hardly affected by it; copal is also brittle between the teeth, whereas animé softens in the mouth. — (*Rees's Cyclopædia; Ure's Dictionary, &c.*)

The imports of gum animé and copal are not distinguished in the custom-house accounts The entries of both for home consumption amounted, in 1842, to about 983 cwts. The duty was, in the same year, reduced from 6*s.* to 1*s.* a cwt. Copal fetches in the London market from 3*l.* to 3*l.* 10*s.* a cwt.

COPENHAGEN, the capital of Denmark, on the E. coast of the island of Zealand, in the channel of the Baltic called the Sound; lat. 55° 41′ 4″ N., lon. 12° 35′ 46″ E. Population, in 1834, 119,292. It is a well-built, handsome city. In going into Copenhagen, the course is between the buoy on the Stubben Bank to the left, and the buoy on the Middle-grounds, and those in advance of the three Crown batteries on the right, W. S W. by compass. From the three crowns to the roads the course is S. S. W. The water in the channel is from 6 to 4 fathoms deep; but it is narrow, and the navigation rather difficult. There is no obligation to take a pilot on board; but if a vessel wish for one, she may heave to abreast of the battery, when he will come to her. Vessels not intending to come into harbour bring up in the roads, at from ¼ to ½ mile from shore, in about 4 fathoms, the town bearing S. S. W. In the harbour, within the boom, the water is from 17 to 18 feet deep. Vessels in harbour load and unload alongside the quay. The anchorage in the roads is good and safe.

Money. — Accounts are kept in rixdollars of 6 marcs, or 96 skillings, the rixdollar being formerly worth about 1*s* 1*d* sterling. But in 1813, a new monetary system was adopted, according to which the new or *Rigsbank* dollar is worth 2*s* 3½*d*, being half the value of the old specie dollar, and ⅔ of the old current dollar But the money generally used in commercial transactions is bank money, which is commonly at a heavy discount. The par of exchange, estimated by the Rigsbank dollar, would be 8 dollars 7 6 skillings per pound sterling.

Weights and Measures. — The commercial weights are, 16 pounds = 1 lispound, 20 lispound = 1 shippound, 100 lbs. = 110½ lbs. avoirdupois = 134 lbs. Troy = 101 lbs of Amsterdam = 103 of Hamburg.

The liquid measures are, 4 ankers = 1 ahm or ohm; 1½ ahm = 1 hogshead, 2 hogsheads = 1 pipe; 2 pipes = 1 quarter. The anker = 10 (very nearly) English wine gallons. A *fuder* of wine = 930 pots: and 100 pots = 25½ wine-gallons.

The dry measures are, 4 vertels = 1 scheffel, 8 scheffels = 1 toende or ton, 12 tons = 1 last = 47½ Winchester bushels. The last of oil, butter, herrings, and other oily substances should weigh 224 lbs nett.

The measure of length is the Rhineland foot = 12⅓ inches very nearly. The Danish ell = 2 feet; 100 ells = 68½ English yards.

Trade of Copenhagen. — This is not very considerable, and has latterly declined. Timber, pitch and tar are chiefly imported from Sweden and Norway; flax, hemp, masts, sail-cloth, and cordage, from Russia; West India produce, from the Danish and foreign West India islands; tobacco, from America; wines and brandy, from France: coal, earthenware, iron and steel, and salt, are the principal articles of direct importation from England. Of coal, we sent to Denmark (principally to Copenhagen), in 1840, 126,779 tons, and of salt, 684,460 bushels. Owing to the erroneous policy of the Danish government, which is attempting, at a great public loss, to raise and bolster up manufactures, the direct imports of woollens and cottons are inconsiderable. These articles are not, however, absolutely prohibited. Down to 1841 they were admitted on condition of their being stamped and put up to auction by the custom-house, which, after retaining 30 per cent. of the gross produce of the sale, paid over the surplus to the importer. In the above year, however, the duty, in imitation of the German plan, was ordered to be assessed partly according to the description of the goods, and partly according to their weight; so that the existing duty varies on cotton goods, from 3*l.* 15*s.* to 22*l.* 10*s.* per 100 lbs. Danish (equal to 110 lbs. English); and on woollens, from 2*l.* 16*s.* 3*d.* to 14*l.* 1*s.* 3*d.* per 100 lbs. Danish. But, though advantageous in some respects, this change will be mischievous in others; for, while it has facilitated the collection of the duties, and reduced those on the finer descriptions, it has added materially to those on the coarser and most essential fabrics. Hence we need not be surprised that there is an extensive illicit importation of these articles by the Elbe and Holstein frontier. The exports consist principally of the produce of the soil, as corn, rape seed, butter and cheese, beef and pork, horses and cattle, wool, hides and skins, bones, corn-brandy, &c. At an average of the seven years ending with 1839, the annual exports of corn from Denmark were: — wheat, 140,989 imp. qrs.; rye, 127,521 do.; barley, 588,068 do.; and oats, 125,986 do. In 1842 we imported from Denmark 89,683 qrs. wheat, 19,047 do. barley, and 38,046 do. oats. (See CORN LAWS.) We subjoin an

Account of the Quantity and Value of the principal Articles, the produce of Denmark and her Dependencies, exported from that Kingdom and the Duchies of Sleswick and Holstein, in 1836.

Articles.	Danish Weights and Measures.	British Weights and Measures.	Approximate Value.
I. AGRICULTURAL PRODUCE.			£
Wheat	156,222 tonder	75,507 qrs.	
Flour	61,041 —	29,493 —	150,704
Rye	150,477 —	72,730 —	
Flour	6,334 —	3,061 —	71,570
Barley	408,631 —	197,505 —	
Flour	2,980 —	1,440 —	
Groats	23,105 —	11,167 —	178,304
Malt	30,226 —	14,609 —	
Oats	176,347 —	85,234 —	
Meal	674 —	326 —	
Groats	1,556 —	752 —	44,855
Buckwheat	26,868 —	12,986 —	
Flour	3,311 —	1,600 —	18,865
Groats			
Pease	64,607 —	31,231 —	
Tares	12,396 —	5,991 —	55,309
Beans	45,201 —	21,847 —	
Rape seed	194,373 —	93,932 —	230,368
Flax & other seeds	18,007 —	8,703 —	16,673
Clover seed	318,880 lbs.	350,768 lbs.	5,167
Biscuits of wheat	2,595,952 —	25,496 cwts.	13,460
Oil cakes	— —	— —	14,814
Butter	66,665 barrels	— —	395,032
Cheese	956,649 lbs.	9,425 —	11,072
Pork, salted	5,167,136 —	50,907 —	87,171
smoked	803,088 —	7,912 —	
Beef, salted	2,508,061 —	24,710 —	26,292
smoked	164,016 —	1,616 —	
Tallow	178,016 —	1,754 —	3,297
Candles	322,624 —	3,179 —	7,842
Horses	7,566 head	— —	84,067
Oxen	28,323 —	— —	
Cows	5,69 —	— —	231,610
Calves	6,903 —	— —	
Pigs	13,028 —	— —	14,476
Sheep and Lambs	15,242 —	— —	5,534
Corn Brandy	4,755 hhds.	— —	13,250
Hides: — Horse, ox, and cow	2,249,136 lbs.	22,159 —	28,638
Skins: Calf, sheep and lamb	1,453,903 —	14,324 —	40,387
Honey	52,656 —	514 —	
Wax	30,978 —	305 —	2,782
Quills, writing	14,579 —	— —	1,845
Bones	22,568 sh. lbs.	70,928 —	12,030
Wool	5,979 —	18,797 —	88,955
Potatoes	119,496 tonder	57,756 —	15,490
Wood for fuel	10,708 fathms.	— —	7,821
Turf	— —	— —	8,000
		Total	1,880,667
II. PRODUCE OF THE FISHERY.			
Herrings	1,779 barrels	— —	
Fish, salted or smoked	— —	— —	4,390
Oysters	2,221 —	— —	
III. PRODUCE OF THE COLONIES.			
(a) *Of Iceland, the Faroe Islands, and Greenland.*			
Eider down	3,759 lbs.	4,135 lbs.	
Feathers for beds	1,056 —	1,161 —	
Lub fish	663 sh. lbs.	2,081 cwts.	
Flat fish	629 —	1,977 —	
Walrus skins	100 pieces	— —	
Sheep and lamb skins	41,517 —	— —	
Reindeer skins	3,835 —	— —	
Fox	2,407 —	— —	62,052
Seal	52,342 —	— —	
Swoolerts	10,800 —	— —	
Tallow	302 sh. lbs.	949 cwts.	
Train oil	5,526 barrels	— —	
Wool	2,4 0 sh. lbs.	7,606 —	
Worsted jackets	25,180 pieces	— —	
Stockings	117,218 pairs	— —	
Mittens	32,488 —	— —	
Whalebone	11,416 lbs.	112 —	
(b) *Of the Islands of St. Croix and St. Thomas.*			
Sugar	The quantity exported not having been stated, the value has been taken of the quantity exported in the preceding year: — say		12,000
Rum			
		Total	1,959,116

We have no means of ascertaining the proportion shipped from Copenhagen, but it was very considerable.

Shipping. — In 1840, there entered the port of Copenhagen 4,630 ships of all sizes. There arrived during the same year 89 British ships of the burden of 16,408 tons, chiefly coal laden. In the following year, 1841, there arrived in the different Danish ports, 156 English ships of the burden of 27,000 tons.

Including vessels under 10 tons, there belonged, in 1839, to

	Ships.	Tonnage.
Denmark	1,558	65,433
Sleswick	965	35,811
Holstein	1,331	36,167
Total	3,854	137,411

Colonial Trade. — In the West Indies, the Danes possess the island of St. Croix, which, though small, is fertile, and well cultivated. All the ports of Denmark may send vessels thither, and import sugar or other produce, on payment of the duties. St. Croix produces about 25,000,000 lbs. sugar, and 1,400,000 gallons rum.

But since 1833, when the restrictions on the colonial trade were abolished, the exports of sugar from St. Croix to Denmark have materially diminished, large quantities being now sent from the island to the U. States. The imports of colonial sugar may at present (1843) be estimated at about 8,500,000 lbs., and those of rum at about 450,000 gallons. About two thirds of the trade with the West Indies is engrossed by Copenhagen, and the rest by Flensburg. About 6,500,000 lbs. foreign raw sugar are imported. It is stated that government intends to reduce the duty on raw sugar from 5*s.* 11*d.* a cwt., its present (1843) amount, to 2*s.* 9*d.* a cwt.

The trade to India and China, formerly a monopoly in the hands of a joint stock company, was opened to the public in 1840. Several vessels have since been fitted out for the trade; but it is doubtful, from the want of produce suitable for the Eastern markets, whether it can ever attain to any considerable importance.

Port Charges vary according as the vessel has come from this or the further side of Cape Finisterre, or from the Indian seas; as she is wholly, or only part loaded; and as she clears out with goods that have been *in transitu*, and are for the most part free of duty, or has on board a cargo of native produce subject to duty. On a ship of 300 tons belonging to a privileged nation from this side Cape Finisterre, unloading and loading mixed cargoes in Copenhagen, the different public charges, including Sound dues, brokerage, &c., would exceed 60*l.*; and from the further side of Cape Finisterre, the charges would be nearly 100*l.* When a ship is not fully loaded, lastage money and light dues are only charged in proportion to the cargo on board. Lastage money is not charged on ships outward bound, laden with transit goods, as tar, pitch, iron, &c. But notwithstanding these deductions, it is obvious that port charges are very heavy, and there can be no doubt that they are a material obstacle to the extension of trade.

Commission on purchases is generally 2 per cent., and on sales, 3 per cent., including 1 per cent. *del credere.*

Citizenship. — To enable a foreigner to trade as a merchant in Denmark, he must become a burgher, which costs about 100*l.*, and it will require about 60*l.* more to free him from the obligation of serving in the militia. The obstacles in the way of a foreigner establishing himself in Denmark as a manufacturer, are much greater, on account of the exclusive privileges enjoyed by the guilds or corporations into which the principal crafts or trades are divided.

Credit. — Goods imported into Copenhagen are commonly sold on credit; 3 months is the term generally allowed on most sorts of goods, and in a few instances 6 months. The discount for ready money is 4 per cent. Bankruptcy is of rare occurrence.

Insurance. — Marine insurance is effected, on liberal terms, by a company established in 1746. A good many risks are, however, insured at Amsterdam and Hamburg.

Careening, Ships' Stores, &c. — Copenhagen has good building-yards, and is in all respects an eligible place for the repair of ships, and for supplying them with provisions.

Account of the Quantities of the principal Articles of Foreign and Colonial Produce imported into the United Kingdom from Denmark in 1840 and 1841; and of the Quantities and Values of the principal Articles of British and Irish Produce exported to the same in 1839 and 1840.

Principal Articles of Import.		1840. Quantities.	1841. Quantities.	Principal Articles of Export.		1839. Quantities.	1839. Values.	1840. Quantities.	1840. Values.
							£		£
Butter	cwts.	14,080	16,196	Coals, culm, and cinders	tons	129,005	38,485	126,779	35,604
Corn, wheat	qrs.	190,351	236,240	Cotton manufac. entered by yd.	yds.	143,896	3,491	101,637	2,183
barley	—	232,037	81,946	twist and yarn	lbs.	15,330	1,941	101,748	4,024
oats	—	78,919	25,088	Earthenware of all sorts	pieces	1,366,918	14,421	1,146,371	14,183
peas and beans	—	46,207	25,233	Hardware and cutlery	cwts.	538	2,618	955	2,984
wheat-meal & flour	cwts.	10,951	8,810	Iron and steel, wrought and unw.	tons	6,153	47,600	13,540	97,980
Seeds, clover	—	3,751	2,656	Machinery and mill-work	—	—	1,376	—	4,628
tlas & lin-				Salt	bush.	693,960	12,425	584,460	9,335
seed	bush.	13,692	17,331	Tin and pewter wares and tin plates		—	840	—	5,869
rape	—	465,202	343,908	All other articles		—	20,535	—	26,732
tares	—	56,962	31,548						
Wool, sheep's	lbs.	605,521	778,256	Total		—	143,732	—	201,462

Tares. — Statement of the Tares allowed by the Custom-house at Copenhagen, on the principal Articles of Importation.

Articles.	Description of Packages.	Tares.	Articles.	Description of Packages.	Tares.
Almonds	Linen bags	4 per ct.	Ochre	All sorts of packages	10 per ct.
Cassia lignea	All sorts of packages	16 —	Olive oil	In single and double casks	18 —
Cinnamon	do.	do.		Bottled, in baskets and straw	20 —
Cocoa	In linen bags	4 per ct.		do. in boxes and sawdust	40 —
Coffee	Casks of 400 lbs. and under exceeding 400 lbs.	16 — 12 —	Pepper	Bags of 150 lbs. and under exceeding 150 lbs.	2 lbs. 4 —
	Matted bags of 150 lbs. & under exceeding 150 lbs.	2 lbs. 4 —		Linen bags do.	do. do.
	East India bags, double do. single	do. 2 lbs.	Pimento		do.
Cotton	Bags, or bales	4 —	Raisins	½ barrel	18 lbs.
Currants	All sorts of packages	16 per ct.		¼ do.	12 —
Delft ware	do.	12 —		Casks exceeding ¼ barrel	10 per ct.
Figs	½ casks	12 lbs.		do. under ¼ barrel	12 —
	¼ do.	18 —	Rice	Casks	10 —
	Casks	10 per ct.		Barrels	24 lbs.
	Baskets, or frails	8 —		Bags of 100 lbs. and not exceeding 150 lbs.	4 —
Glass ware	Boxes	34 —		150 lbs. and under	2 —
	Bottles in crates and in straw	20 —	Saltpetre	All kinds of packages	10 per ct.
	do. in boxes and in sawdust	40 —	Soap, white	do.	14 —
Hardware	In casks and boxes	12 —	Sugar, raw	In casks	17 —
	Packed in mats, per piece	4 lbs.		Brazil boxes	do.
Hops	Bags and packets	4 per ct.		Havannah do.	12 —
Indigo	All sorts of packages	20 —	refined	Casks (transit)	do.
Mustard	Glasses, in boxes and casks	12 —	Tobacco	do.	do.
				Baskets packed in mats	5 —

General Remarks. — On the whole, the commerce of Denmark may be pronounced to be in a stationary state; a consequence partly of the peculiar circumstances under which the country is placed, and partly of the policy of government. The latter has long been exerting itself to bolster up a manufacturing interest, by laying oppressive duties on most species of manufactured articles. Even under the most favourable circumstances, such conduct, though it may benefit a few individuals, is sure to be productive of great national loss. But in the case of Denmark, the circumstances are such as to render the restrictive system peculiarly injurious. All, or nearly all, the branches of industry carried on in the kingdom are subject to the government of guilds or corporations; no person can engage in any line of business until he has been authorised by its peculiar guild; and as the sanction of this body is rarely obtained without a considerable sacrifice, the real effect of the system is to fetter competition and improvement, and to perpetuate monopoly and routine. Even the Danish writers acknowledge that such is the influence of the present regulations. "*Nos ouvriers*," say they, "*sont chers, travaillent lentement, et souvent mal et sans goût; leur éducation est négligée. On ne les forme point à penser, et l'apprentif suit machinalement ce qu'il voit faire au maître.*" — (*Catteau, Tableau des Etats Danois*, tome ii. p. 260.) But, however favourably situated in other respects, it would be idle to expect that a country without waterfalls, and without coal, should be able to manufacture cottons, woollens, &c. at so cheap a rate as they may be imported from others enjoying greater natural facilities for their production. Happily, however, the staple business of Denmark, her agriculture and rural economy, has been most materially improved of late years; and, as already seen, her exports of raw produce are now of great value and importance.

The trade of the country suffers from the too great magnitude of the port dues and of the transit duties; and the Sound duties, being charged on native as well as foreign ships, operate as an inland duty on trade. Considerable improvements have, however, been effected in the commercial legislation of the country during the last dozen years, by the opening of the trade to the East and West Indies, and the abolition and reduction of other regulations and duties; and it may be fairly presumed that the benefits resulting from these measures will pave the way for the introduction of others of a similar character.

In compiling this article, we have consulted *Oddy's European Commerce*, pp. 330—369.; *Dictionnaire du Commerce* (*Ency. Méthodique*, tome ii. pp. 3—16.); *Catteau, Tableau des Etats Danois*, tome ii. pp. 292—371.; the valuable Reports of Mr. M'Gregor, consul at Elsinore, &c.

COPPER (Ger. *Kupfer*; Du. *Koper*; Da. *Kobber*; Sw. *Kopper*; Fr. *Cuivre*; It. *Rame*; Sp. *Cobre*; Port. *Cobre*; Rus. *Mjed*, *Krasnoi mjed*; Pol. *Miedz*; Lat. *Cuprum*; Arab. *Nehass*; Sans. *Tamra*), a well-known metal, so called from its having been first discovered, or at least wrought to any extent, in the island of Cyprus. It is of a fine red colour, and has a great deal of brilliancy. Its taste is styptic and nauseous; and the hands, when rubbed for some time on it, acquire a peculiar and disagreeable odour. It is harder than silver; its specific gravity varies according to its state, being,

when quite pure, near 9·000. Its malleability is great; it may be hammered out into leaves so thin as to be blown about by the slightest breeze. Its ductility is also considerable. Its tenacity is so great, that a copper wire 0·078 of an inch in diameter is capable of supporting 302·26 lbs. avoirdupois without breaking. Its liability to oxidation from exposure to air or damp is its greatest defect. The rust with which it is then covered is known by the name of verdigris, and is one of the most active poisons. —(*Thomson's Chemistry.*)

If we except gold and silver, copper seems to have been more early known than any other metal. In the first ages of the world, before the method of working iron was discovered, copper was the principal ingredient in all domestic utensils and instruments of war. Even now it is applied to so many purposes, as to rank next, in point of utility, to iron.

Alloys of Copper are numerous and of great value. Those of tin are of most importance. Tin added to copper makes it more fusible, less liable to rust, or to be corroded by the air and other common substances, harder, denser, and more sonorous. In these respects the alloy has a real advantage over unmixed copper: but this is in many cases more than counterbalanced by the great brittleness which even a moderate portion of tin imparts; and which is a singular circumstance, considering that both metals are separately very malleable.

Copper alloyed with from 1 to 5 per cent. of tin is rendered harder than before; its colour is yellow, with a cast of red, and its fracture granular: it has considerable malleability. This appears to have been the usual composition of many of the ancient edged tools and weapons, before the method of working iron was brought to perfection. The χαλκος of the Greeks, and, perhaps the *æs* of the Romans, was nothing else. Even their copper coins contain a mixture of tin. The ancients did not, in fact, possess (as has been often contended) any peculiar process for hardening copper, except by adding to it a small quantity of tin. An alloy in which the tin is from 0·1 to ¼ of the whole is hard, brittle, but still a little malleable, close grained, and yellowish white. When the tin is as much as ¼ of the mass, it is entirely brittle; and continues so in every higher proportion. The yellowness of the alloy is not entirely lost till the tin amounts to 0·3 of the whole.

Copper (or sometimes copper with a little zinc), alloyed with as much tin as will make from about 0·1 to ¼ of the whole, forms an alloy, which is principally employed for bells, brass cannon, bronze statues, and various other purposes. Hence it is called *bronze* or *bell metal*; and is excellently fitted for the uses to which it is applied, by its hardness, density, sonorousness, and fusibility. For cannon, a lower proportion of tin is commonly used. According to Dr. Watson, the metal employed at Woolwich consists of 100 parts of copper and from 8 to 12 of tin; hence it retains some little malleability, and, therefore, is tougher than it would be with a larger portion of tin. This alloy being more sonorous than iron, brass guns give a louder report than iron guns. A common alloy for bell metal is 80 parts of copper and 20 of tin: some artists add to these ingredients zinc, antimony, and silver, in small proportions; all of which add to the sonorousness of the compound. —(See BELL METAL.)

When, in an alloy of copper and tin, the latter metal amounts to about ¼ of the mass, the result is a beautiful compound, very hard, of the colour of steel, and susceptible of a very fine polish. It is well adapted for the reflection of light for optical purposes; and is therefore called *speculum metal*. Besides the above ingredients, it usually contains a little arsenic, zinc, or silver. The application of an alloy similar to the above, to the construction of mirrors, is of great antiquity, being mentioned by Pliny; who says, that formerly the best mirrors were reckoned those of Brundusium, of tin and copper mixed (*stanno et ære mistis*). — (*Hist. Nat.* lib. xxxiii. § 9.)

For the alloys of copper with zinc, see the articles BRASS, PINCHBECK. See, also, *Thomson's Chemistry*; *Rees's Cyclopædia*; *Dr. Watson's Chemical Essays*, vol. iv., *&c.*

British Copper Trade. — Great Britain has various copper mines, in Cornwall, Devonshire, Wales, &c., but particularly in the first. Though known long before, the Cornish copper mines were not wrought with much spirit till last century. From 1726 to 1735, they produced at an average about 700 tons a year of pure copper. During the ten years from 1766 to 1775, they produced, at an average, 2,650 tons. In 1798, the produce exceeded 5,000 tons; and it now amounts to from 10,000 to 12,000 tons, worth, at 100*l.* a ton, from 1,000,000*l.* to 1,200,000*l.* sterling! In 1768, the famous mines in the Parys mountain, near Amlwch, in Anglesea, were discovered. The supplies of ore furnished by them were for a long time abundant beyond all precedent; but for many years past the productiveness of the mine has been declining, and it now yields comparatively little copper. At present the mines in Anglesea, and other parts of Wales, yield from 1,750 to 2,000 tons of copper; those of Devonshire yield about 500 tons; the quantity produced in the other parts of England being quite inconsiderable. The Irish mines produce about 500 tons. Those of Scotland never were productive, and have been almost entirely abandoned. The entire produce of the copper mines of the empire may, therefore, be estimated at present at from 14,000 to 15,000 tons.

In consequence of the greatly increased supplies of copper that were thus obtained, England, instead of being, as formerly, dependent on foreigners for the greater part of her supplies of this valuable metal, became, previously to 1793, one of the principal markets for the supply of others. And notwithstanding the vastly increased demand for copper during the war for the sheathing of ships and other purposes, the exports continued to increase and the imports to diminish; the greater productiveness of the Cornish mines having sufficed not only to balance the increased demand, but also to make up for the falling off in the supplies from Anglesea.

Owing to the want of coal in Cornwall, the ores are not smelted on the spot, but are, for the most part, sent to Swansea; it being found cheaper to carry the ores to the coal than the contrary.

The East Indies and China, France, the U. States, and Italy, are the great markets for British copper. Thus, in 1842, of the total quantity exported, amounting, as seen above, to 194,061 cwts., 99,990 went to the East Indies and China, 21,292 to France, 16,378 to the U. States, and 10,765 to Italy. —(*Parl. Paper* No. 237. Sess. 1843.)

Foreign Copper.—Copper ores are abundant in Sweden, Russia, Persia, Japan, Cuba, Chili, Colombia, &c. Near Fahlun, in the province of Dalecaria, in Sweden, is the celebrated copper mine of the same name, supposed to have been wrought nearly 1,000 years. For a long time it was extremely productive, yielding, towards the beginning of the seventeenth century, an annual produce of about 8,000,000 lbs. of pure metal; but it has since greatly declined; and it is most probable that at no distant period it will be wholly abandoned. —(*Thomson's Travels in Sweden*, p. 221.) There are copper mines in other parts of Sweden; but the entire produce of copper in that country does not at present exceed from 750 to 800 tons, of a quality inferior to that of England. The produce of the copper mines in the government of Olonetz, in Russia, has been estimated at 210,000 poods, or 3,375 tons (Eng.) a year. —(*Schnitzler, Essai d'une Statistique Générale, &c.* p. 41.) The copper mines of Japan are said to be among the richest in the world. The Dutch and Chinese export considerable quantities of their produce, which is spread all over the East, and is regularly quoted in the price currents of Canton, Calcutta, and Singapore. It is uniformly met with in the shape of bars or ingots; and when the copper of S. America is worth in the

Canton market from 15 to 16 dollars per picul, that of Japan is worth from 18 to 20 per ditto. Copper, the produce of the Persian mines, is imported into Bombay and Calcutta from Bushire and Bussorah.

But, in a commercial point of view, the copper mines of Cuba and Chili are, after those of England, by far the most important. The working of the mines of Cuba, which had been abandoned for a lengthened period, was resumed a few years ago, principally by an English company, which has been eminently successful. Large quantities of Cuba ore are brought to Swansea to be smelted; and large quantities of Chili ore are also brought hither for the same purpose. Of the total imports of copper ore in 1842, amounting to above 50,000 tons, Cuba furnished 32,270 tons, and Chili 12,643 ditto; the rest being supplied by Colombia, Brazil, &c. Foreign copper imported into this country, and the copper obtained from the smelting of foreign ore, were, previously to 1842, wholly, or almost wholly, re-exported (*Geographical Dictionary*, arts. *Cuba* and *Chili*; *Parl. Paper* No. 237. Sess. 1843, &c.); the duty on the copper or ore when it was taken or smelted for home use being so very heavy, as to make it be altogether exported in an unwrought state. But, in 1842, the duty on copper ores and unwrought copper was so much reduced, that it is believed that considerable quantities of foreign copper, and of copper derived from foreign ore, will in future be brought into use in this country.

Account of the Copper produced from the Mines in Cornwall since 1800; showing the Quantity of *Ore*, (in tons of 21 cwt.) of Metal or Fine Copper, the Value of the Ores in Money, the average Percentage or Produce, and the average Standard or Miner's Price of Fine Copper, made up to the end of June in each Year.

Years.	Quantity of Ores.	Metal or Fine Copper.				Value of the Ores.			Produce of Ores per cent.	Average Standard Price per Ton.		
	Tons.	*Tons.*	*cwt.*	*qrs.*	*lbs.*	£	*s.*	*d.*		£	*s.*	*d.*
1800	55,981	5,187	0	3	7	550,925	1	0	9½	133	5	6
1801	56,611	5,267	18	3	10	470,813	1	0	9¾	117	5	0
1802	53,937	5,228	15	3	5	445,094	4	0	9¾	110	18	0
1803	60,366	5,616	16	0	21	533,010	16	0	8¾	122	0	0
1804	64,657	5,574	18	1	20	507,840	11	0	8¾	138	5	0
1805	78,152	6,254	5	0	6	805,110	16	0	8	169	16	0
1806	79,259	6,865	10	2	13	730,815	6	6	8¾	158	5	0
1807	71,694	6,216	12	1	26	649,012	13	0	9	120	0	0
1808	67,867	6,595	13	2	25	495,303	1	6	10	100	7	0
1809	76,245	6,821	15	1	19	770,028	15	6	8¾	143	12	0
1810	66,048	6,682	19	1	27	550,035	8	0	8¾	132	5	0
1811	66,786	6,141	15	3	7	586,725	19	0	9¾	120	15	0
1812	71,547	6,520	7	2	1	549,665	6	6	9¾	111	0	0
1813	74,047	6,918	5	0	[illegible]	594,515	10	0	9¾	115	7	0
1814	74,522	6,569	15	3	[illegible]	627,901	10	0	8¾	150	12	0
1815	78,185	6,525	6	3	25	557,813	8	6	8¾	117	16	0
1816	77,334	6,697	3	0	17	442,959	17	0	8¾	98	13	0
1817	76,701	6,198	2	0	16	491,009	12	6	8	108	10	0
1818	88,174	6,849	7	1	1	686,005	4	6	7¾	134	15	0
1819	88,736	6,804	2	2	7	623,765	4	6	7¾	127	10	0
1820	91,473	7,408	0	3	26	692,141	12	0	8¼	113	15	0
1821	98,426	8,514	19	2	12	695,968	19	6	8¾	105	0	0
1822	104,525	9,130	8	3	20	663,085	13	6	8¾	104	0	0
1823	95,790	7,922	17	2	7	606,053	1	0	8¼	109	18	0
1824	99,780	7,825	15	1	10	587,178	3	6	7¾	110	0	0
1825	107,454	8,228	5	0	21	726,553	12	0	7¾	124	4	0
1826	117,508	9,026	12	3	15	788,971	15	6	7¾	123	3	0
1827	126,710	10,511	14	3	15	715,178	1	0	8¼	106	1	0
1828	150,566	9,924	1	2	11	750,174	16	0	7¾	112	7	0
1829	121,502	9,656	10	3	1	717,334	0	0	7¾	109	14	0
1830	133,964	10,743	0	0	0	777,846	0	0	8	106	5	0
1831	144,102	12,044	0	0	0	800,000	0	0	8¼	100	0	0
1832	137,357	11,941	4	0	0	823,512	11	0	8¾	100	15	0
1833	138,500	11,185	7	0	0	858,708	10	0	8	110	10	0
1834	145,296	11,224	19	3	27	887,902	0	0	7¾	114	4	0
1835	150,617	12,271	14	1	1	893,402	15	0	8¼	106	11	0
1836	140,981	11,659	11	0	0	952,752	8	6	8¼	115	12	0
1837	140,753	10,825	0	1	26	909,513	15	0	7¾	119	5	0
1838	145,688	11,527	4	1	17	857,279	11	0	7¾	109	3	0
1839	159,551	12,450	18	1	24	952,397	12	6	7¾	110	2	0
1840	147,266	11,037	16	3	1	792,758	3	6	7½	108	10	0
1841	135,080	9,987	2	1	23	819,949	2	0	7¼	119	6	0
1842	154,180	9,896	3	0	15	822,870	12	0	7¼	120	16	0

Exports of British Copper in the undermentioned Years.

Years.	Unwrought.	Coin.	Sheets, Nails, &c.	Wire.	Wrought Copper of other Sorts.	Total of British Copper exported.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
1820	41,155	10	58,121	8	22,663	121,958
1825	10	2,134	51,437	40	25,802	78,624
1830	56,722	640	66,331	16	56,448	183,154
1835	39,409	- -	100,307	49	20,219	161,524
1840	20,355	391	119,266	39	10,427	150,478
1841	8,638	726	100,619	65	8,454	118,582
1842	65,446	210	130,848	64	9,493	191,061

N.B.—The quantity of copper smelted from foreign ores in the U. Kingdom in 1842 was almost exactly equal to the quantity of British copper exported.

Customs Regulations.—Old copper sheathing, old copper utensils, and old copper and pewter utensils of British manufacture, imported from British plantations, and also old copper stripped off vessels in ports in the U. Kingdom, may be admitted to entry, duty free, under the following regulations; viz.—

1st. Old copper sheathing stripped off British vessels in ports in the British possessions, upon proof to the satisfaction of the commissioners of customs that such sheathing was stripped off in such ports, and also that the said sheathing is the property of the owner of the ship from which it was so stripped, to be delivered to such owner.

2d. Old copper sheathing stripped off any ship in any port in the U. Kingdom, upon the fact being certified by the landing-waiter superintending the process; the old copper to be delivered only to the coppersmith who may re-copper the vessel from which the copper was stripped, he making proof to that fact.

3d. Old worn-out British copper and pewter utensils to be in all cases delivered when brought from British possessions abroad in British ships, upon the consignee submitting proof that they had been used on a particular estate, and are consigned on account of the owner of that estate, and that he (the consignee) verily believes them to have been of British manufacture.—(*Min. Com. Cus.*, 15th of Feb. 1833.)

The act 7 & 8 Geo. 4. c. 58. § 23. authorised copper ore to be taken out of warehouses to be smelted, on proper notice being given to the customs officers, and giving sufficient security, by bond, for returning

the computed quantity of fine copper in it; but this provision was repealed by the act 5 & 6 Victoria, cap. 47. § 9.

Copper is in extensive demand all over India; being largely used in the dock-yards, in the manufacture of cooking utensils, in alloying spelter and tin, &c. The funeral of every Hindoo brings an accession to the demand, according to his station; the relatives of the deceased giving a brass cup to every Brahmin present at the ceremony: so that 5, 10, 50, 100, 1,000, and sometimes more than 10 times this last number, are dispensed upon such occasions.—(*Bell's Commerce of Bengal.*)

COPPERAS, a term employed by the older chemists, and popularly as synonymous with vitriol. There are three sorts of copperas: the *green*, or sulphate of iron; the *blue*, or sulphate of copper; and the *white*, or sulphate of zinc. Of these, the first is the most important.

Sulphate of iron is distinguished in common by a variety of names, as Martial vitriol, English vitriol, &c. When pure, it is considerably transparent, of a fine bright, though not very deep, grass green colour; and of a nauseous astringent taste, accompanied with a kind of sweetness. Its specific gravity is 1·834. It uniformly reddens the vegetable blues. This salt was well known to the ancients; and is mentioned by Pliny (*Hist. Nat.* lib. xxxiv. § 12.) under the names of *misy*, *sory*, and *chalchantum*. It is not made in the direct way, because it can be obtained at less charge from the decomposition of pyrites on a large scale in the neighbourhood of collieries. It exists in two states; one containing oxide of iron, with 0·22 of oxygen, which is of a pale green, not altered by gallic acid, and giving a white precipitate with prussiate of potass. The other, in which the iron is combined with 0·30 of oxygen, is red, not crystallisable, and gives a black precipitate with gallic acid, and a blue with prussiate of potass. In the common sulphate, these two are often mixed in various proportions.

Sulphate of iron is of great importance in the arts. It is a principal ingredient in dyeing; in the manufacture of ink, and of prussian blue: it is also used in tanning, painting, medicine, &c. Sulphuric acid, or oil of vitriol, was formerly manufactured from sulphate of iron.—(See Acids.)

Sulphate of copper, or *blue* vitriol, commonly called Roman or Cyprian vitriol, is of an elegant sapphire blue colour, hard, compact, and semi-transparent; when perfectly crystallised, of a flattish, rhomboidal, decahedral figure; its taste is extremely nauseous, styptic, and acrid; its specific gravity is 2·1943. It is used for various purposes in the arts, and also in medicine.

Sulphate of zinc, or *white* vitriol, is found native in the mines of Goslar and other places. Sometimes it is met with in transparent pieces, but more commonly in white efflorescences. These are dissolved in water, and crystallised into large irregular masses, somewhat resembling fine sugar, having a sweetish, nauseous, styptic taste. Its specific gravity, when crystallised, is 1·912; when in the state in which it commonly occurs in commerce, it is 1·3275. Sulphate of zinc is prepared in the large way from some varieties of the native sulphuret. The ore is roasted, wetted with water, and exposed to the air. The sulphur attracts oxygen, and is converted into sulphuric acid; and the metal, being at the same time oxidized, combines with the acid. After some time the sulphate is extracted by solution in water; and the solution being evaporated to dryness, the mass is run into moulds. Thus, the white vitriol of the shops generally contains a small portion of iron, and often of copper and lead.—(*Lewis's Mat. Medica; Ure's Dictionary; Rees's Cyclopædia; Thomson's Chemistry*, &c.)

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CORAL (Ger. *Korallen*; Du. *Koraalen*; Fr. *Corail*; It. *Corale*; Sp. and Port. *Coral*; Rus. *Korallü*; Lat. *Corallium*; Arab. *Besed*; Pers. *Merjan*; Hind. *Moonga*), a marine production, of which there are several varieties. It was well known to the ancients, but it was reserved for the moderns to discover its real nature. It is, in fact, the nidus or nest of a certain species of vermes, which has the same relation to coral that a snail has to its shell. As an ornament, black coral is most esteemed; but the red is also very highly prized. Coral is found in very great abundance in the Red Sea, the Persian Gulph, in various places in the Mediterranean, on the coast of Sumatra, &c. It grows on rocks, and on any solid submarine body; and it is necessary to its production that it should remain fixed to its place. It has generally a shrub-like appearance. In the Straits of Messina, where a great deal is fished up, it usually grows to nearly a foot in length, and its thickness is about that of the little finger. It requires 8 or 10 years to arrive at its greatest size. The depth at which it is obtained is various—from 10 to 100 fathoms or more: but it seems to be necessary to its production that the rays of the sun should readily penetrate to the place of its habitation. Its value depends upon its size, solidity, and the depth and brilliancy of its colour; and is so very various, that while some of the Sicilian coral sells for 8 or 10 guineas an ounce, other descriptions of it will not fetch 1*s.* a pound. It is highly prized by opulent natives in India, as well as by the fair sex throughout Europe. The inferior or worm-eaten coral is used in some parts of the Madras coast, in the celebration of funeral rites. It is also used medicinally. Besides the fishery in the Straits of Messina already alluded to, there are valuable

fisheries on the shores of Majorca and Minorca, and on the coast of Provence. A good deal of Mediterranean coral is exported to India, which, however, draws the largest portion of its supplies from the Persian Gulph. The produce of the fishery at Messina is stated by Spallanzani (*Travels in the Two Sicilies*, vol. iv. p. 408, &c.) to amount to 12 quintals of 250 lbs. each.

The manner of fishing coral is nearly the same every where. That which is most commonly practised in the Mediterranean is as follows:—Seven or 8 men go in a boat, commanded by the proprietor; the caster throws his net, if we may so call the machine which he uses to tear up the coral from the bottom of the sea; and the rest work the boat, and help to draw in the net. This is composed of two beams of wood tied crosswise, with leads fixed to them to sink them: to these beams is fastened a quantity of hemp, twisted loosely round, and intermingled with some loose netting. In this condition the machine is let down into the sea; and when the coral is pretty strongly entwined in the hemp and nets, they draw it up with a rope, which they unwind according to the depth, and which it sometimes requires half a dozen boats to draw. If this rope happen to break, the fishermen run the hazard of being lost. Before the fishers go to sea, they agree for the price of the coral; and the produce of the fishery is divided, at the end of the season, into 13 parts; of which the proprietor has 4, the caster 2, and the other 6 men 1 each; the thirteenth belongs to the company for payment of boat-hire, &c.—(See *Ainslie's Mat. Indica*; *Rees's Cyclopædia*; *Ency. Metrop.*; *Bell's Com. of Bengal*, &c.)

CORDAGE (Ger. *Tauwerk*; Du. *Touwwerk*; Fr. *Manœuvres*, *Cordage*; It. *Caolame*; Sp. *Jarcia*, *Cordaje*), a term used in general for all sorts of cord, whether small, middling, or great, made use of in the rigging of ships. The manufacture of cordage is regulated by the act 5 Geo. 4. c. 56., which specifies the sort of materials that are to be employed in the manufacture of cables, hawsers, and other ropes, the marks that are to be affixed to them, and the penalties of non-compliance with their respective enactments.—(See Cable.) Masters of British ships are obliged, on coming into any port in Great Britain or the colonies, to report, under a penalty of 100*l*., the foreign cordage, not being standing or running rigging, in use on board such ship.—(3 & 4 *Will. 4.* cap. 52. § 8.)

The following table shows how many fathoms, feet, and inches, of a rope of any size, not exceeding 14 inches, make 1 cwt.

At the top of the table, marked inches, fathoms, feet, inches, the first column is the circumference of a rope in inches and quarters; the second, the fathoms, feet, and inches that make up 1 cwt. of such a rope. One example will make it plain.

Suppose it is required how much of a 7-inch rope will make 1 cwt.: find 7 in the 3d column, under inches, or circumference of the rope, and immediately opposite to it you will find 9, 5, 6; which shows that in a rope of 7 inches, there will be 9 fathoms 5 feet 6 inches required to make 1 cwt.

Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.
1	486	0	0	3¾	34	3	9	6½	11	3	0	9¼	5	4	0	11¾	3	3	3
1¼	313	3	0	4	30	1	6	6⅝	10	4	0	9½	5	2	0	12	3	2	3
1½	216	3	0	4¼	26	5	3	7	9	5	6	9¾	5	0	6	12¼	3	2	1
1⅝	159	3	0	4½	24	0	0	7¼	9	1	6	10	4	5	0	12½	3	2	0
2	121	3	0	4¾	21	3	0	7½	8	4	0	10¼	4	4	1	12⅝	2	7	8
2¼	96	2	0	5	19	3	0	7⅝	8	3	6	10½	4	2	2	13	2	5	3
2½	77	3	0	5¼	17	4	0	8	7	3	6	10¾	4	1	8	13¼	2	4	9
2⅝	65	4	0	5½	16	1	0	8¼	7	0	8	11	4	0	3	13½	2	4	0
3	54	0	0	5¾	14	4	6	8½	6	4	3	11¼	3	5	7	13¾	2	3	6
3¼	45	5	2	6	13	3	0	8¾	6	2	1	11⅜	3	4	1	14	2	2	1
3½	39	3	0	6¼	12	2	9	9	6	0	0								

CORK (Ger. *Kork*; Du. *Kork*, *Kurk*, *Vlothout*; Fr. *Liège*; It. *Sughero*, *Suvero*; Sp. *Corcho*; Port. *Cortica* (*de Sovreiro*); Rus. *Korkowoe derewo*; Lat. *Suber*), the thick and spongy bark of a species of oak (*Quercus Suber* Lin.), abundant in dry mountainous districts in the south of France, and in Spain, Portugal, Italy, and Barbary. The tree grows to the height of 30 feet or more, has a striking resemblance to the *Quercus Ilex*, or evergreen oak, and attains to a great age. After arriving at a certain state of maturity, it periodically sheds its bark; but this valuable product is found to be of a much better quality when it is artificially removed from the tree, which may be effected without any injury to the latter. After a tree has attained to the age of from 26 to 30 years, it may be barked; and the operation may be subsequently repeated once every 8 or 10 years *, the quality of the cork improving with the increasing age of the tree. The bark is taken off in July and August; and trees that are regularly stripped are said to live for 150 years, or more.—(*Poiret, Hist. Philosophique des Plantes*, tom. vii. 419.)

Cork is light, porous, readily compressible, and wonderfully elastic. It may be cut into any sort of figure, and notwithstanding its porosity, is nearly impervious to any common liquor. These qualities make it superior to all other substances for stoppers for bottles, in the manufacture of which it is principally made use of. It is also employed as buoys to float nets, in the construction of life-boats, the making of waterproof shoes, and in various other ways. Before being manufactured into stoppers, the

* Beckmann (vol. ii. p. 115. Eng. ed.) says, that "when the tree is 15 years old, it may be barked, and this can be done successively for 8 years." This erroneous statement having been copied into the article

cork is charred on each side; this makes it contract, lessens its porosity, and consequently fits it the better for cutting off all communication between the external air and the liquid in the bottle. Spanish black is made of calcined cork.

The Greeks and Romans were both well acquainted with cork. They seem also to have occasionally used it as stoppers for vessels (*Cadorum obturamentis*, Plin. Hist. Nat. lib. xvi. cap. 8.); but it was not extensively employed for this purpose till the 17th century, when glass bottles, of which no mention is made before the 15th century began to be generally introduced.—(*Beckmann's Hist. Invent.* vol. ii. pp. 114—127. Eng. ed.)

The duty on manufactured cork is prohibitory; and on the rude article it is very heavy, being no less than 8*s.* a cwt. or 8*l.* a ton. The quantity entered for home consumption amounts, at an average, to from 40,000 to 45,000 cwts. Its price, including duty, varies with the variations in its quality, from about 20*l.* to about 70*l.* a ton. The Spanish is the best, and fetches the highest price.

CORN (Ger. *Corn, Getreide;* Du. *Graanen, Koren;* Da. *Korn;* Sw. *Sad, Spanmal;* Fr. *Bleds, Grains;* It. *Biade, Grani;* Sp. *Granos;* Rus. *Chljeb;* Pol. *Zboze;* Lat. *Frumentum*), the grain or seed of plants separated from the spica or ear, and used for making bread, &c. Such are wheat, rye, barley, oats, maize, peas, &c.; which see.

CORNELIAN. See CARNELIAN.

CORN LAWS AND CORN TRADE. — From the circumstance of corn forming, in this and most other countries, the principal part of the food of the people, the trade in it, and the laws by which that trade is regulated, are justly looked upon as of the highest importance. But this is not the only circumstance that renders it necessary to enter at some length into the discussion of this subject. Its difficulty is at least equal to its interest. The enactments made at different periods with respect to the corn trade, and the opinions advanced as to their policy, have been so very various and contradictory that it is indispensable to submit them to some examination, and, if possible, to ascertain the *principles* which ought to pervade this department of commercial legislation.

I. HISTORICAL SKETCH OF THE CORN LAWS.
II. PRINCIPLES OF THE CORN LAWS.
III. BRITISH CORN TRADE.
IV. FOREIGN CORN TRADE.

I. HISTORICAL SKETCH OF THE CORN LAWS.

For a long time the regulations with respect to the corn trade were principally intended to promote abundance and low prices. But though the purpose was laudable, the means adopted for accomplishing it had, for the most part, a directly opposite effect. When a country exports corn, it seems, at first sight, as if nothing could do so much to increase her supplies as the prevention of exportation: and even in countries that do not export, its prohibition seems to be a prudent measure, and calculated to prevent the supply from being diminished, upon any emergency, below its natural level. These are the conclusions that immediately suggest themselves upon this subject; and it requires a pretty extensive experience, an attention to facts, and a habit of reasoning upon such topics, to perceive their fallacy. These, however, were altogether wanting when the regulations affecting the corn trade began to be introduced into Great Britain and other countries. They were framed in accordance with what were supposed to be the dictates of common sense; and their object being to procure as large a supply of the prime necessary of life as possible, its exportation was either totally forbidden, or forbidden when the home price was above certain limits.

The principle of absolute prohibition seems to have been steadily acted upon, as far as the turbulence of the period would admit, from the Conquest to the year 1436, in the reign of Henry VI. But at the last-mentioned period an act was passed, authorising the exportation of wheat whenever the home price did not exceed 6*s.* 8*d.* (equal in amount of pure silver to 12*s.* 10¾*d.* present money) per quarter, and barley when the home price did not exceed 3*s.* 4*d.* In 1463, an additional benefit was intended to be conferred on agriculture by prohibiting importation until the home price exceeded that at which exportation ceased. But the fluctuating policy of the times prevented these regulations from being carried into full effect; and, indeed, rendered them in a great measure inoperative.

In addition to the restraints laid on exportation, it has been common in most countries to attempt to increase the supply of corn, not only by admitting its unrestrained importation from abroad, but by holding out extraordinary encouragement to the importers. This policy has not, however, been much followed in England. During the 500 years immediately posterior to the Conquest, importation was substantially free; but it was seldom or never promoted by artificial means; and during the last century and a half it has, for the most part, been subjected to severe restrictions.

Besides attempting to lower prices by prohibiting exportation, our ancestors attempted to lower them by proscribing the trade carried on by corn dealers. This most useful class of persons were looked upon with suspicion by every one. The agriculturists concluded that they would be able to sell their produce at higher prices to the consumers, were the corn dealers out of the way: while the consumers concluded that the profits of the dealers were made at their expense; and ascribed the dearths that were then very prevalent entirely to the practices of the dealers, or to their buying up corn and withholding it from market. These notions, which have still a considerable degree of influence, led to various enactments, particularly in the reign of Edward VI., by which the freedom of the internal corn trade was entirely suppressed. The *engrossing* of corn, or the buying of it in one market with intent to sell it again in another, was made an offence punishable by imprisonment and the pillory; and no one was allowed to carry corn from one part to another without a licence, the privilege of granting which was confided by a statute of Elizabeth to the quarter sessions. But as the principles of commerce came to be better understood, the impolicy of these restraints gradually grew more and more obvious. They were considerably modified in 1624; and, in 1663, the engrossing of corn was declared to be legal so long as the price did not exceed 48*s.* a quarter — (15 *Chas.* 2. c. 7.); an act which, as Dr. Smith has justly observed, has, with all its imperfections, done more to promote plenty than any other law in the statute book. In 1773, the last remnant of the *legislative* enactments restraining the freedom of the internal corn dealers, was entirely repealed. But the engrossing of corn has, notwithstanding, been since held to be an offence at common law; and, so late as 1800, a corn dealer was convicted of this imaginary crime. He was not, however, brought up for judgment; and it is not very likely that any similar case will ever again occupy the attention of the courts.

The acts of 1436 and 1463, regulating the prices when exportation was allowed and when importation was to cease, continued, nominally at least, in force till 1562, when the prices at which exportation might take place were extended to 10*s.* for wheat and 6*s.* 8*d.* for barley. But a new principle — that of imposing duties on exportation — was soon after introduced; and, in 1571, it was enacted that wheat might be exported, paying a duty of 2*s.* a quarter, and barley and other grain a duty of 1*s.* 4*d.*, whenever the home price of wheat did not exceed 20*s.* a quarter, and barley and malt 12*s.* At the Restoration, the limit at which exportation might take place was very much extended; but as the duty on exportation was, at the same time, so very high as to be almost prohibitory, the extension was of little or no service to the agriculturists. This view of the matter seems to have been speedily taken by the legislature; for in 1663, the high duties on exportation were taken off, and an *ad valorem* duty imposed in their stead, at the same time that the limit of exportation was extended. In 1670, a still more decided step was taken in favour of agriculture; an act being then passed which extended the exportation price to 53*s.* 4*d.* a quarter for wheat, and other grain in proportion, imposing, at the same time, prohibitory duties on the importation of wheat till the price rose to 53*s.* 4*d.*, and a duty of 8*s.* between that price and 80*s.* But the real effects of this act were not so great as might have been anticipated. The extension of the limit of exportation was rendered comparatively nugatory, in consequence of the continuance of the duties on exportation caused by the necessities of the Crown; while the want of any proper method for the determination of prices went far to nullify the prohibition of importation.

At the accession of William III. a new system was adopted. The interests of agriculture were then looked upon as of paramount importance: and to promote them, not only were the duties on exportation totally abolished, but it was encouraged by the grant of a *bounty* of 5*s.* on every quarter of wheat exported, while the price continued at or below 48*s.*; of 2*s.* 6*d.* on every quarter of barley or malt, while their respective prices did not exceed 24*s.*; and of 3*s.* 6*d.* on every quarter of rye, when its price did not exceed 32*s.* — (1 *Will. & Mary*, c. 12.) A bounty of 2*s.* 6*d.* a quarter was subsequently given upon the exportation of oats and oatmeal, when the price of the former did not exceed 15*s.* a quarter. Importation continued to be regulated by the act of 1670.

Much diversity of opinion has been entertained with respect to the policy of the bounty. That it was intended to raise the price of corn is clear, from the words of the statute, which states, "that the exportation of corn and grain into foreign parts, *when the price thereof is at a low rate in this kingdom*, hath been a great advantage not only to the owners of land, but to the trade of the kingdom in general; therefore," &c. But admitting this to have been its object, it has been contended that the low prices which prevailed during the first half of last century show that its real effect was precisely the reverse; and that, by extending tillage, it contributed to reduce prices. It will be afterwards shown that this could not really be the case; and the fall of prices may be sufficiently accounted for by the improved state of agriculture, the gradual consolidation of farms, the diminution of sheep husbandry, &c., combined with the slow increase of the population. In point of fact, too, prices had begun to give way 30 years before the bounty was

granted; and the fall was equally great in France, where, instead of exportation being encouraged by a bounty, it was almost entirely prohibited; and in most other Continental states. — (For proofs of what is now stated, see the article *Corn Laws*, in the new edition of the *Ency. Brit.*)

The Tables annexed to this article show that, with some few exceptions, there was, during the first 66 years of last century, a large export of corn from England. In 1750, the wheat exported amounted to 947,000 quarters; and the total bounties paid during the 10 years from 1740 to 1751 reached the sum of 1,515,000*l.* But the rapid increase of population subsequently to 1760, and particularly after the peace of Paris, in 1763, when the commerce and manufactures of the country were extended in an unprecedented degree, gradually reduced this excess of exportation, and occasionally, indeed, inclined the balance the other way. This led to several suspensions of the restrictions on importation; and at length, in 1773, a new act was framed, by which foreign wheat was allowed to be imported on paying a nominal duty of 6*d.* whenever the home price was at or above 48*s.* a quarter, and the bounty * and exportation were together to cease when the price was at or above 44*s.* This statute also permitted the importation of corn at any price, duty free, in order to be again exported, provided it were in the mean time lodged under the joint locks of the king and the importer.

The prices when exportation was to cease by this act seem to have been fixed too low; and, as Dr. Smith has observed, there appears a good deal of impropriety in prohibiting exportation altogether the moment it attained the limit when the bounty given to force it was withdrawn; yet, with all these defects, the act of 1773 was a material improvement on the former system, and ought not to have been altered unless to give greater freedom to the trade.

The idea that this law must, when enacted, have been injurious to the agriculturists, seems altogether illusory; the permission to import foreign grain, when the home price rose to a moderate height, certainly prevented their realising exorbitant profits, in dear years, at the expense of the other classes; and prevented an unnatural proportion of the capital of the country from being turned towards agriculture. But as the limit at which importation at a nominal duty was allowed was fixed a good deal above the average price of the reign of George II., it cannot be maintained that it had any tendency to reduce previous prices, which is the only thing that could have discouraged agriculture: and, in fact, no such reduction took place.

It is, indeed, true, that, but for this act, we should not have imported so much foreign grain in the interval between 1773 and 1791. This importation, however, was not a consequence of the decline of agriculture; for it is admitted that every branch of rural economy was more improved in that period than in the whole of the preceding century; but arose entirely from a still more rapid increase of the manufacturing population, and hence, of the effective demand for corn.

By referring to the Tables annexed to this article, it will be seen that, in 1772, the balance on the side of wheat imported amounted to 18,515 quarters; and in 1773, 1774, and 1775, all years of great prosperity, the balance was very much increased. But the loss of a great part of our colonial possessions, the stagnation of commerce, and difficulty of obtaining employment, occasioned by the American war, diminished the consumption; and this, combined with unusually productive harvests, rendered the balance high on the side of exportation, in 1778, 1779, and 1780. In 1783 and 1784 the crops were unusually deficient, and considerable importations took place; but in 1785, 1786, and 1787 the exports again exceeded the imports; and it was not till 1788, when the country had fully recovered from the effects of the American war, and when manufacturing improvements were carried on with extraordinary spirit, that the imports permanently overbalanced the exports.

The growing wealth and commercial prosperity of the country had thus, by increasing the population and enabling individuals to consume additional quantities of food, caused the home supply of corn to fall somewhat short of the demand; but it must not therefore be concluded that agriculture had not at the same time been very greatly meliorated. "The average annual produce of wheat," says Mr. Comber, "at the beginning of the reign of George III. (1760), was about 3,800,000 quarters, of which about 300,000 had been sent out of the kingdom, leaving about 3,500,000 for home consumption. In 1773, the produce of wheat was stated in the House of Commons to be 4,000,000 quarters, of which the whole, and above 100,000 imported, were consumed in the kingdom. In 1796, the consumption was stated by Lord Hawkesbury to be 500,000 quarters per month, or 6,000,000 quarters annually, of which about 180,000 were imported; showing an increased produce in about 20 years of 1,820,000 quarters. It is evident, therefore, not only that no defalcation of produce had taken place in consequence of the cessation of exportation, as has been too lightly assumed from the

* The bounty amounted to 5*s.* on every quarter of wheat; 2*s.* 6*d.* on every quarter of barley; 3*s* 6*d.* on every quarter of rye; and 2*s.* 6*d* on every quarter of oats.

occasional necessity of importation, but that it had increased with the augmentation of our commerce and manufactures."—(*Comber on National Subsistence*, p. 180.)

These estimates are, no doubt, very loose and unsatisfactory; but the fact of a great increase of produce having taken place is unquestionable. In a report by a committee of the House of Commons on the state of the *waste lands*, drawn up in 1797, the number of acts passed for enclosing, and the number of acres enclosed, in the following reigns, are thus stated: —

	Number of Acts.	Number of Acres.
In the reign of Queen Anne -	2	1,439
George I. - -	16	17,960
George II. -	226	318,778
George III. to 1797	1,532	2,804,197

It deserves particular notice, that from 1771 to 1791, both inclusive, the period during which the greater number of these improvements were effected, there was no rise of prices.

The landholders, however, could not but consider the liberty of importation granted by the act of 1773 as injurious to their interests, inasmuch as it prevented prices from rising with the increased demand. A clamour, therefore, was raised against that law; and in addition to this interested feeling, a dread of becoming habitually dependent on foreign supplies, operated on many, and produced a pretty general acquiescence in the act of 1791. By this act, the price when importation could take place from abroad at the low duty of 6*d.* was raised to 54*s.*; under 54*s.* and above 50*s.* a middle duty of 2*s.* 6*d.*; and under 50*s.* a prohibiting duty of 24*s.* 3*d.* was exigible. The bounty continued as before, and exportation without bounty was allowed to 46*s.* It was also enacted, that foreign wheat might be imported, stored under the king's lock, and again exported free of duty; but, if sold for home consumption, it became liable to a warehouse duty of 2*s.* 6*d.* in addition to the ordinary duties payable at the time of sale.

In 1797, the Bank of England obtained an exemption from paying in specie; and the consequent facility of obtaining discounts and getting a command of capital, which this measure occasioned, gave a fresh stimulus to agriculture; the efficacy of which was most powerfully assisted by the scarcity and high prices of 1800 and 1801. Inasmuch, however, as the prices of 1804 would not allow the cultivation of the poor soils, which had been broken up in the dear years, to be continued, a new corn law was loudly called for by the farmers, and passed in 1804. This law imposed a prohibitory duty of 24*s.* 3*d.* per quarter on all wheat imported when the home price was at or below 63*s.*; between 63*s.* and 66*s.* a middle duty of 2*s.* 6*d.* was paid, and above 66*s.* a nominal duty of 6*d.* The price at which the bounty was allowed on exportation was extended to 50*s.*, and exportation without bounty to 54*s.* By the act of 1791, the maritime counties of England were divided into 12 districts, importation and exportation being regulated by the particular prices of each; but by the act of 1804 they were regulated, in England, by the *aggregate average* of the maritime districts; and in Scotland by the aggregate average of the 4 maritime districts into which it was divided. The averages were taken 4 times a year, so that the ports could not be open or shut for less than 3 months. This manner of ascertaining prices was, however, modified in the following session; it being then fixed that importation, both in England and Scotland, should be regulated by the average price of the 12 maritime districts of England.

In 1805, the crop was very considerably deficient, and the average price of that year was about 22*s.* a quarter above the price at which importation was allowed by the act of 1804. As the depreciation of paper, compared with bullion, was at that time only *four* per cent., the high price of that year must have been principally owing to the new law preventing importation from abroad till the home price was high, and then fettering mercantile operations; and to the formidable obstacles which the war threw in the way of importation. In 1806 *, 1807, and 1808, the depreciation of paper was nearly 3 per cent.; and the price of wheat in those years being generally from 66*s.* to 75*s.*, the importations were but small. From autumn 1808, to spring 1814, the depreciation of the currency was unusually great; and several crops in that interval being likewise deficient, the price of corn, influenced by both causes, rose to a surprising height. At that time no vessel could be laden in any Continental port for England without purchasing a licence, and the freight and insurance were at least 5 times as high as during peace. But the destruction of Napoleon's anti-commercial system, in the autumn of 1813, having increased the facilities of importation, a large quantity of corn was poured into the kingdom; and, in 1814, its *bullion* price fell below the price at which importation was allowed.

* Several impolitic restraints had been for a long time imposed on the free importation and exportation of corn between Great Britain and Ireland, but they were wholly abolished in 1806; and the act of that year (46 Geo. 3. c. 97.), establishing a free trade in corn between the 2 great divisions of the empire, was not only a wise and proper measure in itself, but has powerfully contributed to promote the general advantage.

Before this fall of price, a committee of the House of Commons had been appointed to inquire into the state of the laws affecting the corn trade; and recommended in their Report (dated 11th of May, 1813) a very great increase of the prices at which exportation was allowable, and when importation free of duty might take place. This recommendation was not, however, adopted by the House; but the fact of its having been made when the home price was at least 112*s.* a quarter, displayed a surprising solicitude to exclude foreigners from all competition with the home growers.

The wish to lessen the dependence of the country on foreign supplies formed the sole ostensible motive by which the committee of 1813 had been actuated, in proposing an alteration in the act of 1804. But after the fall of price in autumn 1813, and in the early part of 1814, it became obvious, on comparing our previous prices with those of the Continent, that without an alteration of the law in question this dependence would be a good deal increased; that a considerable extent of such poor lands as had been brought into cultivation during the high prices, would be again thrown into pasturage; and that rents would be lowered. These consequences alarmed the landlords and occupiers; and in the early part of the session of 1814, a series of resolutions were voted by the House of Commons, declaring that it was expedient to repeal the bounty, to permit the free exportation of corn whatever might be the home price, and to impose a graduated scale of duties on the importation of foreign corn. Thus, foreign wheat imported when the home price was at or under 64*s.* was to pay a duty of 24*s.*; when at or under 65*s.* a duty of 23*s.*; and so on, till the home price should reach 86*s.*, when the duty was reduced to 1*s.*, at which sum it became stationary. Corn imported from Canada, or from the other British colonies in North America, was to pay half the duties on other corn. As soon as these resolutions had been agreed to, two bills founded on them — one for regulating the importation of foreign corn, and another for the repeal of the bounty, and for permitting unrestricted exportation — were introduced. Very little attention was paid to the last of these bills; but the one imposing fresh duties on importation encountered a very keen opposition. The manufacturers, and every class not directly supported by agriculture, stigmatised it as an unjustifiable attempt artificially to keep up the price of food, and to secure excessive rents and large profits to the landholders and farmers at the expense of the consumers. Meetings were very generally held, and resolutions entered into strongly expressive of this sentiment, and dwelling on the fatal consequences which, it was affirmed, a continuance of the high prices would have on manufactures and commerce. This determined opposition, coupled with the indecision of ministers, and perhaps, too, with an expectation on the part of some of the landholders that prices would rise without any legislative interference, caused the miscarriage of this bill. The other bill, repealing the bounty, and allowing an unlimited freedom of exportation, was passed into a law.

Committees had been appointed in 1814, by both Houses of Parliament, to examine evidence and report on the state of the corn trade; and, in consequence, a number of the most eminent agriculturists were examined. The witnesses were unanimous in this only, — that the protecting prices in the act of 1804 were insufficient to enable the farmers to make good the engagements into which they had subsequently entered, and to continue the cultivation of the inferior lands lately brought under tillage. Some of them thought that 120*s.* should be fixed as the lowest limit at which the importation of wheat free of duty should be allowed: others varied from 90*s.* to 100*s.* — from 80*s.* to 90*s.* — and a few from 70*s.* to 80*s.* The general opinion, however, seemed to be that 80*s.* would suffice; and as prices continued to decline, a set of resolutions founded on this assumption were submitted to the House of Commons by Mr. Robinson, of the Board of Trade (now Lord Ripon); and having been agreed to, a bill founded on them was, after a very violent opposition, carried in both Houses by immense majorities, and finally passed into a law (*55* Geo. 3. c. 26.). According to this act, all sorts of foreign corn, meal, or flour might be imported at all times free of duty into any port of the United Kingdom, in order to be warehoused; but foreign corn was not permitted to be imported for home consumption, except when the average prices of the several sorts of British corn were as follows: viz. wheat, 80*s.* per quarter; rye, peas, and beans, 53*s.*; barley, bear, or bigg, 40*s.*; and oats, 26*s.*: and all importation of corn from any of the British plantations in North America was forbidden, except when the average home prices were at or under — wheat, 67*s.* per quarter; rye, peas, and beans, 44*s.*; barley, bear, or bigg, 33*s.*; and oats, 22*s.*

The agriculturists confidently expected that this act would immediately raise prices, and render them steady at about 80*s.* But, for reasons which will be afterwards stated, these expectations were entirely disappointed; and a more ruinous fluctuation of prices took place during the period it was in existence, than in any previous period of our recent history. In 1821, when prices had sunk very low, a committee of the House of Commons was appointed to inquire into the causes of the depressed state of agriculture, and to report their observations thereon. This committee, after ex-

amining a number of witnesses, drew up a report, which, though not free from error, is a valuable document. It contains a forcible exposition of the pernicious influence of the law of 1815, of which it suggested several important modifications. These, however, were not adopted; and as the low prices, and consequent distress of the agriculturists, continued, the subject was brought under the consideration of parliament in the following year. After a good deal of discussion, a new act was then passed (3 Geo. 4. c. 60.), which enacted, that after prices had risen to the limit of free importation fixed by the act of 1815, that act was to cease and the new statute to come into operation. This statute lowered the prices fixed by the act of 1815, at which importation could take place for home consumption, to the following sums, viz. —

	For corn not of the British Possessions in North America.	For Corn of the British Possessions in North America.
Wheat	70*s.* per quarter.	66*s.* per quarter.
Rye, peas, and beans	46*s.* —	39*s.* —
Barley, bear, or bigg	35*s.* —	30*s.* —
Oats	25*s.* —	20*s.* —

But, in order to prevent any violent oscillation of prices from a large supply of grain being suddenly thrown into the market, it was enacted, that a duty of 17*s.* a quarter should be laid on all wheat imported from foreign countries during the first 3 months after the opening of the ports, if the price was between 70*s.* and 80*s.* a quarter, and of 12*s.* afterwards; that if the price was between 80*s.* and 85*s.*, the duty should be 10*s.* for the first 3 months, and 5*s.* afterwards; and that if the price should exceed 85*s.*, the duty should be constant at 1*s.*; and proportionally for other sorts of grain.

This act, by preventing importation until the home price rose to 70*s.*, and then loading the quantities imported between that limit and the limit of 85*s.* with heavy duties, was certainly more favourable to the views of the agriculturists than the act of 1815. But, unluckily for them, the prices of no species of corn, except barley, were sufficiently high, while this act existed, to bring it into operation.

In 1825, the first approach was made to a better system, by permitting the importation of wheat from British North America, without reference to the price at home, on payment of a duty of 5*s.* a quarter. But this act was passed with difficulty, and was limited to one year's duration.

Owing to the drought that prevailed during the summer of 1826, there was every prospect that there would be a great deficiency in the crops of that year; and, in order to prevent the disastrous consequences that might have taken place, had importation been prevented until the season was too far advanced for bringing supplies from the great corn markets in the north of Europe, his Majesty was authorised to admit 500,000 quarters of foreign wheat on payment of such duties as the order in council for its importation should declare. And when it was ascertained that the crops of oats, peas, &c. were greatly below an average, ministers issued an order in council, on their own responsibility, on the 1st of September, authorising the immediate importation of oats on payment of a duty of 2*s.* 2*d.* a boll; and of rye, peas, and beans, on payment of a duty of 3*s.* 6*d.* a quarter. A considerable quantity of oats was imported under this order, the timely appearance of which had undoubtedly a very considerable effect in mitigating the pernicious consequences arising from the deficiency of that species of grain. Ministers obtained an indemnity for this order on the subsequent meeting of parliament.

Nothing could more strikingly evince the impolicy of the acts of 1815 and 1822, than the necessity, under which the legislature and government had been placed, of passing the temporary acts and issuing the orders alluded to. The more intelligent portion of the agriculturists began, at length, to perceive that the corn laws were not really calculated to produce the advantages that they had anticipated; and a conviction that increased facilities should be given to importation became general throughout the country. The same conviction made considerable progress in the House of Commons; so much so, that several members who supported the measures adopted in 1815 and 1822, expressed themselves satisfied that the principle of exclusion had been carried too far, and that a more liberal system should be adopted. Ministers having participated in these sentiments, Mr. Canning moved a series of resolutions, as the foundation of a new corn law, on the 1st of March, 1827, to the effect that foreign corn might always be imported, free of duty, in order to be warehoused; and that it should always be admissible for home consumption upon payment of certain duties. Thus, in the instance of wheat, it was resolved that, when the home price was at or above 70*s.* a quarter, the duty should be a fixed one of 1*s.*; and that for every shilling that the price fell below 70*s.* a duty of 2*s.* should be imposed; so that when the price was at 69*s.* the duty on importation was to be 2*s.*, when at 68*s.* the duty was to be 4*s.*, and so on. The limit at which the constant duty of 1*s.* a quarter was to take place in the case of barley was originally fixed at 37*s.*; but it was subsequently raised to 40*s.*, the duty increasing by 1*s.* 6*d.* for every 1*s.* when the price fell below that limit. The

limit at which the constant duty of 1*s.* a quarter was to take place in the case of oats was originally fixed at 28*s.*; but it was subsequently raised to 33*s.*, the duty increasing at the rate of 1*s.* a quarter for every shilling that the price fell below that limit. The duty on colonial wheat was fixed at 6*d.* the quarter when the home price was above 65*s.*; and when the price was under that sum the duty was constant at 5*s.*; the duties on other descriptions of colonial grain were similar. These resolutions were agreed to by a large majority; and a bill founded on them was subsequently carried through the House of Commons. Owing, however, to the change of ministers, which took place in the interim, several peers, originally favourable to the bill, and some, even, who assisted in its preparation, saw reason to become amongst its most violent opponents; and a clause moved by the Duke of Wellington, interdicting all importation of foreign corn until the home price exceeded 66*s.* having been carried in the Lords, ministers gave up the bill, justly considering that such a clause was entirely subversive of its principle.

A new set of resolutions with respect to the corn trade were brought forward in 1828 by Mr. Charles Grant (now Lord Glenelg). They were founded on the same principles as those which had been rejected during the previous session. But the duty was not made to vary equally, as in Mr. Canning's resolutions, with every equal variation of price; it being 23*s.* 8*d.* when the home price was 64*s.* the Imperial quarter; 16*s.* 8*d.* when it was 69*s.*; and 1*s.* only when it was at or above 73*s.* After a good deal of debate, Mr. Grant's resolutions were carried, and embodied in the act 9 Geo. 4. c. 60.

The crops having been deficient in 1829 and 1830, there was a large importation of corn in these years, its average price being at the same time about 65*s.* a quarter. But the crops from 1831 to 1836 having been more than usually abundant, importation almost wholly ceased, and the price of wheat sunk in 1835 to 39*s.* 4*d.* a quarter, being less than it had been in any previous year since 1776. In consequence of this succession of good harvests and low prices, the corn laws ceased for a while to attract any considerable portion of the public attention, and an impression began to gain ground that the improvement of agriculture was so very rapid, that, despite the increase of population and the existence of the corn laws, our prices would fall to about the level of those of the Continent. But the cycle of favourable seasons having terminated in 1837, the crops of that and the succeeding 5 years were considerably deficient; so much so that prices rose in 1839 to 70*s.* 8*d.* a quarter, the importations in that and the 3 following years being also very large. This increase in the price of corn, combined with the depressed state of the commerce of the country, originating in the pecuniary revulsion in the U. States and other causes, again attracted a great deal of attention to the corn laws; and the oppressive magnitude and injurious operation of the duties were very strongly animadverted upon at public meetings in the manufacturing towns and elsewhere. The subject having been at last forced on the attention of government, ministers, in 1841, actuated partly by a conviction of the mischievous influence of the duties, and partly, no doubt, by a wish to strengthen their declining popularity, brought forward a plan for remodelling the corn laws, by repealing the sliding scale and imposing in its stead a constant duty of 8*s.* a quarter on wheat, and in proportion on other grain. But, having no majority in parliament, ministers were obliged to resort to a dissolution; and their proposal having, notwithstanding its moderation, excited the greatest apprehensions among the agriculturists, without being very warmly supported by the other classes, a new parliament was returned, which gave a decided majority to the opposition. It was, however, felt on all hands to be necessary to make some considerable change in the existing law, and in 1842 a measure was introduced in that view by Sir Robert Peel, which was subsequently passed into a law, 5 Victoria, 2d Sess. c. 14., by which the corn trade is now regulated.

Unfortunately, however, this measure, like that by which it was preceded, proceeds on the principle of making the duties vary with the variations in the price of corn; and though the duties are decidedly less oppressive than those imposed by the 9 Geo. 4. c. 60., still they are in no ordinary degree objectionable, as well from their too great magnitude as from their adding to the natural insecurity of the corn trade, and increasing the chances and severity of fluctuations. We need not, therefore, be surprised that the new measure has given but little satisfaction, and that continued efforts have been made to have the trade placed on a more liberal footing.

Before closing this imperfect sketch of the history of the corn laws, we may observe that in 1842 the legislature of Canada passed a law imposing a duty of 3*s.* a quarter on all wheat imported into the province, unless from the U. Kingdom, stating in the preamble to this act, that it was passed in the expectation and belief that a corresponding reduction would be made in the duties on wheat and wheat-flour imported into the U. Kingdom from Canada. And conformably to this anticipation, the act 6 & 7 Vict. c. 29., passed in the course of the present year (1843), has reduced the duty on wheat imported

from Canada to 1*s.* a quarter, and proportionally on wheat-flour. This act met with a good deal of opposition from the agricultural interest in this country, who contended that it would lead to the introduction of unlimited supplies of corn from the U. States at a duty of only 4*s.* a quarter, or, allowing for smuggling, at perhaps only half that amount. We believe, however, that the expectations of any large supply of corn coming to us from this quarter will most likely turn out to be destitute of any good foundation. The wheat brought into Canada from the U. States must be ground in the former before it can be shipped as flour for England. And it is farther to be observed, that instead of exporting, the New England states are large importers of corn, and that the U. States corn imported into England under this law must be derived partly from the western parts of the state of New York, bordering on lake Ontario, but principally, no doubt, from the northern parts of Ohio, bordering on lake Erie. The navigation thence to Montreal, partly by natural and partly by artificial channels, is tedious, difficult, and expensive; and when the wheat has arrived at the latter or at Quebec, and been ground, the voyage to England is longer, the risk greater, and the rate of freight materially higher than from New York or Baltimore. It is, therefore, we apprehend, quite idle to suppose that any very large quantity of American flour should reach us by this channel. The fact is, that prices in America are too high, and the voyage too distant, to admit of her supplying us under any arrangement of duties, except in peculiarly dear years, with any considerable supply of corn. In this respect the countries in the N. of Europe have a decided advantage over America.

II. Principles of the Corn Laws.

1. *Internal Corn Trade.* — It is needless to take up the reader's time by endeavouring to prove by argument the advantage of allowing the free conveyance of corn from one province to another. Every one sees that this is indispensable, not only to the equal distribution of the supplies of food over the country, but to enable the inhabitants of those districts that are best fitted for the raising and fattening of cattle, sheep, &c. to addict themselves to these or other necessary occupations not directly connected with the production of corn. We shall, therefore, confine the few remarks we have to make on this subject, to the consideration of the influence of the speculations of the corn merchants in buying up corn in anticipation of an advance. Their proceedings in this respect, though of the greatest public utility, have been the principal causes of that odium to which they have been long exposed.

Were the harvests always equally productive, nothing would be gained by storing up supplies of corn; and all that would be necessary would be to distribute the crop equally throughout the country and throughout the year. But such is not the order of nature. The variations in the aggregate produce of a country in different seasons, though not perhaps so great as are commonly supposed, are still very considerable; and experience has shown that two or three unusually luxuriant harvests seldom take place in succession; or that when they do, they are invariably followed by those that are deficient. The speculators in corn anticipate this result. Whenever prices begin to give way in consequence of an unusually luxuriant harvest, speculation is at work. The more opulent farmers withhold either the whole or a part of their produce from market; and the more opulent dealers purchase largely of the corn brought to market, and store it up in expectation of a future advance. And thus, without intending to promote any one's interest but their own, speculators in corn become the benefactors of the public. They provide a reserve stock against those years of scarcity which are sure at no distant period to recur; while, by withdrawing a portion of the redundant supply from immediate consumption, prices are prevented from falling so low as to be injurious to the farmers, or at least are maintained at a higher level than they would otherwise have reached; provident habits are maintained amongst the people; and that waste and extravagance are checked, which always take place in plentiful years, but which would be carried to a much greater extent if the whole produce of an abundant crop were to be consumed within the season.

It is, however, in scarce years that the speculations of the corn merchants are principally advantageous. Even in the richest countries, a very large proportion of the individuals engaged in the business of agriculture are comparatively poor, and are totally without the means of withholding their produce from market, in order to speculate upon any future advance. In consequence the markets are always most abundantly supplied with produce immediately after harvest; and in countries where the merchants engaged in the corn trade are not possessed of large capitals, or where their proceedings are fettered and restricted, there is then, almost invariably, a heavy fall of prices. But as the vast majority of the people buy their food in small quantities, or from day to day, as they want it, their consumption is necessarily extended or contracted according to its price at the time. Their views do not extend to the future; they have no means of

judging whether the crop is or is not deficient. They live, as the phrase is, from hand to mouth; and are satisfied if, in the mean time, they obtain abundant supplies at a cheap rate. But it is obvious, that were there nothing to control or counteract this improvidence, the consequence would very often be fatal in the extreme. The crop of one harvest must support the population till the crop of the other harvest has been gathered in; and if that crop should be deficient — if, for instance, it should only be adequate to afford, at the usual rate of consumption, a supply of 9 or 10 months' provisions instead of 12 — it is plain that, unless the price were so raised immediately after harvest as to enforce economy, and put, as it were, the whole nation on short allowance, the most dreadful famine would be experienced previously to the ensuing harvest. Those who examine the accounts of the prices of wheat and other grain in England, collected by Bishop Fleetwood and Sir F. M. Eden, will meet with abundant proofs of the accuracy of what has now been stated. In those remote periods when the farmers were generally without the means of withholding their crops from market, and when the trade of a corn dealer was proscribed, the utmost improvidence was exhibited in the consumption of grain. There were then, indeed, very few years in which a considerable scarcity was not experienced immediately before harvest, and many in which there was an absolute famine. The fluctuations of price exceeded every thing of which we can now form an idea; the price of wheat and other grain being 4 or 5 times as high in June and July as in September and October. Thanks, however, to the increase of capital in the hands of the large farmers and dealers, and to the freedom given to the operations of the corn merchants, we are no longer exposed to such ruinous vicissitudes. Whenever the dealers, who, in consequence of their superior means of information, are better acquainted with the real state of the crops than any other class of persons, find the harvest likely to be deficient, they raise the price of the corn they have warehoused, and bid against each other for the corn which the farmers are bringing to market. In consequence of this rise of prices, all ranks and orders, but especially the lower, who are the great consumers of corn, find it indispensable to use greater economy, and to check all improvident and wasteful consumption. Every class being thus immediately put upon short allowance, the pressure of the scarcity is distributed equally throughout the year; and instead of indulging, as was formerly the case, in the same scale of consumption as in seasons of plenty, until the supply became altogether deficient, and then being exposed without resource to the attacks of famine and pestilence, the speculations of the corn merchants warn us of our danger, and compel us to provide against it.

It is not easy to suppose that these proceedings of the corn merchants should ever be injurious to the public. It has been said that in scarce years they are not disposed to bring the corn they have purchased to market until it has attained an exorbitant price, and that the pressure of the scarcity is thus often very much aggravated; but there is no real ground for any such statement. The immense amount of capital required to store up any considerable quantity of corn, and the waste to which it is liable, render most holders disposed to sell as soon as they can realise a fair profit. In every extensive country in which the corn trade is free, there are infinitely too many persons engaged in it to enable any sort of combination or concert to be formed amongst them; and though it were formed, it could not be maintained for an instant. A large proportion of the farmers and other small holders of corn are always in straitened circumstances, more particularly if a scarce year has not occurred so soon as they expected; and they are consequently anxious to relieve themselves, as soon as prices rise, of a portion of the stock on their hands. Occasionally, indeed, individuals are found, who retain their stocks for too long a period, or until a reaction takes place, and prices begin to decline. But instead of joining in the popular cry against such persons, every one who takes a dispassionate view of the matter will perceive that, inasmuch as their miscalculation must, under the circumstances supposed, be exceedingly injurious to themselves, we have the best security against its being carried to such an extent as to be productive of any material injury or even inconvenience to the public. It should also be borne in mind, that it is rarely, if ever, possible to determine beforehand, when a scarcity is to abate in consequence of new supplies being brought to market; and had it continued a little longer, there would have been no miscalculation on the part of the holders. At all events, it is plain that, by declining to bring their corn to market, they preserved a resource on which, in the event of the harvest being longer delayed than usual, or of any unfavourable contingency taking place, the public could have fallen back; so that, instead of deserving abuse, these speculators are most justly entitled to every fair encouragement and protection. A country in which there is no considerable stock of grain in the barnyards of the farmers, or in the warehouses of the merchants, is in the most perilous situation that can easily be imagined, and may be exposed to the severest privations, or even famine. But so long as the sagacity, the miscalculation, or the avarice of merchants and dealers retain a stock of grain in the warehouses, this last extremity cannot take place. By refusing to sell it till it has reached a very high price, they put an

effectual stop to all sorts of waste, and husband for the public those supplies which they could not have so frugally husbanded for themselves.

We have already remarked that the last remnant of the shackles imposed by statute on the freedom of the internal corn dealer was abolished in 1773. It is true that engrossing, forestalling, and regrating — (see ENGROSSING, &c.) — are still held to be offences at common law; but there is very little probability of any one being in future made to answer for such ideal offences.

2. *Exportation to Foreign Countries.* — The fallacy of the notion so long entertained, that the prevention of exportation was the surest method of increasing plenty at home, is obvious to every one who has reflected upon such subjects. The markets of no country can ever be steadily and plentifully supplied with corn, unless her merchants have power to export the surplus supplies with which they may be occasionally furnished. When a country without the means of exporting grows nearly her own average supplies of corn, an abundant crop, by causing a great overloading of the market, and a heavy fall of price, is as injurious to the farmer as a scarcity. It may be thought, perhaps, that the greater quantity of produce in abundant seasons will compensate for its lower price; but this is not the case. It is uniformly found that variations in the quantity of corn exert a much greater influence over prices, than equal variations in the quantity of almost any thing else offered for sale. Being the principal necessary of life, when the supply of corn happens to be less than ordinary, the mass of the people make very great, though unavailing, exertions, by diminishing their consumption of other and less indispensable articles, to obtain their accustomed supplies of this prime necessary; so that its price rises much more than in proportion to the deficiency. On the other hand, when the supply is unusually large, the consumption is not proportionally extended. In ordinary years, the bulk of the population is about adequately fed; and though the consumption of all classes be somewhat greater in unusually plentiful years, the extension is considerable only among the lowest classes, and in the feeding of horses. Hence it is that the increased supply at market, in such years, goes principally to cause a glut, and consequently a ruinous decline of prices. These statements are corroborated by the widest experience. Whenever there is an inability to export, from whatever cause it may arise, an unusually luxuriant crop is uniformly accompanied by a very heavy fall of price, and severe agricultural distress; and when two or three such crops happen to follow in succession, the ruin of a large proportion of the farmers is completed.

If the mischiefs resulting from the want of power to export stopped here, they might, though very great, be borne; but they do not stop here. It is idle to suppose that a system ruinous to the producers can be otherwise to the consumers. A glut of the market, occasioned by luxuriant harvests, and the want of power to export, cannot be of long continuance: for, while it continues, it can hardly fail, by distressing all classes of farmers, and causing the ruin of many, to give a check to every species of agricultural improvement, and to lessen the extent of land in tillage. When, therefore, an unfavourable season recurs, the reaction is, for the most part, appalling. The supply, being lessened, not only by the badness of the season, but also by a diminution of the quantity of land in crop, falls very far below an average; and a severe scarcity, if not an absolute famine, is most commonly experienced. It is, therefore, clear, that if a country would render herself secure against famine and injurious fluctuations of price, she must give every possible facility to exportation in years of unusual plenty. If she act upon a different system, — if her policy make exportation in such years impracticable, or very difficult, — she will infallibly render the bounty of Providence an injury to her agriculturists; and two or three abundant harvests in succession will be the forerunners of scarcity and famine.

3. *Bounty on the Exportation of Corn.* — In Great Britain, as already observed, we have not only been allowed to export for a long series of years, but from the Revolution down to 1815 a bounty was given on exportation, whenever the home prices were depressed below certain limits. This policy, however, erred as much on the one hand as a restriction on exportation errs on the other. It causes, it is true, an extension of the demand for corn: but this greater demand is not caused by natural, but by artificial means; it is not a consequence of any really increased demand on the part of the foreigner, but of our furnishing the exporters of corn with a *bonus*, in order that they may sell it abroad below its natural price! To suppose that a proceeding of this sort can be a public advantage, is equivalent to supposing that a shopkeeper may get rich by selling his goods below what they cost. (See BOUNTY.)

4. *Importation from Foreign Countries.* — If a country were, like Poland or Russia, uniformly in the habit of exporting corn to other countries, a restriction on importation would be of no material consequence; because, though such restriction did not exist, no foreign corn would be imported, unless its ports were so situated as to serve for an *entrepôt*. A restriction on importation is sensibly felt only when it is enforced in a country which, owing to the greater density of its population, the limited extent of its

fertile land, or any other cause, would, either occasionally or uniformly, import. It is familiar to the observation of every one, that a total failure of the crops is a calamity that but rarely occurs in an extensive kingdom; that the weather which is unfavourable to one description of soil, is generally favourable to some other description; and that, except in anomalous cases, the total produce is not very different. But what is thus generally true of single countries, is always true of the world at large. History furnishes no single instance of a universal scarcity; but it is uniformly found, that when the crops in a particular country are unusually deficient, they are proportionally abundant in some other quarter. It is clear, however, that a restriction on importation excludes the country which enacts it from profiting by this beneficent arrangement. She is thrown entirely on her own resources. Under the circumstances supposed, she has nothing to trust to for relief but the reserves in her warehouses; and should these be inadequate to meet the exigency of the crisis, there are apparently no means by which she can escape experiencing all the evils of scarcity, or, it may be, of famine. A country deprived of the power to import is unable to supply the deficiencies of her harvests by the surplus produce of other countries; so that her inhabitants may starve amidst surrounding plenty, and suffer the extreme of scarcity, when, but for the restrictions on importation, they might enjoy the greatest abundance. If the restriction be not absolute, but conditional; if, instead of absolutely excluding foreign corn from the home markets, it merely loads it with a duty, the degree in which it will operate to increase the scarcity and dearth will depend on the magnitude of that duty. If the duty be constant and moderate, it may not have any very considerable effect in discouraging importation; but if it be fluctuating and heavy, it will, by falsifying the speculations of the merchants, and making a corresponding addition to the price of the corn imported, be proportionally injurious. In whatever degree foreign corn may be excluded in years of deficient crops, to the same extent must prices be artificially raised, and the pressure of the scarcity rendered so much the more severe.

Such would be the disastrous influence of a restriction on importation in a country which, were there no such obstruction in the way, would sometimes import and sometimes export. But its operation would be infinitely more injurious in a country which, under a free system, would uniformly import a portion of her supplies. The restriction, in this case, has a twofold operation. By preventing importation from abroad, and forcing the population to depend for subsistence on corn raised at home, it compels recourse to comparatively inferior soils; and thus, by increasing the cost of producing corn above its cost in other countries, adds proportionally to its average price. The causes of fluctuation are, in this way, increased in a geometrical proportion; for, while the prevention of importation exposes the population to the pressure of want whenever the harvest happens to be less productive than usual, it is sure, at the same time, by raising average prices, to hinder exportation in a year of unusual plenty, until the home prices fall ruinously low. It is obvious, therefore, that a restriction of this sort must be alternately destructive of the interests of the consumers and producers. It injures the former by making them pay, at an average, an artificially increased price for their food, and by exposing them to scarcity and famine whenever the home crop proves deficient; and it injures the latter, by depriving them of the power to export in years of unusual plenty, and by overloading the market with produce, which, under a free system, would have met with an advantageous sale abroad.

The principle thus briefly explained, shows the impossibility of permanently keeping up the home prices by means of restrictions on importation, at the same time that it affords a clue by which we may trace the causes of most part of the agricultural distress experienced in this country since the peace. The real object of the Corn Law of 1815 was to keep up the price of corn to 80*s.* a quarter; but to succeed in this, it was indispensable not only that foreign corn should be excluded when prices were under this limit, but that the markets should never be overloaded with corn produced at home: for it is clear, according to the principle already explained, that if the supply should in ordinary years be sufficient to feed the population, it must, in an unusually abundant year, be more than sufficient for that purpose; and when, in such a case, the surplus is thrown upon the market, it cannot fail, in the event of our average prices being considerably above the level of those of the surrounding countries, to cause a ruinous depression. Now, this was the precise situation of this country at the end of the war. Owing partly to the act of 1804, but far more to the difficulties in the way of importation, and the depreciation of the currency, prices attained to an extraordinary elevation from 1809 to 1814, and gave such a stimulus to agriculture, that we grew, in 1812 and 1813, sufficient corn for our own supply. And, such being the case, it is clear, though our ports had been hermetically sealed against importation from abroad, that the first luxuriant crop must have occasioned a ruinous decline of prices. It is the exclusion, not the introduction, of foreign corn that has caused the distress of the agriculturists; for it is this exclusion that has forced up the price of corn in this country,

in scarce and average years, to an unnatural level, and that, consequently, renders exportation in favourable seasons impossible, without such a fall of prices as is most disastrous to the farmer. It may be mentioned, in proof of what is now stated, that the average price of wheat in England and Wales in 1814 was 74*s.* 4*d.* a quarter, and in 1815 it had fallen to 65*s.* 7*d.* But as these prices would not indemnify the occupiers of the poorest lands brought under tillage during the previous high prices, they were gradually relinquishing their cultivation. A considerable portion of them had been converted into pasture; rents had been generally reduced, and wages had begun to decline; but the legislature having prohibited the importation of foreign corn, the operation of this natural principle of adjustment was unfortunately counteracted, and the price of 1816 rose to 78*s.* 6*d.* This rise was, however, insufficient to occasion any new improvement; and as foreign corn was now excluded, and large tracts of bad land had been thrown out of cultivation, the supply was so much diminished, that, notwithstanding the increase in the value of money, prices rose in 1817, partly, no doubt, in consequence of the bad harvest of the previous year, to 96*s.* 11*d.*; and in 1818 to 86*s.* 3*d.* These high prices had their natural effect. They revived the drooping spirits of the farmers, who imagined that the corn law was, at length, beginning to produce the effects anticipated from it, and that the golden days of 1812, when wheat sold for 126*s.* 6*d.* a quarter, were about to return! But this prosperity carried in its bosom the seeds of future mischief. The increased prices necessarily occasioned a fresh extension of tillage; capital was again applied to the improvement of the soil; and this increase of tillage, conspiring with favourable seasons, and the impossibility of exportation, sunk prices to such a degree, that they fell, in October, 1822, so low as 38*s.* 1*d.*, the average price of that year being only 44*s.* 7*d.*

It is thus demonstrably certain, that the recurrence of periods of distress, similar to those which have been experienced by the agriculturists of this country since the peace, cannot be warded off by restricting or prohibiting importation. A free corn trade is the only system that can give them that security against fluctuations that is so indispensable. The increased importation that would take place, were the ports always open, as soon as any considerable deficiency in the crops was apprehended, would prevent prices from rising to an oppressive height; while, on the other hand, when the crops were unusually luxuriant, a ready outlet would be found for the surplus in foreign countries, without its occasioning any very heavy fall. To expect to combine steadiness of prices with restrictions on importation, is to expect to reconcile what is contradictory and absurd. The higher the limit at which the importation of foreign corn into a country like England is fixed, the greater will be the oscillation of prices. If we would secure for ourselves abundance, and avoid fluctuation, we must renounce all attempts at exclusion, and be ready to deal in corn, as we ought to be in every thing else, on fair and liberal principles.

That the restrictions imposed on the foreign corn trade during the last 12 years should not have been productive of more disastrous consequences than those that have actually resulted from them, is partly and principally to be ascribed to the unparalleled improvement of tillage in Great Britain during the last 20 years, and partly, also, to the great increase that has taken place in the imports from Ireland. Previously to 1806, when a perfectly free corn trade between Great Britain and Ireland was for the first time established, the yearly imports did not amount to 400,000 quarters, whereas they now amount to nearly 3,000,000; and any one who has ever been in Ireland, or is aware of the wretched state of agriculture in it, and of the amazing fertility of the soil, must be satisfied that a very slight improvement would occasion an extraordinary increase in the imports from that country; and it is believed by those best qualified to form an opinion on such a subject, that the check that has latterly been given to the pernicious practice of splitting farms, and the increase of population, has, in this respect, already had great influence, and that it will eventually lead to the most material improvements. Hence it is by no means improbable, as previously stated, that the rapid spread of improvement at home, and the growing imports from Ireland, may, at no distant period, reduce our prices to the level of those of the Continent, and even render us an occasionally exporting country. These, however, are contingent and uncertain results; and supposing them to be ultimately realised, the corn laws must in the mean time be productive of great inconvenience, and must, in all time to come, materially aggravate the misery inseparable from bad harvests.

Nothing but the great importance of the subject could excuse us for dwelling so long on what is so very plain. To facilitate production, and to make commodities cheaper and more easily obtained, are the grand motives which stimulate the inventive powers, and which lead to the discovery and improvement of machines and processes for saving labour and diminishing cost; and it is plain that no system of commercial legislation deserves to be supported, which does not conspire to promote the same objects: but a restriction on the importation of corn into a country like England, which has made a great comparative advance in population and manufacturing industry, is diametrically

opposed to these principles. The density of our population is such, that any exclusion of foreign corn forces us to resort to soils of less fertility than those that are under cultivation in the surrounding countries; and, in consequence, our average prices are comparatively high. We have resolved that our people should not confine their attention to the culture of the better class of soils, and to those branches of manufacturing and commercial industry in which they have a decided advantage over every other country; but that they should, also, be made to force comparatively barren soils that yield but a scanty return for their outlay. If we could, by laying out 1000*l.* on the manufacture of cottons or hardware, produce a quantity of these articles that would exchange for 500 quarters of American or Polish wheat; and if the same sum, were it expended in cultivation in this country, would not produce more than 400 quarters; the prevention of importation occasions an obvious sacrifice of 100 out of every 500 quarters consumed in the empire; or, which is the same thing, it occasions an artificial advance of 20 per cent. in the price of corn. We do not mean to say that this statement exactly represents the amount of injury inflicted by the corn laws; but, at all events, it clearly illustrates the principle which they embody. In a public point of view, the impolicy of such a system is obvious; but it seems, at first sight, as if it were advantageous to the landlords. The advantage is, however, merely apparent: at bottom there is no real difference between the interests of the landlords and those of the rest of the community. It would be ridiculous, indeed, to imagine for a moment that the landlords can be benefited by a system in which those fluctuations of prices, so subversive of all agricultural prosperity, are inherent; but though these could be got rid of, the result would be the same. The prosperity of agriculture must always depend upon, and be determined by, the prosperity of other branches of industry; and any system which, like the corn laws, is injurious to the latter, cannot but be injurious to the former. Instead of being publicly advantageous, high prices are in *every case* distinctly and completely the reverse. The smaller the sacrifice for which any commodity can be obtained, so much the better. When the labour required to produce, or the money required to purchase, a sufficient supply of corn, is diminished, it is as clear as the sun at noon-day that more labour or money must remain to produce or purchase the other necessaries, conveniences, and amusements of human life, and that the sum of national wealth and comforts must be proportionally augmented. Those who suppose that a rise of prices can ever be a means of improving the condition of a country might, with equal reason, suppose that it would be improved by throwing its best soils out of cultivation, and destroying its most powerful machines. The opinions of such persons are not only opposed to the plainest and best established principles, but they are opposed to the obvious conclusions of common sense, and the universal experience of mankind.

Experience of the injurious effects resulting from the corn laws has induced many that were formerly their zealous advocates to come round to a more liberal way of thinking. It would, however, be unjust not to mention that there has always been a large and respectable party amongst the landlords, opposed to all restrictions on the trade in corn, and who have uniformly thought that their interests, being identified with those of the public, would be best promoted by the abolition of restrictions on importation. A protest expressive of this opinion, subscribed by 10 peers, was entered on the Journals of the House of Lords, against the corn law of 1815. This document is said to have been drawn up by the late Lord Grenville, distinguished as an enlightened advocate of sound commercial principles. Its reasoning is so clear and satisfactory, that we are sure we shall gratify our readers, as well as strengthen the statements previously made, by laying it before them.

"*Dissentient.*—I. Because we are adverse in principle to all new restraints on commerce. We think it certain that public prosperity is best promoted by leaving uncontrolled the free current of national industry; and we wish rather, by well considered steps, to bring back our commercial legislation to the straight and simple line of wisdom, than to increase the deviation by subjecting additional and extensive branches of the public interest to fresh systems of artificial and injurious restrictions.

"II. Because we think that the great practical rule, of leaving all commerce unfettered, applies *more peculiarly*, and on still stronger grounds of justice as well as policy, to the corn trade than to any other. Irresistible, indeed, must be that necessity which could, in our judgment, authorise the legislature to tamper with the sustenance of the people, and to impede the free purchase of that article on which depends the existence of so large a portion of the community.

"III. Because we think that the expectations of ultimate benefit from this measure are founded on a delusive theory. We cannot persuade ourselves that this law will ever contribute to produce plenty, cheapness, or steadiness of price. So long as it operates at all, its effects must be the opposite of these. *Monopoly is the parent of scarcity, of dearness, and of uncertainty.* To cut off any of the sources of supply, can only tend to lessen its abundance; to close against ourselves the cheapest market for any commodity, must enhance the price at which we purchase it; and to confine the consumer of corn to the produce of his own country, is to refuse to ourselves the benefit of that provision which Providence itself has made for equalising to man the variations of climate and of seasons.

"IV. But whatever may be the future consequences of this law at some distant and uncertain period, we see with pain that these hopes must be purchased at the expense of a great and present evil. To compel the consumer to purchase corn dearer at home than it might be imported from abroad, is the immediate practical effect of this law. In this way alone can it operate. Its present protection, its promised extension of agriculture, must result (if at all) from the profits which it creates by keeping up the price of corn to an artificial level. These future benefits are the consequences expected, but, as we con-

fidently believe, erroneously expected, from giving a bounty to the grower of corn, by a tax levied on its consumer.

"V. Because we think the adoption of any permanent law for such a purpose, required the fullest and most laborious investigation. Nor would it have been sufficient for our satisfaction, could we have been convinced of the general policy of a hazardous experiment. A still further inquiry would have been necessary to persuade us that the present moment is fit for its adoption. In such an inquiry, we must have had the means of satisfying ourselves what its immediate operation will be, as connected with the various and pressing circumstances of public difficulty and distress with which the country is surrounded; with the state of our circulation and currency, of our agriculture and manufactures, of our internal and *external* commerce, and, above all, with the condition and reward of the industrious and labouring classes of our community.

"On all these particulars, as they respect this question, we think that parliament is almost wholly uninformed; on all we see reason for the utmost anxiety and alarm from the operation of this law.

"Lastly. Because, if we could approve of the principle and purpose of this law, we think that no sufficient foundation has been laid for its details. The evidence before us, unsatisfactory and imperfect as it is, seems to us rather to disprove than to support the propriety of the high price adopted as the standard of importation, and the fallacious mode by which that price is to be ascertained. And on all these grounds we are anxious to record our dissent from a measure so precipitate in its course, and, as we fear, so injurious in its consequences."

Attempts have sometimes been made to estimate the pecuniary burden which the restrictions on importation entail in ordinary years upon the country. This, however, is a subject with respect to which it is not possible to obtain any accurate data. But supposing the total quantity of corn annually produced in Great Britain and Ireland to amount to 62,000,000 quarters, every shilling that is added to its price by the corn laws is equivalent to a tax on corn of 3,100,000*l.*; and estimating the average rise on all sorts of grain at 3*s.* a quarter, the total sum will be 9,300,000*l.* So great a quantity of corn is, however, consumed by the agriculturists themselves, as food, in seed, the keep of horses, &c., that not more than a half, perhaps, of the whole quantity produced is brought to market. If we are nearly right in this hypothesis, and in the previous estimates, it will follow that the restrictions cost the classes not engaged in agriculture no less than 4,650,000*l.*, exclusive of their other pernicious consequences. Of this sum a *fifth*, probably, or 930,000*l.*, may go to the landlords as rent; and this is *all* that the agriculturists can be said to gain by the system, for the additional price received by the farmer on that portion of the produce which is exclusive of rent is no more than the ordinary return for his capital and labour. His profits, indeed, like those of all other capitalists, instead of being increased by this system, are really diminished by it; and though, nominally at least, it somewhat increases the rents of the landlords, it is, notwithstanding, abundantly certain that it is anything but advantageous to them. It would require a far larger sum to balance the injury which fluctuations of price occasion to their tenants, and the damage done to their estates by over-cropping when prices are high, than all that is derived from the restrictions.

5. *Duties on Importation.* — A duty may be equitably imposed on imported corn, for two objects; that is, either for the sake of revenue, or to balance any excess of taxes laid on the agriculturists over those laid on the other classes. — (See the edition of *Wealth of Nations* by the author of this work, 1 vol. 8vo. pp. 522—524.) With respect, however, to a duty imposed for the sake of revenue, it may be doubted whether corn be a proper subject for taxation. At all events, a duty for such an object should be exceedingly moderate. It would be most inexpedient to attempt to add largely to the revenue by laying heavy duties on the prime necessary of life.

If it be really true that agriculture is more heavily taxed than any other Branch of industry, the agriculturists are entitled to demand that a duty be laid on foreign corn when imported corresponding to the *excess* of burdens affecting them. It has been doubted, however, whether they are in this predicament. But though the question be not quite free from difficulty, it would be easy to show, were this a proper place for such inquiries, that, owing to the local and other direct and indirect burdens laid on the land, those occupying it are really subjected to heavier taxes than any other class. It is difficult, or rather, perhaps, impossible, to estimate with any degree of precision what the *excess* of taxes laid on the agriculturists beyond those laid on manufacturers and merchants may amount to: but we have elsewhere shown, that if we estimate it as making an addition of 5*s.* or 6*s.* to the quarter of wheat, we shall certainly be beyond the mark. — (*Wealth of Nations, ubi suprà.*) However, we should, in a case of this sort, reckon it safer to err on the side of too much protection than of too little; and would not, therefore, object to a fixed duty of 5*s.* or even 7*s.* a quarter being laid on wheat, and a proportional duty on other species of grain. Under such a system the ports would be always open. The duty would not be so great as to interpose any very formidable obstacle to importation. Every one would know beforehand the extent to which it would operate; at the same time that the just rights and interests of the agriculturists and of every other class would be maintained unimpaired.

When a duty is laid on the importation of foreign corn, for the equitable purpose of countervailing the peculiar duties laid on the corn raised at home, an *equivalent drawback* should be allowed on its exportation. "In allowing this drawback, we are merely returning to the farmer a tax which he has already paid, and which he must have, to

place him in a fair state of competition in the foreign market, not only with the foreign producer, but with his own countrymen who are producing other commodities. It is essentially different from a bounty on exportation, in the sense in which the word bounty is usually understood; for by a bounty, is generally meant a tax levied on the people for the purpose of rendering corn unnaturally cheap to the foreign consumer; whereas what I propose is, to sell our corn at the price at which we can really afford to produce it, and not to add to its price a tax which shall induce the foreigner rather to purchase it from some other country, and deprive us of a trade which, under a system of free competition, we might have selected." — *Ricardo on Protection to Agriculture*, p. 53.)

A duty accompanied with a drawback, as now stated, would not only be an equitable arrangement, but it would be highly for the advantage of farmers, without being injurious to any one else. The radical defect, as already shown, of the system followed from 1815 down to the present moment, in so far, at least, as respects agriculture, is, that it forces up prices in years when the harvest is deficient, while it leaves the market to be glutted when it is abundant. But while a constant duty of 5*s*. would secure to the home growers all the increase of price which the regard due to the interests of others should allow them to realise in a bad year, the drawback of 5*s*., by enabling them to export in an unusually plentiful year, would prevent the markets from being overloaded, and prices from falling to the ruinous extent that they now occasionally do. Such a plan would render the businesses of the dealers in and growers of corn comparatively secure; and would, therefore, provide for the continued prosperity of both. We are astonished that the agriculturists have not taken this view of the matter. If they be really entitled to a duty on foreign corn, on account of their being heavier taxed than the other classes of their fellow citizens (and they are not entitled to it on any other gronnd), they must also be entitled to a corresponding drawback. And it admits of demonstration, that *their* interests, as well as those of the community, would be far better promoted by such a duty and drawback as we have suggested, than they can ever be by any system of mere duties, how high soever they may be carried.

The principal objection to this plan proceeds on the assumption that it would not be possible to levy the duty when the home price became very high, and that, consequently, it would be every now and then necessary to suspend it. It might, however, be easily shown that in cases of scarcity a reasonable duty on importation would not really have any influence over prices; and that, instead of being borne by the consumers, it would then be deducted from the profits of the foreigners who supply the imported corn. But without insisting on these considerations, though they are of the essence of this question, it may, we think, be concluded on unassailable grounds, that were the ports constantly open under a moderate fixed duty and an equivalent drawback, extreme fluctuations of price would be very rare. Supposing it were enacted, that when the home price rises above a certain high level, as 70*s*., the duty should cease, the popular prejudice on the subject would be conciliated, at the same time that the clause would very seldom come into operation; and those who object that it is not fair to the farmers to deprive them of the full advantage to be derived from the highest prices, should recollect that in matters of this sort it is not always either possible, or, if possible, prudent to carry the soundest principles to an extreme; and that, generally speaking, the public interests will be better consulted by guarding against scarcity and dearth, than by securing, at all hazards, a trifling though just advantage to a particular class.

III. British Corn Trade.

1. *Quantity of Corn consumed in Great Britain.* — Attempts have sometimes been made to estimate the quantity of corn raised in a country, from calculations founded on the number of acres in tillage, and on the average produce per acre; but it is plain that no accurate account can ever be framed of the extent of land under cultivation. It is perpetually changing from year to year; and the amount of produce varies not only with the differences of seasons, but also with every improvement of agriculture. This method, therefore, is now rarely resorted to, and the growth of corn is generally estimated from the *consumption*. The conclusions deduced from this criterion must indeed be subject to error, as well from variations in the consumption, occasioned by variations in the price of corn, as from the varying extent to which other food is used. But supposing the prices of corn to be reduced to an average, if the consumption of a considerable number of persons, of all ranks and orders, and of all ages and sexes, were accurately determined, we should be able, supposing the census of the population to be nearly correct, to make a pretty close approximation to the total consumption of the country. Mr. Charles Smith, the well-informed and intelligent author of the Tracts on the Corn Trade, made many curious investigations, with a view to discover the mean annual consumption of corn; and reducing it to *the standard of wheat*, he found it to be at the rate of about *a quarter for each individual*, young and old. This estimate has been confirmed

by a variety of subsequent researches; and among others, by inquiries made during the scarcity of 1795 and 1796, by the magistrates of Suffolk, in 42 different parishes, in the view of ascertaining the average consumption of each family, which they found to correspond very closely with Mr. Smith's estimate. It is also worthy of remark, that M. Paucton, the intelligent author of the *Metrologie*, estimates the mean annual average consumption in France, when reduced to the standard of wheat, at about 10 bushels for each individual; and as the French consume more bread and less animal food than the English, this estimate affords a strong proof of the correctness of that of Mr. Smith.

Having taken the population of England and Wales in 1765 at 6,000,000, Mr. Smith reckoned the consumers of each kind of grain, the quantity consumed by each individual, and hence, the whole consumed by man, to be as follows: —

Estimated Population of England and Wales.	Average Consumption of each Person.	Consumed by Man. Qrs.
3,750,000 consumers of wheat, at 1 quarter each	-	3,750,000
739,000 do. of barley, at 1⅔ do.	-	1,016,125
888,000 do. of rye, at 1⅛ do.	-	999,900
623,000 do. of oats, at 2⅞ do.	-	1,791,225
Consumed by man	-	7,556,350
In addition to this, Mr. Smith estimated the wheat distilled, made into starch, &c.	-	90,000
Barley used in malting, &c.	-	3,417,000
Rye for hogs, &c.	-	31,000
Oats for horses, &c.	-	2,461,500
Total of home consumption	-	13,555,850
Add excess of exports over imports	-	398,624
		13,954,474
Add seed (one tenth)	-	1,395,447
Total growth of all kinds of grain in England and Wales in 1765	-	15,349,921

This estimate, it will be observed, does not include either Scotland or Ireland; and later inquiries have rendered it probable that Mr. Smith underrated the population of England and Wales by nearly 1,000,000. The most eminent agriculturists seem also to be of opinion, that the allowance for seed ought to be stated as high as a *sixth* or a *seventh*.

Mr. Chalmers, availing himself of the information respecting the numbers of the people furnished under the Population Act of 1800, estimated the total consumption of the different kinds of grain in Great Britain at that epoch at 27,185,300 quarters, whereof wheat constituted 7,676,100 quarters. The crops of 1800 and 1801 being unusually deficient, the importation in these years was proportionally great; but excluding these scarcities, the total average excess of all sorts of grain imported from Ireland and foreign countries into Great Britain over the exports had previously amounted to about 1,000,000 quarters, which, deducted from 27,185,300, leaves 26,185,300, to which if we add *one sixth* as seed, we shall have 30,549,516 quarters as the average growth of Great Britain in 1800.

According to Dr. Colquhoun, the consumption of corn in Great Britain and Ireland, in 1814, amounted to about 35,000,000 quarters. We subjoin his estimate.

Species of Grain.	Estimated Average of the Population of Great Britain and Ireland.	Each Person averaged.	Consumed by Man.	Consumed by Animals.	Used in Beer and Spirits.	Used in various Manufactures.	Total Quarters.
		Quarters.	Quarters.	Quarters.	Quarters.	Quarters.	
Wheat	9,000,000	1	9,000,000	-	-	170,000	9,170,000
Barley	1,500,000	1¼	1,875,000	210,000	4,250,000	-	6,335,000
Oats	4,500,000	1½	6,750,000	10,200,000	-	-	16,950,000
Rye	500,000	1¼	625,000	59,000	-	1,000	685,000
Beans and peas	500,000	1	500,000	1,360,000	-	-	1,860,000
Totals	16,000,000		18,750,000	11,829,000	4,250,000	171,000	35,000,000

But though this estimate be compiled with greater care, and is entitled to more confidence, than most of those put forth by its author, it is in some respects grossly inaccurate and defective. There can, for example, be no manner of doubt that the consumption of oats is underrated by at least 2,250,000 quarters, or by ½ quarter in the quantity assigned to each of the 4,500,000 individuals Dr. Colquhoun supposed were fed on them. And besides underrating the consumption of oats, the learned Dr. has made no allowance for seed, though it be unnecessary to say that the expenditure of corn as seed is as indispensable, and its consumption as effectual, as if it were employed in the feeding of men or of horses. Adding, therefore, to the 37,250,000 quarters which Colquhoun's estimate should have amounted to, ⅛th for seed, we have, on his

data, 43,458,000 quarters for the total consumption of corn in the U. Kingdom in 1814.

But instead of a population of 16 millions, which is assumed as the basis of the above estimate, the U. Kingdom had, in 1841, a population of 26,861,796. If, therefore, the estimate of Dr. Colquhoun were accurate, and the consumption, as compared with the population, were about the same as in 1814, it should now amount to about 70,000,000 quarters. But, during the last 30 years, the proportion of wheat used as food has been materially increased; and at present the consumers of barley certainly amount to nothing like 1,500,000 individuals; probably to not more than 500,000. And though the consumption of oats has, also, increased very materially, partly and principally from the great increase in the number of horses and their better keep, and partly, also, from the increase of population in Ireland and the greater proportion of its inhabitants that now use oats; still it is abundantly certain that the expenditure of corn on the lower animals, and in breweries, distilleries, &c. does not now amount to any thing like twice the quantity at which it was estimated by Colquhoun.

On the whole, we are inclined to think that the consumption of the various kinds of corn in the U. Kingdom may, at present (1842), be estimated as follows: —

	Qrs.	Total Qrs.
I. Consumed by man: —		
Wheat	15,000,000	
Oats, rye, and maslin, (a mixture of rye and wheat)	15,000,000	
Barley for malting, food, &c.	6,000,000	
Beans and peas as meal	600,000	
		36,600,000
II. Consumed by the lower animals: —		
Corn (principally oats) used in the feeding of horses and other animals, in distillation, manufactories, &c.		18,000,000
Total consumed by man and the lower animals, &c.		54,600,000

But it appears from No. VIII. of the subjoined tables, that at an average of the 13 years ending with 1842, the annual entries of foreign corn for home consumption were, wheat 1,281,721 quarters, barley 187,911 do., oats 280,098 do., rye 21,620 do., peas 72,558 do., and beans 75,341 do., making an aggregate importation of 1,919,246 quarters a year. And, therefore, if from the annual consumption by man and the lower animals, amounting to 54,600,000 quarters, we deduct the above average annual importation, we have 52,680,754 quarters for the portion of such consumption supplied by the native corn of the U. Kingdom; and adding to the latter $\frac{1}{6}$th part, or 8,780,125 quarters, for seed, we have 61,460,879 quarters for the total average annual growth of all sorts of corn in the U. Kingdom.

The total entries of foreign corn in 1839 amounted to 4,615,262 quarters, being the largest quantity ever entered in any single year. But as this quantity does not amount to $\frac{1}{13}$th part of the entire corn raised at home, it would seem as if the greatest importation could have but a very slight influence over prices; but it has been already shown that a very large proportion, perhaps a half, of the corn produced in the empire is never brought to market, but is partly consumed by the agriculturists, and partly used as seed and in the feeding of farm horses, &c. Hence, if we be nearly right in this estimate, it follows that an importation of 4,615,262 quarters is really equivalent to between $\frac{1}{8}$th and $\frac{1}{4}$th part of the entire produce brought to market in an average year, and must consequently have a very material influence in alleviating the pressure of scarcity in a bad year, and in checking the rise of prices.

Regulations under which the Corn Trade of the U. Kingdom is at present conducted. — These regulations are embodied in the act 5 Vict. 2 sess. cap. 14., of which an abstract is subjoined. This act is, as already stated, substantially the same in principle with that of 9 Geo. 4. cap. 60., by which the trade in corn was previously regulated. It permits, like the former act, the free importation and warehousing of all sorts of foreign corn; imposing, like it, duties on such corn when entered for consumption, which vary according to the variations of prices in the home market. Thus there is a duty of 20*s.* a quarter on wheat, when the home price is at or under 51*s.* a quarter; the duty decreasing, though not regularly, till the price reaches 73*s.* or upwards, when it amounts to 1*s.* only. But though the duties imposed by this act be, in consequence of their reduction, decidedly preferable to those which they superseded, still they are much too high, and must go far, indeed, to prevent all importation under ordinary circumstances, till the home price rises to, or exceeds, 63*s.* a quarter, when the duty is no less than 10*s.*; and besides their influence in obstructing importation till the home price rises very decidedly above what would otherwise be its natural level, a variable scale of duties has the incurable defect of adding to the uncertainty incident to the corn trade; and of preventing, so long as it is kept up, its establishment on sound principles.

From the extreme difficulty of forming anything like correct conclusions as to the state of the crops at any given period in any extensive country, and still more of es-

timating the supply and probable price of corn at any future period, though but a little remote, the risk attending the corn trade is proverbially great. Under such circumstances, if government interfere at all, it should certainly be to lessen such hazards; and, at all events, it should take especial care to do nothing to increase them. Hence, if a duty be imposed on importation, it should be constant, so that its influence may always be estimated beforehand; for if the amount of duty depend on accidental circumstances, or on anything so fluctuating and incapable of previous estimation as the prices in the home market, it must necessarily, by increasing the hazard of all speculations in corn, tend to augment those inequalities in its supply and price, that should, in as far as possible, be diminished. To show the direct influence of such duties, it may suffice to mention that if, under the late corn law, a merchant had commissioned a quantity of wheat when the home price was 71*s.* a quarter, he would, in the event of the price falling to 68*s.* before the importation took place, have lost no less than 13*s.* a quarter by the transaction, viz. 8*s.* a quarter by the fall of price, and 10*s.* a quarter by the increase of duty! The new scale is not, luckily, so bad as this; but still its influence, though diminished, is of the same pernicious kind, and in most cases doubles the risk. Should a merchant, for example, order a quantity of foreign wheat when the home price is from 57*s.* to 58*s.* a quarter, he will, in the event of the price falling 3*s.* a quarter before the wheat can be entered for consumption, lose 6*s.* a quarter by the speculation; 3*s.* by the fall of price, and 3*s.* by the rise of duty.

It may, perhaps, be said that if, on the one hand, the present scale of duties be injurious to the merchant when prices are falling, and when importation is consequently either unnecessary or of less advantage, it is, on the other hand, equally advantageous to him when prices are rising, and when the public interests require that importation should be encouraged: but the prices in the view of the merchant when he gives an order are always such as he supposes will yield a fair profit; and if they rise, this rise would, supposing the duty to be constant, yield such an extra profit as would make him increase his imports to the utmost. If it were possible to devise a system that should diminish the losses incurred in unfavourable speculations, by making a proportional deduction from the profits of such as were unusually successful, something, perhaps, might be found to say in its favour. But the system we have adopted proceeds on quite opposite principles: its effect is not to diminish risks, but to increase them; it adds to the loss resulting from an unsuccessful, and to the profit resulting from a successful, speculation!

But there are other considerations that serve to set the pernicious operation of a fluctuating duty in a still more striking point of view. Should a tract of unfavourable weather occur before harvest, and a deficient crop be anticipated, prices rise, and the duty falls to next to nothing: but now suppose that the weather becomes fine, and that the anticipations of a short crop are dispelled, and observe what, under such circumstances, is the operation of the sliding-scale. In such a case, prices immediately begin to give way, and, to avoid the consequent increase of duty, every bushel of foreign corn warehoused in the country, and, indeed, in every contiguous foreign port, is forthwith entered for consumption, and thrown upon a falling market! With a fixed duty, or with no duty at all, the merchants would distribute the supply of corn according to the best estimate they could form of the real wants and necessities of the people. But the operation of a sliding scale goes far to exclude such considerations. Besides doubling the hazards of the trade, it tempts the merchants, when prices are rising, to hold back, in the expectation of being able to enter their corn at a reduced duty; and when, on the other hand, a fall of prices is anticipated, the market, as already seen, is overloaded, and prices ruinously depressed by the supplies forced upon it to escape the increase of duty! It is thus alternately injurious to the manufacturing and the agricultural classes; entailing the severest privations on the former, by making the importers withhold their corn from market till the price attains to a ruinously high level; and, on the latter, by making the same parties throw it on a market which is already depressed. The extreme low prices of 1821 and 1822, and of 1833, 1834, and 1835, were, no doubt, in part occasioned by the excess of the foreign entries for consumption arising out of the circumstances now mentioned.

Were our ports always open under a moderate duty, nothing, it is plain, would be gained by pouring in supplies at any particular moment; they would only be furnished when necessary, and would be limited by the necessity; and when prices were low, or falling, a large proportion of the imports would be warehoused in anticipation of a future rise. But at present there is no room for consideration or combination; every thing must be done on the moment, and by fits and starts. We may not have brought a bushel of wheat from the Baltic for a year or two; but prices have risen in this country, and, the duty having fallen still more rapidly, we have an instantaneous demand for all the corn that can be had! Not being expected, no provision is made for meeting such sudden and capricious demands; and prices rise to such a degree as to make our pre-

sence in the foreign markets hateful to every one, except the few who may happen to have on hand stocks of corn. It is plain, too, that a commerce, if so we may call it, conducted in this way cannot be carried on by an interchange of goods for corn, as it would be were the ports constantly open. We may have a demand this year for ten times the quantity of Polish corn that we required last year, but it is abundantly certain that the Poles will not reciprocate by taking off corresponding quantities of our cottons, woollens, or hardware. Under ordinary circumstances, an increase of imports is always accompanied by a corresponding increase of exports; but, to bring this about, the increase must neither be sudden nor excessive; for, if so, the chances are a thousand to one that the foreign demand for our products will not increase to an equal extent. Corn is the principal means which the Poles have of paying for English goods; and, as we frequently shut it wholly out, their imports from England are unavoidably below even the average amount of their exports; so that, when we have an extraordinary demand for corn, the greater part of the excess must be paid for in bullion; and, instead of being benefited by its occurrence, our commercial and manufacturing interests are deeply injured.

But it is unnecessary to dwell on what is so well known. Most fortunately, we did not require to import any foreign corn in 1835 and 1836; for no one, either in the Bank of England or out of it, acquainted with the circumstances, can have the smallest doubt that, had it been then necessary to make the same payments for foreign corn we had to make in 1830 and 1831, and in 1838 and 1839, the Bank must have stopped payment; and a shock would have been given to the credit and financial interests of the country, from which they might never have recovered. The severe pressure on the money market in 1839 mainly originated in the same circumstances; and who can doubt that that pressure was productive of incomparably greater loss and inconvenience to the agriculturists than any advantage they gained by the rise of prices in that year?

It is in these respects that the existing corn law is most inimical to manufactures and commerce. The disorder occasioned by a sudden and extensive demand for corn affects the prices of every article, and vitiates every speculation. The mischief is sometimes ascribed to the conduct of the directors of the Bank of England: but they have little or nothing to do in the matter; they are merely endeavouring to provide, as is their bounden duty, for the safety of the Bank, which is suddenly called upon to advance *four*, *five*, or *six* millions of bullion to be sent abroad in payment of foreign corn! It is plain that the real origin of the pressure is to be found in that system of commercial legislation that produces every now and then such sudden and heavy drains on the resources of the Bank and the country.

In every point of view, therefore, it is of the highest importance that the regulations as to the corn trade should be placed on such a footing, that, 1st, they may at no time give any serious obstruction to importation; and 2d, that the supply may be admitted according to our wants, and when it is really required. In their present form, the corn laws are opposed to both the principles now laid down, and are adverse alike to agriculture, commerce, and credit.

It must not, however, be supposed, from any thing now said, that we mean to state or insinuate that it is possible by any contrivance, or by the utmost possible degree of freedom, to avert all fluctuations in the supply and price of corn. Any such idea would be alike chimerical and absurd. Variations of the harvests, in so rich and populous a country as Great Britain, must always, and under any circumstances, have a powerful influence over prices; not only here, but also in those foreign markets whence we are in the habit of drawing a portion of our supplies. But it admits of demonstration, that the adoption of a system as to importation, in which there shall be no fluctuation of duties, is the best means by which to mitigate the influence of variations of harvests, and to secure the greatest steadiness of price. Under such a system, the merchants of this and other countries would be able to form their plans without the fear of their being overturned by accident or contingent circumstances; and the fact that we every now and then require a large supply of foreign corn would make capitalists, here and elsewhere, warehouse, in abundant years, large supplies, in anticipation of the demand when a deficiency occurs. The merchant would then have to deal only with real wants and necessities; and these it is comparatively easy to provide against. In a matter of this kind all restrictions and interferences are unalloyed evils. Freedom is all that is required to place the trade on the best possible footing.

It is, therefore, obvious that a constant duty on importation is, in all respects, preferable to one that fluctuates. When the duty is constant, all classes, farmers as well as merchants, are aware of its amount, and can previously calculate the extent of its influence. But the influence of a duty that fluctuates with fluctuations of price can never be previously appreciated. Its magnitude depends on contingent and accidental circumstances; and it must, therefore, of necessity, occasion that uncertainty, and those sudden and capricious movements, that are so destructive of the interests of all classes.

It is further to be observed that, with a fluctuating duty, there can be no corresponding drawback on exportation; and so long, therefore, as it is maintained, prices, in unusually favourable years, must, as previously explained, sink so low as to be ruinous to the agriculturists; and that justice will be denied to the latter, to which they have an undoubted claim.

At the same time it is but fair to state, that the pernicious operation of the corn laws has been grossly, and indeed ludicrously, exaggerated. According to the statements put forth by the itinerant demagogues who have of late years been haranguing the public on this favourite theme, one would be led to suppose that the repeal of the corn laws would be a universal panacea; that it would obviate every abuse or defect in our social system; and that the price of corn would immediately fall to something like a half or a third part of its present amount! But every man of sense knows that there is no real room or ground for such statements, which are alike false and deluding. Thanks to the extraordinary spread of improvement at home, and to the increased amount of our imports from Ireland, the corn laws, notwithstanding the rapid increase of population, are now far less objectionable than they were a few years ago. The statements that will be laid before the reader in a subsequent part of this article show, that supposing foreign wheat were always admitted for consumption on payment of a fixed duty of only *5s.* a quarter, there are no grounds whatever for thinking that its average price would be under *53s.* or *54s.* a quarter.

We do not say this by way of apology for the corn laws, or in extenuation of the serious injury they really occasion. But misrepresentation and misstatements on such subjects cannot be too much condemned. The progress of sound commercial legislation can never be advanced, while it may be and has been very decidedly obstructed, by the violence, agitation, and declamatory trash of which the proposed repeal of the corn laws has been the pretext.

We subjoin an abstract of the act 5 Victoria, 2 sess. cap. 14.

Section 1. repeals the act 9 Geo. 4. c. 60., under which the corn trade had previously been conducted.

Corn may be imported from Foreign Countries and from British Possessions on Payment of the specified Duties. — And whereas it is expedient that corn, grain, meal, and flour, the growth, produce, and manufacture of any foreign country, or of any British possession out of Europe, should be allowed to be imported into the U. Kingdom for consumption, upon the payment of duties to be regulated from time to time according to the average price of British corn made up and published in manner hereinafter required: be it therefore enacted, that from and after the passing of this act there shall be levied and paid upon all corn, grain, meal, or flour entered for home consumption in the U. Kingdom, from parts beyond the seas, the several duties specified and set forth in the table annexed to this act; and that the said duties shall be raised, levied, collected, and paid in the same manner in all respects as the several duties of customs enumerated in the table of duties annexed to act 3 & 4 Will. 4. c. 56. — § 2.

We subjoin the table referred to.

An Account of the Duties chargeable on all Kinds of Grain.

If imported from any Foreign Country.

Wheat.			Wheaten Flour or Meal.		Rye, Peas, and Beans.		Barley, Maize, or Indian Corn, Buckwheat, Bear, or Bigg.		Oats.		Oatmeal.	
Average Price per Quarter.	Duty per Quarter.		Duty per Cwt.	Duty per Barrel of 196 lbs.	Average Price per Quarter.	Duty per Quarter.	Average Price per Quarter.	Duty per Quarter.	Average Price per Quarter.	Duty per Quarter.	Duty per Cwt.	
s. *s.*	£ *s.* *d.*		£ *s.* *d.*	£ *s.* *d.*	*s.* *s.*	£ *s.* *d.*	*s.* *s.*	£ *s.* *d.*	*s.* *s.*	£ *s.* *d.*	£ *s.* *d.*	
under 51	1 0 0		0 6 10½	0 12 0 12	under 30	0 11 6	under 26	0 11 0	under 19	0 8 0	0 4 11 29/8	
51 — 52	0 19 0		0 6 8½	0 11 5 5	30 — 31	0 10 6	26 — 27	0 10 0	19 — 20	0 7 0	0 4 3 11½	
52 — 53	0 18 0		0 6 2½	0 10 9 30	31 — 32	0 10 6	27 — 28	0 9 0	20 — 21	0 6 0	0 3 8 52	
53 — 54	0 18 0		0 6 2½	0 10 9 30	32 — 33	0 10 6	28 — 29	0 9 0	21 — 22	0 6 0	0 3 8 52	
54 — 55	0 18 0		0 6 2½	0 10 9 30	33 — 34	0 9 6	29 — 30	0 9 0	22 — 23	0 6 0	0 3 8 30	
55 — 56	0 17 0		0 5 10½	0 10 2 23	34 — 35	0 8 6	30 — 31	0 8 0	23 — 24	0 5 0	0 3 1 3	
56 — 57	0 16 0		0 5 6	0 9 7 16	35 — 36	0 7 6	31 — 32	0 7 0	24 — 25	0 4 0	0 2 5 75	
57 — 58	0 15 0		0 5 1½	0 9 0 9	36 — 37	0 6 6	32 — 33	0 6 0	25 — 26	0 3 0	0 1 10 26	
58 — 59	0 14 0		0 4 9½	0 8 5 2	37 — 38	0 5 6	33 — 34	0 5 0	26 — 27	0 2 0	0 1 2 99	
59 — 60	0 13 0		0 4 5½	0 7 9 27	38 — 39	0 4 6	34 — 35	0 4 0	27 and upwards.	0 1 0	0 0 7 49	
60 — 61	0 12 0		0 4 1½	0 7 2 20	39 — 40	0 3 6	35 — 36	0 3 0				
61 — 62	0 11 0		0 3 9½	0 6 7 13	40 — 41	0 2 6	36 — 37	0 2 0				
62 — 63	0 10 0		0 3 5½	0 6 0 6	41 — 42	0 1 6	37 and upwards.	0 1 0				
63 — 64	0 9 0		0 3 1½	0 5 4 31	42 and upwards.	0 1 0						
64 — 65	0 8 0		0 2 9½	0 4 9 24								
65 — 66	0 7 0		0 2 4½	0 4 2 17								
66 — 67	0 6 0		0 2 0½	0 3 7 10								
67 — 68	0 6 0		0 2 0½	0 3 7 10								
68 — 69	0 6 0		0 2 0½	0 3 7 10								
69 — 70	0 5 0		0 1 8½	0 3 0 3								
70 — 71	0 4 0		0 1 4½	0 2 4 28								
71 — 72	0 3 0		0 1 0½	0 1 9 21								
72 — 73	0 2 0		0 0 8½	0 1 2 14								
73 and upwards.	0 1 0		0 0 4½	0 0 7 7								

* The fractions under oatmeal are so many 120 parts of a penny; under barrel of flour, so many 32 parts of a penny.

Note.—Flour is rated to pay for every barrel of 196 lbs. a duty equal in amount to the duty payable on 381 gallons of wheat; and oatmeal for every 1814 lbs., a duty equal in amount to the duty payable on a quarter of oats. It is the practice to enter the above by the cwt.

If the produce of and imported from any British Possession in North America, or elsewhere out of Europe.

Wheat. — Whenever the average price of wheat shall be under *55s.* the duty shall be

	£ *s.* *d.*	
- - -	0 5 0	per qr.
55s. and under *56s.* - - -	0 4 0	
56s. — *57s.* - - -	0 3 0	
57s. — *58s.* - - -	0 2 0	
58s. and upwards - - -	0 1 0	

Barley. — Whenever the average price of barley shall be under *28s.* the duty shall be

	£ *s.* *d.*	
- - -	0 2 6	per qr.
28s. and under *29s.* - - -	0 2 0	
29s. — *30s.* - - -	0 1 6	
30s. — *31s.* - - -	0 1 0	
31s. — — - - -	0 0 6	

	£	s.	d.	
Oats. — Whenever the average price of oats shall be under 22*s.* the duty shall be	-	-	- 0	2 0 per qr.
22*s.* and under 23*s.*	-	-	- 0	1 6
23*s.*	-	-	- 0	0 6
Rye, Peas, and Beans. — Whenever the average price of rye, peas, and beans shall be under 30*s.* the duty shall be			0	3 0
30*s.* and under 31*s.*	-	-	- 0	2 6
31*s.* — 32*s.*	-	-	- 0	2 0
32*s.* — 33*s.*	-	-	- 0	1 6
33*s.* and under 34*s.*	-	-	- 0	1 0 per qr.
34*s.*	-	-	- 0	0 6

Wheat, Meal, and Flour. — For every barrel, being 196 lbs., a duty equal to the duty payable on 38½ galls. wheat.

Oatmeal. — For every 181½ lbs., a duty equal to the duty payable on a quarter of oats.

Maize, or Indian Corn, Buckwheat, Bear, or Bigg. — For every quarter a duty equal to the duty payable on a quarter of barley.

With respect to importation from Canada, see *ante*, p. 397.

Section 3. permits foreign corn to be imported into the Isle of Man, on payment of the duties specified in this act.

Regulations to be observed on shipping Corn from any British Possession out of Europe. — No corn, grain, meal, or flour shall be shipped from any British possession out of Europe as the produce of any such possession until the owner or proprietor or shipper thereof have made and subscribed, before the collector or other chief officer of customs at the port of shipment, a declaration in writing, specifying the quantity of each sort of such corn, grain, meal, or flour, and that the same was the produce of some British possession out of Europe to be named in such declaration, nor until such owner or proprietor or shipper shall have obtained from the collector or other chief officer of the customs of the said port a certificate, under his signature, of the quantity of corn, grain, meal, or flour so declared to be shipped; and before any corn, grain, meal, or flour shall be entered at any port or place in the U. Kingdom as being the produce of any British possession out of Europe, the master of the ship importing the same shall produce and deliver to the collector or other chief officer of customs of the port or place of importation a copy of such declaration, certified to be a true and accurate copy thereof, under the hand of the collector and other chief officer of customs at the port of shipment before whom the same was made, together with the certificate, signed by the said collector or other chief officer of customs, of the quantity of corn so declared to be shipped; and such master shall also make and subscribe, before the collector or other chief officer of customs at the place of importation a declaration in writing that the several quantities of corn, grain, meal, or flour on board such ship, and proposed to be entered under the authority of such declaration, are the same that are mentioned and referred to in the declaration and certificate produced by him, without any admixture or addition; and if any person shall in any such declaration wilfully and corruptly make any false statement respecting the place of which any such corn, grain, meal, or flour was the produce, or respecting the identity of any such corn, grain, meal, or flour, such person shall forfeit and become liable to pay to her Majesty the sum of 100*l.*, and the corn, grain, meal, or flour to such person belonging on board any such ship shall also be forfeited; and such forfeiture may be sued for, recovered, and applied in the same manner in all respects as any forfeiture incurred under and by virtue of the said act 3 & 4 Will. 4. c. 58.— § 5.

Prohibition of Importation of Malt. — It shall not be lawful to import from parts beyond the seas into the U. Kingdom, for consumption there, any malt, or any corn ground, except wheat meal, wheat flour, and oatmeal; and if any such article be imported contrary to this provision, the same shall be forfeited; and such forfeitures shall be sued for, recovered, &c. under the act 3 & 4 Will. 4. c. 56., in all respects as any forfeiture incurred under and by virtue of the said Customs Duties Act. — § 6.

Accounts of Corn imported, &c. to be published monthly. — The commissioners of customs shall once in each month publish in the London Gazette an account of the total quantity of each sort of corn, grain, meal, and flour respectively imported into the U. Kingdom, and also an account of the total quantity of each sort of corn, grain, meal, and flour upon which duties of importation have been paid in the U. Kingdom during the month next preceding, and of the several rates of duty which shall from time to time during such month have been payable upon each sort of corn, grain, meal, and flour respectively, with an account of the total quantity of each sort of corn, grain, meal, and flour remaining in warehouse at the end of such next preceding month. — § 7.

Section 8. enacts, that if any foreign state subject British vessels, goods, &c. to any higher duties or charges than are levied on the vessels of other countries, &c. her Majesty may prohibit the importation of corn from such state.

Section 9. enacts, that weekly returns of purchases and sales of corn shall be made in the places named in the schedule of cities and towns which is here annexed.

[The towns marked with an asterisk were not referred to in taking the averages under the late act.]

Counties and Towns.	Counties and Towns.	Counties and Towns.	Counties and Towns.
CHESHIRE: Chester. Nantwich. Middlewich. *Four Lane Ends. *Congleton. *Macclesfield. *Stockport.	*Peterborough. *Daventry. *Wellingborough. *Kettering.	*Wivelscomb.	HAMPSHIRE: Winchester. Andover. Basingstoke, Fareham. Havant. Newport. Ringwood. Southampton. Portsmouth. *Christchurch.
LANCASTER Liverpool. Ulverston. Lancaster. Preston. Wigan. Warrington. Manchester. Bolton. *Blackburn. *Bury. *Rochdale.	WARWICKSHIRE: Coventry. Birmingham. *Warwick. *Stratford-on-Avon.	MONMOUTHSHIRE: Monmouth. Abergavenny. Chepstow. Pontypool. *Newport.	RUTLAND: *Okeham.
DERBY: Derby. *Chesterfield.	WORCESTER: Worcester. *Bromsgrove. *Kidderminster. *Stourbridge. *Evesham.	DEVONSHIRE: Exeter. Barnstable. Plymouth. Totness. Tavistock. Kingsbridge. *Oakhampton. *Tiverton. *Honiton.	HEREFORD: *Leominster. *Hereford. *Kington.
NOTTINGHAM: Nottingham. Newark. *Mansfield. *Ratfield.	GLOUCESTER: Gloucester. Cirencester. Tetbury. Stow-on-the-Wold. Tewkesbury. *Cheltenham. *Dursley. *North Leach. *Stroud.	CORNWALL: Truro. Bodmin. Launceston. Redruth. Helston. St. Austell. *Falmouth. *Callington. *Liskeard. *St. Columb.	SHROPSHIRE: *Shrewsbury. *Ludlow. *Newport. *Oswestry. *Wellington. *Wenlock. *Whitchurch. *Market Drayton.
LEICESTER: Leicester. *Loughborough. *Hinckley. *Lutterworth.	SOMERSETSHIRE: Bristol. Taunton. Wells. Bridgewater. Frome. Chard. *Somerton. *Shepton Mallet. *Wellington.	DORSETSHIRE: Blandford. Bridport. Dorchester. Sherborne. Shaftesbury. Wareham. *Poole.	WILTSHIRE: *Swindon. *Devizes. *Salisbury. *Troubridge. *Warminster. *Chippenham.
NORTHAMPTON: Northampton.			STAFFORDSHIRE: *Stafford.

Counties and Towns.	Counties and Towns.	Counties and Towns.	Counties and Towns.
*Burton-on-Trent. *Lichfield. *Newcastle-under-Lyme. *Stone. *Uttoxeter. *Walsall. *Wolverhampton.	*Midhurst. *Shoreham.	Lynn. Thetford. Watton. Diss. East Dereham. Harleston. Holt. Aylsham. Fakenham. North Walsham. *Swaffham.	*Thirsk. *Rotherham. *Otley. *Thorne.
MIDDLESEX: London. Uxbridge.	BEDFORD: Bedford. *Leighton Buzzard. *Luton.	LINCOLN: Lincoln. Gainsborough. Glanford Bridge. Louth. Boston. Sleaford. Stamford. Spalding. *Barton on Humber. *Bourne. *Grantham. *Grimsby. *Horncastle. *Market Raisin. *Caistor. *Alford. *Holbech. *Long Sutton.	DURHAM: Durham. Stockton. Darlington. Sunderland. Barnard Castle.
HERTFORDSHIRE: Hertford. Royston. *Bishop Stortford. *St. Albans. *Hemel Hempstead. *Hitchin.	BERKSHIRE: Windsor. Reading. *Abingdon. *Maidenhead. *Newbury. *Wallingford.		NORTHUMBERLAND: Walsingham. Belford. Hexham. Newcastle-upon-Tyne. Morpeth. Alnwick. Berwick.
SURREY: Guildford *Croydon. *Kingston. *Dorking.	BUCKS: Aylesbury. *Buckingham. *High Wycombe. *Newport Pagnel.		CUMBERLAND: Carlisle. Whitehaven. Cockermouth. Penrith. Egremont. *Wigton. *Maryport. *Workington.
ESSEX: Chelmsford. Colchester. Romford. *Chipping Ongar. *Saffron Walden. *Braintree.	OXFORDSHIRE: Oxford. *Banbury. *Henley. *Witney. *Chipping Norton.	YORK: York. Leeds. Wakefield. Bridlington. Beverley. Hawden. Sheffield. Hull. Whitby. New Malton. *Barnsley. *Bedale. *Bradford. *Doncaster. *Knaresborough. *Pickering. *Richmond. *Ripon. *Selby. *Skipton.	WESTMORLAND: Appleby. Kendal.
KENT: Maidstone. Canterbury. Dartford. *Chatham and Rochester. *Dover. *Gravesend. *Ashford.	HUNTINGDON: Huntingdon. St. Ive's.		WALES: Carmarthen. Carnarvon. Haverfordwest. Cardiff. Denbigh. Wrexham. *Brecon. *Mold. *Bangor. *Cowbridge. *Newtown. *Corwen. *Welshpool. *Llangefni. *Llandillo. *Knighton. *Swansea.
SUSSEX: Chichester. Lewes. Rye. *Brighton. *East Grinstead. *Battle. *Arundel. *Hastings.	CAMBRIDGE: Cambridge. Ely. Wisbeach. *Newmarket.		
	SUFFOLK: Ipswich. Woodbridge. Sudbury. Hadleigh. Stowmarket. Beccles. Bungay. Lowestoft. Bury St. Edmund's.		
	NORFOLK: Norwich. Yarmouth.		

Section 10. gives her Majesty power of appointing a comptroller of corn returns.

Section 11. enacts that the comptroller shall execute his office in person, but that a deputy may be appointed to act in certain cases.

Sections 12. and 13. authorise the Lord Mayor and aldermen to appoint an inspector of corn returns for the city of London, under the same conditions as the general comptroller.

Section 14. authorises the chancellors of the universities of Oxford and Cambridge to appoint and remove inspectors of corn returns for the said city and town.

Section 15. enacts that no person dealing in corn, flour, or malt be appointed inspector or deputy-inspector of corn returns for the cities of London or Oxford, or town of Cambridge.

Section 16. enacts that the appointments of inspectors for London, Oxford, and Cambridge be enrolled.

Dealers in Corn in and near London to deliver in a Declaration to the Lord Mayor, &c. — Every person carrying on trade or business in the city of London, or within 5 miles from the Royal Exchange in the said city, as a corn factor, or as an agent employed in the sale of British corn, and every person who shall sell any British corn within the Corn Exchange in Mark Lane in the said city, or within any other building or place which is or may hereafter be used within the city of London, or within 5 miles from the Royal Exchange in the said city, for such and the like purposes for which the said Corn Exchange in Mark Lane hath been and is used, shall, before he or they shall carry on such trade or business, or sell any corn in manner aforesaid, make and deliver to the Lord Mayor, or one of the aldermen of the city of London, a declaration in the following words; (that is to say,)

"I *A. B.* do declare, that the returns to be by me made, conformably to an act passed in the fifth year of the reign of her Majesty Queen Victoria, intituled [*here set forth the title of this act*], of the quantities and prices of British corn which henceforth shall be by or for me sold or delivered, shall, to the best of my knowledge and belief, contain the whole quantity, and no more, of the corn *bonâ fide* sold and delivered by or for me within the periods to which such returns respectively shall refer, with the prices of such corn, and the names of the buyers respectively, and of the persons for whom such corn shall have been sold by me respectively, and to the best of my judgment the said return shall in all respects be conformable to the provisions of the said act."

Which declaration shall be in writing, and shall be subscribed by the person so making the same; and the Lord Mayor or alderman aforesaid of the city of London for the time being shall and is hereby required to deliver a certificate thereof, under his hand, to the inspector of corn returns for the city of London, to be by him registered in a book to be provided and kept for that purpose. — § 17.

Dealers in Corn to make Returns to Corn Inspector. — Every corn factor and other person as aforesaid who is herein-before required to make and who shall have made such declaration as aforesaid, shall and he or she is hereby required to return or cause to be returned, on Wednesday in each and every week, to the inspector of corn returns for the city of London, an account in writing, signed with his or her own name, or the name of his or her agent duly authorised in that behalf, of the quantities of each sort of British corn by him or her sold during the week ending on and including the next preceding Tuesday, with the prices thereof, and the amount of every parcel, with the total quantity and value of each sort of corn, and by what measure or weight the same was sold, and the names of the buyers thereof, and of the persons for and on behalf of whom such corn was sold; and it shall be lawful for any such inspector of corn returns to deliver to any person making or tendering any such returns a notice in writing requiring him or her to declare and set forth therein where and by whom and in what manner any such British corn was delivered to the purchaser or purchasers thereof; and every person to whom any such notice shall be so delivered shall and he or she is hereby required to comply therewith, and to declare and set forth in such his or her return, or in a separate statement in writing, the several particulars aforesaid. — § 18.

Section 19. enacts that the present comptroller, deputy-comptroller, and inspectors of corn returns for London, Oxford, and Cambridge continue in office, and that the appointments of the other inspectors of returns shall cease on the 24th day of June next after the passing of this act.

Section 20. enacts that in cities and towns, other than London, Oxford, and Cambridge, officers of excise are to act as corn inspectors, and attend at places appointed.

Section 21. enacts that the commissioners of excise shall make known the place to be appointed for delivering returns of corn purchased.

Section 22. authorises the commissioners of treasury to continue, if they think fit, the present inspectors of corn returns in their offices.

Dealers in Corn in Cities and Towns to make Declaration. — Every person who shall deal in British corn at or within any city or town named in the prefixed list of towns, excepting the city of London, or who shall at or within any such city or town engage in or carry on the trade or business of a corn factor, miller, maltster, brewer, or distiller, or who shall be the owner or proprietor, or part owner or proprietor, of any stage coaches, waggons, carts, or other carriages carrying goods or passengers for hire to and from any such city or town, and each and every person who, as a merchant, clerk, agent or otherwise, shall purchase at any such city or town any British corn for sale, or for the sale of meal, flour, malt, or bread made or to be made thereof, shall, before he or she shall so deal in British corn at any such city or town, or shall engage in or carry on any such trade or business as aforesaid, or shall purchase any British corn for any such purpose as aforesaid, at or within any such city or town, make and deliver a declaration in the following words; (that is to say,)

"¶ *A. B.* do declare, that the returns to be by me made, conformably to the act passed in the fifth year of the reign of her Majesty Queen Victoria, intituled [*here set forth the title of this act*], of the quantities and prices of British corn which henceforward shall by or for me be bought, shall, to the best of my knowledge and belief, contain the whole quantity, and no more, of the British corn *bonâ fide* bought for or by me within the periods to which such returns respectiveiy shall refer, with the prices of such corn and the names of the sellers respectively, and to the best of my judgment the said returns shall in all respects be conformable to the provisions of the said act."

Which declaration shall be in writing, and shall be subscribed with the hand of the person so making the same, and shall by him or her, or by his or her agent, be delivered to the mayor or chief magistrate, or to some justice of the peace for such city or town, or for the county, riding, or division in which the same is situate, who are hereby required to deliver a certificate thereof to the officer of excise acting as inspector of corn returns for such city or town as aforesaid, or to such continuing inspector of corn returns as aforesaid for such city or town (as the case may be), to be by such officer or inspector registered in a book to be provided and kept for that purpose. — § 23.

Section 24. authorises the inspectors of corn returns to require the above declaration from corn dealers.

Corn Dealers to make Returns in Writing to Inspectors of the Corn bought by them. — All persons who are herein-before required to make and who shall have made such declaration as aforesaid shall and they are hereby required, on the first market day which shall be holden in each and every week within each and every city or town named in the said schedule hereunto annexed, except the city of London, at or within which they shall respectively deal in corn, or engage in or carry on any such trade or business as aforesaid, or purchase any corn for any such purpose as aforesaid, to return or cause to be returned to the officer of excise acting as inspector of corn returns for such city or town, at the place appointed for receiving such returns, or to the continuing inspector of corn returns for such city or town, or to the inspector of corn returns for the city of Oxford, or the town of Cambridge (as the case may be), an account in writing, signed with their names respectively, of the amount of each and every parcel of each respective sort of British corn so by them respectively bought during the week ending on and including the day next preceding such first market day as aforesaid, with the price thereof, and by what weight or measure the same was so bought by them, with the names of the sellers of each of the said parcels respectively, with the names of the person or persons, if any, other than the person making such return, for or on account of whom the same was so bought and sold; and it shall be lawful for any officer of excise acting as inspector of corn returns, or any continuing inspector of corn returns as aforesaid, to deliver to any person making or tendering any such return a notice in writing requiring him or her to declare and set forth where and by whom and in what manner any such British corn was delivered to him or her; and every person to whom any such notice shall be so delivered shall and he or she is hereby required to comply therewith, and to declare and set forth in such his or her return, or in a separate statement in writing, the several particulars aforesaid. — § 25.

Inspectors to enter Returns made to them in a Book, &c. — The inspector of corn returns for the city of London, the city of Oxford, and the town of Cambridge, and every officer of excise acting as inspector of corn returns for the several other cities and towns aforesaid, and every continuing inspector of corn returns for any of such other cities or towns as aforesaid, shall duly and regularly enter in a book, to be by him provided and kept for that purpose, the several accounts of the quantities and prices of corn returned to him by such persons respectively as aforesaid; and every inspector of corn returns for any of the cities and towns enumerated in the said schedule shall in each and every week return to the comptroller of corn returns an account of the weekly quantities and prices of the several sorts of British corn sold in the city of London, or in the city or town for which he shall be or act as inspector, according to the returns so made to him as aforesaid, and in such form as shall be from time to time prescribed and directed by the said comptroller of corn returns; and the said returns shall be so made to the said comptroller by the inspector of corn returns for the city of London on Friday in each week, and by the respective inspectors of corn returns for the city of Oxford and the town of Cambridge, and by the respective officers of excise acting as inspectors of corn returns, and by the respective continuing inspectors of corn returns, for the several other cities and towns aforesaid, within three days next after the first market day holden in each and every week in any such city or town. — § 26.

Section 27. enacts that inspectors shall not include returns until they have ascertained that the persons making them have taken the declaration required.

Average Prices to be made up and published every Week. — The average prices of all British corn, by which the rate and amount of the said duties shall be regulated, shall be made up and computed on Thursday in each week, in manner following; (that is to say,) the said comptroller of corn returns shall on such Thursday in each week, from such returns as shall be received by him during the week next preceding, ending on and including the Saturday in such preceding week, add together the total quantities of each sort of British corn respectively appearing by such returns to have been sold, and the total prices for which the same shall thereby appear to have been sold, and shall divide the amount of such total prices respectively by the amount of such total quantities of each sort of British corn respectively, and the sum produced thereby shall be added to the sums in like manner produced in the 5 weeks immediately preceding the same, and the amount of such sums so added shall be divided by 6, and the sum thereby given shall be deemed and taken to be the aggregate average price of each such sort of British corn respectively, for the purpose of regulating and ascertaining the rate and amount of the said duties; and the said comptroller of corn returns shall cause such aggregate weekly averages to be published in the next succeeding Gazette, and shall on Thursday in each week transmit a certificate of such aggregate average prices of each sort of British corn to the collector or other chief officer of the customs at each of the several ports of the U. Kingdom, and to the said functionary at the port of Douglas in the Isle of Man; and the rate and amount of the duties to be paid under the provisions of this act shall from time to time be regulated and governed at each of the ports of the U. Kingdom by the aggregate average

prices of British corn at the time of the entry for home consumption of any corn, grain, meal, or flour chargeable with any such duty, as such aggregate average prices shall appear and be stated in the last of such certificates received by the collector or other chief officer of customs at such port. — § 28.

How Quantities of Corn are to be computed. — In the returns to be made as aforesaid to the comptroller of corn returns, and in the publications to be made from time to time in the London Gazette, and in the certificate to be transmitted to the said comptroller of corn returns to collectors or other chief officers of customs, the quantities of each sort of British corn respectively shall be computed and set forth by, according, and with reference to the imperial standard gallon, as the same is declared and established by the act 5 Geo. IV. cap. 74. amended or altered by the act 6 Geo. 4. cap. 12., and by the act 5 & 6 Will. 4 cap. 63. — § 29.

Until sufficient Number of Returns are made, Comptroller may use the present Averages. — Until a sufficient number of weekly returns have been received by the said comptroller of corn returns under this act to afford such aggregate average prices of British corn as aforesaid, the weekly average prices of British corn published by him immediately before the passing of this act shall be used and referred to in making such calculations as aforesaid, in such manner as if the same had been made up and taken under this act. — § 30.

What shall be deemed British Corn. — All corn or grain the produce of the U. Kingdom shall be deemed and taken to be British corn for the purposes of this act. — § 31.

Any Corn Return believed fraudulent may be omitted in the Computation. — If the said comptroller of corn returns shall at any time see cause to believe that any return made to any inspector of corn returns is fraudulent or untrue, the said comptroller is hereby required, with all convenient expedition, to lay before the Lords of the Committee of Privy Council (for Trade) a statement of the grounds of such his belief; and if upon consideration of any such statement the said Lords of said Committee shall direct the comptroller to omit any such return in the computation of such aggregate weekly average price, then and in that case, but not otherwise, the said comptroller of corn returns shall be authorised to omit such return in the computation of such aggregate weekly average price. — § 32.

Section 33. enacts that corn dealers having made the declaration previous to this act shall transmit returns, and comply with the rules hereby required.

Comptroller to issue Directions respecting the Inspection of Books of Inspectors. — The comptroller of corn returns is hereby authorised from time to time, in pursuance of any instructions which he shall receive in that behalf from the Lords of the Committee of Privy Council (for Trade), to issue to the inspectors of corn returns for the city of London, the city of Oxford, and the town of Cambridge respectively, any general or special directions respecting the inspection by any person or persons of the books so directed as aforesaid to be kept by such inspector of corn returns; and no such inspectors for the city of London, the city of Oxford, or the town of Cambridge, shall permit or suffer any person to inspect any such book, or to peruse or transcribe any entry therein, except in compliance with some such general or special directions from the said comptroller of corn returns. — § 34.

Copy of last Return to be affixed on Market Place on each Market Day. — The inspector of corn returns for every city or town other than the city of London shall and is hereby required, on each and every market day, to put up or cause to be put up in the market place of the city or town for which he shall act as inspector, or if there shall be no market place, then in some other conspicuous place therein near to where the corn market is usually held, a copy of the last return made by him to the comptroller of corn returns, omitting the names of the parties who may have sold and bought the said corn; and every such officer or inspector shall also again put up such account on the market day immediately following that on which it shall first have been put up, in case the same shall from accident or any other cause have been removed, and shall take due care that the same shall remain up for public inspection until a new account for the ensuing week shall have been prepared and set up. — § 35.

Sections 36, 37, 38. relate to the payment of comptrollers and inspectors.

Penalty on Corn Dealers for not making Declarations or Returns. — If any person hereby required to make and deliver the declaration or declarations herein-before particularly mentioned and set forth, or either of them, shall not make and deliver such declaration or declarations at the time and in the form and manner and to the person or persons herein-before directed and prescribed in that behalf, every person so offending shall forfeit and pay a sum not exceeding 20*l.* for each and every calendar month during which he shall neglect or delay to make and deliver such declaration; and if any person who is herein-before required to make any return to any inspector or officer of corn returns shall not make such returns to such inspector or officer at the time and in the form and manner herein-before directed and prescribed, every such offender shall for such his offence forfeit and pay a sum not exceeding 20*l.* — § 39.

Section 40. relates to the recovery and application of penalties.

Penalty on Witness not attending when required. — If any person who shall be summoned as a witness to give evidence before any justices of the peace, touching any matter of fact contained in any information or complaint for any offence against this act, either on the part of the prosecutor or of the person or persons accused, shall, after a reasonable sum of money for his or her charges and expences shall have been paid or been tendered to him or her, refuse or neglect to appear at the time and place for that purpose appointed, without a reasonable excuse for his, her, or their neglect, or appearing shall refuse to be examined on oath and give evidence before such justices of the peace, then and in either of such cases such person shall forfeit for every such offence any sum not exceeding 10*l.* — § 41.

Punishment for making false Returns. — If any person shall make any false and fraudulent statement in any such return as he is herein-before directed and required to make, or shall falsely and wilfully include, or procure or cause to be included, in any such return, any British corn which was not truly and *bonâ fide* sold or bought to, by, or on behalf of the person or persons in any such return mentioned in that behalf, in the quantity and for the price therein stated and set forth, every such offender shall be and be deemed guilty of a misdemeanor. — § 42.

Section 43. declares that the act shall not affect the practice of measuring or privileges of the city of London.

Limitation of Actions. — Actions brought under this act must be within 3 months of the matter or thing done. Defendants may plead the general issue; and if judgment be given against the plaintiffs, defendants shall have treble costs. — § 44.

Substitution of Wheat Flour or Biscuit for bonded Wheat. — Our readers are, no doubt, generally aware, that of late years efforts have occasionally been made in the House of Commons to get a law enacted authorising the delivery of bonded wheat from the warehouse, on the substitution in its stead of a proportional quantity of wheat flour or biscuit. But this proposal encountered the hostility of the more zealous partisans of the corn laws, principally on the alleged ground that it would open a door to fraud, and lead to the clandestine introduction of large quantities of foreign wheat. In the course, however, of the past year (1842), the project was again introduced by the president of the board of trade (Mr. Gladstone), and, having been supported by government, was passed into a law, 5 & 6 Victoria, cap. 92. We believe the measure will be productive of considerable advantage. It will enable millers, bakers, and others in this country to take advantage of such openings in the home and foreign markets as

may offer for the manufacture and sale of flour and biscuit; and to make such changes in the nature of their stocks as may be thought most advantageous. There do not seem to be any very good grounds for thinking that it will afford any considerable facilities for the commission of fraud by the introduction of wheat without a countervailing deposit of flour; but supposing it did, who is to be injured by such introduction? This, in truth, is one of the few cases in which fraud is advantageous rather than otherwise. We subjoin an abstract of the act now referred to.

Warehoused Wheat to be delivered Duty free upon substituting an equivalent Quantity of Wheat Flour or Biscuit.—Whereas it will be of advantage to the trade and commerce of the country that wheat may be delivered duty-free from the warehouse or from the vessel, upon the deposit in the warehouse, or due exportation therefrom, of an equivalent quantity of wheat flour and biscuit; be it therefore enacted, that it shall be lawful for the principal officer of customs having charge of any warehouse, in which wheat may be warehoused without payment of duty upon the first entry thereof, to deliver any quantity thereof duty-free upon there being deposited in warehouse in lieu thereof fine wheat flour or biscuit, as under.

For every 96 lbs. of kiln-dried wheat, or for every 100 lbs. of wheat not being kiln-dried, not less than 78 lbs. of fine wheat flour, or 68 lbs. of captain's biscuit, or 80 lbs. of biscuit of the standard of the biscuit supplied to her Majesty's navy, or 118 lbs. of common ship's biscuit; and so in proportion for any less quantity than 96 lbs. of kiln-dried wheat, or 100 lbs. of wheat not kiln-dried; such flour or biscuit having been manufactured in the U. Kingdom, or such flour having been duly imported and the duty thereon having been paid. — § 1.

Section 2. enacts, that fine wheat flour and biscuit may be deposited in warehouse, and certificate of such deposit granted, to entitle the holder to an equivalent quantity of warehoused wheat duty-free any time within six weeks of the date thereof.

Section 3. enacts, that persons making deposits of flour and biscuit be entitled to have equivalent quantities of wheat entered duty-free from the vessel.

Section 4. orders that three days' notice in writing be given to the collector of the quantity of wheat required to be delivered from the warehouse and of the day of delivery.

Section 5. orders that no wheat shall be delivered duty-free until the substituted article has been deposited and the certificate duly examined.

Section 6. enacts that substituted flour and biscuit shall be subject to the warehousing laws, but shall not be taken out for home consumption.

Section 7. enacts that such substituted flour and biscuit shall not be re-imported.

Section 8. imposes penalties for depositing articles of inferior quality.

Section 9. enacts that the act shall continue till the 31st of August 1845.

3. Tables showing the Prices of the different Sorts of Grain in Great Britain, the Quantities imported and exported, &c.

I. — Current Prices of Grain, Seed, &c. per Imperial Quarter. London, 21st of August, 1843.

British.	Per Quarter.
	s. *s.*
Wheat, Essex, Kent, and Suffolk, old red	54 to 58
Do. do. white	56 — 62
Do. do. new red	48 — 54
Do. do. white	52 — 58
Norfolk and Lincolnshire, old	50 — 54
Northumberland, Berwick, and Scot., do.	47 — 54
Galway and Limerick, white and red Cork and Youghal do. Dublin, Waterford, and Clonmel, do.	46 — 52
Rye, new	30 — 32
Barley, Kent, Essex, Norfolk, and Suffolk, new	32 — 36
Lincolnshire and Yorkshire do.	32 — 36
stained and grinding do.	28 — 32
Scotch	28 — 32
Malt, Essex, Norfolk, and Suffolk	58 — 61
Kingston and Ware	58 — 61
Oats, Norfolk, Cambridgeshire, Lincolnshire, and Yorkshire, feed	20 — 23
Do. Poland	23 — 25
Northumberland, Berwick, and Scotch potato	24 — 26
Do. feed	22 — 24
Devonshire and West Country feed, or black	19 — 22
Dundalk, Newry, and Belfast, feed	19 — 22
Limerick, Sligo, and Westport, feed do.	20 — 23
Cork, Waterford, Dublin, Youghal and Clonmel black	17 — 21
Cork, Waterford, Dublin, Youghal and Clonmel white	17 — 21
Beans, tick, new	28 — 30
old	30 — 32
harrow and small, new	31 — 34
do. old	35 — 37
Peas, boiling	35 — 38
hog, grey, and maple	32 — 34
Tares per bush.	4*s.* —4*s.* 6*d.*
Flour, English, per sack of 280 lbs. town made	48 — 52
Do. fine do. ship flour	40 — 45
Irish	38 — 42
Linseed, sowing, per quarter	50 — 56
cake, per 1,000 of 3 lbs. each, 9*l.* 10*s.* to 10*l.*	
Cloverseed, old English, red per cwt.	45 — 68
foreign, red —	45 — 68
Rapeseed, crushing, new, per last, 25*l.* to 28*l.*	
cake, per ton, 5*l.* to 5*l.* 5*s.*	

Foreign.	Free Per Qr.	In Bond Per Qr.
	s. *s.*	*s.* *s.*
Wheat, Dantzic and Königsberg, finest high mixed	62 — 64	Less duty of 14*s.* per quarter, being the rate which is at present (21st August 1843) expected to be paid upon the present stock in bond.
Do. good mixed	56 — 60	
Do. red mixed	54 — 58	
Stettin and Mecklenburg	54 — 58	
Danish	50 — 54	
Hamburg and Pomerania	52 — 57	
Zealand and Brabant	52 — 56	
Odessa, soft	46 — 48	
Polish	48 — 50	
Riga, Petersburg, and Liebau, soft	46 — 49	
Archangel	44 — 47	
Tuscan, red	48 — 50	
Canada	52 — 56	
Spanish, soft	50 — 56	
Buck or blank	32 — 36	Less duty 8*s.*
Indian corn	26 — 28	18 — 20
Rye, Baltic, dried	30 — 32	Less duty 8*s.*
do. undried	30 — 32	
Barley, Hamburg, Dantzic, Königsberg, and Riga, grinding	27 — 30	20 — 25
Danish do.	27 — 30	20 — 25
Oats, Dutch brew and thick	23 — 25	Less duty 6*s.*
Danish	20 — 22	
Friesland	20 — 23	
Russian	19 — 21	
Beans, tick	28 — 32	20 — 21
small	30 — 34	22 — 26
Mediterranean	27 — 28	17 — 18
Peas, white, boiling	34 — 37	
grey or hog	30 — 32	
Tares (duty 5*s.*) per bush.	4*s.* — 4*s.* 6*d.*	
Lentils (Egyptian) per qr.	24 — 27	
Flour, Dantzic, per barrel	27 — 30	
American, sour —	26 — 28	20 — 22
Do. sweet —	28 — 32	23 — 24
Linseed, Russian, crushing (duty 1*s.* per quarter) per quarter	40*s.* to 44*s.*	
Baltic, per barrel	37*s.* — 40*s.*	
Mediterranean, per quarter	38*s.* — 42*s.*	
Rapeseed (duty 1*d.* per qr.), crushing, new, per last	24*l.* 0*s.* — 27*l.* 0*s.*	
Linseed cake (duty 2*d.* per cwt.) per ton	6*l.* 10*s.* — 7*l.* 5*s.*	
Rape cake (duty 2*d.* per cwt.) —	4*l.* 10*s.* — 5*l.* 0*s.*	
Cloverseed, red (duty 10*s.* 6*d.* per cwt.) per cwt.	45*s.* — 68*s.*	
white (duty 10*s.* 6*d.* per cwt.), —	45*s.* — 48*s.*	

II. Account of the Prices of Middling or Mealing Wheat per Quarter at Windsor Market, as ascertained by the Audit-books of Eton College.

Years.	Prices of Wheat at Windsor, 9 Gallons to the Bushel.			Prices of Wheat reduced to the Winchester Bushel of 8 Gallons.			Average of Ten Years according to the Winchester Bushel of 8 Gallons.		
	£	s.	d.	£	s.	d.	£	s.	d.
1646	2	8	0	2	2	8			
1647	3	13	8	3	5	5⅝			
1648	4	5	0	3	15	6½			
1649	4	0	0	3	11	1½			
1650	3	16	8	3	8	1⅝			
1651	3	13	4	3	5	2½			
1652	2	9	6	2	4	0			
1653	1	15	6	1	11	6⅛			
1654	1	6	0	1	3	1½			
1655	1	13	4	1	9	7½	2	11	7⅝
1656	2	3	0	1	18	2⅝			
1657	2	6	8	2	1	5⅛			
1658	3	5	0	2	17	9½			
1659	3	6	0	2	18	8			
1660	2	16	6	2	10	2⅝			
1661	3	10	0	3	2	2½			
1662	3	14	0	3	5	9⅛			
1663	2	17	0	2	10	8			
1664	2	0	6	1	16	0			
1665	2	9	4	2	3	10½	2	10	5⅛
1666	1	15	0	1	12	0			
1667	1	16	0	1	12	0			
1668	2	0	0	1	15	6¾			
1669	2	4	4	1	19	5			
1670	2	1	8	1	17	0⅜			
1671	2	2	0	1	17	4			
1672	2	1	0	1	16	5½			
1673	2	6	8	2	1	5⅜			
1674	3	8	8	3	1	0¼			
1675	3	4	8	2	17	5⅜	2	0	11⅛
1676	1	18	0	1	13	9⅛			
1677	2	2	0	1	17	4			
1678	2	19	0	2	12	5⅛			
1679	3	0	0	2	13	4			
1680	2	5	0	2	0	0			
1681	2	6	8	2	1	5⅜			
1682	2	4	0	1	19	1½			
1683	2	0	0	1	15	6¾			
1684	2	4	0	1	19	1⅞			
1685	2	6	8	2	1	5⅜	2	1	4⅛
1686	1	14	0	1	10	2⅝			
1687	1	5	2	1	2	4⅛			
1688	2	6	0	2	0	10⅜			
1689	1	10	0	1	6	8			
1690	1	14	8	1	10	9⅜			
1691	1	14	0	1	10	2⅝			
1692	2	6	8	2	1	5⅜			
1693	3	7	8	3	0	1⅛			
1694	3	4	0	2	16	10½			
1695	2	13	0	2	7	1⅛	1	19	6⅜
1696	3	11	0	3	3	1⅞			
1697	3	0	0	2	13	4			
1698	3	8	4	3	0	9			
1699	3	4	0	2	16	10⅜			
1700	2	0	0	1	15	6⅜			
1701	1	17	8	1	13	5⅜			
1702	1	9	6	1	6	2⅜			
1703	1	16	0	1	12	0			
1704	2	6	6	2	1	4			
1705	1	10	0	1	6	8	2	2	11
1706	1	6	0	1	3	1⅛			
1707	1	8	6	1	5	4			
1708	2	1	6	1	16	10⅜			
1709	3	18	6	3	9	9⅛			
1710	3	18	0	3	9	4			
1711	2	14	0	2	8	0			
1712	2	6	4	2	1	2⅛			
1713	2	11	0	2	5	4			
1714	2	10	4	2	4	9			
1715	2	3	0	1	18	2⅜	2	4	2⅛
1716	2	8	0	2	2	8			
1717	2	5	8	2	0	7⅛			
1718	1	18	10	1	14	6⅛			
1719	1	15	0	1	11	1⅛			
1720	1	17	0	1	12	10⅜			
1721	1	17	6	1	13	4			
1722	1	16	0	1	12	0			
1723	1	14	8	1	10	10⅜			
1724	1	17	0	1	12	10⅜			
1725	2	8	6	2	3	1⅛	1	15	4⅜
1726	2	6	0	2	0	10⅜			
1727	2	2	0	1	17	4			
1728	2	14	6	2	8	5⅛			
1729	2	6	10	2	1	7⅛			
1730	1	16	6	1	12	5⅛			
1731	1	12	10	1	9	2⅛			
1732	1	6	8	1	3	8⅛			
1733	1	8	4	1	5	2⅛			
1734	1	18	10	1	14	6⅛			
1735	2	3	0	1	18	2⅜	1	15	2
1736	2	0	4	1	15	10⅛			
1737	1	18	0	1	13	9⅛			
1738	1	15	6	1	11	6⅛			
1739	1	18	6	1	14	2⅜			
1740	2	10	8	2	5	1⅛			
1741	2	6	8	2	1	5⅜			
1742	1	14	0	1	10	2⅜			
1743	1	4	10	1	2	1			
1744	1	4	10	1	2	1			
1745	1	7	6	1	4	5⅛	1	12	1
1746	1	19	0	1	14	8			
1747	1	14	10	1	10	11⅛			
1748	1	17	0	1	12	10⅜			
1749	1	17	0	1	12	10⅜			
1750	1	12	6	1	8	10⅛			
1751	1	18	6	1	14	2⅜			
1752	2	1	10	1	17	2⅛			
1753	2	4	8	1	19	8⅛			
1754	1	14	8	1	10	9⅛			
1755	1	13	10	1	10	1	1	1	1⅛
1756	2	5	2	2	0	1⅛			
1757	3	0	0	2	13	4			
1758	2	10	0	2	4	5⅛			
1759	1	19	8	1	15	3			
1760	1	16	6	1	12	5⅛			
1761	1	10	2	1	6	9⅛			
1762	1	19	0	1	14	8			
1763	2	0	8	1	16	1⅛			
1764	2	6	8	2	1	5⅛			
1765	2	14	0	2	8	0	1	19	3⅛
1766	2	8	6	2	3	1⅛			
1767	3	4	6	2	17	4			
1768	3	0	6	2	13	9⅛			
1769	2	5	8	2	0	7			
1770	2	9	0	2	3	6⅛			
1771	2	17	0	2	10	8			
1772	3	6	0	2	18	8			
1773	3	6	6	2	19	1⅛			
1774	3	2	0	2	15	1⅛			
1775	2	17	8	2	11	3⅛	2	11	3⅛
1776	2	8	0	2	2	8			
1777	2	15	0	2	8	10⅜			
1778	2	9	6	2	4	0			
1779	2	0	8	1	16	1⅛			
1780	2	8	6	2	3	1⅛			
1781	2	19	0	2	12	5⅛			
1782	3	0	6	2	13	9⅛			
1783	3	1	0	2	14	2⅛			
1784	3	0	6	2	13	9⅛			
1785	2	14	0	2	8	0	2	7	8⅛
1786	2	7	6	2	2	2⅜			
1787	2	11	6	2	5	9⅛			
1788	2	15	6	2	9	4			
1789	3	3	2	2	16	1⅛			
1790	3	3	2	2	16	1⅛			
1791	2	15	6	2	9	4			
1792*	-	-		2	13	0			
1793	-	-		2	15	8			
1794	-	-		2	14	0			
1795	-	-		4	1	6	2	14	3⅛
1796	-	-		4	0	2			
1797	-	-		3	2	0			
1798	-	-		2	14	0			
1799	-	-		3	15	8			
1800	-	-		6	7	0			
1801	-	-		6	8	6			
1802	-	-		3	7	2			
1803	-	-		3	0	0			
1804	-	-		3	9	6			
1805	-	-		4	8	0	4	1	2⅛
1806	-	-		4	3	0			
1807	-	-		3	18	0			
1808	-	-		3	19	2			
1809	-	-		5	6	0			
1810	-	-		5	12	0			
1811	-	-		5	8	0			
1812	-	-		6	8	0			
1813	-	-		6	0	0			
1814	-	-		4	5	0			
1815	-	-		3	16	0	4	17	6
1816	-	-		4	2	0			
1817	-	-		5	16	0			
1818	-	-		4	18	0			
1819	-	-		3	18	0			
1820	-	-		3	16	0			
1821	-	-		3	11	0			
1822	-	-		2	13	0			
1823	-	-		2	17	0			
1824	-	-		3	12	0			
1825	-	-		4	4	0	3	18	8⅜
1826	-	-		3	13	0			

The Eton Account of Prices commenced in 1595; the accuracy of the returns in the first years cannot however be so implicitly relied on, as those quoted above.—Bishop Fleetwood and Sir F. M. Eden have collected, with great industry, almost all the existing information respecting the state of prices in England during the last *six hundred* years.

* From this year, inclusive, the account at Eton College has been kept according to the bushel of 8 gallons, under the provision of the act 31 Geo. 3. c. 30. § 82.

III. Account of the Average Prices of British Corn, per Imperial Quarter, from the 15th of July, 1828, to the 29th April, 1842, being the whole Period during which the Act 9 Geo. 4. cap. 60. was in operation. —(*Parl. Paper* No. 511. Sess. 1842.)

Wheat.	Barley.	Oats.	Rye.
50*s.* 4*d.*	32*s.* 7*d.*	22*s.* 8*d.*	35*s.* 5*d.*

IV. Account of the Average Prices of British Corn per Imperial Quarter, in England and Wales, since 1771, as ascertained by the Receiver of Corn Returns.

Years.	Wheat.			Barley.			Oats.			Rye.			Beans.			Peas.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1771	2	8	7	1	6	5	0	17	2	1	15	4	1	9	4			
1772	2	12	3	1	6	1	0	16	8	1	17	9	1	10	11			
1773	2	12	7	1	9	2	0	17	8	1	14	4	1	14	0			
1774	2	14	3	1	9	4	0	18	4	1	15	4	1	12	1			
1775	2	9	10	1	6	9	0	17	0	1	13	10	1	9	6			
1776	1	19	4	1	0	9	0	15	5	1	7	8	1	7	3			
1777	2	6	11	1	1	1	0	16	1	1	8	10	1	9	4			
1778	2	3	3	1	3	4	0	15	7	1	9	2	1	8	6			
1779	1	14	8	1	0	1	0	14	5	1	4	0	1	4	11			
1780	1	16	9	0	17	6	0	13	2	1	2	10	1	2	10			
1781	2	6	0	0	17	8	0	14	1	1	7	8	1	3	8			
1782	2	9	3	1	3	2	0	15	7	1	9	8	1	6	9			
1783	2	14	3	1	11	3	1	0	5	1	16	9	1	15	11			
1784	2	10	4	1	8	8	0	18	10	1	13	2	1	13	2			
1785	2	3	1	1	4	9	0	17	8	1	8	10	1	11	7			
1786	2	0	0	1	5	1	0	18	6	1	8	0	1	14	2			
1787	2	2	5	1	3	4	0	17	2	1	8	6	1	12	9			
1788	2	6	4	1	2	8	0	16	1	1	8	6	1	8	0			
1789	2	12	9	1	3	6	0	16	6	1	10	9	1	8	0			
1790	2	14	9	1	6	3	0	19	5	1	15	0	1	11	11			
1791	2	8	7	1	6	10	0	18	1	1	12	7	1	11	5	1	13	2
1792	2	3	0	-		-	0	16	9	1	9	10	1	11	7	1	12	4
1793	2	9	3	1	11	1	1	0	6	1	16	2	1	17	6	1	19	11
1794	2	12	3	1	11	9	1	1	3	1	17	5	1	19	3	2	8	5
1795	3	15	2	1	17	5	1	4	5									
1796	3	18	7	1	15	4	1	1	10									
1797	2	13	9	1	7	2	0	16	3									
1798	2	11	10	1	9	0	0	19	5									
1799	3	9	0	1	16	2	1	7	6									
1800	5	13	10	2	19	10	1	19	4									
1801	5	19	6	3	8	6	1	17	0									
1802	3	9	10	1	13	4	1	0	4									
1803	2	18	10	1	5	4	1	1	6									
1804	3	2	3	1	11	0	1	4	3									
1805	4	9	9	2	4	6	1	8	4									
1806	3	19	1	1	18	8	1	7	7									
1807	3	15	4	1	19	4	1	8	4									
1808	4	1	4	-		-	1	13	4									
1809	4	17	4	2	7	0	1	11	5									
1810	5	6	5	2	8	1	1	8	7	2	19	5	2	14	4	2	16	11
1811	4	15	3	2	2	3	1	7	7	2	8	4	2	9	4	2	13	11
1812	6	6	6	3	6	9	2	4	6	3	18	7	3	14	7	3	16	10
1813	5	9	9	2	18	6	1	18	6	3	11	11	3	16	4	4	1	11
1814	3	14	4	1	17	4	1	5	8	2	4	8	2	6	2	2	11	10
1815	3	5	7	1	10	3	1	3	7	1	18	1	1	16	2	1	19	4
1816	3	18	6	1	13	11	1	7	2	2	5	1	1	19	4	1	19	10
1817	4	16	11	2	9	4	1	12	5	2	18	3	2	11	7	2	13	4
1818	4	6	3	2	13	10	1	12	5	2	15	4	3	3	7	3	1	9
1819	3	14	6	2	5	9	1	8	2	2	9	6	2	14	1	2	16	1
1820	3	7	10	1	13	10	1	4	2	2	2	0	2	3	3	2	5	10
1821	2	16	1	1	6	0	0	19	6	1	12	0	1	10	11	1	12	8
1822	2	4	7	1	1	10	0	18	1	1	0	10	1	4	5	1	6	4
1823	2	13	4	1	11	6	1	2	11	1	11	10	1	13	1	1	14	11
1824	3	3	11	1	16	4	1	4	10	2	1	5	2	0	0	2	0	7
1825	3	8	6	2	0	0	1	5	8	2	2	3	2	2	9	2	5	4
1826	2	18	8	1	14	4	1	6	8	2	1	1	2	4	3	2	7	7
1827	2	18	6	1	17	7	1	8	2	2	0	2	2	9	0	2	9	0
1828	3	0	5	1	12	10	1	2	6	1	14	2	1	18	4	2	0	6
1829	3	6	3	1	12	6	1	2	9	1	14	10	1	16	8	1	16	8
1830	3	4	3	1	12	7	1	4	5	1	15	10	1	16	1	1	19	2
1831	3	6	4	1	18	0	1	5	4	2	0	0	1	19	10	2	1	11
1832	2	18	8	1	13	1	1	0	5	1	14	7	1	15	4	1	17	0
1833	2	12	11	1	7	6	0	18	5	1	12	11	1	13	2	1	16	5
1834	2	6	2	1	9	0	1	0	11	1	12	9	1	15	3	1	19	4
1835	1	19	4	1	9	11	1	2	0	1	10	4	1	16	11	1	16	6
1836	2	8	6	1	12	10	1	3	1	1	13	4	1	19	1	1	18	4
1837	2	15	10	1	10	4	1	3	1	1	14	9	1	18	7	1	17	6
1838	3	4	7	1	11	5	1	2	5	1	15	1	1	16	8	1	17	2
1839	3	10	8	1	19	6	1	5	11	2	2	0	2	1	3	2	1	2
1840	3	6	4	1	16	5	1	5	8	1	17	0	2	3	5	2	2	5
1841	3	4	4	1	12	10	1	2	5	1	16	9	1	19	10	2	0	4
1842	2	17	3	1	7	6	0	19	3	1	13	0	1	12	5	1	12	11

N. B. — The Imperial bushel contains 2218·192 cubic inches, the Winchester bushel 2150·42 do., the former being about one thirty-secondth part larger than the latter. —(See BUSHEL, and WEIGHTS AND MEASURES.)

V. Account of the Quantity of Wheat and Wheat Flour exported, and of Foreign Wheat and Wheat Flour imported, in the following Years.—*N.B.* This account includes the trade with Ireland.

Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.	Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.	Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.
England.	Qrs.	Qrs.	England.	Qrs.	Qrs.	Gt. Britain.	Qrs.	Qrs.
1697	14,699	400	1747	266,907		1795	18,839	313,793
1698	6,857	845	1748	543,387	385	1796	24,679	879,200
1699	557	486	1749	620,049	382	1797	54,525	461,767
1700	49,056	5	1750	947,602	279	1798	59,782	396,721
1701	98,324	1	1751	661,416	3	1799	39,362	463,185
1702	90,230		1752	459,279		1800	22,013	1,264,520
1703	166,615	50	1753	299,609		1801	28,406	1,424,765
1704	90,313	2	1754	356,270	201	1802	149,304	917,663
1705	96,185		Gt. Britain.			1803	76,580	373,725
1706	188,332	77	1755	237,466		1804	63,073	461,140
1707	74,155		1756	102,752	5	1805	77,955	920,834
1708	83,406	86	1757	11,545	141,562	1806	29,566	310,342
1709	169,680	1,552	1758	9,234	20,353	1807	25,113	404,946
1710	13,924	400	1759	227,641	162	1808	98,005	84,889
1711	76,949		1760	393,614	3	1809	31,278	455,987
1712	145,191		1761	441,956		1810	75,785	1,567,126
1713	176,227		1762	295,385	56	1811	97,765	336,131
1714	174,821	16	1763	420,538	72	1812	46,325	290,710
1715	166,490		1764	396,857	1	1813	Records destroyed.	559,000
1716	74,926		1765	167,126	104,547			
1717	22,954		1766	164,939	11,020	1814	111,477	852,567
1718	71,800		1767	5,071	497,905	1815	227,947	384,475
1719	127,762	20	1768	7,433	349,268	1816	121,611	332,491
1720	83,084		1769	49,892	4,378	1817	317,524	1,089,855
1721	81,633		1770	75,449	34	1818	58,668	1,054,261
1722	178,880		1771	10,089	2,510	1819	44,689	625,638
1723	157,720		1772	6,959	25,474	1820	94,657	996,479
1724	245,865	148	1773	7,637	56,857	1821	199,846	707,384
1725	204,413	12	1774	15,928	289,149	1822	160,499	510,602
1726	142,183		1775	91,037	560,088	1823	145,951	424,019
1727	30,315		1776	210,964	20,578	1824	61,680	411,591
1728	3,817	74,574	1777	87,686	233,323	1825	38,796	787,606
1729	18,993	40,315	1778	111,070	106,394	1826	20,054	897,127
1730	93,971	76	1779	222,261	5,039	1827	57,323	711,868
1731	130,025	4	1780	221,059	3,915	1828	76,489	1,410,300
1732	202,058		1781	103,021	159,806	1829	75,097	2,190,695
1733	427,199	7	1782	145,152	80,695	1830	37,149	2,205,731
1734	498,196	6	1783	51,943	584,183	1831	65,875	2,867,860
1735	153,343	9	1784	89,288	216,947	1832	289,558	1,254,351
1736	118,170	16	1785	132,685	110,863	1833	96,212	1,106,157
1737	461,692	32	1786	205,166	51,163	1834	159,182	981,186
1738	580,596	2	1787	120,536	59,339	1835	134,076	750,808
1739	279,542	5,423	1788	82,971	148,710	1836	256,978	861,156
1740	54,390	7,568	1789	140,014	112,656	1837	308,420	1,109,492
1741	45,417	40	1790	30,892	222,557	1838	158,621	1,923,100
1742	293,260	1	1791	70,626	469,054	1839	42,512	3,110,729
1743	371,431	2	1792	300,278	622,417	1840	87,242	2,526,645
1744	231,984	2	1793	76,620	490,398	1841	30,390	2,910,263
1745	324,839	6	1794	155,948	327,902	1842	68,047	3,111,290
1746	130,646							

VI. Account of the Total Quantities of Foreign and Colonial Wheat and other Grain and Pulse, entered for Consumption in the U. Kingdom, from the time that the Act 9 Geo. IV. cap. 60. came into operation to the 5th of January, 1842; exhibiting also the Total Amount of Duty paid upon each Species of Corn and Pulse and the Average Rate of Duty during the whole Period.

	Foreign Corn, Meal and Flour.			Corn, Meal and Flour, the Produce of, and imported from, British Possessions out of Europe.		
	Quantities charged with Duty for Home Consumption, under Act 9 G. 4. c. 60. from the passing of the Act (15th July, 1828) to the 5th January, 1842.	Amount of Duty received thereon.	Rates of Duty, taken on the Average of the whole Period.	Quantities charged with Duty for Home Consumption, under Act 9 G. 4. c. 60. from the passing of the Act (15th July, 1828) to the 5th January, 1842.	Amount of Duty received thereon.	Rates of Duty, taken on the Average of the whole Period.
	Qrs.	£	Per Qr. s. d.	Qrs.	£	Per Qr. s. d.
Wheat	13,555,471	3,779,417	5 7	589,012	104,639	3 7
Barley	2,826,397	650,559	4 8	839	89	2 1
Oats	3,534,627	1,137,940	6 5	9,060	303	0 8
Rye	319,842	49,195	3 1			
Peas	919,227	266,374	5 10	25,872	1,786	1 5
Beans	1,071,369	371,698	6 11	57	1	0 6
Indian corn	140,164	26,940	3 10	8,365	456	1 1
Buckwheat	40,024	12,357	6 2			
	Cwts.		Per Cwt. s. d.	Cwts.		Per Cwt. s. d.
Wheat, meal and flour	4,303,981	428,083	2 0	1,704,528	81,479	0 11
Oatmeal	1,422	253	3 7	18,877	932	1 0

VII. Account of the Quantities of Wheat imported into the U. Kingdom during each of the Thirteen Years ending with 1842, exhibiting the Quantity brought from each Country; and exhibiting, also, the Total Imports of Wheat Flour during each of the above Years.

Countries.	1830.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
Russia	235,302	464,901	91,290	18,656	-	-	1,036	11,244	41,339	371,693	268,263	99,599	288,087
Sweden	2,937	71	-	357	1	-	-	251	-	392	2	807	12
Norway	-	-	-	-	-	-	-	-	-	360	-	-	-
Denmark	88,032	55,960	33,548	7,958	11,732	9,758	10,258	18,240	111,499	196,730	150,351	236,250	89,683
Prussia	517,811	298,605	119,320	87,903	29,826	3,236	100,199	315,121	550,826	740,203	809,508	881,982	739,617
Germany	361,961	219,773	43,016	49,121	42,770	11,577	51,562	87,665	312,442	409,729	364,553	656,056	201,589
Holland	76,711	30,219	-	276	-	8	3,984	10,741	82,010	116,480	50,612	101,983	9,067
Belgium				-	-	111	-	420	17,596	23,141	7,627	23,670	696
France	15,219	101,075	475	692	-	-	-	716	53,190	278,182	48,350	147,966	469,116
Portugal, Proper	-	-	-	-	-	2,158	1,593	-	15	26,382	1,596	1,049	2,614
Azores	1,141	46	-	-	-	-	-	-	-	1,961			
Madeira	-	-	-	-	-	-	-	-	-	616			
Spain, and the Balearic Islands	39,493	146,131	1,763	-	1	6	-	1	421	17,741	46,939	35,298	68,451
Spain, and the Canaries	-	1,082	-										
Gibraltar	-	-	-	-	-	-	-	-	-	4,573	1	570	714
Italy, and the Italian Islands	28,612	253,059	2,301	6	1	1	4	4,483	30,264	335,612	149,328	112,700	608,394
Malta	7,268	13,339	-	-	-	-	-	6,390	11,647	16,370	1,941	9,855	114,750
Ionian Islands	-	219	1,062	-	-	-	-	-	5,370	13,928	1,960	2,923	7,400
Morea	-	-	-	-	-	-	-	-	-	-	-	-	2,017
Turkey	-	7,383	19	-	-	-	-	257	5,150	43,740	4,802	1,337	15,060
Egypt	-	-	-	-	-	-	-	-	800	1,729	2,874	6,729	37,658
Tripoli, Tunis, Algiers, and Morocco	-	-	-	-	-	-	-	-	-	3,360	-	-	-
Cape of Good Hope	-	2,178	1,612	-	1,616	1,107	1	-	-	3	-	-	176
Mauritius	-	-	-	-	-	-	-	-	-	-	-	-	-
East India Company's Territories and Ceylon	656	1,568	945	2,696	471	336	-	510	-	2	-	1	5,431
British Settlements in Australia	-	45	25	752	1,766	1	1	-	-	-	2		
British North American Colonies	58,963	190,796	89,510	79,410	44,907	14,526	-	-	-	27	8,192	70,299	33,656
United States of America	6,086	42,736	6,286	-	-	-	-	-	555	3,766	73,755	10,553	16,111
Chili	-	140	180	-	-	1	8	-	-	-	51	-	2,840
Peru	-	-	-	-	-	-	-	-	-	-	12,253		
Isles of Guernsey, Jersey, Alderney and Man (foreign goods)	32,079	7,329	-	-	-	-	-	-	20,531	28,236	-	10,147	9,180
Total	1,475,314	1,836,529	391,417	248,171	133,091	42,628	168,617	455,871	1,241,460	2,631,556	1,993,583	2,409,754	2,722,349
Total of flour and wheatmeal in cwts.	707,082	1,636,059	194,896	172,877	151,506	84,969	255,831	364,248	456,739	843,046	1,537,818	1,263,126	1,130,755

VIII. Account showing the Quantities of the different Varieties of Foreign and Colonial Grain entered for Consumption in the U. Kingdom in each of the Thirteen Years ending with 1842, with the Total Quantities so entered, and the Annual Entries at an Average of the above Period. — (Compiled from the *Parl. Paper* No. 77. Sess. 1843.)

Years.	Wheat and Flour.	Barley.	Oats and Oatmeal.	Rye.	Peas.	Beans.	Total entered.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
1830	1,727,847	48,505	904,472	19,189	44,507	18,697	2,763,217
1831	1,506,740	514,610	355,492	56,203	57,977	17,678	2,508,700
1832	376,755	77,988	3,082	60	16,595	7,439	481,919
1833	84,036	1,226	975	1	18,092	6,028	110,358
1834	64,974	11,071	55,620	22	57,702	44,566	233,955
1835	28,554	136,853	176,142	3	25,184	69,824	436,560
1836	30,107	110,021	97,197	18	80,928	87,796	406,067
1837	244,272	47,475	334,024	19,576	87,615	109,076	842,038
1838	1,848,475	8,192	11,072	2,517	11,618	54,240	1,936,114
1839	2,711,723	594,301	862,789	152,182	170,270	123,597	4,615,262
1840	2,401,436	619,801	517,052	1,857	159,457	129,517	3,829,120
1841	2,647,808	222,837	27,918	518	132,857	267,697	3,299,635
1842	2,989,645	49,969	295,437	28,516	80,450	43,279	3,487,296
Totals	16,662,372	2,442,849	3,641,272	281,662	943,252	979,434	24,950,241
Average annual entries for consumption	1,281,720 7/13	187,911 6/13	280,097 11/13	21,620 2/13	72,557 11/13	75,341 1/13	1,919,246 3/13

IX. Account of the Quantities of Grain, Flour, Meal, and Malt of Irish Growth, annually imported into Great Britain from Ireland, from 1800 to 1842, both inclusive.

Years.	Wheat and Wheat Flour.	Barley, including Bear or Bigg.	Oats and Oatmeal.	Rye.	Peas.	Beans.	Malt.	Total.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
1800	749	78	2,411	- -	- -	- -	- -	3,238
1801	150	- -	375	- -	- -	- -	- -	525
1802	108,751	7,116	341,151	282	113	1,655	2,303	461,371
1803	61,267	12,879	266,359	753	611	1,653	25	343,547
1804	70,071	2,521	240,022	206	1,078	3,060	- -	316,958
1805	84,087	15,656	203,302	235	1,634	2,010	- -	306,924
1806	102,276	3,237	357,077	330	1,389	2,361	- -	466,760
1807	44,900	23,048	389,649	431	1,390	3,777	- -	463,195
1808	43,497	30,586	579,974	573	75	2,065	- -	656,770
1809	66,944	16,619	845,783	425	38	2,669	- -	932,478
1810	126,388	8,321	492,741	20	216	3,541	- -	631,227

TABLE IX. — *continued.*

Years.	Wheat and Wheat Flour.	Barley, including Bear or Bigg.	Oats and Oatmeal.	Rye.	Peas.	Beans.	Malt.	Total.
	Qrs.	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*
1811	147,245	2,713	275,757	21	50	4,081	- -	429,867
1812	158,352	43,138	390,629	178	51	5,008	- -	597,356
1813	217,154	63,560	691,498	420	77	4,455	- -	977,164
1814	225,478	16,779	564,010	4	460	5,731	- -	812,462
1815	189,514	27,108	597,837	207	425	6,371	- -	821,192
1816	121,631	62,254	683,714	43	239	5,984	- -	873,865
1817	55,481	26,766	611,117	- -	12	2,275	- -	695,651
1818	105,179	25,387	1,069,385	4	10	4,768	- -	1,204,733
1819	153,850	20,311	789,613	2	- -	3,904	- -	967,680
1820	403,407	87,095	916,251	134	439	8,596	- -	1,415,722
1821	569,700	82,884	1,162,249	550	2,474	4,959	- -	1,822,816
1822	463,604	22,532	569,237	353	728	7,235	- -	1,063,089
1823	400,068	19,274	1,102,487	198	586	5,540	- -	1,528,153
1824	356,384	44,699	1,225,085	112	756	5,791	1,173	1,634,000
1825	396,018	154,256	1,629,856	220	1,431	11,355	10,826	2,203,962
1826	314,851	64,885	1,303,734	77	1,452	7,190	1,203	1,693,392
1827	405,255	67,791	1,343,267	256	1,282	10,037	572	1,828,460
1828	652,584	84,294	2,075,631	1,424	4,826	7,068	853	2,826,590
1829	519,017	97,140	1,673,628	568	4,435	10,445	2,011	2,307,244
1830	529,717	189,745	1,471,252	414	2,520	19,053	2,820	2,215,521
1831	557,498	185,409	1,655,701	515	4,142	15,029	10,888	2,429,182
1832	790,263	123,039	2,051,867	294	1,915	14,530	8,229	2,990,767
1833	844,211	101,767	1,762,520	166	2,646	19,114	7,017	2,737,441
1834	779,505	217,855	1,769,503	943	2,176	18,771	3,865	2,792,658
1835	661,776	156,242	1,822,767	614	3,447	24,235	10,357	2,679,438
1836	598,757	184,156	2,132,138	483	2,920	17,604	22,214	2,958,272
1837	534,465	187,173	2,274,675	1,016	60	25,630	4,174	3,030,253
1838	542,583	156,167	2,742,807	628	5,232	21,584	5,001	3,474,302
1839	258,331	61,676	1,904,933	2,331	1,484	14,535	2,861	2,243,151
1840	174,439	95,954	2,037,835	192	1,403	14,573	3,456	2,327,782
1841	218,708	75,588	2,539,380	172	855	15,907	4,935	2,855,525
1842	201,998	50,297	2,261,435	76	1,551	19,831	3,046	2,538,234

IV. FOREIGN CORN TRADE.

Polish Corn Trade. — Dantzic is the port whence we have hitherto always derived the largest portion of our supplies in deficient seasons; and as it is most probable that our principal importations will continue to be drawn from the same source, it becomes peculiarly important to ascertain the cost of wheat in Dantzic, and the expense of its importation into this country.

According to the data collected by Mr. Jacob in his reports on the agriculture and corn trade of the north of Europe, the ordinary price of wheat at Dantzic free on board would amount to about 40*s.* a quarter, made up as follows: —

	s.	*d.* per quarter.
Cost of wheat at Warsaw - - -

made large importations, we have hardly, in a still greater number, brought away a single bushel of corn; so that the average prices of this period may be taken as pretty correctly representing the prices of corn in Dantzic in seasons when the export is rather under a medium.

Account exhibiting the Lowest, the Highest, and the Average Prices of Wheat in Dantzic, in Sterling Money, per Imperial Quarter, in each of the 11 Years, from 1831 to 1841, both inclusive, with the Averages for the whole Period.

Years.	Lowest Prices ℔ Quarter.	Highest Prices ℔ Quarter.	Average Prices ℔ Quarter.	Years.	Lowest Prices ℔ Quarter.	Highest Prices ℔ Quarter.	Average Prices ℔ Quarter.
	s. *d.*	*s.* *d.*	*s.* *d.*		*s.* *d.*	*s.* *d.*	*s.* *d.*
1831	41 1	51 6	46 3½	1839	31 9	61 1	46 5
1832	32 5	43 7	38 0	1840	39 0	62 9	50 10½
1833	28 5	32 9	30 7	1841	45 9	57 0	51 4½
1834	25 1	29 11	27 6				
1835	21 0½	26 3½	23 8	Average of 11 Years from 1831 to 1841	30 8½	45 2	37 11
1836	22 3	35 7	28 11				
1837	24 9	34 8½	29 8½				
1838	26 6½	61 9	44 1½				

It appears from this table that the average price of wheat in Dantzic during the 11 years ending with 1841 was 37*s.* 11*d.* a quarter; making, with the addition of 10*d.* a quarter for shipping charges, its average price free on board, 38*s.* 9*d.* a quarter. Now, if to this last sum we add 12*s.* or 13*s.* for the expense of its importation and delivery to the millers in London, it is plain, judging from the experience of the last 11 years, that the average cost of Dantzic wheat in England, independent of duty, may be estimated, in round numbers, at from 51*s.* to 52*s.* a quarter.

It is material, however, to bear in mind that no very large quantity could be shipped at the above prices. They represent only average years: and whenever there is any unusual demand for corn, or when from 150,000 to 300,000 quarters are wanted for this country, the price immediately rises, as seen above, to from 45*s.* to 50*s.* a quarter and upwards.

That the charges on importation into England, warehousing here, and then delivering to the millers, exclusive of duty and profit, would amount to about 10*s.* a quarter, appears from the following statements * : —

Account of the Ordinary Charges on 100 Quarters of Wheat, shipped from Dantzic on Consignment, and landed under Bond in London. — (*Parl. Paper* No. 333. Sess. 1827. p. 28.)

	£	*s.*	*d.*	£	*s.*	*d.*
One hundred quarters, supposed cost at Dantzic, free on board, 30*s.*	-		-	150	0	0
Freight at 5*s.* per quarter, and 10 per cent.	27	10	0			
Metage ex ship, &c., 6*s.* 6*d.* per last	3	5	0			
Lighterage and landing, 9*d.* per quarter	3	15	0			
Insurance on 180*l.*, including 10 per cent. imaginary profit, at 80*s.* per cent.; policy 5*s.* per cent.	7	14	0			
Granary rent and insurance for one week	0	5	0			
Turning and trimming, about	0	2	0			
Delivering from granary, 3*d.* per quarter	1	5	0			
Metage, &c. ex granary, 2*s.* per last	1	0	0			
Commission on sale, 1*s.* per quarter	5	0	0			
Del credere, 1 per cent. on, suppose, 40*s.*	2	0	0			
				51	16	0
Total cost to importer if sold in bond.				201	16	0
Imaginary profit, 10 per cent.				20	3	6
				221	19	6
Would produce, at 44*s.* 4*d.* per quarter,				£221	13	4

N. B. — Loss on remeasuring not considered.
Freight and Insurance are taken in this statement at an average, being sometimes higher and sometimes lower.

Account of the Ordinary Charges on 100 Quarters of Wheat imported from Dantzic, for Sale on Consignment in London, in May, 1841.

	£	*s.*	*d.*	£	*s.*	*d.*
One hundred quarters fine high mixed wheat, weighing about 61 lbs. per bushel, would cost 40*s.* per quarter	-		-	200	0	0
Sound dues, 6*d.* per quarter	2	10	0			
Freight, at present, 3*s.* 3*d.* but, on an average, supposed 4*s.* 6*d.*	22	10	0			
Insurance 12*s.* 6*d.* per cent., but on an average, 20*s.* £2 5 0						
Policy, 2*s.* 6*d.* 0 7 6						
	2	12	6			
Metage and dues ex ship, 6*s.* 8*d.* per ten quarters	3	6	8			
Lighterage and landing, 9*d.*	3	15	0			
Granary rent and fire insurance for three weeks, at 5*s.* per one hundred quarters per week	0	15	0			
Turning and trimming, same period	0	4	6			
Seller's metage ex granary, 2*s.* per ten quarters	1	0	0			
Delivering from granary, 3*d.*	1	5	0			
Commission or factorage on sale, 1*s.* per quarter	5	0	0			
Del credere, 1 per cent. (on 55*s.*), 275*l.*	2	15	0			
				45	13	8
				245	13	8

* The first was furnished by Messrs. Richard Birkett and Sons to the Lords' Committee of 1827, on the price of foreign corn; the other was obligingly furnished by Mr. Irvine, corn factor, in 1841.

According to this statement, the cost of importation would be 9*s* 1½*d.* per quarter; but to this has to be added an allowance for waste, and 2*s.* 6*d.* or 3*s.* a quarter for profit, which would raise the cost to about 12*s.* 6*d.* or 13*s.* a quarter.

We are well convinced that it is not possible successfully to controvert any portion of these statements; and such being the case, we are entitled to say that nothing can be more perfectly unfounded than the notions so prevalent in this country as to the extreme cheapness of corn in Dantzic. The truth is, that no considerable quantity of corn can be derived from her without resorting to Gallicia and other provinces from 500 to 700 miles inland. The corn is thence conveyed to the city in boats suited to the navigation of the rivers; but, owing to the uncertain supply of water in the latter, the communication is sometimes entirely broken off, and it is always very tedious and expensive. In proof of this, we may mention that, in November, 1838, when wheat sold in Dantzic for 41*s.* 6*d.* a quarter, it was selling in Lemberg, the principal corn market of Gallicia, for 15*s.*; the difference, amounting to 26*s.* 6*d.*, being the measure of the cost and risk of conveyance from Lemberg to Dantzic! It is, in fact, quite nugatory to suppose that any large supplies should be furnished by Dantzic, were the shipping price under 40*s.* or 45*s.* But, supposing that we could in ordinary years ship considerable supplies even for 35*s.*, still it is plain it could not be sold in London, under a low duty of 5*s.* or 7*s.*, for less than 53*s.* or 55*s.* a quarter.

It is difficult to draw any conclusions on which it would be safe to place much reliance as to the supplies of corn that might be obtained from Dantzic, were our ports constantly open under a reasonable duty. Mr. Jacob gives the following

Account of the Total annual Average Quantity of Wheat and Rye exported from Dantzic, in Periods of 25 Years each, for the 166 Years ending with 1825.

Years.	Wheat, Qrs.	Rye, Qrs.	Total, Qrs.	Years.	Wheat, Qrs.	Rye, Qrs.	Total, Qrs.
1651 to 1675	81,775	225,312	307,087	1751 — 1775	141,080	208,140	349,220
1676 — 1700	124,897	227,482	352,379	1776 — 1800	150,299	103,045	253,344
1701 — 1725	59,795	170,100	229,895	1801 — 1825	200,330	67,511	267,841
1726 — 1750	80,624	119,771	200,395				

"The average of the whole period," Mr. Jacob observes, "gives an annual quantity of wheat and rye of 279,794 quarters; and this surplus may be fairly considered as the nearest approach that can be made, with existing materials, to what is the usual excess of the produce of bread corn above the consumption of the inhabitants, when no extraordinary circumstances occur to excite or check cultivation." —(*Report*, p. 49.)

We incline, however, to think that Mr. Jacob has underrated the capabilities of improvement of the countries traversed by the Vistula, the Bug, &c.; and that were our ports open under a fixed duty of 5*s.* or 7*s.* a quarter on wheat, and other grain in proportion, we might, supposing our average prices not to fall below 50*s.* or 55*s.* a quarter, reckon upon getting from Dantzic an annual supply of from 350,000 to 450,000 quarters. It should, however, be observed, that Mr. Meek, who visited the N. of Europe in the latter part of 1841 and early in 1842, concurs with Mr. Jacob in thinking it improbable that any considerable increase of exportation would take place from Dantzic under any modification of our corn laws.—(*Parl. Paper* No. 7. Sess. 1842, p. 31.) But it is difficult to believe that such should be the case. Hitherto, owing to the fluctuating and capricious nature of our demand, it has proved of little advantage to the Polish cultivators; and but little corn has been raised in the expectation of its finding its way to England. But it might be quite another thing were our ports always open. The supply of our markets might, under such circumstances, be an object of importance to the Polish agriculturists; and if so, there can be little doubt, they would endeavour to extend and improve their tillage, and the means of bringing corn to market. At the same time, however, nothing positive can be stated on the subject, inasmuch as the stimulus given to polish agriculture by any change in our corn laws would wholly depend on the extent of our demand; and if, as we apprehend would be the case, it should, in ordinary seasons, be much more limited than is commonly supposed, it would have comparatively little influence. We subjoin an

Account exhibiting the Quantities of the different Varieties of Corn and the Quantities of Flour shipped from Dantzic during each of the Seven Years ending with 1840, with the Prices of Wheat in Dantzic during the same Period.

Years.	Wheat.	Rye.	Barley.	Oats.	Flour.	Average Price of Wheat.		
	Qrs.	*Qrs.*	*Qrs.*	*Qrs.*	*Barrels.*	£	*s.*	*d.*
1834	71,043	24,811	326	1,522	33,863	1	7	6
1835	45,129	13,869	95	2,898	28,392	1	3	8
1836	129,635	70,812	7,317	7,224	58,891	1	8	11
1837	314,601	109,989	2,357	8,085	67,612	1	9	8⅞
1838	458,440	31,290	2,509	1,206	78,274	2	4	1¼
1839	419,055	134,253	65,919	8,379	45,251	2	6	5
1840	496,776	131,880	37,054	2,735	21,809	2	10	10⅛
Totals	1,934,079	511,895	117,597	31,749	334,092	1	17	10½

Quality of Dantzic Wheat. — The price of wheat in Dantzic is usually about 7*s.* a quarter above its average price in Hamburg, and about 2*s.* above the average of Amsterdam. This difference is entirely owing to the superior quality of the Dantzic wheat. Though small grained, and not so heavy as several other sorts, it is remarkably thin-skinned, and yields the finest flour. Some of the best white, or, as it is technically termed, "high mixed" Dantzic wheat, is superior to the very best English; but the quantity of this sort is but limited, and the average quality of all that is exported from Dantzic is believed to approach very nearly to the average quality of English wheat. Allowing for its superior quality, it will be found that wheat is, speaking generally, always cheaper in Dantzic than in any of the Continental ports nearer to London. There are but few seasons, indeed, in which Dantzic wheat is not largely imported into Amsterdam; and it frequently, also, finds its way into Hamburg. But it is quite impossible that such should be the case, unless, taking quality and other modifying circumstances into account, it were really cheaper than the native and other wheats met with in these markets. When there is any considerable importation into England, it is of every day occurrence for merchants to order Dantzic wheat in preference to that of Holstein, or of the Lower Elbe, though the latter might frequently be put into warehouse here for 20*s.* a quarter less than the former! It is, therefore, quite indispensable, in attempting to draw any inferences as to the comparative prices of corn in different countries, to make the requisite allowances for differences of quality. Unless this be done, whatever conclusions may be come to can hardly fail of being false and misleading; and when they happen to be right, they can only be so through the merest accident.

Dantzic being by far the greatest port for the exportation of corn in the north of Europe, its price may be assumed as the general measure of the price in other shipping ports. At all events, it is certain that when Dantzic is exporting, wheat cannot be shipped, taking quality into account, at a cheaper rate from any other place. The importer invariably resorts to what he believes to be, all things considered, the cheapest market; and it is a contradiction and an absurdity to suppose that he should burden himself with a comparatively high freight, and other charges for wheat in Dantzic, provided he could buy an equally good article in so convenient a port as Hamburg at the same or a lower price.

If, therefore, we are right in estimating the lowest price at which wheat could be imported from Dantzic under a duty of 5*s.* or 7*s.*, at from 53*s.* to 55*s.*, we may be assured that this is the lowest importation price. The greater cheapness of the imports from other places is apparent only; and is uniformly countervailed by a corresponding inferiority of quality. — (For further details as to the Dantzic and Polish corn trade, see the articles DANTZIC, KÖNIGSBERG, &c.)

Russian Corn Trade. — Russia exports large quantities of wheat, rye, oats, and meal. The wheat is of various qualities; but the greater portion of it is small-grained, coarse, brown, and very badly dressed. The hard, or Kubanka, is the best; it keeps well, and is in considerable demand for mixing with other wheats that are old or stale. Russian oats are very thin; but, being dried in the straw, they weigh better than could be expected from their appearance, and are reckoned wholesome food. Our imports from Russia in 1839 were unusually large, she having supplied us with no fewer than 371,693 quarters wheat, 316,823 do. oats, and 14,000 do. rye. Generally, however, our imports do not exceed a fifth part of this quantity. — (The reader will find notices of the Russian corn trade under the articles ARCHANGEL, PETERSBURG, and RIGA. For an account of the corn trade by the Black Sea, see *post*, and the article ODESSA.)

Danish Corn Trade. — The export of wheat from Denmark Proper, that is, from Jutland and the islands, is but inconsiderable. There is, however, a pretty large exportation of wheat and other grain, as well as of butter, cheese, beef, &c., from Sleswick and Holstein. As already stated, the quality of the wheat is inferior; for, though it looks plump, it is coarse and damp. The chief shipping port for Danish corn is Kiel; but, owing to the superior facilities enjoyed by Hamburg, the greater portion of it is consigned to that city. In 1841 we imported from Denmark 236,250 quarters wheat, 81,947 do. barley, 25,088 do. oats, and 1,719 do. rye. — (For an account of the exports of raw produce from Denmark, see COPENHAGEN.)

Corn Trade of the Elbe, &c. — Next to Dantzic, Hamburg is, perhaps, the greatest corn market in the north of Europe, being a depôt for large quantities of Baltic corn, and for the produce of the extensive countries traversed by the Elbe. The exports of wheat from Hamburg amounted, as seen below, at an average of the 11 years ending with 1841, to 210,871 quarters a year. The price of wheat, as already stated, is frequently less in Hamburg than in Dantzic; but this lowness of price is altogether ascribable to the inferiority of the Holstein and Hanover wheats, which are generally met with in great abundance in Hamburg. Wheat from the Upper Elbe is of a better quality. Bohemian wheat is occasionally forwarded by the river to Hamburg;

but the charges attending its conveyance from Prague amount to full 15*s.* a quarter, and prevent its being sent down, except when the price is comparatively high. In 1841, the shipments of wheat from Hamburg amounted to 507,400 quarters, of which 460,900 were for England. Perhaps we might be able, did our prices average about 55*s.*, to import in ordinary years from 350,000 to 450,000 quarters of wheat from Denmark and the countries intersected by the Weser and the Elbe.

Account of the Exports of the various Descriptions of Corn from Hamburg during each of the Eleven Years ending with 1841.

Years.	Wheat.	Rye.	Barley.	Oats.	Peas.	Beans.	Malt.	Buck Wheat.	Rape Seed.	Tares.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
1831	220,697	73,343	80,660	6,426	759	154	202	23	871	153
1832	139,082	54,118	9,213	14,605	75	53	136	37	1,294	72
1833	93,417	99,518	9,100	3,662	671	258	109	284	1,082	85
1834	68,113	24,376	7,530	5,528	994	603	154	21	1268	178
1835	40,631	19,508	8,394	5,812	198	345	91	23	1,242	304
1836	101,180	26,537	34,932	8,076	1,097	185	121	179	2,522	142
1837	110,178	37,730	21,510	6,095	616	556	69	26	1,618	130
1838	276,301	34,853	8,679	4,697	622	91	151	17	2,165	91
1839	379,101	43,256	32,816	8,110	968	445	118	133	618	147
1840	380,550	34,873	55,146	19,257	1,596	267	189	127	411	473
1841	507,400	61,600	43,400	5,600	12,700	1,900	- -	- -	13,400	13,000

Average exports of wheat for the above 11 years, 210,870$\frac{10}{11}$ quarters.

N. B. — The Hamburg last is equal to about 11 imperial quarters.

Amsterdam is an important depôt for foreign corn, every variety of which may be found there. Only a small part of its consumption is supplied by corn of native growth; so that the prices in it are for the most part dependent on those at which corn can be brought from Dantzic, Kiel, Hamburg, and other shipping ports. During 1840, they fluctuated from 35*s.* to 58*s.* a quarter. The corn trade of Holland was formerly conducted under a fixed duty; but in 1836 a law was enacted which imposes duties on exportation and importation which vary with the price. We subjoin

A Statement of the existing Duties on the Importation, Exportation, and Transit of Wheat in Holland.

When the Average Price is		The Import Duty is		The Export is		The Transit Duty is	
	℔ Last. ℔ Quarter.	℔ Last.	℔ Qr.	℔ Last.	℔ Qr.	℔ Last.	℔ Qr.
Above - -	270 fl. or 42*s.* 10*d.*	7·50 fl. or	1*s.* 2½*d.*	15 fl. or	2*s.* 4½*d.*	3 fl. or	5½*d.*
From 270 fl. and above	240 fl. — 42*s.* 10*d.* to 38*s.* 1*d.*	15 fl. —	2*s.* 4½*d.*	Free.		3 fl. —	5½*d.*
240 fl. —	210 fl. — 38*s.* 1*d.* — 33*s.* 4*d.*	30 fl. —	4*s.* 9*d.*	—		3 fl. —	5½*d.*
210 fl. —	180 fl. — 33*s.* 4*d.* — 28*s.* 7*d.*	45 fl. —	7*s.* 1½*d.*	—		3 fl. —	5½*d.*
180 fl. —	165 fl. — 28*s.* 7*d.* — 26*s.* 2*d.*	60 fl. —	9*s.* 6*d.*	—		3 fl. —	5½*d.*
165 fl. —	150 fl. — 26*s.* 2*d.* — 23*s.* 9*d.*	75 fl. —	11*s.* 10½*d.*	—		3 fl. —	5½*d.*
150 fl. lower	23*s.* 9*d.*	90 fl. —	14*s.* 3*d.*	—		3 fl. —	5½*d.*

Rotterdam is a very advantageous port for warehousing foreign corn, being conveniently situated, and the warehouse rent low, not exceeding 2*d.* or 2½*d.* per quarter per month.

French Corn Trade. — It appears, from the accounts given by the Marquis Garnier in the last edition of his translation of the *Wealth of Nations*, that the price of the *hectolitre* of wheat in the market of Paris amounted, at an average of the 19 years ending with 1819, to 20 fr. 53 cents; equal to 30 fr. 80 cents the septier; or, taking the exchange at 25 fr., to 45*s.* 6*d.* the quarter. Chaptal, in his valuable work, *Sur l'Industrie Française* (tom. i. p. 226.), published in 1819, estimates the ordinary average price of wheat throughout France at 18 fr. the hectolitre, or 42*s.* 10*d.* the quarter. In 1840, however, the price of wheat in Paris in June varied from 63*s.* to 64*s.* 6*d.*, falling to about 45*s.* after harvest. The various expenses attending the importation of a quarter of French wheat into London and its delivery to the millers may be taken, at a medium, at about 8*s.* a quarter. France, however, has but rarely any surplus produce to dispose of; so that it would be impossible for us to import any considerable quantity of French corn without occasioning a great advance of price; and, in point of fact, our imports from France have been generally inconsiderable, except in years when our prices were much above an average.

The mean of the different estimates framed by Vauban, Quesnay, Expilly, Lavoisier, and Arthur Young, gives 61,519,672 septiers, or 32,810,000 quarters, as the total average growth of the different kinds of grain in France. — (*Peuchet, Statistique Elémentaire*, p. 290.) We, however, took occasion formerly to observe (*Supp. to Encyc. Brit.* art. *Corn Laws*) that there could not be a doubt that this estimate was a great deal too low; and the more careful investigations of late French statisticians fully confirm this remark. The annual produce of the harvest of France is at present (1843) estimated, from returns obtained under official authority, at 69,558,000 hectolitres of wheat, and 112,958,000 do. of other sorts of grain; making in all 182,517,000 hectolitres, or 62,740,000 Imp. quarters. Of this quantity it is supposed that about 16 per cent. is consumed as seed, 19 per cent. in the feeding of different species of animals, and 2 per cent. in distilleries and breweries.

The reader will not fail to observe that, according to this statement, the consumption of corn in France, which has a population of about 35,000,000, is not more than equal to that of the U. Kingdom, the population of which may be taken at 27,000,000. And we have no doubt that such is the fact; for, though the consumption of corn in France materially exceeds its proportional consumption in Ireland, it is very far below the proportional consumption of Great Britain. The corn expended in this country in the keep of horses and in distilleries would, of itself, suffice to feed a third part of the people of France.

The foreign corn trade of France was regulated till within these few years by a law which forbade exportation, except when the home prices were below certain limits; and which restrained and absolutely forbade importation except when they were above certain other limits. The prices regulating importation and exportation differed in the different districts into which the kingdom was divided. Latterly, however, importation has been at all times allowed under graduated duties, which, like those of this country, become prohibitory when the prices sink to a certain level. The frontier departments are divided into 4 separate districts, the prices in each district governing the duties on importation into it, so that it sometimes happens that corn warehoused in a particular port, where it is not admissible except under a high duty, has been carried to another port in another district, and admitted at a low duty. An official announcement is issued on the last day of each month, of what the duties are to be in each district during the succeeding month.

Spanish Corn Trade. — The exportation of corn from Spain was formerly prohibited under the severest penalties. But in 1820, grain and flour were both allowed to be freely exported; and in 1823, this privilege was extended to all productions (*frutos*), the growth of the soil. There is now, in fact, no obstacle whatever, except the expense of carriage, to the conveyance of corn to the sea-ports, and thence to the foreigner. Owing, however, to the corn-growing provinces being principally situated in the interior, and to the extreme badness of the roads, which renders carriage to the coast both expensive and difficult, the exports are reduced within comparatively narrow limits: the same difficulty of carriage frequently gives rise to very great differences in the prices in markets, in all parts of the country, only a few leagues distant. Were the means of communication improved, and any thing like security given to the husbandman, Spain would, in no long time, become one of the principal exporting countries of Europe. Old Castile, Leon, Estremadura, and that part of Andalusia to the south and east of Seville, are amongst the finest corn countries of Europe, and might be made to yield immense supplies. But owing to the disturbed state of the country, and the want of a market for their produce, they can hardly be said to be at all cultivated. And yet such is their natural fertility, that in good seasons the peasants only reap those fields nearest to the villages!

In 1831 we imported 146,134 quarters of wheat from Spain, principally from Bilbao, Santander, and other northern towns. But from that period down to 1840, when we imported 46,939 quarters, exportation from Spain had almost entirely ceased. The imports of wheat from Spain in 1842 amounted to 68,451 quarters. — (See BILBAO.)

Corn Trade of Odessa. — Odessa, on the Black Sea, is the only port in Southern Europe from which any considerable quantity of grain is imported. But the exports from her are not nearly so extensive as is generally supposed, and they cannot be materially increased without a previous increase in the facilities of conveying corn from the interior. At present it is almost wholly brought to the town in carts drawn by oxen; and the supply of corn depends almost as much on the number of cattle that may be employed for this purpose as on the productiveness of the harvests. It appears from an official statement published in Odessa, that the quantity of corn brought to the town in the undermentioned years has been —

1834	-	-	691,000 chetwerts.*	1838	-	-	1,241,000 chetwerts.
1835	-	-	378,700	1839	-	-	1,150,000
1836	-	-	878,700	1840	-	-	680,000
1837	-	-	950,498				

During the three years ending with 1840, the average price of the best Odessa wheat, which, however, is inferior to that of England, was 34*s.* 6*d.* per quarter on the spot; and owing to the length and tediousness of the voyage from Odessa, and the risk of the grain heating on the passage, the charges attending its importation, including insurance, &c., amount to from 15*s.* to 16*s.* a quarter. It is plain, therefore, that the Odessa wheat brought to England during the above three years must, speaking generally, have cost the importer about 50*s.* a quarter exclusive of profit; and, supposing its price in Odessa to be reduced under a system of free intercourse to 30*s.* a quarter, still it is plain it could not be sold in London, under a duty of 5*s.* or 7*s.* a quarter, for less than

* A chetwert is about 5·8 bushels.

52s. to 54s. a quarter; that is, for less than the price of Dantzic wheat, which is superior to it by at least 5s. or 6s. a quarter.

N. B. For an account of the exports of corn from Odessa in 1842, and for farther details as to the corn trade of Southern Russia, and of the countries on the Lower Danube, see the articles ODESSA and GALACZ.

Both soft and hard wheat are exported from Odessa; but the former, which is by far the most abundant, is only brought to England. Supposing British wheat to sell at about 60s., Odessa wheat, in good order, would not be worth more than 52s. in the London market; but it is a curious fact, that in the Mediterranean the estimation in which they are held is quite the reverse; at Malta, Marseilles, Leghorn, &c., Odessa wheat fetches a decidedly higher price than British wheat.

The hard wheat brought from the Black Sea comes principally from Taganrog. It is a very fine species of grain, being full 10 per cent. heavier than British wheat, with not more than half the bran. It is used in Italy for making maccaroni and vermicelli, and things of that sort; very little of it has found its way to England.

The voyage from Odessa to Britain is of uncertain duration, but generally very long. It is essential to the importation of the wheat in a good condition, that it should be made during the winter months. When the voyage is made in summer, unless the wheat be very superior, and be shipped in exceedingly good order, it is almost sure to heat; and has sometimes, indeed, been injured to such a degree as to require to be dug from the hold with pickaxes. Unless, therefore, means be devised for lessening the risk of damage during the voyage, there is little reason to think that Odessa wheat will ever be largely imported into Britain. — (See the evidence of J. H. Lander, Esq. and J. Schneider, Esq. before the Lords' Committee of 1827, on the price of foreign corn.) We subjoin a

Statement of the probable Cost of importing 2,000 Chetwerts or 1453 Quarters of Wheat from Odessa to London.

Charges in London.	£	s.	d.	£	s.	d.	£	s.	d.
Policy duty on 1,200*l.* at ¼ per cent.	3	0	0						
Insurance on 1,150*l.* at 2*l.* 2*s.* per cent.	24	3	0						
				27	3	0			
Commission do. ½ per cent.	-		-	5	15	0			
Freight on 1,453 quarters wheat at 12*s.* per quarter	871	10	0						
Primage, 10 per cent.	87	3	7						
Gratification	10	10	0						
				969	9	7			
Charterparty, 1*l.*; custom-house entries, 10*s.*	-		-	1	10	0			
Metage on ship, at 4*s.* 3½*d.* per last	-		-	31	3	7			
Lastage	-		-	1	4	2			
Lighterage of 1,453 quarters at 4*d.*	-		-	24	4	4			
Landing, wharfage, housing, and delivering, at 9*d.*	-		-	54	9	8			
Rent 4 weeks, at 5*s.* per 100 quarters per week	-		-	14	10	7			
Metage, &c. ex granary	-		-	7	5	0			
				£1,136	15	0			
				Or per quarter			0	15	8

And in addition to the above, the charge for probable damage on the voyage may be estimated at 2*s.* a quarter.
And the factorage in London at 1*s.* per quarter.

American Corn Trade. — The prices of wheat at New York and Philadelphia may be taken, at an average, at from 40*s.* to 43*s.* a quarter; and as the cost of importing a quarter of wheat from the United States into England amounts to from 13*s* to 14*s.*, it is seen that no considerable supply could be obtained from that quarter, were our prices under 53*s.* or 56*s.* It should also be remarked, that prices in America are usually higher than in the Baltic; so that but little can be brought from the former, except when the demand is sufficient previously to take off the cheaper wheats of the northern ports.

The exports of wheat from the United States are, however, comparatively trifling; it being in the shape of flour that almost all their exports of corn are made. The shipments of this important article from Baltimore, Philadelphia, New York, New Orleans, and other ports, have occasionally been very large, though latterly they have been rather decreasing, and in some late years there was, in fact, a considerable exportation of corn from England, the Hanse Towns, &c., for the U. States. In proof of this it may be mentioned, that in the year ending the 30th of September, 1837, 3,921,259 bushels of foreign wheat were imported into the U. States, of which 792,675 bushels were from England. The British West Indies, Cuba, Mexico, Brazil, England, and France are the principal markets to which American flour is sent. All sorts of flour, whether made of wheat, rye, Indian corn, &c., exported from the U. States, must previously be submitted to the inspection of officers appointed for that purpose. The law further

directs, that the barrels, in which it is shipped, shall be of certain dimensions, and that each barrel shall contain 196 lbs. of flour, and each half barrel 98 lbs. The inspector, having ascertained that the barrels correspond with the regulations as to size, weight, &c., decides as to the quality of the flour: the first or best sort being branded *Superfine;* the second, *Fine;* the third, *Fine Middlings;* and the fourth, or lowest quality, *Middlings*. Such barrels as are not merchantable are marked *Bad;* and their exportation, as well as the exportation of those deficient in weight, is prohibited. Rye flour is divided into 2 sorts, being either branded *Superfine Rye Flour*, or *Fine Rye Flour*. Maize flour is branded *Indian Meal;* flour made from buck-wheat is branded *B. Meal*. Indian meal may be exported in hhds. of 800 lbs. Flour for home consumption is not subjected to inspection. The inspection must take place at the time and place of exportation, under a penalty of 5 dollars per barrel. Persons altering or counterfeiting marks or brands forfeit 100 dollars; and persons putting fresh flour into barrels already marked or branded, or offering adulterated wheaten flour for sale, forfeit in either case 5 dollars for each barrel.

The fees of branding were reduced in 1832. They amount, in New York, to 3 cents for each hogshead, and 1 cent for each barrel and half barrel of full weight. A fine of 30 cents is levied on every barrel or half barrel below the standard weight, exclusive of 20 cents for every pound that is deficient.

The act 5 Vict. sess. ii. c. 14. enacts, that every barrel of wheaten flour imported shall be deemed equivalent to 38½ gallons of wheat, and shall be charged with a corresponding duty (*antè*, p. 415). Hence, when the price of British wheat per quarter is between 52*s.* and 53*s.*, the duty on the barrel of flour is 10*s.* 9·3*d.*; when wheat is between 60*s.* and 61*s.*, the duty on flour is 7*s.* 2*d.*; and when wheat is between 69*s.* and 70*s.*, the duty on flour is 3*s.* 3*d.* We subjoin

An Account of the Exports of Wheat and Wheat-flour from the United States in each Year, from 1810 to 1840, both inclusive, with the Prices of Wheat per Barrel in Philadelphia, and the Annual Shipments of Flour for England.

Years.	Bushels of Wheat exported.	Barrels of Flour exported.	Average Price of Flour per Barrel each year in Philadelphia.	Average Price of Flour per Barrel each year in British Currency.	Quantity of Flour shipped to England.	Exports of Flour from Canada.	Years.	Bushels of Wheat exported.	Barrels of Flour exported.	Average Price of Flour per Barrel each year in Philadelphia.	Average Price of Flour per Barrel each year in British Currency.	Quantity of Flour shipped to England.	Exports of Flour from Canada.
			Dolls.	£ *s.* *d.*	*Barrels.*	*Barrels.*				*Dolls.*	£ *s.* *d.*	*Barrels.*	*Barrels.*
1810	325,924	798,431	9·37	2 0 7	92,136	12,519	1826	45,166	857,820	4·65	1 0 1	18,355	33,640
1811	216,833	1,445,042	9·95	2 3 1	38,183	10,310	1827	22,182	868,406	5·23	1 2 7	53,129	54,023
1812	53,852	1,435,192	9·83	2 2 7	28,129	37,625	1828	8,996	860,809	5·40	1 3 3	23,258	35,720
1813	288,535	1,260,912	8·92	1 18 7	- -	517	1829	4,007	837,385	6·33	1 7 5	221,176	11,785
1814	- -	193,274	8·60	1 17 3	- -	1,217	1830	45,289	1,227,434	4·83	1 0 11	326,182	71,749
1815	17,634	862,759	8·71	1 17 8	101,885	1,920	1831	408,910	1,806,529	5·67	1 4 6	879,430	
1816	62,521	729,053	9·78	2 2 4	5,572	1,135	1832	88,301	864,919	5·72	1 4 9	95,958	31,419
1817	96,107	1,479,198	11·69	2 11 5	706,601	38,047	1833	32,421	955,768	5·63	1 4 4	22,907	51,455
1818	196,808	1,157,697	9·96	2 3 1	389,536	30,543	1834	36,948	855,552	5·17	1 2 4	19,687	26,812
1819	82,065	779,160	7·11	1 12 9	51,847	12,085	1835	47,762	779,596	5·88	1 5 5	5,376	16,976
1820	22,137	1,177,036	4·72	1 0 5	171,772	45,369	1836	2,062	505,400	7·99	1 14 7	161	
1821	25,821	1,056,119	4·78	1 0 8	94,541	22,635	1837	17,303	318,719	9·37	2 0 7		
1822	4,118	827,865	6·58	1 8 4	12,006	47,217	1838	6,291	448,161	7·79	1 13 9	8,295	
1823	4,272	756,702	6·82	1 9 6	4,252	46,250	1839	96,325	923,151	- -	- -	167,582	
1824	20,573	996,792	5·62	1 4 4	70,873	41,901	1840	1,720,860	1,807,401	- -	- -	620,919	
1825	17,990	813,906	5·10	1 2 1	27,272	40,005	1841	868,585	1,515,817	- -	- -	208,984	

Mr. Reuss (p. 120.) gives the following *pro formâ* account of the expenses attending the importation of a cargo of 5,000 bushels of wheat from New York, supposing it to cost 1 dol. 12 cents a bushel, which, however, is below its average price.

	£ *s.* *d.*	£ *s.* *d.*	*Dollars.*
5,000 bushels, at 1 dol. 12 cents per bushel			5,600·00
Winnowing, measuring, and delivery on board		150·00	
Brokerage, ¼ per cent.		28·00	
Insurance, 6,000 dols. at 1½ per cent.		90·00	
			268·00
			5,868·00
Commission, 5 per cent.			293·40
			6,161·40
Exchange, 110 per cent.			
Freight, 125 tons at 15*s.* per ton	93 15 0		
Primage, 5 per cent.	4 13 9		
	98 8 9		
Entry, officer's fees, and city dues	1 10 0		
Metage from the ship at 2*s.* 8*d.* per last of 10 qrs.	6 18 4		
	117 7 1		£1,260 1 8

	£ *s.* *d.*	£ *s.* *d.*
Brought forward	117 7 1	1,260 1 8
Petty charges, at 1*s.* per last of 10 qrs.	2 12 0	
Lighterage and porterage to granary, 9*d.* per quarter	19 10 0	
Granary rent and fire insurance, say, 4 weeks at 2*s.* per 100 qrs. per week	2 2 0	
Turning, at 2*s.* per 100 quarters	0 10 6	
Metage and porterage to the granary, at 4*s.* per 100 quarters	10 8 0	
Do. do. from do., at 5*s.* per qr.	11 16 8	
Postage and stamps	1 7 0	
Factorage, 1*s.* per quarter	26 0 0	
Commission, 2½ per cent.		
Guarantee, 1 — } 4½ p. cent.	63 0 11	
Interest 1 —		
		214 4 2
		1,504 5 10
In London.		
103·06 quarters, Winchester measure, equal to 100 quarters Imperial		
5,000 bushels Winchester measure, equal to 601 quarters Imperial measure, costing 19*s.* 9½*d.* per quarter in bond		1,503 11 2

The usual price of wheat in Canada, when there is a demand for the English market, is about 40*s.* a quarter; but taking it as low as 35*s.*, if we add to this 13*s.* a quarter for the expenses of carriage and warehousing, it will make its price in Liverpool, when delivered to the consumer, 48*s.*; and being spring wheat, it is not so valuable, by about 6*s.* a quarter, as English wheat. We have already noticed the act of the present year (1843) relative to the admission of Canadian wheat and flour.—(See *antè*, p. 397.)

We subjoin a statement, compiled by authority, from returns made by the British consuls in 1841, exhibiting the probable amount of corn which they suppose might be furnished by the principal continental ports, in the event of importation being always free in England under a moderate duty, and the probable average price of such corn free on board. There may be, and probably are, errors in this statement; but, on the whole, its general correctness may be depended on; and it strikingly corroborates the statements already laid before the reader.

	Quantity of Grain of each Kind that could be exported to England, from the Consular Districts, if the Trade in Corn in England were constantly open, at a moderate Duty.				Average Prices, free on board, per Imperial Quarter.							
	Wheat.	Rye.	Barley.	Oats.	Wheat.		Rye.		Barley.		Oats.	
	Qrs.	Qrs.	Qrs.	Qrs.	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
Petersburg* -	192,500	122,500	47,000	245,000	39 1		19 4		17 11		12 5	
Riga - -	Uncert.	Uncert.	Uncert.	Uncert.	42 7		26 4		21 10		18 0	
Libau* -	70,000	120,000	280,000	240,000	43 7		25 9		18 7		11 4	
Odessa -	150,000	Uncert.	Uncert.	Uncert.	26 6							
Stockholm -	1,000	2,000	10,000	12,000	50 0	to 55 0	29 0	to 24 0	15 0	to 18 0	11 0	to 12 0
Dantzic -	315,000	105,000	42,000	10,500	40 0		20 0		18 0		12 0	
Königsberg	65,000	100,000	20,000	40,000	40 0	to 45 0	18 0	to 20 0	14 0	to 18 0	10 0	to 14 0
Stettin -	250,000	40,000	30,000	20,000	40 0		22 0		20 0		11 0	
Memel -	5,961	15,759	15,464¼	20,021¼	55 0		27 0		15 0		10 0	to 12 0
Elsinore -	175,000	- -	275,000	225,000	50 0	to 56 0	22 0	to 25 0	16 0	to 24 0	12 0	to 15 0
Hamburg*	558,000†	97,000	195,700	158,700	55 0	to 46 0	23 0	to 30 0	20 0	to 25 0	11 0	to 16 0
Rotterdam -	Uncert.	Uncert.	Uncert.	Uncert.	55 0		-	-	-	-	15 0	to 22 0
Antwerp -	Uncert.	Uncert.	Uncert.	Uncert.	56 5		32 1		28 9		22 1	
Palermo -	200,000‡	- -	- -	- -	58 0							
Total -	2,222,461	913,259	852,564½	808,721½								
General average	- -	- -	- -	- -	40*s.* 6*d.*		21*s.* 0½*d.*		19*s.* 6½*d.*		14*s.* 1¾*d.*	

Inferences from the above Review of Prices. — We may, we think, satisfactorily conclude, from this pretty lengthened review of the state of the foreign corn trade, that in the event of all restrictions on the importation of corn into our markets being abolished, it could not, in ordinary years, be imported for less than 50*s.* or 52*s.* a quarter. But taking it so low as 48*s.*, it is plain it could not, in the event of its being charged with a duty of 5*s.* or 7*s.*, be sold for less than 53*s.* or 55*s.*

Now, it appears, from the previous account, No. III., that the average price of wheat in England and Wales, during the whole period (from the 15th of July 1828 to the 28th of April 1842) that the late corn act, the 9 Geo. IV. cap. 60., was in operation, amounted to 59*s.* 4*d.* a quarter; and it will be observed that the crops from 1828 to 1831, and from 1837 to 1841, inclusive, were very deficient, and that the importations in those years were extremely large. But, without taking this circumstance into account, it is clear, from the previous statements, that the opening of the ports under a fixed duty of 5*s.* or 7*s.* could not occasion a reduction of more than 4*s.*, or, at the outside, of 6*s.* a quarter in the average prices of the above period.

We feel pretty confident that these statements cannot be successfully controverted; and they show, conclusively, how erroneous it is to suppose that the repeal of the existing corn laws, and the opening of the ports for importation, under a low duty of 5*s.* or 7*s.*, would cause a ruinous decline in the price of corn, or give any serious check to agriculture. The price of wheat in England, at an average of the ten years ending with 1820, was no less than 86*s.* 3*d.* a quarter. Its average price has since, as we have just seen, been reduced to 59*s.* 4*d.* a quarter; and yet, notwithstanding this tremendous fall, a most extraordinary improvement has taken place in agriculture since 1820; so much so that we now provide for an additional population of above seven millions, with but a slight increase of importation in unfavourable years, and in favourable years with no importation at all. Under such circumstances, can any thing be more childish than to suppose that a fall of 5*s.* or 6*s.* a quarter in the average price of corn should have any disastrous, or indeed sensible, influence over agriculture? Improvements of all sorts were never more vigorously prosecuted than in 1836 and 1837, and yet the average price of corn in those years did not exceed 52*s.* 2*d.*; that is, it did not exceed its probable future price with open ports, and a fixed duty of only 5*s.* a quarter!

It is also seen from the previous account, No. VI., that at an average of very nearly the

* In the answers from Petersburg, Liebau, and Hamburg, the gross amount that could be exported to *Foreign Countries* seems to have been given, not the quantity which might be shipped to England.

† The return from Hamburg includes those from Lubeck, Bremen, Rostock, &c.

‡ This quantity could be exported in years of abundant harvest *only*.

whole period during which the late corn law was in operation, the rate of duty on wheat imported amounted to only *5s. 7d.* a quarter; and it has now been sufficiently established, that with a fixed duty of this amount, average prices would undergo very little variation. It is plain, therefore, that the system we have ventured to recommend would occasion little or no inconvenience; at the same time, however, it would have the advantage of obviating the injurious fluctuations that grow out of the present system, and of getting rid of the eternal agitation of this question.

At all events the landlords and farmers may dismiss their unreasonable fears and apprehensions. Their prosperity does not depend on restrictive regulations, but is the effect of the fertility of the soil which belongs to them, of the absence of all oppressive feudal privileges, and of the number and wealth of the consumers of their produce. It would, for the reasons already stated, be unjust wholly to deprive them of protection; but we are well convinced that, though it were entirely abolished, their interests would not be seriously compromised; and that in no very lengthened period agriculture would be as flourishing as ever.

COTTON (Ger. *Baumwolle*; Du. *Katoen*. *Boomwol*; Da. *Bomuld*; Sw. *Bomull*; Fr. *Coton*; It. *Cotone*, *Bambagia*; Sp. *Algodon*; Port. *Algodao*; Rus. *Chlobtschataja bumaja*; Pol. *Bawelna*; Lat. *Gossypium*, *Bombax*; Arab. *Kutun*; Sans. *Kapasa*; Hind. *Ruhi*; Malay, *Kapas*), a species of vegetable wool, the produce of the *Gossypium herbaceum*, or cotton shrub, of which there are many varieties. It is found growing naturally in all the tropical regions of Asia, Africa, and America, whence it has been transplanted, and has become a most important object of civilisation, in the southern parts of the U. States, and to some extent also in Europe.

Cotton is distinguished in commerce by its colour, but more especially by the length, strength, and fineness of its fibre. White is usually considered as characteristic of secondary quality. Yellow, or a yellowish tinge, when not the effect of accidental wetting or inclement seasons, is considered as indicating greater fineness.

There are many varieties of raw cotton in the market, their names being principally derived from the places whence they are brought. They are usually classed under the denominations of *long and short stapled*. The best of the first is the *sea-island* cotton, or that brought from the shores of Georgia; but its qualities differ so much that the price of the finest specimens is often three times as great as that of the inferior. The superior samples of Brazil cotton are reckoned among the long-stapled. The cottons of the U. States, with the exception of sea-island, belong to the short-stapled variety, as do those of India.

The estimation in which the different kinds of cotton wool are held may be learned from the following statement of their prices in Liverpool during the first week of January, 1843. The inferiority of Surat cotton is sometimes ascribed to the defective mode in which it is prepared; but Mr. Horace H. Wilson doubts whether it can he grown in India of a better kind. The raw cotton of the Indian islands has hitherto been almost entirely consumed on the spot.

Prices of Cotton in Liverpool, First Week of January 1843.

Species of Cotton.	Ordin. to Mid.	Fair to Gd. Fair.	Good to Fine.	Species of Cotton.	Ordin. to Mid.	Fair to Gd. Fair.	Good to Fine.
	d. *d.*	*d.* *d.*	*d.* *d.*		*d.* *d.*	*d.* *d.*	*d.* *d.*
Sea Island - -	8½ to 9½	11 to 13	17 to 21	Maranham - -	5¾ to 5¾	6 to 6½	6½ to —
Stained - -	4 — 5½	6 — 6½	7 — 8	Sawginned do. -	5 — 5¼	5¼ — 5¾	— —
Bowed Georgia - -	4 — 4¾	5½ — 5¾	5¾ — 6	Egyptian - - -	6¼ — 6¾	6¾ — 7	8 — 9
Mobile - - -	4 — 4¼	5¼ — 5½	5¾ — 6¼	Peruvian - - -	4¾ — 5	5¼ — 5¾	6 — 6½
Alabama and Tennessee	3¾ — 4¼	4¼ — —	— —	Common West India, &c.	4¼ — 5	5¼ — 5½	6 — —
New Orleans - -	4 — 4¾	5¼ — 5¾	6¼ — 7	Surat - - -	3¼ — 3¾	3¾ — 4¼	4¼ — 4½
Pernambuco and Paraiba	6¼ — 6¾	6¾ — 7	7¼ — 7½	Madras - - -	3¼ — 3½	3¾ — 4	4¼ — 4½
Bahia and Maçelo -	6 — 6¼	6¼ — 6¾	6¾ — —				

The manufacture of cotton has been carried on in Hindostan from the remotest antiquity. Herodotus mentions (lib. iii. c. 106.) that in India there are wild trees that produce a sort of wool superior to that of sheep, and that the natives dress themselves in cloth made of it. — (See, to the same effect, *Arrian Indic.* c. 16. 582.) The manufacture obtained no footing worth mentioning in Europe till last century.

1. *Rise and Progress of the British Cotton Manufacture.* — The rapid growth and prodigious magnitude of the cotton manufacture of Great Britain are, beyond all question, the most extraordinary phenomena in the history of industry. Our command of the finest wool naturally attracted our attention to the woollen manufacture, and paved the way for that superiority in it which we long since attained: but when we undertook the cotton manufacture, we had comparatively few facilities for its prosecution, and had to struggle with the greatest difficulties. The raw material was produced at an immense distance from our shores; and in Hindostan and China the inhabitants had arrived at such perfection in the arts of spinning and weaving, that the lightness and delicacy of their finest cloths emulated the web of the gossamer, and seemed to set competition at defiance. Such, however, has been the influence of the stupendous discoveries

and inventions of Hargreaves, Arkwright, Crompton, Cartwright, and others, that we have overcome all these difficulties — that neither the extreme cheapness of labour in Hindostan, nor the excellence to which the natives had attained, has enabled them to withstand the competition of those who buy their cotton; and who, after carrying it 5,000 miles to be manufactured, carry back the goods to them. This is the greatest triumph of mechanical genius: and what perhaps is most extraordinary, our superiority is not the late result of a long series of successive discoveries and inventions; on the contrary, it has been accomplished in a very few years. Little more than half a century has elapsed since the British cotton manufacture was in its infancy; and it *now* forms the principal business carried on in the country, — affording an advantageous field for the accumulation and employment of millions upon millions of capital, and of thousands upon thousands of workmen! The skill and genius by which these astonishing results have been achieved, have been one of the main sources of our power: they have contributed in no common degree to raise the British nation to the high and conspicuous place she now occupies. Nor is it too much to say that it was the wealth and energy derived from the cotton manufacture that bore us triumphantly through the late dreadful contest, at the same time that it gives us strength to sustain burdens that would have crushed our fathers, and could not be supported by any other people.

The precise period when the manufacture was introduced into England is not known; but it is most probable that it was some time in the early part of the 17th century. The first authentic mention of it is made by Lewis Roberts, in his *Treasure of Traffic*, published in 1641, where it is stated, "The town of Manchester, in Lancashire, must be also herein remembered, and worthily for their encouragement commended, who buy the yarne of the Irish in great quantity, and weaving it, returne the same again into Ireland to sell. Neither doth their industry rest here; for they buy cotton wool in London that comes first from Cyprus and Smyrna, and at home worke the same, and perfect it into fustians, vermillions, dimities, and other such stuffes, and then return it to London, where the same is vented and sold, and not seldom sent into foreign parts, who have means, at far easier termes, to provide themselves of the said first materials."—(Orig. ed. p. 32.) It is true, indeed, that mention is frequently made by previous writers, and in acts of the legislature passed at a much earlier period *, of "Manchester cottons," "cotton velvets," "fustians," &c.; but it is certain that these articles were *wholly composed of wool*, and had most probably been denominated cottons from their having been prepared in imitation of some of the cotton fabrics imported from India and Italy.

From the first introduction of the cotton manufacture into Great Britain down to the comparatively late period of 1773, the weft or transverse threads of the web, only, were of cotton; the warp, or longitudinal threads, consisting wholly of linen yarn, principally imported from Germany and Ireland. In the first stage of the manufacture, the weavers, dispersed in cottages throughout the country, furnished themselves as well as they could with the warp and weft for their webs, and carried them to market when they were finished: but about 1760 a new system was introduced. The Manchester merchants began about that time to send agents into the country, who employed weavers, whom they supplied with foreign or Irish linen yarn for warp, and with raw cotton, which being carded and spun, by means of a common spindle or distaff, in the weaver's own family, was then used for weft. A system of domestic manufacture was thus established; the junior branches of the family being employed in the carding and spinning of the cotton, while its head was employed in weaving the linen and cotton yarn into cloth. This system, by relieving the weaver from the necessity of providing himself with linen yarn for warp and raw cotton for weft, and of seeking customers for his cloth when finished, and enabling him to prosecute his employment with greater regularity, was an obvious improvement on the system that had been previously followed; but it is at the same time clear that the impossibility of making any considerable division among the different branches of a manufacture so conducted, or of prosecuting them on a large scale, added to the interruption given to the proper business of the weavers, by the necessity of attending to the cultivation of the patches of ground which they generally occupied, opposed invincible obstacles to its progress, so long as it was conducted in this mode.

It appears from the Custom-house returns, that the total quantity of cotton wool annually imported into Great Britain, at an average of the *five* years ending with 1705, amounted to only 1,170,881 lbs. The accounts of the imports of cotton from 1705 to 1770 have been but imperfectly preserved; but until the last half dozen years of that period the manufacture increased very slowly, and was of very trifling amount. Dr. Percival, of Manchester, who had the best means of being accurately informed on the subject, states that the entire value of all the cotton goods manufactured in Great Britain, at the accession of George III. in 1760, was estimated to amount to only

* In an act of 5 & 6 Edw. 6. (1552), entitled, for the true making of WOOLLEN cloth, it is ordered, "*That all cottons called Manchester, Lancashire, and Cheshire cottons*, full wrought for sale, shall be in length," &c. This proves incontestably, that what were then called cottons were made wholly of wool.

200,000*l.* a year, and the number of persons employed was quite inconsiderable: but in 1767, a most ingenious person, James Hargreaves, a carpenter at Blackburn in Lancashire, invented the *spinning jenny*. At first, this admirable machine enabled *eight* threads to be spun with the same facility as one; and it was subsequently brought to such perfection, that a little girl was able to work no fewer than from *eighty* to *one hundred and twenty* spindles.

The jenny was applicable only to the spinning of cotton for weft, being unable to give to the yarn that degree of firmness and hardness which is required in the longitudinal threads or warp: but this deficiency was soon after supplied by the introduction of the *spinning-frame*, — that wonderful piece of machinery which spins a vast number of threads of any degree of fineness and hardness, leaving to man merely to feed the machine with cotton, and to join the threads when they happen to break. It is not difficult to understand the principle on which this machine is constructed, and the mode of its operation. It consists of two pairs of rollers, turned by means of machinery. The lower roller of each pair is furrowed or fluted longitudinally, and the upper one is covered with leather, to make them take a hold of the cotton. If there were only one pair of rollers, it is clear that a carding of cotton passed between them would be drawn forward by the revolution of the rollers, but it would merely undergo a certain degree of compression from their action. No sooner, however, has the carding, or *roving* as it is technically termed, begun to pass through the first pair of rollers, than it is received by the second pair, which are made to revolve with (as the case may be) 3, 4, or 5 times the velocity of the first pair. By this admirable contrivance, the roving is drawn out into a thread of the desired degree of tenuity; a twist being given to it by the adaptation of the spindle and fly of the common flax-wheel to the machinery.

Such is the principle on which Sir Richard Arkwright constructed his famous spinning frame. It is obvious that it is radically and completely different from the previous methods of spinning, either by the common hand-wheel or distaff, or by the jenny, which is only a modification of the common wheel. Spinning by rollers was an entirely original idea; and it is difficult which to admire most — the profound and fortunate sagacity which led to so great a discovery, or the consummate skill and address by which it was so speedily perfected, and reduced to practice.*

Since the dissolution of Sir Richard Arkwright's patent, in 1785, the progress of discovery and improvement in every department of the manufacture has been most rapid. The *mule-jenny* — so called from its being a compound of the jenny and the spinning frame — invented by Mr. Crompton, and the *power-loom*, invented by the Rev. Mr. Cartwright, are machines that have had the most powerful influence over the manufacture; and in consequence of their introduction, and of innumerable other inventions and improvements, the prices of cotton cloth and yarn have gone on progressively diminishing. But as the demand for cottons has been, owing to their extraordinary cheapness, extended in a still greater degree, the value of the goods produced, and the number of persons employed in the manufacture, are now decidedly greater than at any previous period.

2. *Imports of Cotton Wool. Countries whence it is imported. Prices, Duties, &c.* — The following Tables have been partly taken from official documents, and partly from the accounts of merchants of great experience. We believe they may be relied on as approaching as near to accuracy as it is possible to attain to in such matters.

Cotton Wool imported, exported, and entered for Consumption, from 1820 to 1841.

Years.	Quantity imported.	Quantity exported.	Quantity entered for Consumption.	Years.	Quantity imported.	Quantity exported.	Quantity entered for Consumption.
	Lbs.	*Lbs.*	*Lbs.*		*Lbs.*	*Lbs.*	*Lbs.*
1820	151,672,655	6,024,038	152,829,637	1831	288,674,853	22,308,555	273,249,653
1821	132,536,620	14,589,197	137,101,549	1832	286,832,525	18,027,940	259,421,463
1822	142,857,628	18,267,776	143,428,127	1833	303,656,837	17,365,882	293,682,976
1823	191,402,503	9,318,102	186,311,070	1834	326,875,425	24,461,965	302,935,657
1824	149,380,142	13,299,505	141,038,743	1835	363,702,963	32,779,734	326,407,692
1825	228,005,291	18,004,953	202,546,869	1836	406,959,057	31,739,763	363,684,232
1826	177,607,401	21,474,920	162,889,012	1837	407,286,783	39,742,031	368,445,035
1827	272,448,909	18,151,170	249,804,396	1838	507,850,577	30,614,469	455,036,755
1828	227,760,642	17,396,776	208,987,744	1839	389,396,599	38,758,238	352,080,477
1829	222,767,411	30,289,115	204,097,037	1840	592,488,010	38,6[illegible]3,229	528,142,743
1830	263,961,452	8,534,976	269,616,640	1841	487,992,355	- -	437,093,631

* There is, in the new edition of the *Encyclopædia Britannica*, a pretty full account of the life of Sir Richard Arkwright. The question as to his merit as an original discoverer is still undecided. Recently, however, it has been ascertained that a patent for spinning by rollers, revolving with different degrees of velocity, was taken out by Messrs. Wyatt and Paul, so early as 1738. — (See the *History of the Cotton Manufacture*, by Edward Baines, jun., Esq.) But it does not appear that the inventors had been able to give effect to their happy idea, and all traces of the invention seem to have been lost. The statements in the case printed by Sir Richard Arkwright and his partners in 1782 show that he was aware of the attempts made in the reign of George II. to spin by machinery; but there is no evidence to prove that he was acquainted with the principle on which those attempts had been made, or that he had seen the patent referred to. Undoubtedly, however, the probability seems to be that he had. But, admitting this to be the case, it detracts but little from the substantial merits of Sir Richard Arkwright. If the idea of spinning by rollers did not spring up spontaneously in his mind, he was, at all events, the first who made it available in practice, and showed how it might be rendered a most prolific source of wealth.

Account of the Imports and Exports of Cotton Wool into and from Great Britain, from 1697 to 1819.

Years.	Imports.	Exports.	Years.	Imports.	Exports.	Years.	Imports.	Exports.
1697	1,976,559	——	1785	18,400,384	407,496	1803	53,812,984	1,561,053
1701	1,985,868	——	1786	19,473,080	323,153	1804	61,867,329	503,171
1700 to 1709			1787	23,250,268	1,073,581	1805	59,089,406	801,943
(Average.)	1,170,881	——	1788	20,167,436	853,146	1806	58,176,283	651,867
1710	714,018	——	1789	32,576,043	997,837	1807	74,925,306	2,176,285
1720	1,072,805	——	1790	31,447,963	944,154	1808	43,905,582	1,644,867
1730	1,341,472	——	1791	28,706,675	365,442	1809	92,812,282	4,351,105
1741	1,645,031	——	1792	34,907,497	1,488,185	1810	139,488,935	8,787,109
1751	2,976,610	——	1793	19,010,929	1,171,366	1811	97,576,535	1,276,867
1761	5,870,392	——	1794	21,358,567	1,349,950	1812	63,025,936	1,440,974
1771 to 1775			1795	26,401,540	1,193,737	1813	80,966,090	——
(Average.)	4,764,589	——	1796	32,136,352	694,962	1814	60,060,439	6,282,137
1776 to 1780			1797	23,351,371	609,058	1815	99,596,343	6,780,592
(Average.)	6,766,615	——	1798	31,880,641	601,139	1816	93,020,055	7,105,034
1781	5,188,278	96,788	1799	43,279,278	844,671	1817	124,918,968	8,185,112
1782	11,800,939	421,429	1800	56,010,732	4,416,610	1818	177,282,158	15,150,153
1783	9,235,463	177,946	1801	56,084,305	1,860,878	1819	149,739,890	16,622,789
1784	11,482,085	291,845	1802	60,345,600	5,730,180			

In 1786, the supplies of cotton wool were derived from the following sources:—

	Lbs.		Lbs.
From the British West Indies - -	5,800,000	From the Portuguese colonies - -	2,000,000
French and Spanish colonies	5,500,000	Smyrna and Turkey - -	5,000,000
Dutch colonies - -	1,000,000		Lbs. 19,900,000

Previously to 1790, North America did not supply us with a single pound weight of raw cotton. A little had, indeed, been raised in some of the Southern States, for domestic use, before the revolutionary war, but the quantity was quite inconsiderable. In 1791, it began, for the first time, to be exported; the trifling quantity of 189,316 lbs. having been shipped in the course of that year, and 138,328 lbs. in 1792. Such was the late and feeble beginning of the American cotton trade. There is nothing in the history of industry to compare with its subsequent increase, unless it be the growth of the manufacture in this country.

American cotton, which is of two kinds, is generally known by the names of *sea-island* and *upland*. The first, which is the finest cotton imported into Britain, grows on the small sandy islands and along the low sandy shores of Carolina and Virginia. It is long in the staple, of an even silky texture, and is easily separated from the seed. Unluckily, however, it can be raised only in certain situations; so that its quantity is limited, and has not, in fact, been increased since 1805. The upland, of which the supply may be considered as unlimited, though of varying qualities, is all short stapled; and its separation from the seed is so very difficult, that if it be done by the hand, the cotton is hardly worth the labour. This, however, was the only way in which it could be made available for home use, or exportation, previously to 1793; and had any one then ventured to predict that 10,000,000 lbs. of upland cotton would ever be exported, he would have been looked upon as a visionary dreamer. But the genius of Mr. Eli Whitney did for the planters of the Southern States what the genius of Arkwright and Watt did for the manufacturers of England. He invented a machine by which the wool of the upland cotton is separated from the seed with the greatest facility and expedition, and by so doing laid the foundations of a new and most important branch of industry, and doubled the wealth and means of employment of his countrymen!—(*Pitkin's Statistics of the United States*, p. 109. ed. 1835.) Whitney's invention came into operation in 1793, and in 1794, 1,601,760 lbs., and, in 1795, 5,276,300 lbs. of cotton were exported. And so astonishing has been the growth of cotton in the interval, that the exports from the United States in 1841 amounted to the prodigious quantity of 530,204,100 lbs.! of which 523,966,676 lbs. were upland!

Account of the Quantities of Cotton Wool imported into the United Kingdom during the Seven Years ending with 1841, specifying the Quantities brought from different Countries, the Total Quantities exported, and the Quantities entered for Consumption.—(Compiled from *Parl. Papers*.)

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Italy and the Italian islands	2,704,068	2,799,288	1,440,174	999,764	3,580,109	843,009	681,649
Turkey - - - -	557,949	557,130	608,120	660,559	102,133	463,978	163,354
Egypt - - - -	5,181,017	4,867,781	7,223,111	4,751,923	2,861,748	6,387,109	8,021,218
E. I. Co.'s territories and Ceylon	41,429,011	75,019,835	81,534,072	40,215,731	47,174,039	77,211,830	97,588,153
British West Indies - -	1,815,220	1,714,357	1,595,702	1,727,356	1,248,114	896,157	1,555,197
Hayti - - -	91,179	25,375	22,039	80,004	171,802	179,895	209,651
United States of America -	284,455,812	289,615,602	320,651,716	431,437,888	311,597,798	487,856,564	358,210,964
Columbia - - -	1,961,260	2,339,980	2,258,867	2,877,191	2,935,741	1,818,910	1,408,560
Brazil - - -	24,996,109	27,291,272	20,940,145	24,464,605	16,951,979	14,779,171	16,671,348
All other countries - -	576,979	1,650,351	964,537	834,594	2,950,913	2,281,478	3,564,281
Total -	363,702,963	406,959,057	407,286,783	507,850,677	389,596,559	592,488,010	487,992,355
Quantities re-exported -	37,779,734	31,739,765	39,722,031	30,644,469	38,738,238	38,673,229	
Quantities entered for home consumption - - -	326,407,692	363,684,232	368,445,035	455,036,755	352,000,277	528,142,743	437,093,631

Though not official, the following statements, from a paper published in New York on the 12th of September, 1842, give, it is believed, a very correct view of the produce of the cotton crops in America from 1824-25 down to 1841-42; and of the shipments of cotton from the Union to foreign parts in 1841-42.

Account of the Produce of the Cotton Crops of the United States from 1824-25 down to 1842-43, both inclusive

Years.	Total Crop.	Years.	Total Crop.	Years.	Total Crop.
1824-25 - -	bales 560,000	1830-31 - -	bales 1,038,848	1837-38 - -	bales 1,801,497
1825-26 - -	— 710,000	1831-32 - -	— 987,477	1838-39 - -	— 1,360,532
1826-27 - -	— 937,000	1832-33 - -	— 1,070,158	1839-40 - -	— 2,177,835
1827-28 - -	— 712,000	1833-34 - -	— 1,205,394	1840-41 - -	— 1,634,945
1828-29 - -	— 857,741	1834-35 - -	— 1,254,328	1841-42 - -	— 1,683,574
1829-30 - -	— 976,845	1835-36 - -	— 1,360,725	1842-43 - -	— 2,378,875
		1836-37 - -	— 1,822,930		

Account of the Shipments of Cotton from the United States in 1842-43, specifying the Quantities shipped from the different Ports, and the Countries for which they were shipped.

	To Great Britain.	To France.	To North Europe.	Other For. Ports.	Total.
From New Orleans - - - bales	679,438	180,875	50,882	43,543	954,738
Alabama - - - —	283,382	55,421	8,032	19,177	366,012
Florida - - - —	53,005	4,196	- -	1,700	58,901
Georgia (Savannah and Darien) - - —	169,676	15,126	6,621	1,676	193,099
South Carolina (mostly Charleston) - - —	201,645	53,725	15,646	2,370	273,386
North Carolina - - - —	512	- -	- -	- -	512
Virginia - - - - —	1,735	- -	182	- -	1,917
Baltimore - - - - —	- -	- -	246	- -	246
Philadelphia - - - - —	1,059	- -	- -	- -	1,059
New York - - - - —	79,259	36,796	35,340	6,311	157,706
Boston - - - - —	- -	- -	845	1,716	2,561
Grand Total - - -	1,469,711	346,139	117,794	76,493	2,010,137
Total in 1841-42 - -	935,631	398,129	79,956	51,531	1,465,249

It has for many years been the practice to levy a duty on cotton wool, when imported. But the policy of such a duty is very questionable; and it is indispensable that, if imposed at all, it should be kept at a low rate. For a number of years previously to 1831, it amounted (on foreign cotton) to 6 per cent. *ad valorem*; but, in order to make up, in part at least, for the loss of revenue caused by the repeal of the duty on printed cottons (see CALICO), it was raised in that year to *5s.* 10*d.* a cwt. Such a duty would, however, have materially affected the imports of the inferior species of cotton, and the price of coarse goods; and being, in consequence, justly objected to, it was reduced in 1833 to *2s.* 11*d.* a cwt. The duty on cotton from a British possession is little more than nominal, being only 4*d.* a cwt. In 1842, the duties on cotton produced *567,156l.*

The subjoined table, taken from the carefully compiled and comprehensive annual statement of Messrs. George Holt and Co., eminent cotton brokers of Liverpool, dated 30th of December, 1843, shows in a very striking manner the progress of the manufacture in this country, and the fall in the price of cotton wool.

Statement of the Consumption, Exportation, &c. of the different Sorts of Cotton Wool, in and from Great Britain, in different Years, from 1816 to 1843, both inclusive.

Average weekly consumption.	1816.	1820.	1825.	1830.	1835.	1839.	1840.	1841.	1842.	1843.
Upland - - -	- -	2,918	3,713	5,452	5,896	5,464	5,316	4,581	4,489	6,463
Orleans and Alabama -	990	1,192	2,442	4,756	7,823	9,915	13,854	12,698	12,533	14,51
Sea-island - -	- -	409	360	460	354	265	392	296	356	377
Total United States	4,036	4,519	6,515	10,668	14,073	15,644	19,592	17,575	17,178	21,355
Brazil - - -	1,589	2,408	2,502	3,602	2,339	2,373	1,414	1,314	1,340	1,496
Egypt - - -	- -	- -	891	508	446	518	540	608	544	744
East India - -	207	1,518	1,096	940	1,069	2,142	2,227	2,996	2,940	2,237
Demerara, West India, &c. - -	656	534	527	284	421	723	260	406	313	362
Total -	6,488	8,979	11,531	16,002	18,318	21,430	24,063	22,929	22,315	26,294
Packages annually consumed - -	337,400	466,900	599,600	832,100	954,100	1,114,400	1,251,300	1,192,300	1,160,400	1,367,300
Average wt. of packages consumed, in lbs.	263	258	278	298	333	345	367	367	375	379
Weekly consumption in packages, average 379 lbs. - -	6,059	8,387	10,771	14,947	16,501	20,016	23,501	22,203	22,079	26,294
Average wt. of packages imported, in lbs.	256	249	270	300	331	348	365	365	379	382
Packages exported -	29,500	28,400	72,800	33,400	102,800	117,300	119,700	116,300	134,400	120,200
Lbs. weight annually imported in millions and tenths - -	93·9	143·9	222·4	261·2	361·7	388·6	583·4	489·9	528·5	667·0
Lbs. wt. consumed do.	88·7	120·3	166·8	247·6	318·1	381·7	458·9	438·1	435·1	517·8
Lbs. weight in ports, 31st of Dec. do.	19·2	110·5	107·0	91·4	73·3	98·5	162·9	186·6	199·9	290·3
Lbs. weight in Great Britain - do.	- -	127·0	115·5	118·8	89·6	125·8	207·0	216·7	242·3	342·0
Average price per lb. of uplands in Liverpool	18½*d.*	11½*d.*	11·6*d.*	6·9*d.*	10½*d.*	7·875*d.*	6*d.*	6¼*d.*	5·375*d.*	4·625*d.*
Do. do. Pernams	26*d.*	15½*d.*	15·1*d.*	8½*d.*	14·1*d.*	10*d.*	9¼*d.*	8¾*d.*	7½*d.*	6·375*d.*
Do. do. Surats -	15½*d.*	8½*d.*	8·9*d.*	5*d.*	7½*d.*	5¾*d.*	4·625*d.*	4·625*d.*	4*d.*	3·625*d.*

N.B. — Messrs. Holt and Co. estimate the average weight of the packages imported in 1843 at 350 lbs. per bag Upland; 430 lbs. Orleans and Alabama; 350 lbs. Sea-island; 182 lbs. Brazil; 207 lbs. Egyptian; 378 lbs. East Indian; and 165 lbs. West Indian.

3. *Value of the British Cotton Manufacture in* 1842. *Amount of Capital, and Number of Persons employed in it.*— It would be very desirable to be able to form a tolerably accurate estimate of the present value of the cotton manufacture, and of the number of persons employed in its different departments; but the data on which such estimates are founded being necessarily very loose, it is impossible to arrive at any thing like precision. Perhaps, however, the following calculations may not be very wide of the mark.

In 1817, Mr. Kennedy, an extremely well-informed manufacturer, in a paper pub-

lished in the *Manchester Transactions*, estimated the number of persons employed in the *spinning* of cotton in Great Britain at 110,763; the aid they derived from steam engines as equal to the power of 20,768 horses; and the number of spindles in motion at 6,645,833. Mr. Kennedy further estimated the number of hanks of yarn annually produced at 3,987,500,000; and the quantity of coal consumed in their production at 500,479 tons. We subjoin Mr. Kennedy's statement for the year 1817:—

Raw cotton converted into yarn in the United Kingdom	- - - -	110,000,000 lbs.
Loss in spinning estimated at 1¼ oz. per lb.	- - - -	10,312,500
Quantity of yarn produced	- - - - - - - -	99,687,500 lbs.
Number of hanks, taking the average at 40 per lb.	- - - - - - - -	3,987,500,000
Number of spindles employed, each spindle being supposed to produce 2 hanks per day, at 300 working days in the year	- - - - - - - -	6,645,833
Number of persons employed in spinning, supposing each to produce 120 hanks per day	- - - -	110,763
Horse power employed, equal in number to	- - - -	20,768

Four ounces and a half of coal estimated to produce one hank of No. 40.; and 130 lbs. of coal per day equal to one horse power.

But the cotton manufacture has increased rapidly since 1817. Mr. Huskisson stated, in his place in the House of Commons, in March, 1824, that he estimated the total value of the cotton goods and yarn then annually manufactured in Great Britain at the sum of *thirty-three and a half* millions; but this, certainly, was very far beyond the mark; and we do not think we should be warranted in estimating their value in 1842 at above *thirty-four* millions. If, indeed, we took the increase in the imports of the raw material as any test of the increase in the value of the manufacture, we should estimate it a great deal higher. But it will be afterwards seen that the improvements that have been made in the different processes, and the fall in the price of raw cotton, have had so powerful an influence in reducing the price of the goods brought to market, that, notwithstanding the increase of their quantity, their total value must have remained, for some time past, nearly constant.

The average annual quantity of cotton wool imported, after deducting the exports, may be taken at about 430,000,000 lbs. weight. It is supposed, that of this quantity about 30,000,000 lbs. are used in a raw or half manufactured state, leaving a balance of 400,000,000 lbs. for the purposes of manufacturing, the cost of which may be taken, at an average, at 6*d.* per lb. Deducting, therefore, from the total value of the manufactured goods, or 34,000,000*l.*, the value of the raw material, amounting to 10,000,000*l.*, there remains 24,000,000*l.*; which, of course, forms the fund whence the wages of the persons employed in the various departments of the manufacture, the profits of the capitalists, the sums required to repair the wear and tear of buildings, machinery, &c., the expense of coals, &c. &c., must all be derived. If, then, we had any means of ascertaining how this fund is distributed, we should be able, by taking the average of wages and profits, to form a pretty accurate estimate of the number of labourers, and the quantity of capital employed. But here, unfortunately, we have only probabilities and analogies to guide us. It may, however, be confidently assumed, in the first place, that in consequence of the extensive employment of highly valuable machinery in all the departments of the cotton manufacture, the proportion which the profits of capital, and the sum to be set aside to replace its wear and tear, bears to the whole value of the manufacture, must be much larger than in any other department of industry. We have heard this proportion variously estimated, at from a fourth to a half of the total value of the manufactured goods, exclusive of the raw material; and as the weight of authority seems to be pretty much divided on the subject, we shall take an intermediate proportion. Assuming, therefore, that the profits of the capital employed in the cotton manufacture, the wages of superintendence, &c., the sum required to replace the wear and tear of machinery, buildings, &c., and to furnish coals, &c., amount together to *one third* part of the value of the manufactured goods, exclusive of the raw material, or to 8,000,000*l.*, a sum of 16,000,000*l.* will remain as the wages of the spinners, weavers, bleachers, &c. engaged in the manufacture; and taking, inasmuch as a large proportion of women, and children under 16 years of age, are employed, the average rate of wages at only 20*l.* a year, we shall have (dividing 16,000,000 by 20) 800,000 as the total number of persons directly employed in the different departments of the manufacture.

We should mistake, however, if we supposed that this number, great as it certainly is, comprised the whole number of persons to whom the cotton manufacture furnishes subsistence, exclusive of the capitalists. Of the sum of 8,000,000*l.* set apart as the profit of the capitalists, and the sum required to furnish coal, and to defray the wear and tear of machinery, &c., a large proportion must annually be laid out in paying the wages of engineers, machine-makers, iron-founders, smiths, joiners, masons, bricklayers, &c. It is not easy to say what this proportion may amount to; but taking it at a *third*, or 2,666,000*l.*, and supposing the rate of wages of each individual to average 30*l.* a year, the total number employed in the various capacities alluded to will be (2,666,000 divided by 30) 88,000; and a sum of 5,334,000*l.* will remain to cover the profits of the capital employed in the various branches of the manufacture, to repair the different parts of the

machinery and buildings as they wear out, and to buy coal, flour *, &c. The account will, therefore, stand as under: —

Total value of every description of cotton goods annually manufactured in Great Britain		£34,000,000
Raw material, 100,000,000 lbs. at 10*d.* per lb.	£10,000,000	
Wages of 800,000 weavers, spinners, bleachers, &c. at 20*l.* a year each	16,000,000	
Wages of 88,000 engineers, machine-makers, smiths, masons, joiners, &c. at 30*l.* a year each	2,666,000	
Profits of the manufacturers, wages of superintendence, sums to purchase the materials of machinery, coals, &c.	5,334,000	
		34,000,000
The capital employed may be estimated as follows: —		
Capital employed in the purchase of the raw material		£5,000,000
Capital employed in payment of wages		9,000,000
Capital vested in spinning-mills, power and hand looms, workshops, warehouses, stocks on hand, &c.		20,000,000
		£34,000,000

Now, this sum of 34,000,000*l.*, supposing the interest of capital, inclusive of the wages of superintendence &c., to amount to 10 per cent., will yield a sum of 3,400,000*l.*; which being deducted from the 5,334,000*l.* profits, &c., leaves 1,934,000*l.*, to purchase materials to repair the waste of capital, the flour required for dressing, the coals necessary in the employment of the steam engines, to effect insurances, and to meet all other outgoings.

The aggregate amount of wages, according to the above estimate, is 18,666,000*l.*; but there are not many departments of the business in which wages have to be advanced more than 6 months before the article is sold. We, therefore, incline to think that 9,000,000*l.* is a sufficient (perhaps too great) allowance for the capital employed in the payment of wages.

It has been said by some that this estimate is under, and by others that it is overrated; but we believe it will be found to be nearly correct, though, if any thing, it may, perhaps, be a little in excess. No doubt we estimated, in the former edition of this work, the value of the cotton stuffs and yarn produced in the United Kingdom in 1834, at 34,000,000*l.*; but farther inquiry has convinced us that this estimate was too high; and it is to be borne in mind, that though the consumption of raw cotton has increased fully 50 per cent. since 1834, there has been in the interval a very considerable fall in the value of the raw material, in the wages and profits of those engaged in the manufacture, and in the prices of the manufactured articles. The declared value of the exports of cotton goods and yarn, at an average of 1841 and 1842, amounted to about 22,500,000*l.*; and estimating the value of those consumed at home at half the value of those exported, we shall have 33,750,000*l.* for the total value of the manufacture. Perhaps it may be thought that in this estimate we have underrated the home consumption of cottons; but the truth is, that, if any thing, we have rather inclined to the other extreme. If, indeed, we were to deduce the value of the home consumption from the quantity of yarn, as given in Burns' *Glance* and other publications of authority, it might be supposed that we had very much overrated the home consumption. But this would not be a fair criterion, both because it might, we incline to think, be shown that the weight of the yarn left for home consumption is underrated in the publications referred to, and because the great bulk of the cotton goods manufactured at home are of a superior fabric, and much more costly than those sent abroad. On the whole, therefore, we are disposed to believe that in estimating the present value of the products of the British cotton manufacture at 34,000,000*l.* a year, we shall not be very wide of the mark; and moderate as this estimate may appear as compared with others put forth on the same subject †, it strikingly evinces the great value and importance of the manufacture.

Allowance being made for old and infirm persons, children, &c. dependent on those actually employed in the various departments of the cotton manufacture, and in the construction, repair, &c. of machinery and buildings required to carry it on, it must furnish, on the above hypothesis, subsistence for from 1,200,000 to 1,300,000 persons! And for this new and most prolific source of wealth we are indebted partly and principally, as already shown, to the extraordinary genius and talent of a few individuals; but, in a great degree, also, to that security of property and freedom of industry which give confidence and energy to all who embark in industrious undertakings, and to that universal diffusion of intelligence which enables those who carry on any work to press every power of nature into their service, and to avail themselves of productive capacities of which a less instructed people would be wholly ignorant.

The effect that the sudden opening of so vast and profitable a field for the employment of capital and labour has had on the populations of the different towns of Lancashire and Lanarkshire, the districts where the cotton manufacture is principally carried

* This is a much more important item than might be at first supposed. Flour is indispensable in the dressing of webs; and we are well assured that its consumption in this way is not less than 300,000 barrels a year!

† Messrs. Macqueen and Spackman, for example, who have respectively estimated the value of the cotton manufacture at 52½ and 60 millions sterling!

on, has been most striking. In 1774, for example, the townships of Manchester and Salford were estimated to contain 27,246 inhabitants — a number which was swelled, in 1831 to 182,812; the entire population of the *boroughs* of Manchester and Salford having amounted, in that year, to 227,808, and in 1841 to 296,183. The population of Preston, in 1780, is said not to have exceeded 6,000; whereas it amounted, in 1841, to 50,131. In like manner, the population of Blackburn has increased from 11,980, in 1801, to 36,629, in 1841; that of Bolton has increased, in the same period, from 17,416 to 49,763; that of Wigan, from 10,989 to 25,517, &c. But the progress of Liverpool is most extraordinary, and can be matched only by the progress of one or two cities in the United States. Liverpool is not properly one of the seats of the cotton manufacture; but she is, notwithstanding, mainly indebted to it for the unparalleled rapidity of her growth. She is the grand emporium of the cotton district—the port where almost all the raw cotton, and the various foreign articles required for the employment and subsistence of the persons engaged in the manufacture, are imported, and whence the finished goods are exported to other countries. She has, therefore, become a place of vast trade, and is now, in that respect, second only to London. In 1700, according to the best accounts that can be obtained, the population of Liverpool amounted to only 5,145; in 1750 it had increased to 18,450; in 1770 it amounted to 34,050. The cotton manufacture now began rapidly to extend, and, in consequence, the population of Liverpool increased, in 1801, to 77,653; in 1821, to 118,972; in 1831, to 165,175; and in 1841 it amounted to 222,954. The progress of population in Lanarkshire and Renfrewshire has been equally striking. In 1780, the city of Glasgow contained only 42,832 inhabitants; in 1801, that number had increased to 77,385; in 1831, to 202,426; and in 1841, to 274,533!

Since the repeal of the Irish protecting duties, in 1823, the cotton manufacture has made considerable progress in Ireland. It is principally centred in Belfast, and employs in all about 4,700 hands. But the unsettled state of the country and the want of coal are insuperable obstacles to the continued increase of the manufacture.

We subjoin the account, previously referred to, given in Burns' *Glance*, of the consumption of cotton in England in 1842. It will be observed that the statements in it differ in some respects, though to no very great extent, from those of Messrs. Holt and Co., which we believe to be of the highest authority. Such disagreements must necessarily, however, occur in all accounts not drawn up from official sources, and founded in part upon estimate and conjecture.

Statement of the Cotton spun in England and Scotland in 1842, and of the Quantity of Yarn produced; showing, also, how the Quantity spun in England was disposed of.

Description.	Number of Bags consumed.	Average Weight of Bags.	Total Weight in Pounds.	Weekly Consumption of Bags describing each Sort.
American cotton	928,804	373	346,443,892	19,350+ 4
Brazil, &c.	72,937	171	12,472,227	1,519+25
Egyptian -	21,398	284	6,077,032	445+38
East India	141,982	363	51,540,466	2,957+46
West India	9,247	216	1,997,352	192+31
Total number of bags consumed -	1,174,368	356	418,530,969	24,466
Allowed for loss in spinning 1¼ oz. per lb.	-	-	45,776,825	
				Lbs.
Total quantity spun in England and Scotland	-	-		372,754,144
Deduct spun in Scotland in 1842 -	-	-		31,273,837
Total quantity spun in England in 1842 -	-	-		341,480,307
Disposal of Cotton spun in England.			*Lbs.*	
Exported in yarn during the year - - - -			136,537,162	
Ditto in thread - - - -			1,972,632	
Ditto in manufactured goods - - - -			129,842,680	
Estimated quantity of yarn sent to Scotland and Ireland - -			6,847,416	
Exported in mixed manufactures, not stated in the above named articles, consumed in cotton banding, braids, candle and lamp wicks, waddings, flocks, calender bowls, paper, umbrellas, hats, and loss in manufacturing goods			17,530,912	
Balance left for home consumption and stock, 1st January, 1843			48,749,506	341,480,307
Ditto	1842		52,760,274	
Ditto	1841		114,818,919	
Ditto	1840		60,813,674	
Ditto	1839		84,133,283	
Ditto	1838		63,657,902	
Ditto	1837		43,486,696	
Ditto	1836		49,582,800	
Ditto	1835		52,975,627	
Ditto	1834		* 64,567,907	

* These numbers will not always agree with those in the population returns, as the limits of the boroughs have in some instances been varied. In the above statements the limits are supposed to have been invariable.

Exports of Cotton Goods and Yarn. Fall of Prices, &c. — For a very long period the woollen manufacture was the great staple of the country. But the progress of improvement in the spinning and manufacturing of cotton, since 1770, being so much more rapid than any that has taken place in the woollen manufacture, the value of the former is now vastly greater than that of the latter. It appears, from the accounts of the declared or real values of the different sorts of exported commodities given by the Custom-house, that the exports of cotton goods, including yarn, amount, at an average, to about 22,500,000*l.* sterling, being about two thirds the value of the whole manufacture; and forming of themselves about *two thirds* of the total value of all the wove fabrics exported from the empire. We subjoin a statement, compiled from the Annual Finance Accounts, of the declared or real values of the cotton manufactured goods, cotton yarn, woollen and silk manufactures, and the totals of all other articles of British produce and manufacture, exported from Great Britain to all parts of the world (except Ireland) annually since 1816.

	Years.	Cotton Manufactures.	Cotton Yarn.	Manufactures.			Total of Wove Fabrics.	Total of all other Articles.
				Woollen.	Linen.	Silk.		
		£	£	£	£	£	£	£
Declared Values.	1816	13,072,757	2,628,448	7,841,855	1,152,667	480,522	25,479,252	14,845,690
	1817	14,178,022	2,014,182	7,163,472	1,703,632	408,525	25,167,827	14,869,292
	1818	16,643,579	2,585,305	8,143,193	1,949,815	499,175	29,821,067	15,567,162
	1819	12,388,833	2,516,783	5,986,807	1,591,245	376,798	22,860,467	11,588,029
	1820	13,843,560	2,826,613	5,383,450	1,653,804	374,114	24,278,570	11,590,109
	1821	13,746,957	2,307,830	6,461,267	1,981,465	373,038	24,911,759	10,914,223
	1822	11,531,253	2,700,457	6,188,523	2,192,772	381,455	23,297,429	9,879,468
	1823	13,751,415	2,625,947	5,634,137	2,095,574	350,880	24,457,952	10,253,172
	1824	15,210,006	3,135,496	6,011,534	2,442,440	442,582	27,272,059	10,501,359
	1825	15,034,138	3,306,729	6,193,775	2,130,705	296,477	26,862,024	11,221,749
	1826	10,502,557	3,491,268	4,992,598	1,445,644	168,453	20,976,625	10,195,015
	1827	13,975,825	3,545,568	5,277,861	1,885,186	256,092	24,911,532	11,444,807
	1828	13,515,638	3,594,945	5,120,226	2,080,033	235,755	24,516,647	11,636,131
	1829	13,120,944	3,974,039	4,656,809	1,885,831	267,192	24,804,115	11,008,158
	1830	15,203,713	4,132,258	4,817,398	1,926,256	319,919	26,629,514	11,061,758
	1831	13,207,947	3,974,959	5,385,811	2,501,803	578,260	25,448,810	11,203,854
	1832	12,622,880	4,721,796	5,475,298	1,655,478	599,808	25,075,260	11,949,767
	1833	13,751,992	4,704,008	6,535,853	2,167,670	737,264	27,897,787	11,477,716
	1834	15,302,571	5,211,015	5,912,559	2,501,293	637,014	29,624,452	11,662,142
	1835	16,393,170	5,706,563	7,145,826	3,054,685	973,479	33,273,723	13,672,647
	1836	18,482,586	6,120,396	7,904,807	3,561,661	916,777	37,179,157	15,956,274
	1837	13,432,146	6,955,936	4,991,557	2,525,623	502,652	28,678,895	13,303,403
	1838	16,709,136	7,431,948	6,177,952	3,373,127	777,273	34,469,336	15,171,760
	1839	17,677,370	6,858,173	6,692,018	3,992,002	868,113	36,092,676	16,608,853
	1840	17,557,162	7,101,308	5,779,160	3,892,034	792,648	35,122,312	15,774,214
	1841	16,225,556	7,266,933	6,299,090	4,119,168	788,994	34,699,641	16,518,017
	1842	13,898,663	7,771,464	5,820,709	3,210,613	590,166	31,321,615	15,691,036

Account of the Official and of the Declared or Real Value of the Cotton Manufactures and Yarn exported from Great Britain since 1798.

Years.	Manufactured Goods.		Twist and Yarn.		Total Exports.		Years.	Manufactured Goods.		Twist and Yarn.		Total Exports.	
	Official Value.	Declared Value.	Official Value.	Declared Value.	Official Value.	Declared Value.		Official Value.	Declared Value.	Official Value.	Declared Value.	Official Value.	Declared Value.
	£	£	£	£	£			£	£	£	£	£	£
1798	3,572,217		30,271		3,602,488		1821	21,642,936	13,788,077	1,898,679	2,505,830	23,541,615	16,094,607
1799	5,593,107		201,602		5,808,089		1822	24,559,278	14,521,211	2,351,771	2,697,590	26,911,013	17,218,801
1800	5,406,501		447,556		5,854,057		1823	24,119,559	13,650,896	2,425,411	2,625,947	26,544,770	16,276,843
1801	6,606,368		444,441		7,050,809		1824	27,171,586	15,941,119	2,984,345	3,135,396	30,155,931	18,576,515
1802	7,195,909		488,605		7,684,505		1825	26,397,575	15,046,502	2,897,706	3,306,729	29,295,281	18,353,231
1803	6,442,037		639,404		7,081,441		1826	21,145,713	10,522,407	3,748,527	3,491,268	25,194,270	14,013,675
1804	7,834,564		902,208		8,746,772		1827	29,903,138	13,956,826	3,979,760	3,545,568	33,182,898	17,502,394
1805	8,619,990		914,475		9,534,165		1828	28,981,575	13,345,188	4,485,812	3,594,926	33,467,417	17,140,114
1806	9,753,424		736,225		10,489,649		1829	31,810,474	13,420,536	5,458,958	3,974,039	37,269,432	17,394,575
1807	9,708,046		601,719		10,309,765		1830	35,393,407	15,915,715	5,655,569	4,132,258	41,050,969	19,335,971
1808	12,515,918		472,078		12,986,996		1831	33,684,475	13,207,947	5,674,600	3,974,959	39,357,075	17,182,906
1809	18,425,614		1,020,552		19,445,966		1832	37,060,750	12,622,880	6,725,505	4,721,796	43,786,255	17,344,676
1810	17,898,519		1,055,475		18,951,994		1833	40,058,153	13,754,992	6,279,057	4,704,008	46,337,210	18,459,000
1811	11,529,551		483,598		12,013,149		1834	44,266,903	15,302,571	6,802,238	5,211,015	51,069,141	20,513,586
1812	13,723,225		794,465		16,517,690		1835	44,849,038	16,393,170	7,399,851	5,706,563	52,248,889	22,099,733
1813	Records	destroyed.					1836	50,646,918	18,482,586	7,844,819	6,120,396	58,491,737	24,602,982
1814	16,555,598	17,241,884	1,119,850	2,791,248	17,655,378	20,033,132	1837	41,790,110	13,432,146	9,211,732	6,955,936	51,111,842	20,388,082
1815	21,480,792	18,946,855	808,853	1,671,021	22,289,645	20,620,956	1838	54,590,603	16,709,136	10,202,011	7,431,948	64,792,617	24,140,984
1816	16,183,975	12,948,944	1,390,486	2,628,448	17,564,161	15,577,392	1839	58,171,905	17,677,370	9,400,904	6,858,173	67,572,709	24,535,543
1817	20,133,966	13,997,880	1,125,258	2,014,181	21,259,224	16,012,061	1840	62,592,239	17,557,162	10,552,491	7,101,308	73,144,730	24,658,470
1818	21,292,354	16,372,912	1,296,776	2,395,305	22,589,130	18,767,217	1841	58,816,582	16,225,556	10,960,499	7,266,933	69,777,081	23,492,489
1819	16,696,539	12,150,129	1,585,758	2,519,783	18,282,292	14,699,912	1842	56,448,689	13,898,663	12,239,280	7,771,464	68,687,909	21,670,127
1820	20,509,926	13,690,115	2,022,153	2,826,653	22,531,079	16,516,758							

We may here remark, that while the *declared* or real value of the exports of cotton stuffs and yarn has increased but slowly since 1816, their *official* value (now merely an index of quantity) has increased with comparative rapidity. This circumstance has given rise to a great deal of irrelevant discussion; and has even been referred to as proving that the manufacture is in a declining state! But it proves precisely the contrary. It shows that the decline in the price of the raw material, and the improvements in the machinery and processes used in the manufacture, have been so great, that we are now able to export and sell with a profit, (for, unless such were the case, the exportation would very speedily cease,) nearly double the quantity of cotton goods we exported in 1816, for about the same price.

In illustration of this view of the matter, we beg to subjoin the following statement of the production and cost of the different species of cotton yarn in England, in 1812 and 1830. It was furnished by

Mr. Kennedy, of Manchester, to the committee on the East India Company's affairs; so that no doubt can be entertained of its accuracy.

Hanks per Day, per Spindle.			Price of Cotton and Waste per lb.		Labour per lb.*		Cost per lb.	
Description of Yarn.	1812.	1830.	1812.	1830.	1812.	1830.	1812.	1830.
No.			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
40	2·	2·75	1 6	0 7	1 0	0 7½	2 6	1 2½
60	1·5	2·5	2 0	0 10	1 6	1 0	3 6	1 10½
80	1·5	2·	2 2	0 11½	2 0	1 7½	4 4	2 6½
100	1·4	1·8	2 4	1 1½	2 10	2 2½	5 2	3 3½
120	1·35	1·65	2 6	1 4	3 6	2 8	6 0	4 0
150	1·	1·33	2 10	1 8	6 6	4 11	9 4	6 7
200	0·75	0·90	3 4	3 0	16 8	11 6	20 0	14 6
250	0·03	0·06	4 0	3 8	31 0	24 6	35 0	28 2

The fall in the price of most species of cotton goods since 1830 has been most striking. This is evident from the subjoined

Account of the Prices of the principal Descriptions of Cotton Goods on the 10th of January each Year, from 1836 to 1843. — (From the valuable Circular of Messrs. Barbour of Manchester.)

Articles.	Prices, 10th Jan. 1836.	Prices, 10th Jan. 1837.	Prices, 10th Jan. 1838.	Prices, 10th Jan. 1839.	Prices, 10th Jan. 1840.	Prices, 10th Jan. 1841.	Prices, 10th Jan. 1842.	Prices, 10th Jan. 1843.
	£. s.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
7-8th 3d 74 grey calicoes -	3 4	5 7½	5 9	4 9	5 0	4 7½ to 4 9	4 0	3 6	3 7½
7-8th 2d 74 do. -	3 12	6 7½	6 9	5 7½	5 9 to 5 10½	5 4½ — 5 6	4 9 to 4 10½	4 0 to 4 1½	4 0 to 4 1½
7-8th 74 do. -	4 1	7 0	7 3	5 80½	6 3	5 9 — 5 10½	5 1½ — 5 3	4 6 — 4 7½	4 4½ — 4 6
36 in. 64 reed power-loom printers -	4 2	-	5 0	6 9	7 6	6 0	5 6	4 9	4 7½ — 4 9
27 in. 72 reed do. -	4 15	8 9	9 0	7 9	8 6	6 10½	6 4½	5 5½	5 3
28 in. 72 reed do. -	5 3	9 3 to 9 6	10 3	8 6	9 3	7 7½ — 7 9	7 9	6 6	6 1½
36 in. do. -	5 12	10 9 — 11 0	11 1½	9 6	9 4½	8 3	7 7½	6 6	6 8
36 in. best 66 reed shirtings, grey -	7 6	14 0	14 3	12 0	12 4½	10 8	10 0	8 1½	8 3
40 in. G. E. do. -	8 0	15 6	15 9	13 6	13 0	11 9	10 6	9 0	9 3
36 in. best 72 reed. -	8 12	16 1½	16 3	13 10½	14 0	12 3	11 4½	9 9	10 0
40 in. G. E. do. -	9 8	17 6	17 3	14 9	15 3	12 9	11 9	10 3	10 9 — 11 0
26 in. grey domestics - 12 lbs. - 60 yds.		0 3½	0 3½	0 2½	0 2½	0 2½	0 2½	0 2 1/16	0 2 1/16
36 in. do. 16 lbs. - 60 —		0 4½	0 4½	0 3½	0 3½	0 3½	0 3½	0 3½	0 3
33 in. do. { T. 6 lbs. 10 oz. / " - 24 yds. }		9 4½	10 3	9 0	8 6	7 10½	7 1½	6 7½	6 1½
30 in. white madapolams - 24 yds.	6 7—6 9	6 9	5 9	6 1½	5 4½	5 0	4 4½	4 6
5-4th India long cloths, white - 36 —	15 0—15 6	15 6—16 0	14 0—14 6	14 0—14 6	12 6	11 6	10 9	10 4½
6-4th cambrics - 12 —	5 1½	5 3	4 4½	4 4½	4 3	4 0	3 10	3 8
Ditto - 12 —	7 7½	8 0	7 0	7 0	6 9	6 1½	5 7½	5 6
9-8th Jacconets - 20 —	12 6	13 6	11 1½	11 3	11 0	10 3	10 0	9 9
6-4th do. - 20 —	9 1½	10 8	8 6	8 7½	8 3	7 9	7 6	6 10½
Ditto - 20 —	17 3	19 0	15 6	16 0	15 6	14 9	14 2	13 4½
Ditto - 20 —	25 0	28 0	23 9	24 9	24 0	22 6	21 9	20 3
7-8th white satteens per yd.	0 8½	0 8½	0 7½	0 8	0 7½	0 7	0 6½	0 6½
7-8th light striped florentines - —	0 3½ — 0 7½	0 3½	0 3½	0 3½	0 2½ — 0 3	0 2½ — 0 2½	0 2½ — 0 2½	0 2½
7-8th 3d 74 navy blue prints - 24 yds.	8 0	8 0—8 3	7 3 —7 6	8 0 —8 3	7 9	6 9—7 0	6 0—6 6	6 3—6 9
7-8th 3d 74 single color - 24 —	6 10½—7 3	7 0—7 3	6 4½—6 7½	6 10½—7 1½	6 6	5 9 6 0	5 3—5 6	5 4½—5 7½

The Table on the opposite page is interesting, from its exhibiting the state of our trade in wrought cottons with the different countries of the world. It sets the importance of the markets of India and South America, as outlets for our cottons, in a very striking point of view.

Such being the vast extent and importance of the cotton manufacture, the probability of our preserving our ascendancy in it becomes a very interesting topic of inquiry. But it is obvious that a great deal of conjecture must always insinuate itself into our reasonings with respect to the future state of any branch of manufacturing industry. They are all liable to be affected by so many contingent and unforeseen circumstances, that it is impossible to predicate, with any thing like certainty, what may be their condition a few years hence. It is not to be denied that a business which depends in so great a degree on foreign demand, and which may, consequently, be materially influenced, not only by foreign legislation and foreign discoveries and inventions, but also by the mutations of fashion at home and abroad, is in rather a perilous situation; and that those dependent on it must necessarily be exposed to the most trying vicissitudes. These, no doubt, are natural to all businesses of this description; and may not be of a kind to shake the stability of the manufacture, or to endanger our superiority in it, provided they do not disturb tranquillity at home. But when a vast number of persons depend on a manufacture, the privations to which many of them are not unfrequently exposed, and the efforts that are made to inflame their prejudices, by relpresenting their sufferings (which in nine out of ten instances spring from accidental or uncontrollable causes) as the result of vicious legislation, the tyranny or selfishness of their masters, and bad institutions, may easily lead them to commit outrages. And if that feeling of security which has led to the investment of such immense sums in

* Wages are estimated at the same rate, or at 20*d.* a day, for every person employed, men, women, and children, in 1812 and 1850; the saving being entirely in the better application of the labour.

An Account of the Quantities and Declared Value of British Cotton manufactured Goods exported from the United Kingdom, distinguishing the Description of Goods, and the various Countries whereto the same were exported, in the Year 1841.

Countries to which exported.	White or Plain Cottons.		Printed or Dyed Cottons.		Hosiery and Small Wares.	Twist and Yarn.		Total Declared Value.
		Declared Value.		Declared Value.	Declared Value.	Pounds.	Declared Value.	
				£	£		£	£
Russia	1,038,905	31,817	202,760	5,808	5,870	17,508,142	1,096,406	1,139,901
Sweden	56,438	1,634	69,219	2,731	1,289	1,964,560	127,498	133,152
Norway	617,761	10,535	511,799	11,284	2,509	608,164	30,529	54,747
Denmark	117,926	1,999	178,292	3,520	22	178,872	6,679	12,180
Prussia	2,370	59	1,128	36	- -	50,886	2,605	2,700
Germany	17,013,288	303,123	31,738,870	642,072	184,654	41,052,824	2,404,331	3,534,180
Holland	14,590,169	263,363	13,627,359	320,211	79,498	22,179,383	1,684,738	2,347,810
Belgium	967,420	30,364	2,753,568	72,097	112,296	44,564	6,085	220,832
France	1,410,778	27,303	2,016,118	43,898	109,965	138,744	54,762	235,916
Portugal, Proper	21,288,775	506,545	12,663,829	274,717	16,627	702,529	37,141	675,030
Azores	552,557	10,739	475,120	10,154	872	18,612	675	22,440
Madeira	237,301	4,205	267,739	5,462	747	200	12	10,126
Spain and the Balearic Islands	33,195	972	120,787	3,552	2,091	491	38	6,656
Canaries	600,166	9,740	702,690	15,264	913	4,854	240	26,897
Gibraltar	16,165,570	297,244	12,745,643	306,298	15,077	80,510	4,256	622,875
Italy and the Italian Islands	28,825,813	455,778	27,472,513	659,013	41,020	11,616,731	484,954	1,645,815
Malta	2,480,056	37,829	2,157,595	42,092	2,592	326,266	14,152	96,465
Ionian Islands	2,191,878	37,141	1,497,191	25,860	685	311,546	15,447	79,133
Morea and Greek Islands	- -	- -	5,700	195	62	- -	- -	257
Turkey	25,237,523	367,296	16,971,561	387,617	1,516	4,795,458	226,757	983,216
Syria and Palestine	10,992,191	167,699	5,945,244	136,119	270	2,381,675	114,762	419,150
Tripoli, Tunis, Algiers, and Morocco	1,042,010	16,181	334,023	7,489	-	7,268	487	24,157
Western coast of Africa	1,210,023	19,115	7,178,643	164,217	400	2,240	441	184,473
Cape of Good Hope	1,833,801	31,955	2,495,806	64,572	6,607	5,082	312	103,476
Cape Verd Islands	480	11	92,849	1,968	21	-	-	2,000
St. Helena	18,811	306	28,282	921	50	-	-	937
Mauritius	2,800,781	49,529	2,814,200	70,651	5,312	30	3	125,495
East India Company's territori and Ceylon	116,282,357	1,960,072	29,598,862	768,770	37,788	13,141,648	640,982	
Sumatra, Java, and other islands of the Indian seas	4,410,738	87,607	2,995,613	109,268	3,440	217,950	10,400	210,715
Philippine Islands	619	29,200	112,085	5,012	410	320,181	13,100	47,812
China	23,127,568	389,163	1,181,888	32,896	1,588	3,402,100	156,580	579,537
British settlements in Australia	1,409,854	55,829	1,197,961	30,663	19,686	16,884	959	85,117
New Zealand	35,164	- -	95,534	2,413	- -	- -	- -	3,720
British North American colonies	10,561,787	206,551	15,054,403	345,377	60,085	464,282	17,798	629,811
West Indies	- -	279,687	14,633,187	311,254	42,501	123,188	7,741	641,183
Hayti	1,222,177	28,174	2,291,351	51,542	1,621	- -	- -	81,637
Cuba and other foreign West Indian colonies	7,449,193	128,404	15,372,868	308,820	21,133	42,996	2,710	460,867
States of Central and Southern America: —								
Texas	31,301	602	59,172	1,550	213	- -	- -	2,365
Mexico	2,161,770	49,341	3,096,721	139,512	3,128	501,160	20,636	212,620
Guatemala	52,093	3,425	500,664	9,880	176	600	30	13,871
Columbia	2,001,870	33,155	2,772,329	56,714	3,757	- -	- -	93,606
Brazil	37,604,787	588,325	36,270,623	820,135	62,170	13,250	1,052	1,472,980
States of the Rio de la Plata	14,421,572	214,608	11,772,911	242,551	49,805	37,356	1,083	508,157
Chili	4,878,477	76,491	6,289,833	153,135	15,153	- -	- -	244,782
Peru	3,907,989	69,604	8,456,676	210,366	15,265	190,950	8,106	303,335
Isles of Guernsey, Jersey, Alderney, and Man	723,742	28,286	496,219	18,092	16,211	2,772	150	62,739
Total	421,884,732	7,213,075	329,240,892	7,772,735	1,246,700	143,226,519	7,266,968	23,499,478

mills and machinery should once be seriously impaired, the fall of the manufacture might be even more rapid than its rise. Any thing that tends to keep alive and encourage disaffection and agitation is the bane of every country, but especially of one so deeply engaged in manufactures as this: and while, therefore, it is the bounden duty of government to endeavour, by modifying or suppressing prohibitions, and repealing all unjust or partial laws, to give freedom to industry, and to take away all good cause for agitation, every individual interested in the public welfare should endeavour, by every means in his power, to discourage the efforts of those who, to advance their own unworthy ends, endeavour to keep alive a spirit of discontent among the labouring classes, that cannot fail, in the long run, to be subversive alike of good order, industry, and prosperity.

But, abstracting from the influence of such considerations, and of national struggles and commotions, which can neither be foreseen nor estimated, we do not think that there is any thing in our state, or in that of the different commercial and manufacturing countries of the world, that should lead us to anticipate that the gloomy forebodings of those who contend that the cotton manufacture of England has reached its zenith, and that it must now begin to decline, will be realised. The natural capabilities we possess for carrying on the business of manufacturing are, all things considered, decidedly superior to those of any other people. But the superiority to which we have already arrived is, perhaps, the greatest advantage in our favour. Our master manufacturers, engineers, and artisans are more intelligent, skilful, and enterprising, than those of any other country; and the extraordinary inventions they have already made, and their familiarity with all the principles and details of the business, will not only enable them to perfect the processes already in use, but can hardly fail to lead to the discovery of others. Our establishments for spinning, weaving, printing, bleaching, &c. are infinitely more complete and perfect than any that exist elsewhere; the division

of labour in them is carried to an incomparably greater extent; the workmen are trained from infancy to industrious habits, and have attained that peculiar dexterity and sleight of hand in the performance of their separate tasks, that can only be acquired by long and unremitting application to the same employment. Why, then, having all these advantages on our side, should we not keep the start we have already gained? Every other people that attempt to set up manufactures must obviously labour under the greatest difficulties as compared with us. Their establishments cannot, at first, be sufficiently large to enable the division of employments to be carried to any considerable extent, at the same time that expertness in manipulation, and in the details of the various processes, can only be attained by slow degrees. It appears, therefore, reasonable to conclude that such new beginners, having to withstand the competition of those who have already arrived at a very high degree of perfection in the art, must be immediately driven out of every market equally accessible to both parties; and that nothing but the aid derived from restrictive regulations and prohibitions will be effectual to prevent the total destruction of their establishments in the countries where they are set up.

4. *Progress of the Manufacture in other Countries.*—But notwithstanding what has now been stated, a notion seems to be spreading abroad, that we shall have no little difficulty in maintaining our ground against the competition of the Americans, Swiss, Austrians, French, &c., and a good deal of evidence upon this subject was taken before the committee of the House of Commons appointed in 1833 to inquire into the state of manufactures, commerce, and shipping. Such apprehensions appear to us to be quite destitute of any real foundation. Provided we have no agitation, that public tranquillity and security in fact and opinion be maintained unimpaired, we need be under no sort of uneasiness as to any competition to which we may be exposed. The tariff has forced cotton, woollen, iron, and other manufactures into a premature existence in the United States; but excepting the coarser fabrics, and those in which the value of the raw material bears a large proportion to the value of the manufactured article, we have nothing to fear from the Americans. Neither has their progress in the manufacture of this description of goods been at all remarkable; for the official accounts published by order of congress (21st July 1842) show that the value of all descriptions of cotton goods exported from the United States, during the year ended the 30th of September 1841 (p. 232.), amounted to only 3,122,546 doll., or about 620,000*l.*, of which the raw material certainly amounted to more than a half.

Among the singular statements that have been put forth as to the cotton manufactures of America, one is, that the wages of labour are lower there than here! To dwell on the absurdity of such a statement would be an insult to the reader. But though it were true that wages were as low in Massachusetts as in England, that would afford no real ground for anticipating any formidable competition from America in this department. The price of cottons depends more on the profits of stock than on the wages of labour; and, so far as we know, it has not yet been alleged that the former are lower in America than here. Suppose an English and an American manufacturer have each 100,000*l.* vested in cotton mills, and in the floating stock required to carry on the business; if profits in England be 1 per cent. less than in America, the English manufacturer can afford, *cæteris paribus*, to sell his goods for 1,000*l.* less than the American. We are very far from insinuating or believing that this lowness of profit is an advantage; but whatever may be its influence in other respects, so long as it continues, it gives our manufacturers a decided superiority over those of every other country where profits are higher, in the manufacture and sale of all articles, such as cotton yarn and stuffs, principally produced by machinery. It is ludicrous, indeed, to suppose that a half-peopled country like America, possessed of boundless tracts of unoccupied land of the highest degree of fertility, should be able successfully to contend in manufacturing industry, with an old settled, fully peopled, and very rich country like Great Britain. The government which encourages such a misdirection of the public capital and industry, and those who suppose it can end in any thing else than ruin to the parties, are ignorant of the merest elements of the science of wealth.

The following results as to the state of the American cotton manufacture in 1840 are given in the census of that year.

Number of factories	1,240	Number of persons employed	72,112
Spindles	2,484,651	Value of manufactured articles	$ 44,360,433
Dyeing and printing works	129	Amount of capital invested	— 31,102,359

The following statement, though not official, is said to represent with considerable accuracy the consumption of cotton in the American manufactures in the 16 years ending with 1841-42.

Years.	Cotton consumed.	Years.	Cotton consumed.	Years.	Cotton consumed.
1841-42	bales 267,800	1836-37	222,540	1830-31	bales 189,142
1840-41	— 217,288	1835-36	— 236,733	1829-30	— 126,512
1839-40	— 295,193	1834-35	— 216,868	1828-29	— 118,853
1838-39	— 276,018	1833-34	— 196,413	1827-28	— 120,502
1837-38	— 246,063	1832-33	— 194,413	1826-27	— 103,483
		1831-32	178,800		

Little as we have to fear from American, we have still less to fear from Swiss or Saxon competition. America has some advantage over England in the greater cheapness of the raw material; but Switzerland and Saxony, situated almost in the centre of Europe, can only draw their supplies of raw cotton by a distant land carriage by way of Hamburg, Marseilles, and Genoa; and we have the best authority for affirming, that a bale of cotton may be conveyed at a less expense from Charleston to Manchester, than from Genoa, Amsterdam, or Hamburg, to Switzerland or Saxony. Switzerland is altogether destitute of coal; all that she does is done by water power, and that is said to be nearly exhausted. It is not, however, to be wondered at that the Swiss and Saxons should have succeeded in supplying their own markets, and some of those immediately contiguous, with certain species of yarn; or that they should export hosiery and such other articles as they can manufacture on a small scale, in their cottages; but it is idle to suppose that they should ever be able to do much more than this.

It was stated before a committee of the House of Commons, in 1833, that the French cotton manufacture had increased, between 1812 and 1826, in the ratio of 310 per cent., while in England its increase was only 270 per cent. This statement was, we believe, accurate as far as it went; and yet it was eminently calculated, though, no doubt, without being so intended, to mislead. In 1812, and for some years previously, it was hardly possible to import cotton wool into France, and its price was quite excessive. When, therefore, the manufacturers got wool after the return of peace at an ordinary price, it was impossible, seeing that foreign cottons are excluded from France, but that the manufacture should increase with extraordinary rapidity, until the home demand was pretty well supplied. An advance of this sort is assuredly no proof of the capacity of France to prosecute the manufacture with advantage, or to export cottons without the aid of a bounty. Had the manufacture gone on increasing in the above ratio, down to the present time, the circumstance might have justly excited attention; but such has not been the case. No doubt it has made considerable progress in the interval; which is not to be wondered at, seing the increase of wealth and population in France, and seeing also the peculiar facilities which the French enjoy for smuggling cotton stuffs and other prohibited products across the Pyrenees into Spain, where they are taken off in large quantities. But until the French government reduces or repeals the duties on raw cotton, and on foreign iron and other articles indispensable to the cheap construction of cotton factories, it were idle to suppose that, how ingenious soever, the French should be formidable competitors in the production of cottons. We subjoin

An Account of the Quantities of Cotton Wool annually imported into France and taken for Consumption, from 1826 down to 1840, both inclusive; specifying, also, the Amount of Duty derived from the same.

Years.	Quantities of Cotton.				Value.	Duty levied.
	From Turkey and Egypt.	From United States.	From Brazil and other Countries.	Total.		
	Kils.	*Kils.*	*Kils.*	*Kils.*	*Frs.*	*Frs.*
1826	5,976,000	21,924,000	4,117,000	32,014,000	56,354,000	7,997,000
1827	4,291,000	21,880,000	2,513,000	28,684,000	51,919,000	6,633,000
1828	3,143,000	21,617,000	2,615,000	27,375,000	49,144,000	6,019,000
1829	3,117,000	25,944,000	2,808,000	31,769,000	57,140,000	7,004,000
1830	2,958,000	23,150,000	3,172,000	29,260,000	51,761,000	6,354,000
1831	3,495,000	22,778,000	2,026,000	28,229,000	49,442,000	6,020,000
1832	4,312,000	27,385,000	1,861,000	33,556,000	58,443,000	7,210,000
1833	4,495,000	28,819,000	2,416,000	35,660,000	62,290,000	7,576,000
1834	2,156,000	31,587,000	2,157,000	35,934,000	65,051,000	7,933,000
1835	3,844,000	34,323,000	2,594,000	38,761,000	67,732,000	8,288,000
1836	4,788,000	36,368,000	3,974,000	44,125,000	76,813,000	9,338,000
1837	3,598,000	36,469,000	2,943,000	42,810,000	76,221,000	9,733,000
1838	4,586,000	43,780,000	2,893,000	51,259,000	89,465,000	10,853,000
1839	2,513,000	34,832,000	2,683,000	40,028,000	71,905,000	8,621,000
1840	2,130,000	48,581,000	2,231,000	52,942,000	94,006,000	11,345,000

It is supposed by some, that the competition we have to fear from the Continent does not consist so much in the spinning as in the weaving of cottons; and that the probability is, that our exports of yarn will increase, and our exports of manufactured goods diminish. We do not, however, imagine there is much in this. Our power looms are superior to those of any other country; and it is unhappily true, that the wages of hand loom weavers here are sunk below the general level of Europe. There is not, in fact, with the exception of the dyes, a single particular connected with the cotton manufacture in which we have not a manifest superiority over the Swiss, Saxons, French, Prussians, and every Continental nation. Certainly, however, we are inferior to some of them in the brilliancy and durability of their dyes; and this circumstance occasioned a considerable demand for German and Swiss printed cottons in many parts of the East, where vivid colours are held in the highest estimation. But even there, the greater cheapness of our goods is proving an overmatch for the greater brilliancy of those of our rivals

On the whole, therefore, we see no reason to think that the British cotton manufacture has reached, much less passed, its zenith. At the same time, however, it can hardly be necessary to observe, considering the vast importance of the trade, that while, on the one

hand, nothing should be left undone that may serve to widen its foundations, and to promote its prosperity, on the other, nothing should be attempted that may, by possibility, have an opposite effect. The subsistence of 1,400,000 people is not to be endangered on slight grounds. The abuses even of such a business must be cautiously dealt with, lest, in eradicating them, we shake or disorder the whole fabric. No doubt, however, the case of children employed in the cotton factories is one that calls fairly for legislative regulation; and we believe that the regulations that have been enacted, carried out as they have been under the vigilant superintendence of the inspectors, have been productive of much good.

5. Statutory Regulations as to the Employment of Children in Factories.

No statutory restrictions respecting the employment of children in the mills and factories of the United Kingdom existed until the year 1802, when an act of parliament was passed (42 Geo. 3.) for the preservation of the health and morals of apprentices and others employed in cotton and other factories, and directing the local magistrates to report whether the factories were conducted according to law, and to adopt such sanitary regulations as they might think fit. This act was followed, in 1816, by an act, generally called Sir Robert Peel's Act, imposing various regulations on the employment of children in cotton mills.

Both of these acts were repealed in 1831, by an act 1 & 2 Will. 4. c. 39., commonly called Sir John Hobhouse's Act, which provided, that in cotton factories, to which alone it related, no child could legally be employed till it had attained the age of 9 years; and that no person under 18 years of age could be suffered to remain in the factories more than 12 hours in one day; and that on Saturdays they should only be employed in the factories for 9 hours.

Sir John Hobhouse's act was repealed in 1833, by the act 3 & 4 Will. 4. c. 103., which contains the following provisions, comprehending the whole statutory regulations at present applicable to cotton and other factories in the United Kingdom: —

1. That after the 1st of January, 1834, no person under 18 years of age shall be allowed to work in the night, that is, between ½ past 8 P. M. and ½ past 5 A. M., in any cotton or other factory in which steam or water, or any other mechanical power, is or shall be used to propel the machinery, excepting in lace factories.

2. That no person under 18 shall be employed more than 12 hours in one day, nor more than 69 hours in one week.

3. That there shall be allowed, in the course of every day, not less than 1½ hour for meals to every person restricted to the performance of 12 hours' work.

4 That after the 1st of January, 1834, no child, except in silk mills, shall be employed, who shall not be 9 years old.

5 That after the 1st of March, 1834, no child, except in silk mills, shall be employed in any factory more than 48 hours in any one week, nor more than 9 hours in any day, who shall not be 11 years old; nor after the 1st of March, 1835, who shall not be 12 years old; nor after the 1st of March, 1836, who shall not be 13 years old; and that these hours of work shall not be exceeded, even if the child has worked during the day in more factories than one.

6. That children and young persons, whose hours of work are regulated, shall be entitled to 2 holidays and 8 half holidays in every year.

7. That children, whose hours of work are restricted to 9 hours a day, are not to be employed without obtaining a certificate from a physician or surgeon, certifying that they are of the ordinary strength and appearance of children of the age before mentioned, which certificate is to be countersigned by some inspector or justice.

8. That it shall be lawful for his Majesty to appoint, during pleasure, 4 persons to be inspectors of factories, with extensive powers, as magistrates, to examine the children employed in the factories, and to inquire respecting their condition, employment, and education; and that one of the secretaries of state shall have power, on the application of an inspector, to appoint superintendents to superintend the execution of the act.

9. That those inspectors are to make all rules necessary for the execution of the act, and to enforce the attendance at school, for at least 2 hours daily out of 6 days in the week, of children employed in factories from whose weekly wages a deduction, not exceeding 1 penny in every shilling, for schooling shall be made.

10. That no child shall be employed, who shall not on Monday of every week, give to the factory master a certificate of his or her attendance at school for the previous week.

11. That the interior walls of every mill shall be whitewashed every year.

12. That a copy or abstract of the act shall be hung up in a conspicuous part of every mill.

13. That the inspectors shall regularly, once a year, report their proceedings to one of the secretaries of state

The act also contains regulations extending the hours of work where time shall be lost by the want of, or an excess of, water, in mills situated upon a stream of water; respecting the steps to be taken in order to obtain regular certificates of age for the children requiring them; respecting the erection of schools, where necessary; and respecting the proceedings to be had before inspectors and magistrates for enforcing the act, and the right to appeal from their decisions.

COWHAGE, or COWITCH (Hind. *Kiwach*), the fruit or bean of a perennial climbing plant (*Dolichos pruriens* Lin.). It is a native of India, as well as of several other Eastern countries, and of America. The pod is about 4 or 5 inches long, a little curved, and contains from 3 to 5 oval and flattish seeds; the outside is thickly covered with short, bristly, brown hairs, which, if incautiously touched, stick to the skin, and occasion intolerable itching. Syrup thickened with the hairs is prescribed in certain complaints. — (*Ainslie's Materia Indica.*)

COWRIES (Ger. *Kauris*; Du. *Kauris*; Fr. *Coris, Cauris, Bouges*; It. *Cori, Porcellane*; Sp. *Bucios Zimbos*) are small shells brought from the Maldives, which pass current as coin in smaller payments in Hindostan, and throughout extensive districts in Africa. They used to be imported into England previously to the abolition of the slave trade, in which they were subsequently employed. They are an article of trade at Bombay. The best are small, clean, and white, having a beautiful gloss; those that are yellow, large, and without lustre, should be rejected. The freight is calculated at 20 cwt. to the ton. — (*Milburn's Orient. Com.*)

CRANBERRIES, or RED WHORTLEBERRIES, the fruit of a moss plant,

the *Vaccinium oxycoccus* of Linnæus. The berries are globular, about the size of currants; are found in mossy bogs in different parts of Scotland, but not in great numbers: they were once common in Lincolnshire, and the northern parts of Norfolk; but since the bogs have been drained and cultivated, they are rarely met with. Cranberries have a peculiar flavour, and a sharp, acid, agreeable taste; they are easily preserved, and are extensively used in making tarts. They are very abundant in North America, and in the northern parts of Russia; the latter being of a superior quality. We import from 30,000 to 35,000 gallons annually. It is said that some very fine ones have recently been brought from New South Wales.

CRAPE (Fr. *Crêpe*; Ger. *Flohr*, *Krausflohr*; It. *Espumilla*, *Soplillo*; Rus. *Flior*; Sp. *Crespon*), a light transparent stuff, in manner of gauze, made of raw silk gummed and twisted on the mill and woven without crossing. It is principally used in mourning. Crape was originally manufactured in Bologna; but that made in this country is now deemed superior to any made in Italy.

CREAM OF TARTAR. See ARGAL.

CREDIT, the term used to express the trust or confidence placed by one individual in another, when he assigns him money, or other property in loan, or without stipulating for its immediate payment. The party who lends is said to give credit, and the party who borrows to obtain credit.

Origin and Nature of Credit. — In the earlier stages of society, credit is in a great measure unknown. This arises partly from the circumstance of very little capital being then accumulated, and partly from government not having the means, or not being sufficiently careful, to enforce that punctual attention to engagements so indispensable to the existence of confidence and credit. But as society advances, capital is gradually accumulated, and the observance of contracts is enforced by public authority. Credit then begins to grow up. On the one hand, those individuals who have more capital than they can conveniently employ, or who are desirous of withdrawing from business, are disposed to lend, or to transfer, a part or the whole of their capital to others, on condition of their obtaining a certain stipulated premium or interest for its use, and what they consider sufficient security for its repayment; and, on the other hand, there are always individuals to be met with, disposed to borrow, partly (and among merchants principally) in order to extend their business beyond the limits to which they can carry it by means of their own capital, or to purchase commodities on speculation, and partly to defray debts already contracted. These different classes of individuals mutally accommodate each other. Those desirous of being relieved from the fatigues of business find it very convenient to lend their capital to others; while such as are anxious to enlarge their businesses obtain the means of prosecuting them to a greater extent.

It is plain, that to whatever extent the power of the borrower of a quantity of produce or a sum of money, to extend his business, may be increased, that of the lender must be equally diminished. The same portion of capital cannot be employed by two individuals at the same time. If A. transfer his capital to B., he necessarily, by so doing, deprives himself of a power or capacity of production which B. acquires. It is most probable, indeed, that this capital will be more productively employed in the hands of B. than of A.; for the fact of A. having lent it shows that he either had no means of employing it advantageously, or was disinclined to take the trouble; while the fact of B. having borrowed it shows that he conceives he can advantageously employ it, or that he can invest it so as to make it yield an interest to the lender, and a profit to himself. It is obvious, however, that except in so far as credit contributes, in the way now mentioned, to bring capital into the possession of those who, it may be fairly presumed, will employ it most beneficially, it conduces nothing to the increase of wealth.

The most common method of making a loan is by selling commodities on credit, or on condition that they shall be paid for at some future period. The price is increased proportionally to the length of credit given; and if any doubt be entertained with respect to the punctuality or solvency of the buyer, a further sum is added to the price, in order to cover the risk that the seller or lender runs of not receiving payment, or of not receiving it at the stipulated period. This is the usual method of transacting where capital is abundant, and confidence general; and there can be no manner of doubt that the amount of property lent in Great Britain, the Netherlands, and most other commercial countries, in this way, is infinitely greater than all that is lent in every other way.

When produce is sold in the way now described, it is usual for the buyers to give their bills to the sellers for the price, payable at the period when the credit is to expire; and it is in the effects consequent to the negotiation of such bills that much of that magical influence that has sometimes been ascribed to credit is believed to consist. Suppose, to illustrate this, that a paper-maker, A., sells to a printer, B., a quantity of paper, and that he gets his bill for the sum, payable at 12 months after date: B. could not have entered

into the transaction had he been obliged to pay ready money; but A., notwithstanding he has occasion for the money, is enabled, by the facility of negotiating or discounting bills, to give the requisite credit, without disabling himself from prosecuting his business. In a case like this, both parties are said to be supported by credit; and as cases of this sort are exceedingly common, it is contended that half the business of the country is carried on by its means. All, however, that such statements really amount to is, that a large proportion of those engaged in industrious undertakings do not employ their own capital, but that of others. In the case in question, the printer employs the capital of the paper-maker, and the latter employs that of the banker or broker who discounted the bill. This person had most likely the amount in spare cash lying beside him, which he might not well know what to make of; but the individual into whose hands it has now come, will immediately apply it to useful purposes, or to the purchase of the materials, or the payment of the wages of the workmen employed in his establishment. It is next to certain, therefore, that the transaction will have been advantageous. But still it is essential to bear in mind that it will have been so, not because credit is of itself a means of production, or because it can give birth to capital not already in existence; but because, through its agency, capital finds its way into those channels in which it has the best chance of being profitably employed.

The real advantage derived from the use of bills and bank-notes as money consists, as has been already shown, in their substituting so cheap a medium of exchange as paper, in the place of one so expensive as gold, and in the facilities which they give to the transacting of commercial affairs. If a banker lend A. a note for 100*l.* or 1,000*l.*, the latter will be able to obtain an equivalent portion of the land or produce of the country in exchange for it; but that land or produce was already in existence. The issue of the note did not give it birth. It was previously in some one's possession; and it will depend wholly on the circumstance of A.'s employing it more or less advantageously than it was previously employed, whether the transaction will, in a public point of view, be profitable or not. On analysing any case of this kind, we shall invariably find that all that the highest degree of credit or confidence can do, is merely to change the distribution of capital — to transfer it from one class to another. These transfers are occasionally, too, productive of injurious results, by bringing capital into the hands of spendthrifts: this, however, is not, except in the case of the credit given by shopkeepers, a very common effect; and there can be no doubt that the vast majority of regular loans are decidedly beneficial.

Abuses of the present Credit System in Great Britain. Means of obviating them. — The previous observations refer rather to the credit given to individuals engaged in business, who mean to employ the capital which they borrow in industrious undertakings, than to that which is given to individuals not so engaged, and who employ the advances made to them in supporting themselves and their families. In neither case is credit of advantage, unless it be granted with due discrimination, and with reference to the character, condition, and prospects of those receiving it. In this country, however, these considerations have been in a great measure lost sight of, in the granting of credit by shopkeepers and tradesmen of all descriptions. Owing to the competition of such persons, their extreme eagerness to secure customers, and the general indolence of opulent persons, which disinclines them to satisfy every small debt when it is contracted, the system of selling upon credit has become almost universal. Few among us think of paying ready money for any thing; seven tenths of the community are in the constant practice of anticipating their incomes; and there is hardly one so bankrupt in character and fortune as to be unable to find grocers, bakers, butchers, tailors, &c. ready to furnish him upon credit with supplies of the articles in which they respectively deal. We look upon this facility of obtaining accommodations as a very great evil. They are not, in one case out of five, of any real advantage to the parties receiving them, while they are productive of very pernicious results. The system tempts very many, and sometimes even the most considerate individuals, to indulge in expenses beyond their means; and thus becomes the most fruitful source of bankruptcy, insolvency, and bad faith. To guarantee themselves from the extraordinary risk to which such proceedings expose them, tradesmen are obliged to advance the price of their goods to a most exorbitant height; so that those who are able, and who really mean to pay the debts they contract, are, in fact, obliged to pay those of the hosts of insolvents and swindlers maintained by the present system. Many tradesmen consider themselves as fortunate, if they recover from two thirds to three fourths of the sums standing in their books, at the distance of several years.

The extraordinary extent to which the credit practice is carried may be learned from the inquiries of the Parliamentary Committee on Small Debts. It appears from them, that hatters, shoemakers, &c. in the metropolis, have often 4,000*l.* and upwards on their books in debts below 10*l.*, and that *five sixths of their book debts are below that sum!* A large proportion of these debts are irrecoverable; but owing to the artificial enhance-

ment of prices, those that are good are sufficient to indemnify the traders for the loss of the bad.

It is not easy, we think, to imagine any system better fitted to generate improvidence and fraud. The vast majority of those who become insolvent, or are imprisoned for debt, consist of labourers, artisans, half-pay officers, clerks in public and other offices, annuitants, &c. — persons whom no prudent shopkeeper would ever allow to get permanently into his debt. The following Table exhibits some of the effects resulting from this system : —

Number of Persons committed for Debt to the several Prisons of the Metropolis in the Year 1842, and the Sums for which they were committed.

	For Sums above 100*l.*	For Sums between 50*l.* and 100*l.*	For Sums between 50*l.* and 20*l.*	For Sums under 20*l.*	Total.	In Custody January 1. 1843.
Queen's Bench prison	132		96	160	460	
Fleet prison - -	59		26	12	120	288
Marshalsea prison -	2		29	70	106	
Whitecross Street prison	183	265	570	1929	2937	399
Horsemonger Lane prison	28	55	127	146	356	74
				2317	3979	761

It is time, certainly, that something effectual were done to put an end to such flagrant abuses — to a system that sends 1,929 persons to a single prison for debts under 20*l.* ! We do not mean to say or insinuate that credit may not frequently be given to the labouring classes with the best effects : but it is of its abuse that we complain, — of its being indiscriminately granted to every one ; to those whom it encourages to continue in a course of idleness and profligacy, as well as to those industrious and deserving persons to whom it may occasionally be of the greatest service. To secure the advantages of credit to the public, free from the enormous evils that result from its abuse, is an object of the highest importance ; and few things, we believe, would do so much to secure it, as the taking from creditors the power to arrest and imprison for debt. — (See BANKRUPTCY.)

It was stated in the House of Commons, (19th of February, 1827,) that in the space of 2½ years, 70,000 persons were arrested in and about London, at an expense to the parties, it may be estimated, of between 150,000*l.* and 200,000*l.* ! In 1827, in the metropolis and two adjoining counties, 23,515 warrants to arrest were granted, and 11,317 bailable processes were executed. Hence it may be concluded, that in this single year, within the above limits, no fewer than 12,000 persons were deprived of their liberty, on the mere allegation of others, without any *proof* that they owed them a farthing ! Well might Lord Eldon say that "*the law of arrest is a permission to commit acts of greater oppression and inhumanity than are to be met with in slavery itself*, and that the redress of such a grievance would not be attended with any fatal consequences to the country."

The following Table, which shows that 1,078 persons were committed to Horsemonger Lane prison, in 1842, for debts amounting, in all, to only 2,321*l.* 16*s.* 9¾*d.*, being, at an average, no more than 2*l.* 3*s.* 8¼*d.* each, proves that the discussions which have taken place with respect to the law of arrest and imprisonment, have not, in any material degree, lessened its mischievous operation. Whatever else may be dear in England, the fact that thousands of people are annually imprisoned for such miserable trifles shows that personal liberty is, at all events, abundantly cheap.

A Return from Horsemonger Lane Gaol of the Number of Debtors committed to the said Gaol, on Process out of Courts of Request, during the Year ending 1st of January, 1843 ; stating separately the aggregate Amount of Debts and Costs ; showing, in Classes, the Number confined from One to less than Ten Days, for Ten Days and less than Thirty, Fifty, Seventy, and One Hundred Days ; and stating, also, the Amount paid out of the County or other Rates, for the Maintenance and Support of such Prisoners, as accurately as possible.

Number committed in the year -		1,078	
	£	s.	d.
Aggregate amount of debts - -	2,321	16	9¾
costs - -	618	12	11
Number confined from 1 to less than 10 days		423	
for 10 and - 30		402	
30 - - 50		160	
50 - - 70		44	
70 - - 100		15	
100 days and more		34	
Amount paid out of the county rate for the maintenance and support of such prisoners, viz. : —	£	s.	d.
For victuals - -	256	17	0
Proportionate share of expenses of the gaol, for salaries of officers, bedding, fuel, water, rent, &c. - - - - -			

We defy any one to show that the law of arrest and imprisonment has a single good consequence to be placed as a set-off against the evils of which it is productive. Tradesmen depend, as is clearly evinced by the above statements, upon the despotical

power which it puts in their hands, to get them out of scrapes; and believe that the fear of being subjected to arrest will stimulate even the most suspicious portion of their debtors to make payment of their accounts. The records of our prisons, and of our insolvent and other courts, show how miserably these expectations are disappointed. We believe, indeed, that we are warranted in affirming that the more respectable classes of shopkeepers and tradesmen are now generally satisfied that the present system requires some very material modifications. The law of arrest and imprisonment is, in fact, advantageous to none but knaves and swindlers, and the lowest class of attorneys, who frequently buy up small accounts and bills, that they may bring actions upon them, and enrich themselves at the expense of the poor, by the magnitude of their charges. Such oppressive proceedings are a disgrace to a civilised country. Were the law in question repealed, credit would be granted to those only who deserved it; for, generally speaking, tradesmen, supposing they had nothing to trust to but their own discretion, would not deal, except for ready money, with those of whose character and situation they were not perfectly informed; and the difficulty under which all idle and improvident persons would thus be placed of obtaining loans, would do much to wean them from their vicious courses, and to render them industrious and honest. "Those," says Dr. Johnson, "who have made the laws, have apparently considered that every deficiency of payment is the crime of the debtor. But the truth is, that the creditor always shares the act, and often more than shares the guilt, of improper trust. It seldom happens that any man imprisons another but for debts which he suffered to be contracted in hope of advantage to himself, and for bargains in which he proportioned his profit to his own opinion of the hazard; and there is no reason why one should punish another for a contract in which both concurred."

The power of taking goods in execution for debts is also one that requires to be materially modified. At present, the household furniture of every man, and even the *implements used in his trade*, should there be nothing else to lay hold of, may be seized and sold in satisfaction of any petty claim. It seems to us quite clear that some limits should be set to this power; and that such articles as are indispensable either to the subsistence or the business of any poor man ought to be exempted from execution, and, perhaps, distress. The present practice, by stripping its victims of the means of support and employment, drives them to despair, and is productive only of crimes and disorders.

We are glad to observe that there seems to be a growing conviction among mercantile men, of the inconveniences arising from the present practice. A petition against imprisonment for small debts, subscribed by many of the most eminent merchants, manufacturers, bankers, &c. of the city of Glasgow, was presented to the House of Commons in 1833. It contains so brief, and at the same time so forcible, an exposition of the evils resulting from the present system, that we shall take the liberty of laying it before our readers.

"Your petitioners have been long and seriously impressed with the belief that very great evils have arisen and do arise from the imprisonment of debtors in Scotland, especially for small sums.

"The petitioners will not here question the policy of the existing laws which authorise the imprisonment of debtors for considerable sums, nor do they intend to object to the creditor retaining the fullest power over the property and effects of his debtor; but they are humbly of opinion that, in so far as these laws give creditors the power to imprison debtors for small sums, such as for 8*l*. and under, they are not only injurious to the public, and ruinous to the debtor, but even hurtful to the creditor himself.

"It would be a waste of time to dwell upon the hardship of subjecting debtors to imprisonment for small debts, contracted sometimes certainly under circumstances of real distress, but more frequently from the improper use of credit, with which they are too readily supplied. The creditor takes care that his profit shall be commensurate with his risk; and the debtor is induced to purchase freely, and at any price, that which he is not immediately called upon to pay: the creditor coolly and cruelly calculates upon the power which the law has granted him over the person of his debtor if he fail to discharge his debt to him, while the debtor forgets that, by the credit so imprudently afforded him, he is preparing the way for his own ruin, and that of all who have any dependence upon him.

"The total number of debtors imprisoned in the gaol of Glasgow alone, for debts of 8*l*. and under, was, in the year 1830, 353; in 1831, 419; and in 1832, 437; while the whole number of incarcerations in that gaol for sums of every description were, in the year 1830, 557; in 1831, 630; and in 1832, 696; the proportion of sums of 8*l*. and under being nearly two thirds of the whole on the average of these 3 years.

"To remedy these evils, your petitioners humbly submit that means should be adopted for the repeal of the laws at present in force, in so far as they sanction the recovery of small debts by imprisonment, reserving their effect in every other respect; the result of which would be, that credit for small sums would be greatly limited, if not entirely extinguished, and the poorer classes rendered more provident; and by purchasing with money at a cheaper rate what they now buy at an extravagant price, they would be enabled to procure for themselves additional comforts, from the more economical employment of their small incomes.

"May it therefore please your Honourable House to take this matter into your consideration, and to adopt such means as you in your wisdom shall see proper, to prevent the incarceration of debtors for sums under 8*l*., and thereby remove or greatly mitigate the evils of improvidence on the part of the debtor, and of oppression on the part of the creditor, which necessarily arise under the present system."

So reasonable a proposal, supported by such conclusive statements, could not fail to make a deep impression; and a bill was soon after introduced, and passed into a law, (stat. 6 & 7 Will. 4. cap. 70.) taking away the power of imprisonment in Scotland for debts under 8*l*. 6*s*. 8*d*. over and above interest and expenses, except in cases of fraud. This bill is admitted to have been eminently beneficial; and it is to be hoped that the

advantages of which it has been productive may lead to the extension and general application of its principle.

Propriety of placing all small Debts beyond the Pale of the Law. — The taking away the power of arrest and imprisonment, except in the case of fraudulent bankruptcy, would certainly be a material improvement upon the existing system. But we are satisfied that it does not go far enough; and that by far the most desirable and beneficial reform that could be effected in this department would be *to take away all action for debts under a given sum, as 50l. or 100l.* The only exception to this rule should be in the case of *claims for wages*, or labour done under executory contracts. To prevent the measure from being defeated, no action should be granted on bills under *50l.* or *100l.*, except upon those drawn by or upon regular bankers. This would be a radical change certainly; but we are fully satisfied that it would be highly advantageous to every class of the community, and most of all to labourers, retail dealers, and small tradesmen. It would protect the former from oppression, at the same time that it would tend powerfully to render them more provident and considerate; it would teach the latter to exercise that discretion in the granting of credit which is so very indispensable; and it would be publicly beneficial, by strengthening the moral principle, and making the contraction of debts for small sums, without the means of paying them, at once difficult and disgraceful.

We agree entirely in opinion with those who think that it is to no purpose to attempt to remedy the defects now pointed out, by multiplying courts and other devices for facilitating the speedy recovery of small debts. This is beginning at the wrong end; or rather it is attempting to obviate the influence of one abuse by instituting another. No wise statesman will ever be easily persuaded to fill the country with petty local courts; for these, when not absolutely necessary, are the merest nuisances imaginable; and he would, at all events, exert himself, in the first instance, to do away, in so far as possible, with the circumstances that make individuals resort to them. But it is certain that nine tenths of the cases in county courts originate in questions as to simple contract debts under *50l.*; and were such debts placed, as they ought to be, beyond the pale of the law, the courts would be wholly unnecessary. Our object ought not to be to provide means for enforcing the payment of trifling debts, but *to prevent their contraction.* We believe, indeed, that, instead of lessening, the multiplication of district courts will materially aggravate, all the evils of the present credit system. The belief that they may readily enforce their claims by resorting to them will make shopkeepers and tradesmen still more disposed than at present to give credit, while the unprincipled, the inconsiderate, and the necessitous will eagerly grasp at this increased facility. What there is of caution amongst our retail dealers is in no inconsiderable degree owing to the want of those petty tribunals so many are anxious to have universally established. The more they are increased, the less will caution prevail. But instead of diminishing this virtue, — for such it really is, — it cannot be too much increased. Nothing will ever deter those who ought not to obtain credit from taking it while in their power; but those who give it may be made to exercise greater discretion; they may be made to know that it is a private transaction between themselves and those to whom they grant it; and that in the case of petty debts they have only their own sagacity to look to, such transactions not being cognizable by law. A measure of the sort here proposed would not, as some appear to imagine, annihilate credit. It would, no doubt, annihilate that spurious indiscriminating species of credit, that is as readily granted to the spendthrift and prodigal, as to the frugal and industrious individual; but to the same extent that it deprived the former of the means of obtaining accommodation, it would extend those of the latter. Nothing short of this — nothing but the placing all small debts beyond the pale of the law — will ever fully impress tradesmen with a conviction of the vast advantages that would result to themselves from their withdrawing their confidence from courts and prisons, and preventing every one from getting upon their books, of whose situation and circumstances they are not fully aware; nor will anything else be able completely to eradicate the flagrant abuses inherent in the present credit system, and which have gone far to render it a public nuisance.

One of the worst consequences of the present system is the sort of thraldom in which it keeps thousands of labourers and other individuals, whom the improper facilities for obtaining credit originally led into debt. Such persons dare not leave the shops to which they owe accounts; and they dare neither object to the quality of the goods offered to them, nor to the prices charged. Dr. Johnson has truly observed, that "he that once owes more than he can pay, is often obliged to bribe his creditor to patience by increasing his debt. Worse and worse commodities at a higher and higher price are forced upon him; he is impoverished by compulsive traffic; and at last overwhelmed in the common receptacles of misery by debts which, without his own consent, were accumulated on his head." By taking away all right of action upon small debts, this system of invisible but substantial coercion would be put an end to. The tradesman would

take care who got, in the first instance, upon his books; and instead of forcing articles upon him, would cease to furnish him with any unless he found he was regular in making his payments; while the customer to whom credit was of importance would know that his only chance of obtaining it would depend upon his character and reputation for punctuality. The abuses of the sort now alluded to, that grew out of what has been denominated the truck system, justly occasioned its abolition; but these were trifling compared with those that originate in the bringing of petty debts within the pale of the law.

When the former edition of this work was published, we were not aware that it had been previously proposed to take away all action for debts under 50*l.* or 100*l.*; but we have since met with a pamphlet, entitled *Credit Pernicious*, published in 1823, in which this plan is proposed and ably supported. There are also some valuable remarks and observations on the topics now treated of, in the *Treatise on the Police, &c. of the Metropolis*, by the author of the "Cabinet Lawyer," pp. 114—134.

CREW, the company of sailors belonging to any ship or vessel No ship is admitted to be a British ship, unless duly registered and navigated as such by a crew, *three fourths* of which are British subjects, besides the master. —(3 & 4 *Will.* 4. c. 54. § 12.) The master or owners of any British ship having a foreign seaman on board not allowed by law, shall for every such seaman forfeit 10*l.*; unless they can show, by the certificate of the British consul, or of two British merchants, or shall satisfactorily prove, that the requisite number of British seamen could not be obtained at the place where the foreign seaman was taken on board. It is also ordered that the master of every British vessel arriving from the West Indies shall deliver, within 10 days after arrival, to the Custom-house, a list of the crew on board at the time of clearing out from the United Kingdom, and of arrival in the West Indies, and of every seaman who has deserted or died during the voyage, and the amount of wages due to each so dying, under a penalty of 50*l.* —(3 & 4 *Will.* 4. c. 54. § 19.; 3 & 4 *Will.* 4. c. 52. § 16.)

CUBEBS (Ger. *Kubeben*; Fr. *Cubebes*; It. *Cubebi*; Sp. *Cubebas*; Rus. *Kubebü*; Lat. *Piper Cubeba*; Arab. *Kebābeh*; Javan. *Kumunkus*; Hind. *Cubab-chinie*), the produce of a vine or climber, the growth of which is confined exclusively to Java. It is a small dried fruit, like a pepper corn, but somewhat longer. Cubebs have a hot, pungent, aromatic, slightly bitter taste; and a fragrant, agreeable odour. They should be chosen large, fresh, sound, and the heaviest that can be procured. The duty on cubebs was reduced in 1842 from 6*d.* to 1*d.* per lb., and in that year the quantity entered for home consumption amounted to 67,093 lbs., producing a nett revenue of 500*l.* 17*s.* 4*d.* Their price in the London market, in bond, varied, in June 1843, from 1*l.* 12*s.* to 2*l.* per cwt.

CUCUMBER, a tropical plant, of which there are many varieties, largely cultivated in hothouses in England.

CUDBEAR, a purple or violet coloured powder used in dyeing violet, purple, and crimson, prepared from a species of lichen (*Lichen tartareus* Lin.), or crustaceous moss, growing commonly on limestone rocks in Sweden, Scotland, the north of England, &c. About 130 tons of this lichen are annually exported from Sweden. It commonly sells in the port of London for about 20*l.* per ton; but to prepare it for use it must be washed and dried; and by these operations the weight is commonly diminished a half, and the price, in effect, doubled. Though possessing great beauty and lustre at first, the colours obtained from cudbear are so very fugacious, that they ought never to be employed but in aid of some other more permanent dye, to which they may give body and vivacity. In this country it is chiefly used to give strength and brilliancy to the blues dyed with indigo, and to produce a saving of that article; it is also used as a *ground* for madder reds, which commonly incline too much to yellow, and are made *rosy* by this addition. The name cudbear was given to this powder by Dr. Cuthbert Gordon, who, having obtained a patent for the preparation, chose in this way to connect it with his own name.—(*Bancroft, Philosophy of Permanent Colours*, vol. i. pp. 300—304.)

CUMMIN SEED (Ger. *Kumin*; Fr. *Cumin*; It. *Comino, Cumino*; Sp. *Comino*; Arab. *Kemun*), the seeds of an annual plant (*Cuminum Cyminum* Lin.), a native of Egypt, but extensively cultivated in Sicily and Malta. They have a strong, peculiar, heavy odour, and a warm, bitterish, disagreeable taste. They are long and slender.

CURRANTS (Fr. *Raisins de Corinthe*; Ger. *Korinthen*; It. *Uve passe di Corinto*; Lat. *Passulæ Corinthiacæ*; Rus. *Korinka, Opsek*; Sp. *Pasas de Corinto*), a small species of grape, largely cultivated in Zante, Cephalonia, and Ithaca, of which islands they form the staple produce; and in the Morea, in the vicinity of Patras. The plant is delicate; and as 6 or 7 years must elapse, after a plantation has been formed, before it begins to produce, its cultivation requires a considerable outlay of capital. The crop is particularly liable to injury from rains in harvest, and is altogether of a very precarious description. After being dried in the sun, the currants are exported packed in large butts. They are in extensive demand in this country; and, when mixed with flour and suet, make a dish that is peculiarly acceptable to the lower classes. But, as if it had been intended

to put them beyond the reach of all but the richest individuals, they were burdened, down to 1834, with the exorbitant duty of 44*s.* 4*d.* a cwt. In that year, however, the duty was reduced a half, or to 22*s.* 2*d.* a cwt., and their importation has been in consequence very materially increased. Inasmuch, however, as the price of currants in bond varies from about 20*s.* to 35*s.* a cwt., it is plain that the duty is still too high; and it is no doubt mainly owing to this that the consumption has not increased to a decidedly greater extent than it has done. The duty should not in fact exceed 10*s.* or 12*s.* a cwt.; and we are well convinced, that were it reduced to this amount, its produce would in no very lengthened period, be about as great as ever; while, at the same time, a very considerable benefit would be conferred on the consumers in this country, and a powerful stimulus given to the trade with Greece and the Ionian islands, currants being the principal product which they have to export.

Account of the Quantities of Currants entered for Consumption in the United Kingdom in 1840, 1841, and 1842, and of the Amount of Duty received thereon, with the Averages for the above Three Years.

	Quantities.	Duty.
	Cwts. qrs. lbs.	*£ s. d.*
1840 - - - -	164,921 0 22	188,780 1 7
1841 - - - -	190,071 1 21	221,197 6 4
1842 - - - -	196,515 1 4	228,701 16 0
Average of 3 years - -	183,835 3 25	212,894 1 2½

No abatement of duties is made on account of any damage received by currants.

Currants, the produce of Europe, are not to be imported for home use except in British ships, or in ships of the country of which they are the produce, or of the country whence they are imported. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

A Treasury letter of the 30th of March, 1816, directs the following tares to be allowed, with liberty to the merchant and officers to take the actual tare when either party is dissatisfied.

Currants in casks from Zante -	- 13 per cent.
Leghorn -	- 10 —
Trieste -	- 10 —

CUSTOM-HOUSE, the house or office where commodities are entered for importation or exportation; where the duties, bounties, or drawbacks payable or receivable upon such importation or exportation are paid or received; and where ships are cleared out, &c.

For information as to the proceedings necessary at the Custom-house on importing or exporting commodities, see the article IMPORTATION AND EXPORTATION.

The principal British Custom-house is in London; but there are Custom-houses subordinate to the latter in all considerable sea-port towns.

CUSTOMS, are duties charged upon commodities on their being imported into or exported from a country.

Customs duties seem to have existed in every commercial country. The Athenians laid a tax of a fifth on the corn and other merchandise imported from foreign countries, and also on several of the commodities exported from Attica. The *portoria*, or customs payable on the commodities imported into, and exported from, the different ports in the Roman empire, formed a very ancient and important part of the public revenue. The rates at which they were charged were fluctuating and various, and little is now known respecting them. Cicero informs us, that the duties on corn exported from the ports of Sicily were, in his time, 5 per cent. Under the Imperial government, the amount of the *portoria* depended as much on the caprice of the prince as on the real exigencies of the state. Though sometimes diminished, they were never entirely remitted, and were much more frequently increased. Under the Byzantine emperors, they were as high as 12½ per cent. — (*Encyc. Brit.* art. *Taxation.*)

Customs duties seem to have existed in England before the Conquest; but the king's claim to them was first established by stat. 3 Edw. 1. These duties were, at first, principally laid on wool, woolfels (sheep-skins), and leather when exported. There were also extraordinary duties paid by aliens, which were denominated *parva costuma*, to distinguish them from the former, or *magna costuma*. The duties of tonnage and poundage, of which mention is so frequently made in English history, were custom duties; the first being paid on wine by the tun, and the latter being an *ad valorem* duty of so much a pound on all other merchandise. When these duties were granted to the Crown, they were denominated *subsidies*; and as the duty of poundage had continued for a lengthened period at the rate of 1*s.* a pound, or 5 per cent., a subsidy came, in the language of the customs, to denote an *ad valorem* duty of 5 per cent. The *new subsidy* granted in the reign of William III. was an addition of 5 per cent. to the duties on most imported commodities.

The various custom duties were collected, for the first time, in a book of rates published in the reign of Charles II.; a new book of rates being again published in the reign of George I. But, exclusive of the duties entered in these two books, many more had been imposed at different times; so that the accumulation of the duties, and the complicated regulations to which they gave rise, were productive of the greatest embarrassment. The evil was increased by the careless manner in which new duties were added to the old; a percentage being sometimes added to the original tax; while at

other times the commodity was estimated by a new standard of bulk, weight, number, or value, and charged with an additional impost, without any reference to the duties formerly imposed. The confusion arising from these sources was still further augmented by the special appropriation of each of the duties, and the consequent necessity of a separate calculation for each. The intricacy and confusion inseparable from such a state of things proved a serious injury to commerce, and led to many frauds and abuses.

The Customs Consolidation Act, introduced by Mr. Pitt in 1787, did much to remedy these inconveniences. The method adopted was, to abolish the existing duties on all articles, and to substitute in their stead one single duty on each article, equivalent to the aggregate of the various duties by which it had previously been loaded. The resolutions on which the act was founded amounted to about 3,000. A more simple and uniform system was at the same time introduced into the business of the Custom-house. These alterations were productive of the very best effects; and several similar consolidations have since been effected; particularly in 1825, when the various statutes then existing relative to the customs, amounting, including parts of statutes, to about 450, were consolidated and compressed into only 11 statutes of a reasonable bulk, and drawn up with great perspicuity. They were again amended in 1833, by the acts 3 & 4 Will. 4. cap. 51. 52. 56. and 58.; since which they have not been very materially varied.

The Board of Customs consists at present (1843) of 9 commissioners. The Treasury may, if they see cause, appoint 1 commissioner and 2 assistant commissioners, to act for Scotland and Ireland.

Officers of customs taking any fee or reward, whether pecuniary or of any other sort, on account of any thing done, or to be done, by them in the exercise of their duty, from any one, except by the order or permission of the commissioners of the customs, shall be dismissed their office; and the person giving, offering, or promising such gratuity, fee, &c. shall forfeit 100*l.*

Any officer of customs who shall accept of any bribe, recompence, or reward, to induce him to neglect his duty, or to do, conceal, or connive at any act whereby any of the provisions of the customs laws shall be evaded, shall be dismissed the service, and be rendered incapable of serving his Majesty in future in any capacity whatever; and the person offering such bribe, recompence, &c. shall, whether the offer be accepted or not, forfeit 500*l.*

Customs duties, like all duties on particular commodities, though advanced in the first instance by the merchant, are ultimately paid by those by whom they are consumed. When a government lays a duty on the foreign commodities which enter its ports, the duty falls entirely on such of its own subjects as purchase these commodities; for the foreigners would cease supplying its markets with them, if they did not get the full price of the commodities, exclusive of the tax; and, for the same reason, when a government lays a duty on the commodities which its subjects are about to export, the duty does not fall on them, but on the foreigners by whom they are bought. If, therefore, it were possible for a country to raise a sufficient revenue by laying duties on exported commodities, such revenue would be wholly derived from others, and it would be totally relieved from the burden of taxation, except in so far as duties might be imposed by foreigners on the goods it imports from them. Care, however, must be taken, in imposing duties on exportation, not to lay them on commodities that may be produced at the same, or nearly the same, cost by foreigners; for the effect of the duty would then be to make the market be supplied by others, and to put an entire stop to their exportation. But in the event of a country possessing any decided natural or acquired advantage in the production of any sort of commodities, a duty on their exportation would seem to be the most unexceptionable of all taxes. If the Chinese chose to act on this principle, and had the power, they might derive a considerable revenue from a duty on exported teas, which would fall entirely on the English and other foreigners who buy them. The coal and tin, and perhaps, also, some of the manufactured goods produced in this country, seem to be in this predicament.

The revenue derived from the custom duties in 1590, in the reign of Elizabeth, amounted to no more than 50,000*l.* In 1613, it had increased to 148,075*l.* 4 of which no less than 109,572*l.* were collected in London. In 1660, at the Restoration, the customs produced 421,582*l.*; and at the Revolution, in 1688, they produced 781,987*l.* During the reigns of William III. and Anne, the customs revenue was considerably augmented, the nett payments into the exchequer in 1712 being 1,315,423*l.* During the war terminated by the peace of Paris in 1763, the nett produce of the customs revenue of Great Britain amounted to nearly 2,000,000*l.* In 1792, it amounted to 4,407,000*l.* In 1815, at the close of the war, it amounted to 11,360,000*l.*; and last year (1842) it amounted to 20,312,897*l.* 15*s.* 9*d.*, and including Ireland, to 22,523,513*l.* 5*s.*

Astonishing, however, as the increase of the customs revenue has certainly been, it is

not quite so great as it appears. Formerly the duties on some considerable articles, such as sugar, brandy, wine, &c. imported from abroad, were divided partly into customs duties charged on their importation, and partly into excise duties on their being taken into consumption. But these duties have since been wholly transferred to the customs; the facilities afforded, by means of the warehousing system, for paying the duties in the way most convenient for the merchant, having obviated the necessity of dividing them into different portions.

It will be seen from various articles in this work—(See BRANDY, GENEVA, SMUGGLING, TEA, TOBACCO, &c.) — that the exorbitant amount of the duties laid on many articles imported from abroad leads to much smuggling and fraud; and requires, besides, an extraordinary expense in many departments of the customs service, which might be totally avoided were these duties reduced within reasonable limits. This, however, is the business of government, and not of those intrusted with the management of the customs; and it would be unjust to the latter not to mention that this department has been essentially improved, during the last few years, in respect of economy, whatever may be thought of its efficiency. The following extracts from a letter to the Right Hon. H. Goulburn, ascribed to the present chairman of the Board of Customs (R. B. Dean, Esq.), give a brief but satisfactory view of the improvements that have been effected: —

"As regards the department of customs in 1792, the principal officers engaged in the receipt of the duties in the port of London were patent officers.

"The first Earl of Liverpool was collector inwards.

"The late Duke of Manchester, collector outwards.

"The Duke of Newcastle, and afterwards the Earl of Guilford, comptroller inwards and outwards.

"Lord Stowell, surveyor of subsidies and petty customs.

"These noblemen took no part in the official duties, but merely exercised the right of appointing deputies and clerks.

"Both principals and deputies were remunerated by fees. The patentees received the fees denominated patent, and the deputies retained the fees called the fees of usage for their own use. In addition to these fees, both deputies and clerks received fees for despatch.

"The same system prevailed throughout the whole department. The salaries of the officers were nominal; and the principal proportion of all official income was derived from fees. These fees were constantly varying both in rate and amount, and formed a continual source of dispute and complaint between the merchant and the officer.

"This system (after having been repeatedly objected to by various commissions of inquiry, and finally by the committee of finance in 1797,) was put an end to in the year 1812, by the act 51 Geo. 3. c. 71., by which all patent offices and fees were abolished, and compensation allowances granted to the patent officers, and fixed salaries established.

"The additional salaries granted under this arrangement amounted to about 200,000*l.*, and the temporary compensation allowances to about 40,000*l.* per annum.

"The fees abolished, and from which the public were relieved, amounted to about 160,000*l.* per annum.

"In addition to the amount of fees from which the public were relieved, various allowances made by the Crown to officers for quarantine, coal poundage, poundage on seizures, and many other incidental allowances, which did not appear on the establishment, were also abolished, and the salaries of every officer placed at one view upon the establishment.

"The effect of these salutary measures has been to give a great apparent increase to officers' salaries since 1791; and, upon a mere comparison of the establishment of 1792 with 1830, without the above explanation, it would appear that the pay of the officers had been most materially augmented, whereas, in point of fact, the difference is in the mode of payment: and the incomes of the officers at the present period (as compared with 1792) are in general less; and, consequently, the public are less taxed for the performance of the same duty *now* than in 1792.

"In the year 1792, the warehousing system had not been established. Officers were admitted at all ages, and there was no system of classification or promotion. The officers at the out-ports and in London were generally appointed through local influence; and were too often persons who had failed in trade, or had been in menial service, and who regarded their situations rather as a comfortable provision for their families than as offices for which efficient services were required. The superintendence and powers of the Board were cramped and interfered with by circumstances and considerations which prevented the enforcement of wholesome regulation. The whole system was so imperfect, so far back only as 1818, that a special commission was appointed to inquire into the department; and, upon the recommendation of that commission, various regulations have been adopted.

"The age of admission has been limited; a system of classification and promotion of officers, and a graduated scale of salaries, established throughout the whole department; and, by this means, local interference in the promotion of officers has been abolished; the attendance of officers increased, regulated, and strictly enforced; holidays reduced from 46 in the year to 3; viz. Good Friday, the King's birthday, and Christmas-day; useless oaths, and bonds, and forms of documents of various kinds, discontinued; increased facility and despatch afforded to the merchants' business; the accounts kept in the different offices, and returns of all kinds, revised, simplified, and reduced; and various minor regulations of detail established; the whole machinery of the department remodelled, and adapted to the trade and commerce of the country.

"In Ireland, the number of officers employed at all the ports, in the year ended the 5th of January, 1830, and the salaries and charges, did not much exceed the number and expense at the port of Dublin alone in 1818: and within the space of 11 years, nearly two thirds of the officers employed at the ports in Ireland have been discontinued; the number having been, in 1818, 1755; in 1829, 544: and an annual reduction in salaries and charges has been effected to the extent of 173,724*l.*; the amount having been, in 1818, 285,115*l.*; in 1829, 111,391*l.* (103,813*l.* of that amount having been reduced between the years 1823 and 1828), upon an expenditure of 285,115*l.*; and the receipts were nearly equal, in 1827, to those of 1818 and 1823, notwithstanding the total repeal of the cross Channel duties, amounting to about 340,000*l.* per annum, subsequent to the latter period.

"Already has government relinquished, it may be said, any interference with promotion in the department of the customs, and the road is open to advancement to the meritorious officer.

"Influence is no longer allowed to prevail; and in many cases which have recently occurred, and in which the patronage of government might have been fairly exercised, it has been at once abandoned, in order to give way to arrangements by which the services of some very intelligent and highly respectable officers, whose offices had been abolished, could be again rendered available with a material saving to the public.

"By a recent order from the Lords of the Treasury, of the 20th of February, 1830, the salaries of the commissioners, and of other officers, have been prospectively reduced, and directions given to revise the whole establishment in the spirit of that order, with a view to every possible reduction."

Defective Organisation of the Customs Establishment.—The above are great improvements, certainly, and reflect credit alike on the government and the board of customs. But it must, notwithstanding, be admitted that the existing constitution of the customs department is exceedingly defective. This is proved by the recent discovery of the extensive frauds that have been carried on in the port of London for a lengthened period, in the entry of silks, gloves, and other highly taxed articles, with the connivance of the customs officers. The origin, no doubt, of these, as of most similar frauds, may be traced to the exorbitancy of the duties, and to the consequent temptation which they hold out to smuggling on the part of the importers and the corruption of the officers. But, admitting this, it is, at the same time, abundantly clear that had anything like an efficient supervision and check been exercised by the commissioners and their superior officers, these frauds could not possibly have been carried on so long, or to such an extent. It would, however, appear that the former do little more than decide on the claims of private parties for a remission of duties, or on references made to them by the Treasury; and that they are in the habit of committing the enforcement of all the regulations necessary to be observed in the entry of goods to the care of the surveyors-general. But this, as it appears to us, is to abdicate or neglect what is by far the most important part of their peculiar duty. They are appointed to carry the Customs Acts into effect, so that every possible facility and accommodation may be given to the trader consistent with the security of the revenue; and it is impossible they can do this without being thoroughly acquainted with the details of every department, and with the abuses to which it is peculiarly liable. The commissioners could not but suspect that frauds of no common magnitude were taking place in the entry of goods in the Thames. Private parties had assured them that such was the case; and, independently of this, the fact must have been established to the conviction of every reasonable person by comparing the accounts given by the French custom-house of the exportation of silks, gloves, &c. from France for England, with the entries of the same in our customs returns; and it was the bounden duty of the commissioners, on seeing this extraordinary discrepancy, to have themselves immediately entered on a searching inquiry into its origin, and not have devolved that duty on others, or waited till the frauds were discovered by the confessions of some of those engaged in carrying them on.

We confess, too, that we are not of the number of those who think that the adoption of the suggestions in the Report of the commissioners appointed to inquire into the frauds in question will be of any material advantage. The Board of Commissioners should, in fact, be either wholly abolished, or reconstructed on a new principle. We

incline to think that, if they are to be continued, the better plan would be to reduce their numbers to three, and to make their duties entirely executive. The preferable plan, we believe, would be to refer all questions as to mitigation of duties and references from the Treasury on such matters, to a lawyer well versed in mercantile law, connected with the customs department, and acting on his undivided responsibility; so that the duties of the Board might be entirely confined to the enforcement of the laws and regulations for the collection of the revenue and the facilitating of trade.

We hope it will not be supposed, from anything now stated, that we have any wish to extenuate the guilt of the officers who have participated in the plunder of the revenue; but, how much and how deservedly soever we may blame them, we need not be surprised, considering their situation in life, the smallness of their salaries, and the carelessness of their superiors, that they should have yielded to the powerful temptations to which they have been exposed.

The smuggling that is still carried on, despite the officers, is principally occasioned by the oppressive duties on foreign spirits, tobacco, and a few other articles. It is difficult, indeed, seeing that these duties would be much more productive were they reduced to half their present amount, to discover for what purpose they are kept up, unless it be to encourage smuggling. The land guard, and the preventive water guard, costing together above 360,000*l.* a year, might be wholly dispensed with, were the duties now referred to adequately reduced.

In Scotland, separate Custom-houses seem to be multiplied to an absurd extent. Within these few years, indeed, a very considerable change for the better was effected in the Scotch Custom-house; but it is still susceptible of, and ought to be subjected to, great curtailment. Why should a collector, comptroller, cl[illegible]ks, &c. be hired to transact business that in many instances would not afford half employment for a single officer?

The reader will find, in the accounts of most imported articles of any consequence given in this work, statements of the customs duty paid on their importation. It may be gratifying, however, to have them all brought together in one point of view, as in the following Table: —

An Account of the Gross and Nett Produce of the Customs Revenue of Great Britain, in the Year ended 5th January, 1843; distinguishing the Amount collected on each Article usually contributing 1,000*l.* or more to the Revenue of the U. Kingdom.

List of Articles.	Gross Produce.									Nett Produce.								
	England.			Scotland.			Great Britain.			England.			Scotland.			Great Britain.		
Duties Inwards.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Acid, boracic	797	8	4	0	17	10	798	6	2	797	8	4	0	17	10	798	6	2
Almonds	6,171	8	4	414	3	8	6,585	12	0	6,091	12	1	413	8	11	6,505	1	0
Aloes	1,084	7	6	1	15	2	1,086	2	8	1,080	6	9	1	15	2	1,082	1	11
Animals, living, viz. oxen, bulls, cows, and calves	4,083	8	1	94	15	4	4,178	3	5	4,067	2	7	94	15	4	4,161	17	11
horses	286	17	3	1	1	0	287	18	3	286	17	3	1	1	0	287	18	3
Apples, raw	2,274	1	5	1,014	3	8	3,288	7	1	2,250	7	4	997	14	3	3,248	1	7
Arrow root	690	10	3	37	4	11	727	15	2	680	17	0	37	4	11	718	1	11
Ashes, pearl and pot	54	17	8	11	16	5	66	14	1	53	12	6	11	16	5	65	8	11
Bacon and hams	3,482	1	6	512	16	8	3,994	18	2	3,454	5	0	509	10	4	3,963	15	4
Barilla and alkali	44	16	4	0	3	2	44	19	6	34	2	7	0	3	2	34	5	9
Bark for tanners' or dyers' use	9,922	16	6	986	7	6	10,909	4	0	9,864	13	10	974	1	8	10,838	15	6
Baskets	1,534	9	1	6	5	10	1,540	14	11	1,533	5	11	6	5	10	1,538	9	9
Beef, salted (not corned)	2,169	13	11	890	17	1	3,060	11	0	2,168	13	9	889	18	6	3,058	12	3
Beer, spruce	4,436	5	0	1,229	13	8	5,665	18	8	4,430	16	11	1,227	10	10	5,658	7	9
Berries of all sorts	821	2	8	11	17	10	833	0	6	817	16	8	11	17	10	829	14	6
Bones of animals and fish (except whale-fins)	1,967	4	10	589	5	0	2,556	9	10	1,939	14	0	585	5	6	2,524	19	6
Books, foreign	7,772	14	9	47	0	9	7,819	15	6	7,700	6	7	47	0	9	7,747	7	4
Boots, shoes, and calashes	3,957	10	4	4	1	5	3,961	11	9	3,951	15	11	4	1	5	3,955	17	4
Boot fronts, entered since 9th July, 1842	2,373	5	0	9	12	6	2,382	17	6	2,373	5	0	9	12	6	2,382	17	6
Borax	161	14	6	-	-	-	161	14	6	161	14	6	-	-	-	161	14	6
Boxes of all sorts	1,279	14	4	47	5	0	1,326	19	4	1,245	17	0	47	5	0	1,293	2	0
Brass, manufactures of	1,081	18	4	6	8	8	1,088	7	0	1,059	17	4	6	8	8	1,066	6	0
Brimstone	7,235	11	0	1,081	0	11	8,316	11	11	7,210	0	10	1,059	18	7	8,269	19	5
Bristles	25,877	13	6	248	14	2	24,126	7	8	23,857	14	6	224	10	7	24,082	5	1
Bugles and glass beads	1,323	2	2	6	0	4	1,329	2	6	1,315	18	11	6	0	4	1,321	19	3
Butter	184,743	4	0	3,281	16	8	188,025	0	8	184,656	11	7	3,264	15	1	187,921	6	8
Canes of all sorts	1,440	8	4	11	13	9	1,452	2	1	1,439	17	10	11	13	9	1,451	11	7
Cantharides	434	2	2	2	13	10	436	16	0	434	2	2	2	13	10	436	16	0
Capers	2,694	14	11	17	1	11	2,711	16	10	2,686	10	4	17	1	11	2,703	12	3
Cassia lignea	1,579	15	10	93	8	11	1,673	4	9	1,570	10	7	93	8	11	1,663	19	6
Cheese	87,485	2	6	11,939	7	9	99,424	10	3	86,222	8	9	11,870	5	6	98,092	14	3
Chicory, and other vegetable matter applicable to the uses of chicory or coffee	19,891	3	11	1,321	4	8	21,212	8	7	19,890	2	11	1,321	4	8	21,211	7	7
China ware, porcelain, and earthenware	3,366	0	5	51	2	4	3,417	2	9	3,379	18	11	49	9	7	3,329	8	6
Clocks	6,252	0	5	211	10	7	6,463	11	0	6,161	14	1	211	10	7	6,373	4	8
Cloves	2,322	9	3	22	1	6	2,344	10	9	2,322	9	3	22	1	6	2,344	10	9
Cochineal, granilla, and dust	288	16	10	-	-	-	288	16	10	287	10	9	-	-	-	287	10	9
Cocoa, cocoa-nut husks, shells, and chocolate	14,055	16	1	10	2	9	14,065	18	10	14,055	12	9	10	2	9	14,065	15	6
Coffee	710,343	0	3	31,086	18	4	741,429	18	7	709,868	6	3	31,085	4	2	740,953	10	5
Copper, manufactures of	575	7	9	0	2	10	575	10	7	574	5	9	0	2	10	574	8	7
Copper ore	15,688	18	8	-	-	-	15,688	18	8	15,688	18	8	-	-	-	15,688	18	8
Coral beads	427	15	7	-	-	-	427	15	7	408	5	0	-	-	-	408	5	0
Cork, unmanufactured	13,568	9	10	2,479	5	5	16,047	15	3	13,506	5	3	2,468	10	1	15,974	15	4
Corn, grain, meal, and flour	1,196,018	15	8	110,919	13	10	1,306,938	9	6	1,185,961	5	2	108,708	13	0	1,294,669	18	2
Cotton manufactures (not otherwise described)	5,114	2	1	8	10	4	5,122	12	5	5,104	10	3	8	10	4	5,113	0	7
Cream of tartar	982	11	11	53	10	4	1,036	2	3	974	3	11	53	10	4	1,027	14	3
Cubebs	500	17	4	-	-	-	500	17	4	497	14	4	-	-	-	497	14	4
Currants	224,439	18	11	3,368	19	3	227,808	18	2	224,396	13	10	3,368	19	3	227,765	13	1

List of Articles.	Gross Produce.									Nett Produce.								
	England.			Scotland.			Great Britain.			England.			Scotland.			Great Britain.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Duties Inwards — continued.																		
Dye and hard woods; viz.																		
Boxwood - -	538	9	0	3	18	0	542	7	0	534	18	6	3	18	0	538	16	6
Cedar, under 8 in. square -	345	12	9	0	7	7	346	0	4	345	6	5	0	7	7	345	14	0
Fustic - - -	1,296	15	0	30	2	7	1,326	17	7	1,284	11	4	28	19	1	1,313	10	5
Logwood - -	2,493	19	0	96	15	9	2,595	14	9	2,493	7	2	96	13	2	2,590	0	4
Mahogany - -	12,112	14	7	1,136	0	1	13,248	14	8	12,377	6	8	1,135	16	1	13,513	2	9
Nicaragua - -	453	13	3	11	1	1	464	14	4	448	15	11	11	1	1	459	17	0
Rosewood - -	3,577	3	1	199	12	7	3,776	15	8	3,573	17	5	199	12	7	3,773	10	0
Eggs - - -	32,651	9	3	0	10	3	32,651	19	6	32,642	7	0	0	10	3	32,642	17	3
Elephants' teeth - -	275	13	10	-	-	-	275	13	10	275	13	10	-	-	-	275	13	10
Embroidery and needlework	6,969	11	5	5	7	0	6,974	18	5	6,922	17	0	5	7	0	6,928	4	0
Feathers for beds - -	744	4	0	31	2	11	775	6	11	744	4	0	31	2	11	775	6	11
ostrich - -	83	9	9	-	-	-	83	9	9	83	9	9	-	-	-	83	9	9
Figs - - -	17,276	19	5	473	16	2	17,750	15	7	17,263	5	6	461	8	6	17,724	14	0
Fish, anchovies - -	1,380	19	8	2	8	10	1,383	8	6	1,372	3	9	2	6	10	1,374	10	7
eels - - -	985	2	8	-	-	-	985	2	8	985	2	8	-	-	-	985	2	8
Flax and tow, or codilla of hemp and flax -	1,188	16	11	3,672	14	6	4,861	11	5	1,185	0	0	3,663	13	1	4,848	13	1
Flowers, artificial (not of silk)	7,296	5	11	2	12	11	7,298	18	10	7,295	18	0	2	12	11	7,298	10	11
Ginger, dry - -	2,804	3	3	21	0	3	2,825	3	6	2,764	18	3	21	0	3	2,785	18	6
Glass: viz. bottles, green or common, or covered with wicker - -	14,212	10	1	978	1	2	15,190	11	3	13,975	12	6	975	13	2	14,951	5	8
of all other sorts -	4,301	11	9	82	14	9	4,384	6	6	4,223	7	9	82	14	9	4,306	2	6
Grains, Guinea, or of Paradise	739	7	0	-	-	-	739	7	0	735	3	0	-	-	-	735	3	0
Grapes - - -	1,076	13	4	83	17	10	1,160	11	2	1,073	16	4	83	17	10	1,157	14	2
Gum, ammi and copal	295	12	10	2	10	0	298	2	10	292	5	11	2	10	0	294	15	11
Arabic - -	2,981	16	9	83	2	3	3,064	19	0	2,977	10	8	83	2	3	3,060	12	11
Senegal - -	1,585	9	11	-	-	-	1,585	9	11	1,550	15	11	-	-	-	1,550	15	11
lac dye - -	878	16	9	-	-	-	878	16	9	876	5	0	-	-	-	876	5	0
shellac - -	964	17	0	7	15	10	972	12	10	964	17	0	7	15	10	972	12	10
Hair, goats' - -	2,293	14	3	-	-	-	2,293	14	3	2,293	14	3	-	-	-	2,293	14	3
human - -	520	0	4	-	-	-	520	0	4	520	0	4	-	-	-	520	0	4
or goats' wool, manufactures of - -	1,772	[illegible]	9	2	13	7	1,775	2	4	1,769	18	5	2	13	7	1,772	12	0
Hats of chip, straw, bast, cane, or horse-hair -	2,146	7	3	1	5	2	2,147	12	5	2,135	7	7	1	5	2	2,136	12	9
Hemp - - -	2,242	17	8	351	13	5	2,594	11	1	2,223	10	0	350	1	7	2,573	11	7
Hides (including calf and kip) and pieces of hides tanned, tawed, or dressed	25,792	19	4	362	4	0	26,155	3	4	25,540	9	9	358	4	7	25,898	14	4
Honey - - -	3,651	5	0	14	11	4	3,666	16	4	3,651	12	6	14	11	4	3,666	3	10
Jalap - - -	1,636	14	7	122	9	7	1,759	4	2	1,634	11	7	121	3	3	1,755	14	10
Indigo - - -	617	3	6	-	-	-	617	3	6	617	3	6	-	-	-	617	3	6
Iron in bars, unwrought of all other sorts -	15,303	2	9	56	10	6	15,359	13	3	15,276	15	8	56	10	6	15,333	6	2
Isinglass - - -	16,122	5	10	691	0	6	16,813	6	4	16,110	9	9	689	14	3	16,800	4	0
Lace, thread - -	1,283	9	3	77	19	2	1,361	8	5	1,244	7	10	77	19	2	1,322	7	0
made by the hand, commonly called cushion or pillow lace, whether of cotton, silken, or linen thread -	3,588	2	2	12	14	10	3,600	17	0	3,588	2	2	12	14	10	3,600	17	0
	1,001	17	4	-	-	-	1,001	17	4	1,001	17	4	-	-	-	1,001	17	4
Lacquered and japanned ware	2,515	8	7	-	-	-	2,515	8	7	2,515	8	7	-	-	-	2,515	8	7
Lard - - -	883	2	1	32	14	10	915	16	11	880	0	2	31	0	2	911	0	4
Lead, black - -	3,20[illegible]	2	14	111	19	6	3,374	13	8	3,260	9	7	111	13	1	3,372	2	8
Leather gloves - -	2,295	12	2	23	13	5	2,319	5	7	2,295	9	0	23	13	5	2,319	2	5
Leather, manufactures of (except boots, shoes, and gloves)	27,462	16	8	2	0	7	27,464	17	3	27,462	6	2	2	0	7	27,464	6	9
	2,114	17	10	25	17	3	2,114	15	1	2,055	14	8	25	17	3	2,081	11	11
Lemons and oranges -	64,821	12	7	3,162	16	3	67,987	8	10	64,665	16	1	3,433	3	0	68,098	19	1
Linens - - -	10,[illegible]86	11	4	44	14	0	10,831	5	4	10,782	11	11	44	14	0	10,827	5	11
Liquorice juice and paste	13,[illegible]87	18	1	2,331	9	6	15,619	7	7	13,115	1	4	2,301	14	10	15,419	16	2
Mace - - -	2,457	5	5	3	2	8	2,460	8	1	2,453	5	5	3	2	8	2,456	8	1
Madder and madder root	5,[illegible]15	15	8	1,[illegible]47	15	11	7,063	11	7	5,[illegible]66	16	7	1,[illegible]01	7	4	6,[illegible]68	3	11
Mats and matting -	1,[illegible]43	10	[illegible]	151	19	5	1,[illegible]95	10	1	1,[illegible]36	12	4	151	2	5	1,[illegible]87	14	9
Molasses - - -	117,[illegible]28	12	[illegible]	136,291	15	2	254,[illegible]20	7	6	117,[illegible]78	18	5	136,[illegible]86	4	9	254,[illegible]65	3	2
Mother-o'-pearl shells, rough	839	13	9	-	-	-	839	13	9	813	15	1	-	-	-	813	15	1
Musical instruments -	3,[illegible]02	3	8	49	0	4	3,[illegible]51	4	0	3,[illegible]33	2	0	49	0	4	3,[illegible]82	2	4
Nutmegs - - -	21,[illegible]28	15	6	55	4	1	21,[illegible]83	19	7	21,[illegible]11	0	10	55	1	6	21,[illegible]66	2	4
Nuts, chestnuts - -	3,441	17	1	9	2	9	3,451	6	10	3,[illegible]03	4	0	9	2	9	3,[illegible]12	6	9
small - -	13,510	4	11	826	1	11	14,336	6	10	13,[illegible]06	5	1	826	1	11	14,[illegible]32	7	0
walnuts - -	5,[illegible]87	7	2	104	4	0	5,[illegible]91	11	2	5,[illegible]78	11	4	103	16	2	5,[illegible]82	7	6
Oil, castor - - -	252	8	4	0	0	9	252	9	1	252	8	4	0	0	9	252	9	1
cocoa nut - -	1,225	17	11	-	-	-	1,225	17	11	1,212	4	10	-	-	-	1,212	4	10
chemical, essential, and perfumed of all sorts	9,780	0	9	87	7	1	9,867	7	10	9,[illegible]75	19	3	87	7	1	9,[illegible]63	6	4
olive and Florence -	25,672	1	1	1,023	10	1	26,695	11	2	25,[illegible]07	16	2	1,011	2	11	26,[illegible]18	19	1
palm - - -	13,641	9	6	-	-	-	13,641	9	6	13,[illegible]75	8	[illegible]	-	-	-	13,[illegible]75	8	[illegible]
train, spermaceti and blubber - -	10,867	14	9	176	16	0	11,044	10	9	10,865	15	10	176	14	11	11,042	10	9
Onions - - -	817	17	2	128	1	10	945	19	0	815	0	7	45	1	8	860	2	3
Opium - - -	2,476	13	0	7	2	10	2,483	15	10	2,460	19	1	7	2	10	2,468	1	11
Paper and paper hangings, foreign - -	1,734	11	1	81	4	8	1,815	15	9	1,709	17	4	81	4	8	1,791	2	0
Paper and paper hangings of the manufacture of the Isle of Man - -	1,113	5	4	-	-	-	1,113	5	4	1,113	5	4	-	-	-	1,113	5	4
Pepper - - -	61,377	14	3	5,115	9	0	66,493	3	3	61,353	17	1	5,115	9	0	66,469	6	1
Pictures - - -	2,575	7	8	38	6	4	2,613	14	0	2,567	16	0	38	6	4	2,606	2	4
Pimento - - -	1,741	7	5	93	19	11	1,835	7	4	1,727	9	1	93	19	11	1,821	9	0
Pitch - - -	192	7	7	38	10	9	230	18	4	191	14	9	38	5	0	229	17	9
Platting of chip, straw, bast, cane, or horse-hair	4,461	11	5	0	15	9	4,462	7	2	4,460	13	7	0	15	9	4,461	9	4
Plums, dried, French plums, and prunellos -	2,327	17	7	239	13	11	2,567	11	6	2,312	4	11	225	8	0	2,537	12	11
Pork, salted - -	4,773	6	6	251	1	7	5,024	8	1	4,773	15	0	250	19	10	5,023	14	10
Prints and drawings -	1,746	13	5	7	17	6	1,754	10	11	1,746	13	1	7	17	6	1,754	10	7
Prunes - - -	2,211	13	9	48	13	3	2,260	6	7	2,211	5	4	47	8	0	2,258	1	4
Quicksilver - -	1,134	4	10	-	-	-	1,134	4	10	1,133	17	11	-	-	-	1,133	17	11
Quills, goose - -	786	5	7	238	10	5	1,024	16	0	786	5	7	238	10	5	1,024	16	0
Quinine, sulphate of -	1,165	18	8	6	2	4	1,172	1	0	1,147	11	2	6	2	4	1,153	13	6
Radix ipecacuanhæ -	572	18	9	-	-	-	572	18	9	572	18	9	-	-	-	572	18	9
Rags, &c. for paper -	512	9	10	211	12	3	724	2	1	500	17	4	211	9	9	712	7	1
Raisins - - -	138,794	5	9	5,167	5	1	143,961	10	10	138,[illegible]93	19	11	5,[illegible]59	18	5	143,[illegible]53	18	4
Rapeseed and other oil cakes	7,081	4	4	903	11	8	7,984	16	0	7,[illegible]78	12	0	896	19	4	7,[illegible]74	11	4
Rhubarb - - -	966	2	9	1	15	2	967	17	11	966	2	9	1	15	2	967	17	11
Rice - - - -	10,[illegible]20	4	1	258	15	0	10,[illegible]78	17	1	9,[illegible]47	18	6	258	5	10	10,[illegible]06	4	4
in the husk - -	390	12	10	-	-	-	390	12	10	359	3	8	-	-	-	359	3	8
Sago - - - -	2,[illegible]75	7	8	234	13	8	2,[illegible]10	1	4	2,[illegible]73	19	9	234	13	8	2,[illegible]08	13	5
Saltpetre and cubic nitre	8,[illegible]17	7	5	260	18	11	9,[illegible]78	6	4	8,[illegible]52	0	10	202	17	10	9,[illegible]54	18	8
Sarsaparilla - -	1,[illegible]56	12	5	-	-	-	1,[illegible]56	12	5	1,[illegible]36	12	5	-	-	-	1,[illegible]36	12	5
Scammony - - -	607	15	0	-	-	-	607	15	0	605	4	8	-	-	-	603	4	8

List of Articles.	Gross Produce. England. £	s.	d.	Scotland. £	s.	d.	Great Britain. £	s.	d.	Nett Produce. England. £	s.	d.	Scotland. £	s.	d.	Great Britain. £	s.	d.
Duties Inwards — continued.																		
Seeds of all sorts (including tares)	161,829	12	5	21,343	17	0	183,173	9	5	161,297	15	3	21,302	18	6	182,600	13	9
Senna	2,262	8	9	6	4	2	2,268	12	11	2,262	8	9	6	4	2	2,268	12	11
Ships, with their tackle, &c.	192	8	8	116	6	10	308	15	6	192	8	8	116	6	10	308	15	6
Silk, raw	17,225	10	11	-		-	17,225	10	11	17,166	10	3	-		-	17,166	10	3
waste, knubs and husks thrown	672	10	9	-		-	672	10	9	671	12	8	-		-	671	12	8
	40,079	19	8	-		-	40,079	19	8	11,640	5	9	-		-	11,318	8	9
Silk manufactures, East India	5,084	12	5	66	2	10	5,150	15	3	5,010	2	11	66	2	10	5,076	5	9
not ditto	211,910	0	1	9	0	5	211,919	0	6	210,716	18	7	9	0	5	210,725	19	0
Skins and firs, exclusive of calf and kip skins	19,610	3	8	62	11	2	19,672	14	10	19,470	17	0	62	11	2	19,533	8	2
Smalts	1,539	10	6	48	4	5	1,587	14	11	1,535	15	11	48	4	5	1,584	0	4
Soap, hard and soft (foreign)	1,258	18	11	14	19	4	1,273	18	3	1,258	18	11	14	2	7	1,273	1	6
Spelter	2,059	9	1	7	4	1	2,066	13	2	2,058	12	2	7	4	1	2,065	16	3
Spirits, foreign and colonial : —																		
Rum	957,048	12	7	16,831	17	2	973,880	9	9	956,826	12	3	16,781	9	2	973,608	1	5
Brandy	1,180,824	3	3	36,173	9	4	1,216,997	12	7	1,180,626	11	6	36,156	12	7	1,216,783	4	1
Geneva	10,937	12	1	4,278	17	10	15,216	9	11	10,930	5	2	4,277	15	0	15,208	0	2
Of all other sorts	6,089	8	6	518	8	0	6,607	16	6	6,058	9	10	515	16	0	6,574	5	10
Of the manufacture of Guernsey and Jersey	2,628	9	6	240	10	8	2,869	0	2	2,628	9	6	240	10	8	2,869	0	2
Sponge	1,876	4	7	-		-	1,876	4	7	1,870	12	5	-		-	1,870	12	5
Succades	3,586	1	4	98	12	10	3,684	14	2	3,575	19	6	98	12	10	3,674	12	4
Sugar	4,072,836	2	6	362,954	12	0	4,435,790	14	6	4,062,861	2	4	362,996	13	9	4,425,760	16	1
Tallow	155,410	8	8	8,114	3	5	163,524	12	1	155,225	2	0	8,041	9	9	163,266	11	9
Tamarinds	475	9	4	88	16	1	564	5	5	474	12	5	88	6	4	562	18	9
Tar	1,596	10	4	331	19	7	1,928	9	11	1,549	3	3	328	14	9	1,877	18	0
Tea	3,189,747	7	1	343,753	9	4	3,533,500	16	5	3,189,199	11	5	343,734	19	8	3,532,934	11	1
Terra japonica	2,154	13	4	-		-	2,154	13	4	2,145	17	4	-		-	2,145	17	4
Tobacco and snuff	2,430,688	18	10	312,204	17	11	2,742,893	16	9	2,411,165	0	0	310,832	1	5	2,721,997	1	5
Tortoiseshell or turtleshell	220	10	10	0	0	9	220	11	7	206	6	0	0	0	9	206	6	9
Toys	2,813	6	8	55	5	3	2,868	11	11	2,771	6	8	55	5	3	2,826	11	11
Turpentine, common	19,660	11	10	191	0	1	19,791	11	11	19,556	12	1	191	0	1	19,747	12	2
Valonia	3,763	14	3	15	8	3	3,779	2	6	3,763	14	3	15	8	3	3,779	2	6
Verdigris	1,352	16	1	27	18	2	1,380	14	3	1,352	16	1	27	18	2	1,380	14	3
Vermicelli and maccaroni	1,338	8	10	77	9	9	1,415	18	7	1,334	1	8	77	9	9	1,412	11	5
Vinegar, foreign	263	4	5	145	5	6	408	9	11	262	18	1	144	19	2	407	17	3
of the manufacture of Guernsey, Jersey, and Isle of Man	220	14	11	-		-	220	14	11	220	14	11	-		-	220	14	11
Watches	3,272	4	7	0	4	2	3,272	8	9	3,117	11	3	0	4	2	3,117	15	5
Water, Cologne, in flasks	4,984	18	10	191	13	5	5,176	12	3	4,981	1	9	191	13	5	5,172	15	2
Wax, bees'	1,251	0	0	3	18	4	1,254	18	4	1,226	18	0	3	18	4	1,230	16	4
Wines, foreign	1,175,976	14	5	96,822	11	10	1,272,799	6	3	1,113,998	9	3	87,199	14	7	1,201,198	3	10
Wine or sweets, the manufacture of Guernsey and Jersey	942	19	10	-		-	942	19	10	942	19	10	-		-	942	19	10
Wood and timber; viz.																		
Firewood	8,220	11	7	23	8	3	8,243	19	10	8,157	13	11	23	0	4	8,180	14	3
Knees, under 8 in. square	20	9	9	14	15	7	35	5	4	20	9	9	14	15	7	35	5	4
Lathwood	13,927	9	2	729	3	4	14,656	12	6	13,301	12	2	714	2	6	14,015	14	8
Oars	638	16	0	42	6	1	681	2	1	632	17	6	42	1	3	674	18	9
Spars	3,763	1	6	304	16	9	4,067	18	3	3,720	17	1	304	6	9	4,025	3	10
Staves	25,510	14	1	1,047	9	0	26,558	3	1	25,518	5	0	1,041	18	5	26,560	3	5
Teak	6,991	3	11	7	2	2	6,998	6	1	6,924	4	5	7	2	2	6,931	6	7
Deals, battens, boards, &c., sawn or split	577,437	0	2	29,456	12	2	606,893	12	4	568,862	5	3	29,432	10	7	598,294	15	10
Timber or wood, not sawn or split	286,395	0	6	19,977	10	1	306,372	10	7	225,108	6	6	19,822	16	7	244,931	3	1
Wool, cotton	542,239	18	6	26,216	5	3	568,456	3	9	541,017	0	11	26,138	18	0	567,155	18	11
sheep and lambs'	94,837	12	10	375	5	10	95,212	18	8	94,279	7	7	338	8	10	94,617	16	5
Woollen manufactures, not otherwise described	12,392	11	9	13	18	8	12,406	10	5	12,293	19	10	13	18	8	12,307	18	6
Yarn, cotton	188	9	7	2	12	6	191	2	1	188	9	7	2	12	6	191	2	1
linen, raw	23	9	5	13	8	8	36	18	1	23	7	3	13	6	1	36	13	4
worsted	2,030	16	1	13	14	1	2,044	10	2	2,030	16	1	13	14	1	2,044	10	2
All other articles imported	80,111	13	3	3,734	9	9	83,846	3	0	79,476	10	6	3,718	11	0	83,195	1	6
Tonnage duty on Portuguese vessels, levied under order in council, of 10th May, 1837; revoked by order in council of 15th January, 1842	25	17	7	-		-	25	17	7	25	2	7	-		-	25	2	7
Total duties inwards	18,755,226	7	9	1,627,440	19	10	20,382,667	7	7	18,545,629	12	4	1,612,874	15	2	20,158,504	7	6
Duties Outwards.																		
Coals and culm	52,789	12	11	5,463	16	5	58,253	9	4	51,957	0	10	5,402	15	0	57,359	15	10
British sheep and lambs' wool, woollen yarn, &c.	4,532	7	11	40	3	9	4,572	11	8	4,461	10	6	34	14	8	4,496	5	2
Skins	125	15	2	1	5	2	127	0	4	108	2	2	1	5	2	109	7	4
China clay and China stone	312	19	2	6	9	6	319	8	8	179	0	8	0	11	6	179	12	2
Flint stone, ground and unground	1	5	5	-		-	1	5	5	1	5	5	-		-	1	5	5
Other British goods (per centage duty) repealed under act 5 & 6 Vict. c. 47.	45,563	8	2	4,185	6	6	49,748	14	8	44,525	11	5	4,101	11	2	48,627	2	7
Total duties outwards	103,325	8	9	9,697	1	4	113,022	10	1	101,232	11	0	9,540	17	6	110,773	8	6
Total duties inwards, brought down	18,755,226	7	9	1,627,440	19	10	20,382,667	7	7	18,545,629	12	4	1,612,874	15	2	20,158,504	7	6
	18,858,551	16	6	1,637,138	1	2	20,495,689	17	8	18,646,862	3	4	1,622,415	12	8	20,269,277	16	0
Duties collected at the Isle of Man	23,660	4	2	-		-	23,660	4	2	23,617	15	10	-		-	23,617	15	10
Remittances from the plantations	3,549	2	10	-		-	3,549	2	10	3,549	2	10	-		-	3,549	2	10
Rent of legal quays, warehouse rent, wharfage, &c.	6,357	5	9	120	5	3	6,477	11	0	6,319	9	9	120	5	3	6,439	15	0
Proceeds of goods sold for the duties, &c.	12,034	6	10	1,024	9	10	13,058	16	8	11,492	9	10	1,024	9	10	12,516	19	8
Proceeds of surcharge, sale of old stores, &c.	6,575	8	2	809	7	9	7,384	15	11	-		-	801	15	1			
Total	18,910,728	4	3	1,639,092	4	0	20,549,820	8	3	18,688,535	14	11	1,624,362	0	10	20,312,897	15	9

Ireland.—During the same year, the gross amount of the customs revenue received in Ireland amounted to 2,221,494*l.* 9*s.* 9*d.*, and the nett amount to 2,210,615*l.* 9*s.* 3*d.*; making the gross customs revenue of the U. Kingdom 22,681,315*l.*, and the nett revenue 22,523,513*l.*

The charges of collection on the customs revenue of the U. Kingdom during the same year were —

	Great Britain. £	s.	d.		Ireland. £	s.	d.
Civil department	680,681	0	2	—	93,234	7	9
Harbour vessels	6,159	2	10	—	531	7	1
Cruisers	96,617	1	2½	—	16,490	19	10
Preventive water guard	231,360	2	11	—	110,035	1	11
Land guard	19,480	16	6	—			
	£1,034,298	4	7½		£220,291	16	7

To show the distribution of the foreign trade of the country, we subjoin

An Account of the Gross and Nett Receipts of each Custom-House in the U. Kingdom in 1840 and 1841. (*Parl. Paper* No. 143. Sess. 1842.)

Ports.	Gross Receipts. 1840. £ s. d.	1841. £ s. d.	Nett Receipts. 1840. £ s. d.	1841. £ s. d.
ENGLAND.				
London	11,116,685 14 4	11,757,268 7 9	10,473,600 9 3	11,152,270 16 10
Aberystwith	1,099 12 10	1,285 8 8	151 19 6	296 11 3
Aldborough	276 19 2	42 18 3		
Arundel	4,342 4 11	3,975 6 3		
Barnstaple	8,593 14 11	8,856 5 3	5,349 12 5	5,715 11 8
Beaumaris	7,257 3 3	3,608 10 7	5,073 8 0	
Berwick	10,896 13 1	9,600 11 6	2,639 12 2	1,597 9 10
Bideford	5,614 19 8	6,127 15 5	2,654 13 8	3,040 7 0
Blackney and Clay	1,592 5 6	1,179 6 7		
Boston	32,008 5 10	31,637 14 8	27,901 5 1	27,344 4 5
Bridgewater	12,388 7 3	10,293 10 1	10,368 7 1	8,345 6 9
Bridlington	256 2 10	87 12 3		
Bridport	4,051 4 1	3,966 17 6	647 9 11	661 9 3
Bristol	1,027,160 9 2	1,046,800 7 3	998,750 16 10	1,021,195 0 11
Cardiff	11,152 7 4	11,325 8 3	9,356 17 8	9,876 2 0
Cardigan	1,182 12 9	1,691 4 9	- - -	199 16 11
Carlisle	32,111 14 9	30,019 0 5	30,597 19 0	28,160 1 3
Chepstow	16,747 7 4	13,521 11 2	16,230 19 6	12,952 15 4
Chester	78,222 6 10	77,593 15 3	76,803 4 10	76,166 11 1
Chichester	2,179 6 6	1,492 8 10		
Colchester	18,531 1 2	18,713 6 11	13,800 9 8	14,107 0 8
Cowes	3,885 17 4	3,032 2 9		
Dartmouth	6,123 1 7	4,641 4 10		
Deal	76 12 4	387 2 1		
Dover	29,460 11 5	29,673 9 6	2,612 8 7	2,021 2 11
Exeter	90,948 15 5	88,065 18 6	79,811 14 10	77,113 1 3
Falmouth	26,411 6 4	22,314 10 3	13,092 18 2	8,904 17 0
Faversham	4,983 19 9	5,079 8 4		
Fleetwood	7,023 17 8	6,312 5 0	6,040 9 10	5,074 8 0
Fowey	12,072 5 3	11,935 6 8	1,478 15 5	
Gainsborough (from Jan. 5. 1841)	- - -	26,422 15 4	- - -	26,056 15 11
Gloucester	156,641 16 10	123,688 5 0	150,175 4 4	117,787 1 11
Goole	54,694 1 6	61,599 1 9	52,610 8 0	59,509 11 2
Grimsby	7,350 13 7	9,062 4 4	- - -	2,206 14 11
Gweek	12,525 12 0	11,951 0 4	720 11 2	455 8 6
Harwich	3,059 1 11	2,710 5 1		
Hull	800,412 3 11	712,124 3 4	757,120 6 8	667,241 6 10
Ipswich	37,976 11 0	37,959 16 8	35,496 5 6	35,978 11 2
Lancaster	31,598 2 10	30,562 2 2	24,121 9 2	27,878 11 7
Llanelly	4,714 18 3	5,737 10 1	2,896 4 1	1,849 9 2
Liverpool	4,607,326 1 10	4,140,593 6 11	4,454,208 3 3	3,985,646 0 8
Lyme	2,202 5 2	1,836 4 6		
Lynn	67,139 16 3	64,389 19 10	63,310 8 6	60,492 3 0
Maldon	6,159 6 11	6,016 14 0		
Milford	17,557 13 9	10,736 19 4	8,099 19 8	2,586 3 4
Newcastle	443,294 8 4	410,076 11 9	424,575 11 0	391,164 5 7
Newhaven	17,160 2 1	13,796 8 7	8,175 9 1	5,026 17 0
Newport	10,538 15 2	9,762 16 10	9,473 17 4	8,684 4 10
Padstow	2,018 0 11	1,982 1 9		
Penzance	29,568 11 11	21,164 1 7	10,950 14 8	4,010 4 8
Plymouth	135,950 15 7	126,727 18 6	108,122 19 6	96,136 7 11
Poole	12,065 18 1	10,361 12 11	1,745 9 7	
Portsmouth	70,187 16 9	62,227 3 11	51,604 17 11	37,945 13 4
Ramsgate	7,088 8 8	6,997 6 5		
Rochester	52,426 17 4	40,713 15 6	33,467 14 9	22,186 8 11
Rye	6,789 15 7	6,030 1 11		
St. Ives	5,060 17 3	5,965 1 2		
Scarborough	1,887 7 2	3,968 5 8	- - -	1,955 2 1
Scilly	78 14 8	479 19 10		
Shoreham	22,145 18 7	20,292 4 7	10,996 18 2	9,141 5 1
Southampton	77,912 15 11	72,262 5 10	55,145 8 10	51,561 9 11
Southwold	258 2 1	308 18 7		
Stockton	97,295 7 1	85,724 3 10	90,782 1 11	78,413 17 9
Sunderland	119,681 1 1	67,305 16 9	111,811 14 7	60,549 7 9
Swansea	8,934 15 2	5,808 11 5	5,203 15 9	1,926 4 5
Truro	38,841 16 11	44,129 15 7	18,466 10 11	20,793 19 10
Wells	596 7 3	766 17 6		
Weymouth	14,727 11 4	12,028 14 0		
Whitby	6,654 18 7	6,968 3 6	3,257 7 0	3,419 15 0
Whitehaven	92,831 11 11	86,292 15 7	87,459 16 0	80,958 8 6
Wisbeach	8,591 7 9	6,060 1 11	7,462 18 0	5,159 19 0
Woodbridge	4,315 3 7	5,086 0 8	2,277 0 2	2,892 0 8
Yarmouth	61,495 8 1	69,726 14 0	46,731 11 5	55,950 11 2
Douglas	21,869 15 5	22,501 5 3	10,063 8 7	12,395 12 0
Total of England	19,753,382 2 2	20,680,291 12 0	18,425,507 16 11	18,372,135 7 11
SCOTLAND.				
Aberdeen	80,018 3 9	78,126 16 5	71,103 18 1	69,302 5 0
Ayr	1,927 1 7	1,463 4 10	853 7 11	583 13 10
Alloa (from 5th January, 1841)	- - -	2,235 0 1	- - -	1,688 7 10
Banff	1,357 7 8	1,698 9 6		
Borrowstouness	4,870 14 8	4,073 12 6	3,304 16 1	2,571 12 11
Campbeltown	493 12 10	934 1 7		
Dumfries	9,107 4 3	8,766 1 3	5,495 8 7	5,274 7 11
Dundee	63,346 8 9	48,134 1 9	56,484 8 2	37,733 16 6
Glasgow	472,563 19 9	526,100 0 11	455,200 12 10	512,012 19 5
Grangemouth	31,216 9 11	20,692 17 5	28,530 4 4	18,748 4 6
Greenock	241,617 12 2	425,535 3 0	223,936 10 10	407,340 14 4

Ports.	Gross Receipts.						Nett Receipts.					
	1840.			1841.			1840.			1841.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
SCOTLAND—*continued.*												
Inverness	6,176	3	3	4,185	2	2	2,630	12	11	601	8	3
Irvine	3,592	9	3	3,711	8	7	1,827	7	3	1,958	9	6
Kirkaldy	4,907	10	0	4,247	10	5	71	5	2	226	1	3
Kirkwall	671	2	11	771	7	3						
Leith	602,999	6	3	604,098	16	5	465,241	4	10	475,982	17	6
Lerwick	707	16	6	153	9	8						
Montrose	33,483	16	10	31,713	6	1	27,797	6	7	25,914	18	3
Perth (from 5th July, 1840)	10,766	9	7	12,581	18	10	10,555	5	5	11,659	8	10
Port Glasgow	84,569	7	3	100,827	12	0	79,462	9	2	95,819	13	6
Stornoway	646	2	5	349	2	7						
Stranraer	587	4	3	653	6	7						
Wick	1,140	19	1	1,232	10	0						
Total of Scotland	1,755,786	12	11	1,880,088	13	10	1,530,469	18	2	1,667,418	19	4
IRELAND.												
Baltimore	1,731	6	1	960	19	5						
Belfast	365,023	16	6	372,792	8	0	337,208	17	7	345,689	12	0
Coleraine	5,079	4	7	6,581	16	11						
Cork	256,612	17	2	263,364	1	11	224,412	15	6	231,684	15	5
Drogheda	7,979	4	8	8,608	14	4	4,997	5	11	5,447	17	1
Dublin	889,564	4	5	977,718	8	2	834,696	3	7	918,754	1	10
Dundalk	20,128	2	1	24,904	2	10	15,886	13	2	20,618	5	0
Galway	27,465	19	4	27,768	9	5	17,569	0	6	17,560	11	11
Limerick	169,490	5	7	170,552	6	1	148,730	13	1	150,082	5	6
Londonderrry	103,900	8	4	108,507	11	6	90,588	15	3	95,444	14	8
Newry	44,039	10	3	42,010	9	4	29,700	4	10	25,420	7	2
Ross (from 10th October, 1840)	3,678	19	4	25,554	17	3	3,485	19	3	25,476	16	10
Sligo	32,689	16	3	36,627	7	10	17,464	1	5	21,733	7	11
Waterford	196,348	18	0	168,359	6	2	183,510	15	3	156,874	10	2
Westport	7,554	17	5	10,951	19	9	-	-	-	2,219	18	11
Wexford	9,357	1	11	9,736	1	8	1,353	18	11	2,092	9	8
Total of Ireland	2,140,684	11	11	2,254,779	0	7	1,907,503	4	3	2,020,097	14	1

ABSTRACT OF THE ABOVE ACCOUNT.

	Gross Receipts.						Nett Receipts.					
	1840.			1841.			1840.			1841.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
England	19,755,282	2	2	19,680,291	12	0	18,425,507	16	11	18,372,133	7	11
Scotland	1,755,786	12	11	1,880,088	13	10	1,530,469	18	2	1,667,418	19	4
Ireland	2,140,684	11	11	2,254,779	0	7	1,907,503	4	3	2,020,097	14	1
Total of United Kingdom	23,649,853	7	0	23,815,159	6	5	21,863,480	19	4	22,059,650	1	4

Office of Inspector General of Imports and Exports. — The office of inspector general of imports and exports was established in 1696. The accounts of the trade and navigation of the country, annually laid before parliament, are furnished by this office; and, owing to the ability of the officers, and the improved manner in which these accounts are now made out, they have become of great public importance. Their accuracy must, of course, depend on the accuracy of the entries; but, as respects articles on which the duties are reasonable, or low, and in which, consequently, there is no great temptation to clandestine importation, they may be regarded as nearly accurate. It is now usual to give statements of the quantities of the principal articles exported and imported, as well as of their declared or real values; which is a great improvement. But, on all occasions in which it is practicable, the rates of duty as well as the quantities should be given; for it is needless to say, that without being aware of the former, no sound conclusion can be drawn as to the consumption of any article.

CUTLERY, a term used to designate all manner of sharp and cutting instruments made of iron or steel, as knives, forks, scissors, razors, shears, scythes, &c. Sheffield is the principal seat of the cutlery manufacture; but the knives and other articles made in London are said to be of superior quality.

The act 59 Geo. 3. c. 7. gives the manufacturers of cutlery made of *wrought* steel, the privilege of marking or stamping them with the figure of a hammer; and prohibits the manufacturers of any articles of cutlery, edge tools, or hardware, *cast or formed in a mould*, or manufactured otherwise than by means of a hammer, from marking or impressing upon them the figure of a hammer, or any symbol or device resembling it, on pain of forfeiting all such articles, and 5*l.* for every dozen. A penalty of 10*l.* per dozen, exclusive of forfeiture, is also imposed upon every person having articles of cutlery in his possession for the purpose of sale, marked with the words *London*, or *London made*, unless the articles so marked have been really manufactured within the city of London, or a distance of 20 miles from it.

CYPRESS, a forest tree of which there are many varieties, the species denominated the evergreen cypress (*Cupressus sempervirens*) and the white cedar (*Cupressus Thyoides*) being the most celebrated.

The cypress is indigenous to the southern parts of Europe, to several parts of Asia, and to America. It grows to a great size, and is a most valuable species of timber. It is never attacked by worms; and exceeds all other trees, even the cedar, in durability. Hence the Athenians, when desirous to preserve the remains of their heroes and other great men, had them enclosed in cypress coffins; and hence, also, the external covering of the Egyptain mummies is made of the same enduring material. The cypress is said to live to a great age; and this circumstance, combined with its thick dark green foliage, has made it be regarded as the emblem of death and the grave.

In his *Geography and History of the Western States of America*, Mr. Timothy Flint has given the following account of the cypress trees found in the southern parts of the valley of the Mississippi: — "These noble trees rear their straight columns from a large cone-shaped buttress, whose circumference at the ground is, perhaps, 3 times that of the regular shaft of the tree. This cone rises from 6 to 10 feet, with a regular and sharp taper, and from the apex of the cone towers the perpendicular column, with little taper after it has left the cone, from 60 to 80 feet clear shaft. Very near the top it begins to throw out multitudes of horizontal branches, which interlace with those of the adjoining trees, and, when bare of leaves, have an air of desolation and death, more easily felt than described. In the season of vegetation the leaves are short, fine, and of a verdure so deep as almost to seem brown, giving an indescribable air of funereal solemnity to this singular tree. A cypress forest, when viewed from the adjacent hills, with its numberless interlaced arms covered with this dark brown foliage, has the aspect of a scaffolding of verdure in the air. It grows, too, in deep and sickly swamps, the haunts of fever, mosquitoes, moccassin snakes, alligators, and all loathsome and ferocious animals, that congregate far from the abodes of man, and seem to make common cause with nature against him. The cypress loves the deepest, most gloomy, inaccessible swamps; and, south of 33°, is generally found covered with sable festoons of long moss, hanging, like shrouds of mourning wreaths, almost to the ground. It seems to flourish best when water covers its roots for half the year. Unpromising as are the places and circumstances of its growth, no tree of the country where it is found is so extensively useful. It is free from knots, is easily wrought, and makes excellent planks, shingles, and timber of all sorts. It is very durable, and incomparably the most valuable tree in the southern country of this valley." — (Vol. i. p. 62.)

D.

DAMAGED GOODS, in the language of the customs, are goods, subject to duties, that have received some injury either in the voyage home or in the bonded warehouses.

It is enacted by the 3 & 4 Will. 4. c. 52., that if any goods rated to pay duty according to the number, measure, or weight thereof (except those after mentioned), shall receive damage during the voyage, an abatement of such duties shall be allowed proportionally to the damage so received; provided proof be made to the satisfaction of the commissioners of customs, or of officers acting under their direction, that such damage was received after the goods were shipped abroad in the ship importing the same, and before they were landed in the U. Kingdom; and provided claim to such abatement of duties be made at the time of the first examination of such goods. — § 30.

It is further enacted, that the officers of customs shall examine such goods, and may state the damage which, in their opinion, they have so received, and may make a proportionate abatement of duties; but if the officers of customs be incompetent to estimate such damage, or if the importer be not satisfied with the abatement made by them, the collector and comptroller shall choose 2 indifferent merchants experienced in the nature and value of such goods, who shall examine the same, and shall make and subscribe a declaration, stating in what proportion, according to their judgment, the goods are lessened in value by such damage, and the officers of customs may make an abatement of the duties according to the proportion of damage declared by such merchants. — § 31.

Provided always, that no abatement of duties shall be made on account of any damage received by any of the sorts of goods herein enumerated; viz. cocoa, coffee, oranges, pepper, currants, raisins, figs, tobacco, lemons, and wine. — § 32.

DAMAR, a kind of indurated pitch or turpentine exuding spontaneously from various trees indigenous to most of the Indian islands. Different trees produce different species of resin, which are designated according to their colour and consistence. "One is called *Damar-batu* in Malay, or *Damar-selo* in Javanese, which means hard or stony rosin; and another in common use, *Damar-Puteh*, or white rosin, which is softer. The trees which produce the damar yield it in amazing quantity, and generally without the necessity of making incisions. It exudes through the bark; and is either found adhering to the trunk or branches in large lumps, or in masses on the ground under the trees. As these often grow near the sea-side, or on the banks of rivers, the damar is frequently floated away, and collected in distant places as drift. It is exported in large quantities to Bengal and China; and is used for all the purposes to which we apply pitch, but principally in paying the bottoms of ships. By a previous arrangement, almost any quantity may be procured at Borneo, at the low rate of ¼ dollar per picul."— (*Crawfurd, East. Archip.* vol. i. p. 455., vol. iii. p. 420.)

DAMASK (Ger. *Damasten Tafelzeug*; Du. *Damaskwerk*; Fr. *Venise, Damas*; It. *Tela damaschina*; Sp. *Tela adamascada*; Rus. *Kamtschatniüi salffiki*), a species of table linen. — (See LINEN.)

DANTZIC, one of the principal emporiums of the north of Europe, in West Prussia, lat. 54° 20′ 48″ N., lon. 18° 38′ E. Population, in 1838, 56,257. It is situated on the left or western bank of the Vistula, about 4 miles from its embouchure. The harbour, Neufahrwasser, at the mouth of the river, is defended on each side by pretty strong forts. The town is traversed by the small river Motlau, which has been rendered navigable for vessels drawing 8 or 9 feet water.

Roads, Port, &c. — The road or bay of Dantzic is covered on the west side by a long, narrow, low, sandy tongue of land, extending from Reserhoft Point (on which is a light-house), in lat. 54° 50½′, lon. 8° 23′ 15″, upwards of 20 miles, in an E. by S. direction, having the small town of Heela, or Heel, near its termination. A light-house, elevated 123 feet (Eng.) above the level of the sea, has been erected within about ¼ mile of the extremity of this point. The flashes of the light, which is a revolving one, succeed each other every ¼ minute. Dantzic lies about S. ¼ W. from the Heel; its port being distant about 4 leagues. There is good anchorage in the roads for ships of any burden; but they are exposed, except immediately under the Heel, to the north and north-easterly winds. There are harbour lights at the entrance to the port. All ships entering the Vistula must heave to about a mile off the port, and take a pilot on board; and pilots must always be employed in moving ships in the harbour, or in going up and down the river. The usual depth of water at the mouth of the river is from 12 to 13 feet (Eng.); in the harbour, from 13 to 14 feet; at the confluence of the Motlau with the Vistula, from 9 to 9½ feet; and in town, from 8 to 9 feet. Moles have been erected on both sides the entrance to the harbour: that on the eastern side, which is most exposed, is constructed of granite, but is not yet completed; the other is partly of stone and partly of timber.

Trade of Dantzic. — Next to Petersburg, Dantzic is the most important commercial city in the north of Europe. It owes its distinction in this respect to its situation; the Vistula, with its important tributaries the Bug, Narew, &c. giving it the command of a great internal navigation, and rendering it the *entrepôt* where the surplus products of West Prussia, Poland as far as Hungary, and part of Lithuania, are exchanged for those imported from the foreigner. The exports of wheat from Dantzic are greater than from any other port in the world, Odessa, perhaps, excepted. There are four sorts of wheat distinguished here; viz. *white, high-mixed, mixed,* and *red,* according as the white or red predominates. The quality of Dantzic wheat is for the most part excellent; for, though small in the berry, and not so heavy as many other sorts, it is remarkably thin skinned, and yields the finest flour. The white Polish wheat exported here is the best in the Baltic. Rye is also very superior, being both clean and heavy; the exports are very large. The exports of barley and oats are comparatively inconsiderable, and the qualities but indifferent. Very fine white peas are exported. Next to grain, timber is the most important article of export from Dantzic; but latterly the supply has been diminishing, and the quality is said not to be so good as formerly.—(*Meek.*) The principal supply of fir timber, masts, &c. is brought by the River Narew, which, with its branches, rises in Old Prussia and Lithuania, and falls into the Bug near the confluence of the latter with the Vistula. Oak plank, staves, &c. are brought down from the higher parts of the Vistula, and the tributary streams of Dunajetz, Wieprez, &c. Weed ashes, pearlashes, bones, zinc, wool, spruce beer, feathers, &c. are also exported.

Imports. — These consist principally of herrings, sugar, coffee, wine, cotton and cotton yarns; iron and steel, spices, furs, woollens, hardware, silks, indigo, dyewoods, &c., but their value is inconsiderable, as compared with that of the exports.

Account of the Products exported from Dantzic by Sea in 1842, specifying the Quantities shipped for different Countries, with their Prices and aggregate Value.

Articles.	To										Total Quantity.	Average Prices.	Estimated Amount in Sterling Money.
	Britain, Jersey, and Guernsey.	Belgium.	Hansa Towns, Hamburg, and Lubeck.	Denmark.	France.	Hanover, Mecklenburg, and Oldenburg.	Holland.	Russia.	Spain and Africa.	Sweden and Norway.			
Wheat - {lasts of about 10½ imp. qrs.}	35,035	112	118	15	-	-	5,939	-	-	75	41,294	454 *f.*	£ 937,379
Rye - - —	285	78	988	1,759	-	594	1,020	-	-	3,738	8,482	237 *f.*	100,275
Barley - - —	385	73	91	150	-	-	396	-	-	614	1,709	222 *f.*	18,965
Oats - - —	21	-	-	-	-	46	-	-	-	-	67	114½ *f.*	384
Peas - - —	2,310	1	14	38	-	103	268	50	-	81	2,865	228 *f.*	32,661
Linseed - - —	159	53	-	-	622	-	416	-	-	27	1,307	360 *f.*	23,526
Rapeseed - - —	197	3	-	-	57	-	1,074	-	-	-	1,331	480 *f.*	31,944
Potatoes - - scheffels	-	-	-	-	-	-	-	466	-	-	466	14 *f.*	33
Flour - - barrels	6	-	-	251	-	-	-	-	-	36	293	25*s.*	366
Biscuit - - cwt.	-	-	-	-	-	-	-	-	-	-	-	14*s.*	-
Salt provisions - —	14,936	-	-	-	-	-	16	-	-	-	14,952	{60*s.* ℔ bl. of 2 cwt.}	22,428
Wood articles, balks, fir pcs.	69,630	81	2,826	-	32,19"	837	8,000	-	38	-	113,609	35*s.*	149,109
Do. deals and deal ends, —	50,800	25,753	48,805	5,615	72,132	14,262	72,843	-	284	34	290,518	56*s.*	67,785
Do. masts and spars —	5	-	-	-	5	62	-	-	-	-	72	6*d.*	432
Do. lathwoods - fathoms.	935	-	-	-	-	-	-	-	-	-	935	5*d.*	4,675
Do. treenails shock, 60 ps.	4,196	-	3	395	-	-	-	-	-	-	4,594	3*s.*	689
Do. clapboards - pcs.	1,980	-	-	-	-	-	-	-	-	-	1,980	2½ *f.*	247
Do. staves of all kinds mille	47½	2½	-	78½	386½	1	191	-	1	-	556½	66*l.* 10*s.*	35,677
Do. oak timber - pcs.	337	2	-	311	817	73	-	-	706	97	2,295	47. 10*s.*	5,157
Do. planks - —	17,293	379	538	1,697	27,530	-	354	-	53	379	48,203	5*l.* 10*s.*	16,505
Sundry petty wood exports - —	-	-	-	-	-	-	-	-	-	-	-	-	937
Ashes, weed bls. of 3 cwt.	-	2,772	6	-	-	-	797	-	-	15	3,590	33*s.*	5,924
Bones - - cwt.	19,448	-	-	-	-	-	-	-	-	-	19,448	{85*s.* ℔ ton.}	4,153
Black beer - - kegs.	42,375	-	-	243	-	-	-	-	-	30	42,648	5*s.*	10,662
Spirits, raw & distilled eimers	2,065	-	401	6	3	-	243	5,400	-	-	9,018	21 *f.*	9,469
Linen - pcs. of 60 ells	1,404	-	354	787	-	260	1,314	-	-	-	4,119	10*s.*	2,059
Mats - - pcs.	124,324	1,215	2,220	817	1,850	1,770	23,043	190	-	2,074	157,408	{2*s.* ℔ 5 pcs. 82. ℔ 60 pcs. 21*s.*}	3,148
Wheel spokes and felloes —	-	-	-	-	603	-	-	-	46,724	-	47,327	-	315
Spelter - - cwt.	34,538	-	-	-	2,586	-	-	-	9,181	-	46,305	-	55,566
Petty exports of various articles - - -	-	-	-	-	-	-	-	-	-	-	-	-	13,780
Gross value of goods exported in 1842 - - -	£ 1,051,335	£ 16,389	£ 32,779	£ 32,701	£ 119,541	£ 14,139	£ 220,563	£ 19,598	£ 1,798	£ 55,389	£ 1,564,232		£ 1,564,232
Ditto in 1841 - - -	1,179,580	11,857	13,767	15,511	76,057	6,667	156,644	103,198	-	27,066	1,594,271		

Account of the Articles imported into Dantzic by Sea in 1842, specifying the Quantities brought from different Countries, with their Prices and aggregate Value.

Articles.	From Britain.	Belgium.	Bremen, Hamburg and Lubec.	Denmark.	France.	Holland.	Russia.	Sweden, Norway, & elsewhere.	Total Quantity.	Average Prices.	Estimated Amnt. in Sterling Money.
Ashes, pot - - cwt.	- -	- -	7	- -	23	- -	392	- -	422	22s.	£ 464
Brandy, rum, & arrack —	1,196	- -	614	3	128	490	-	- -	2,431	75s.	9,116
Cotton, raw - - —	6,460	- -	44	- -	-	1,664	-	- -	8,168	60s.	24,504
Ditto, yarn - - —	81	- -	21	- -	-	-	-	- -	102	150s.	765
Coffee - - - —	14	- -	4,371	- -	-	9,433	-	- -	13,818	82s.	56,654
Coals - - - —	96,700	- -	-	- -	-	-	-	- -	96,700	7d.	2,901
Dye-wood - - —	- -	- -	2,326	- -	-	7	-	- -	2,333	10s.	1,166
Drugs, &c. - - —	4,225	- -	346	1,950	134	1,224	142	208	8,209	60s.	24,627
Herrings - - barrels	7,416	- -	27	- -	-	510	-	41,590	49,543	18s. 24s. 60s.	47,941
Iron and steel ware - cwt.	1,940	- -	8	- -	1,254	6	21,250	2,720	27,178	20s.	27,178
Ditto, new - - —	31,691	- -	115	- -	-	11	7	4,035	35,859	15s.	26,894
Ditto, old - - —	30,710	- -	8,830	5,000	-	34,060	5,160	1,100	84,860	6s.	25,458
Indigo - - - —	72	- -	-	- -	-	-	-	- -	72	74½ f.	2,673
Lime and plaster - —	- -	- -	-	- -	-	-	-	3,330	3,330	3s.	498
Malt liquors - - —	2,726	- -	-	- -	-	-	-	- -	2,726	30s.	4,089
Oil of all kinds - —	- -	- -	56	- -	456	-	-	- -	512	70s.	1,792
Rice - - - —	386	- -	1,753	42	-	184	-	- -	2,365	27s.	3,193
Spices of all kinds - —	3,803	- -	342	11	-	215	-	- -	4,299	60s.	11,397
Sugar, raw - - —	1,604	- -	4,883	- -	-	-	-	7,434	13,921	40s.	27,842
Ditto, manufactured —	1,405	517	676	- -	-	1,250	-	- -	3,848	60s.	11,544
Salt - - - —	229,400	- -	-	- -	-	-	-	- -	229,400	50s.	15,930
Southern fruits of all kinds —	313	- -	1,874	769	-	23	-	- -	2,979	33s. per last.	4,915
Tallow - - - —	- -	- -	-	- -	-	-	-	280	280	48s.	672
Tar, pitch, &c. - - —	1,403	- -	1,540	920	-	-	6	1,718	5,587	5s.	1,397
Train oil - - - —	- -	- -	342	800	-	-	-	20	820	40s.	1,640
Tea - - - - —	152	- -	57	- -	-	-	-	- -	209	435 f.	4,546
Tobacco leaf - - —	142	- -	2,566	- -	-	805	-	- -	3,513	63s.	10,456
Ditto, manufactured —	2	- -	322	- -	-	1,072	-	- -	1,396	110s.	7,678
Wine - - - - —	112	- -	179	358	20,802	72	-	- -	21,523	60s.	64,569
Sundry petty imports - —	- -	- -	-	- -	-	-	-	- -	-	-	20,537
Gross value of goods imported in 1842 - - -	£ 141,314	£ 2,118	£ 57,577	£ 12,032	£ 66,239	£ 78,039	£ 26,011	£ 59,982			£ 443,322
Ditto in 1841 - - -	167,322	3,831	62,901	8,865	53,353	75,760	33,915	67,727			

Duties on Pilotage and Police Passports at Dantzic.

Duties.	Prussian and privileged Foreign Flags.	Foreign Flags not privileged.
Pilotage Duties.	th. sil. pf.	th. sil. pf.
Vessel drawing 6 feet water and under	1 15 0	½ 0 0
Ditto 7 feet water - -	½ 15 0	3 0 0
Ditto 8 ditto - -	3 0 0	3 15 0
Ditto 9 ditto - -	3 15 0	4 0 0
Ditto 10 ditto - -	4 0 0	5 0 0

Duties.	Prussian and privileged Foreign Flags.	Foreign Flags not privileged.
Police Passport Taxes.	th. sil. pf.	th. sil. pf.
Vessel of 25 lasts, 50 tons and under	1 10 0	1 25 0
Ditto 50 — 100 tons - -	1 17 6	2 0 0
Ditto 100 — 200 — - -	1 25 0	2 5 0
Ditto 200 — 400 — - -	2 7 6	3 5 0
Ditto, above 400 lasts - -	3 5 0	4 15 0

Money. — Accounts used formerly to be wholly kept in guilders, guilders, or florins of 30 groschen. The rixdollar = 3 florins = 90 groschen = 270 schillings = 1,620 pfennings. The florin or guilder = 9*d.* sterling, and the rixdollar = 2*s.* 3*d.*

A new system was, however, introduced into all parts of the Prussian dominions, conformably to the decrees of the 30th of September, 1821, and of the 22d of June, 1825.

The Cologne mark (containing 3,609 Eng. grains) is the weight at present used in the Prussian mint in weighing the precious metals. The fineness of the coins is not determined, as previously, by carats or loths, but the mark is divided for this purpose into 288 grains. Accounts are now kept in the public offices in thalers or dollars (R.), silver groschen, and pfennings: 1 dol. = 30 sil. gr.; 1 sil. gr. = 12 pf.

The only silver monies now coined are dollars and ½ dollar pieces; but smaller coins are in circulation, of former coinages.

The Prussian silver coins have ½ of alloy; and as the mark is coined into 14 dollars, each should contain 257·68 Eng. grains pure silver, and be worth about 2*s.* 11½*d.* sterling; but the assays do not always strictly coincide with the mint valuation.

The gold coins are Frederick d'ors, double, single, and half pieces. The mark of 288 grains, having 960 grains of fine gold, is coined into 35 Fred. d'ors. The Fred. d'or is worth from 5 dol. 18 sil. gr. to 5 dol. 22 sil. gr. according to the demand.

Weights and Measures. — The commercial weights are,

32 Loths = 1 Ounce.
16 Ounces = 1 Pound.
164 Pounds = 1 Lispound.
20 Pounds = 1 Small stone.
33 Pounds = 1 Large stone.

110 lbs. = 1 centner; 3 centners = 1 shippound (330 lbs.); 100 lbs. of Dantzic = 103·3 lbs. avoirdupois = 46·85 kilog. = 94·7 lbs. of Amsterdam = 96·6 lbs. of Hamburg.

The liquid measures are, for beer,

5 Quarts = 1 Anker.
4 Ankers = 1 Ahm.
1¼ Ahm = 1 Hhd.
½ Hhds. = 1 Both.
2 Both = 1 Fuder.
2 Fuder = 1 Last = 620·4 Eng. wine gallons.

In wine measure, which is less than beer measure, the ahm = 594 Eng. gallons. The pipe = 2 ahms.

The last of corn = 3½ malters = 60 scheffels = 240 viertels = 960 metzen; and weighs 4,680 lbs. Dantzic weight in rye. The scheffel = ·547 of a hectolitre = 1·554 Winchester bushel. Hence the last of 60 scheffels = 11 quarters 3 bushels; the last of 56½ scheffels = 10 quarters 7 bushels.

The Dantzic foot = 11·3 Eng. inches, or 100 Dantzic feet = 94·16 Eng. feet. The ell is 2 feet Dantzic measure. The Rhineland or Prussian foot = ·3138 French metres, or 12·356 Eng. inches: hence 100 Prussian = 104·8 English feet. The Prussian or Berlin ell has 2½ Prussian inches = 26·256 Eng. ditto. 100 Berlin ells = 72·93 Eng. yards; and 137·14 Berlin ells = 100 Eng. yards. 14½ Prussian miles are equal to 15 geographical miles.

Oak planks, deals, and pipe staves are sold by the sheck of 60 pieces; wheat, rye, &c. are sold by the last of 56½ scheffels. — (*Kelly's Cambist; Nolkenbrecher, Manuel Universel.*)

Corn Trade of Dantzic. — The reader will find, under the head CORN LAWS AND CORN TRADE (p. 420, &c.), a pretty full account of the Polish corn trade. But the importance of the subject will excuse our giving a few additional details. Grain is almost wholly brought to Dantzic by water, in flat-bottomed boats suited to the navigation of the Vistula, Bug, &c. Mr. Consul Gibson estimated the expense of the conveyance of wheat and rye hither, including the duty at Thorn and the charges of turning on the river, till put into the granary, as follows: —

	Per Imp. qr. *s. d.* *s. d.*
From the upper provinces on the Bug, a distance of from 700 to 800 miles - - - -	9 2 to 7 10
From the provinces of Cracow, Sendomir, and Lublin, 550 to 350 miles - - - -	6 6 - 5 4
From Warsaw and its neighbourhood, about 240 miles - - - - - - -	4 9 - 3 11
From Wlaciawock and its neighbourhood, about 140 miles - - - - -	4 2 - 3 5
From Graudentz, a distance of about 70 miles, no duty at Thorn, and when not turned on the river - - - - - - -	0 10 - 0 9

N.B. — These are the ordinary charges; but they are higher when there is any unusual demand for exportation.

The Bug has many windings, and its navigation, which is tedious and uncertain, can only be attempted in the spring, when the water is high. It is the same, though in a less degree, with some of the rivers that fall into the Vistula before it reaches Warsaw; and towards Cracow the Vistula itself is frequently

unnavigable, especially in dry seasons, except in spring, and after the midsummer rains, when the snow melts on the Carpathian mountains. The navigation of the Polish rivers in some seasons is more than usually bad. The corn from the upper provinces does not reach Dantzic till from 2 to 4 months later than usual, and is burdened with a very heavy additional expense. In fact, the supplies of grain at Dantzic depend quite as much on the abundance of water in the rivers, or on their easy navigation in summer, as on the goodness of the harvests.

"There are," says Mr. Jacob, "two modes of conveying wheat to Dantzic by the Vistula. That which grows near the lower parts of the river, comprehending Polish Russia, and part of the province of Plock, and of Masovia, in the kingdom of Poland, which is generally of an inferior quality, is conveyed in covered boats, with shifting boards that protect the cargo from the rain, but not from pilfering. These vessels are long, and draw about 15 inches water, and bring about 150 quarters of wheat. They are not, however, so well calculated for the upper parts of the river. From Cracow, where the Vistula first becomes navigable, to below the junction of the Bug with that stream, the wheat is mostly conveyed to Dantzic in open flats. These are constructed on the banks, in seasons of leisure, on spots far from the ordinary reach of the water, but which, when the rains of autumn, or the melted snow of the Carpathian mountains in the spring, fill and overflow the river, are easily floated.

"Barges of this description are about 75 feet long, and 20 broad, with a depth of 2½ feet. They are made of fir, rudely put together, fastened with wooden treenails, the corners dovetailed and secured with slight iron clamps, — the only iron employed in their construction.

"A large tree, the length of the vessel, runs along the bottom, to which the timbers are secured. This roughly cut keelson rises 9 or 10 inches from the floor, and hurdles are laid on it, which extend to the sides. They are covered with mats made of rye-straw, and serve the purpose of dunnage; leaving below a space in which the water that leaks through the sides and bottom is received. The bulk is kept from the sides and ends of the barge by a similar plan. The water which these ill-constructed and imperfectly caulked vessels receive, is dipped out at the end and sides of the bulk of wheat.

"Vessels of this description draw from 10 to 12 inches water, and yet they frequently get aground in descending the river. The cargoes usually consist of from 180 to 200 quarters of wheat.

"The wheat is thrown on the mats, piled as high as the gunwale, and left uncovered, exposed to all the inclemencies of the weather, and to the pilfering of the crew. During the passage, the barge is carried along by the force of the stream, oars being merely used at the head and stern, to steer clear of the sand banks, which are numerous and shifting, and to direct the vessel in passing under the several bridges. These vessels are conducted by 6 or 7 men. A small boat precedes, with a man in it, who is employed sounding, in order to avoid the shifting shoals. This mode of navigating is necessarily very slow; and during the progress of it, which lasts several weeks, and even months, the rain, if any fall, soon causes the wheat to grow, and the vessel assumes the appearance of a floating meadow. The shooting of the fibres soon forms a thick mat, and prevents the rain from penetrating more than an inch or two. The main bulk is protected by this kind of covering, and, when that is thrown aside, is found in tolerable condition.

"The vessels are broken up at Dantzic, and usually sell for about ⅓ of their original cost. The men who conduct them return on foot.

"When the cargo arrives at Dantzic or Elbing, all but the grown surface is thrown on the land, spread abroad, exposed to the sun, and frequently turned over, till any slight moisture it may have imbibed is dried. If a shower of rain falls, as well as during the night, the heaps of wheat on the shore are thrown together in the form of a steep roof of a house, that the rain may run off, and are covered with a linen cloth. It is thus frequently a long time after the wheat has reached Dantzic, before it is fit to be placed in the warehouses.

"The warehouses (*speichers*) are very well adapted for storing corn. They consist generally of 7 stories, 3 of which are in the roof. The floors are about 9 feet asunder. Each of them is divided by perpendicular partitions, the whole length, about 4 feet high, by which different parcels are kept distinct from each other. Thus the floors have 2 divisions, each of them capable of storing from 150 to 200 quarters of wheat, and leaving sufficient space for turning and screening it. There are abundance of windows on each floor, which are always thrown open in dry weather to ventilate the corn. It is usually turned over 3 times a week. The men who perform the operation throw it with their shovels as high as they can, and thus the grains are separated from each other, and exposed to the drying influence of the air.

"The whole of the corn warehouses now left (for many were burnt during the siege of 1814) are capable of storing 500,000 quarters of wheat, supposing the quarters to be large enough to fill each of the 2 divisions of the floors with a separate heap; but as of late years it has come down from Poland in smaller parcels than formerly, and of more various qualities, which must of necessity be kept distinct, the present stock of about 280,000 quarters is found to occupy nearly the whole of those warehouses which are in repair, or are advantageously situated for loading the ships. Ships are loaded by gangs of porters, with great despatch, who will complete a cargo of 500 quarters in about 3 or 4 hours." — (*First Report.*)

Mr. Meek gives, in his excellent Report on the Prices of Corn and other Articles in the N. of Europe, the following details with respect to Dantzic: —

"Wheat of moderate quality in ordinary seasons cannot be brought from Poland and delivered at Dantzic at less than 35*s.* per quarter, and that only when no excitement exists in the foreign markets. Some time since a very large accumulation of grain had in the course of several years taken place in the granaries at Dantzic; but the great export which has occurred during the last 3 or 4 years has so reduced the magazines, that the stock at the close of the present season (1841) was not expected to exceed from 80,000 to 100,000 quarters. The demand has been so great during the last 2 or 3 years, that every effort has been made to collect in Poland all the supplies that were available, and to bring them to Dantzic for exportation. If the corn trade in England was so modified as to be constantly open at a moderate duty, it is not likely, under such circumstances, that shipments of wheat from Dantzic would materially exceed that of the last 2 or 3 years. Not more than 5,000 quarters are consumed annually in Dantzic, by a population of 60,000 persons, the people generally preferring and living upon rye bread. Of the corn exported from Dantzic, one-third comes from that part of Poland which belongs to Prussia, and the remaining two-thirds from the Russian territory. Apprehensions were expressed here, as in other places, of the competition of Odessa and America, in the event of any material reduction of the duty on corn in England. The party making the observation, who is a leading corn merchant in Dantzic, said he had at that moment a cargo of Odessa corn in London which stood him in 49*s.* per quarter, and that he could purchase there Odessa wheat of similar quality at 48*s.* per quarter. The same apprehensions were expressed by others as to Odessa, exports from which place having already been largely made to Italy and other parts of the Mediterranean; and recently, it was added, several cargoes had been shipped to England. On pressing one of the most intelligent merchants in Dantzic to state what price was paid to the landed proprietor or farmer in Poland for a quarter of wheat on the estate where it was grown, or at the nearest market to that estate, he replied, that it was generally bought by the Jews upon the estates from the landowners or their agents, and afterwards sold by the former to the merchants at Dantzic, deliverable at Dantzic; that in some instances the princes and great landowners sent their own commissioners to Dantzic to effect sales to the merchants; that a Russian prince, who had 10,000 serfs, had acted upon the principle very recently; that under such circumstances it would not be right to take less than 30*s.* per quarter, as the price at which wheat, when there was a fair average crop, could be delivered at Dantzic, from which, deducting 12*s.* per quarter for the expense of bringing it from the place of growth to Dantzic, including waste, which is generally very considerable, cost of the boats, which are broken up and sold for a trifle compared with their original cost (amounting, perhaps, to 400 or 500 thalers, whereas they are only sold for about 40), the expense of the peasants and other persons navi-

gating them for a voyage, sometimes of 3 or 4 months, and returning back to Poland on foot, there would be left 33s. per quarter, as the price paid to the proprietor at the place of growth; out of which he had to bear the expense of cultivation, to pay the interest and redeem the capital of any mortgage which might exist, the residue being what would remain for rent and interest of capital embarked in the soil. He added, that this was generally considered as an average estimate of the expenses; but that they would vary a little, dependent upon the distance, either greater or less, from which the corn was brought. A considerable quantity of bones are exported from Dantzic to Great Britain, many of which are collected and sent down from Cracow. Complaint was made to the Consul by the merchant chiefly employed in this trade, that a heavy transit duty of 2s. per cwt. had recently been levied for the nominal purpose of repaving the turnpike road, that it was a heavy tax in proportion to the value, and that a representation from England was alone necessary to obtain its repeal.

"Of the timber and staves shipped at Dantzic, nearly the whole comes from Russian Poland. Prussian timber is becoming scarce; and even that from the Russian territory, that is of good quality, is much reduced, and has of late not been so good as formerly. This is owing, principally, to most of the good timber that could be conveniently got afloat having been felled. There is, it is said, but little of good quality now to be had without going much farther back from the shipping places, which the discouragement given by the present timber duties prevents. It will hence be obvious, that whenever any alteration takes place either in the corn trade or timber duties, Russia will be much more benefited than Prussia, so far as relates to the export of corn and timber from Dantzic."

Timber Trade, Brack. — Fir timber is usually brought down in its natural state, and is squared into logs, or sawn into planks, in winter, when the labourers cannot be otherwise employed. The staves shipped here are carefully assorted, and are reckoned superior to those of America.

The expenses of the water conveyance of squared timber, including duty at Thorn, are —

	Per piece. s. d.	s. d.
From the Bug - - - -	from about 6	0 to 5 9
Wieprez (above Warsaw)	- 4	6 - 4 4
Vistula (above do.)	- 3	0 - 2 4

Being higher when the demand is unusually great, or when hands are scarce.

At Dantzic, as well as at Petersburg (which see), Riga, and several other Baltic ports, sworn inspectors (*brackers*) are appointed by authority to examine certain articles intended for exportation, and to classify them according to their qualities. Staves and timber of all sorts, with the exception of pipe wood, is subjected to the brack. Prime quality is branded *Krohn* or *Crown*: second quality, *Brack*: and the third or lowest quality, *Bracks Brack*. All unmerchantable articles are rejected by the brackers, and are not allowed to be exported.

The gauge for crown pipe staves, which the bracker has always in his hand, is 1¼ inches broad, 1¼ thick, and 64 inches in length, which they must be at least; but they are expected to be larger in every respect.

Pipe staves are from 64 to 68 inches long; 6, 5, and 4½ at least, broad; and from 1¼ to 3 inches thick.

Brandy staves are at least 54 to 58 inches long, as thick and broad as pipe staves.

Hogshead staves are 42 to 45 inches long, as thick and broad as pipe staves, all English measure.

The quality is ascertained by marks, to distinguish each sort, as follows: —

Crown pipe staves, stamped at the end, K.
— brack, in the middle, I.
— bracks brack, II.
Hogshead crown, at the end, O K.
— brack, in the middle, I.
— bracks brack, II.
Brandy hogshead crown, at the end, B K.
— brack, in the middle, ℔.
— bracks brack, ℔℔.

Oak planks are assorted in the same manner. Crown plank is marked in the middle, C. Brack, in the end and middle, B. Bracks brack, B B.

To distinguish ¾ from 2, and 2½ from 3 inches, the 1½ are marked with I, and 2½ ℔.

At the end, in rough strokes, with coloured paint, brack is yellow I; bracks brack, white II; crown, red III.

Ashes are subjected to the brack. The calcined are opened and the crust taken off; others are not examined unless there be any suspicion of their quality, or the staves of the hogshead be supposed to be too thick. Every cask of potashes is opened.

Shipping Charges and Duties.

Charges upon the Shipment of 1000 Quarters of Corn at Dantzic in English Money.

	£	s.	d.
Metage in granary - - - - - - - - -	5	0	0
Delivery - - - - - - - - - -	1	4	6
Porterage down - - - - - - - - -	9	0	0
Meters' fee - - - - - - - - -	2	0	0
Town dues - - - - - - - - -	3	15	0
Lighterage - - - - - - - - -	10	0	0
Expenses to the roads - - - - - - - -	2	10	0
	£33	9	6

Exclusive of commission, 2 per cent.

The above are the charges if bought and shipped from the granary: but if bought and warehoused previously to shipping, the following additional charges are incurred: —

Metage from craft.
Porterage up, meters' fees, and town dues, are the same.

Additional.

Granary rent - -	3d.	per last of 10½ quarters per month.
Labourers - -	6	
Turning - -	7½	
Screening - -	-	

Exclusive of insurance against fire.

Charges on the Shipment of —

	R. s. gr.	
Pearlashes	about 0 10	per shippound of 330 lbs.
Weed ashes	— 0 6	— barrel do.
Fir timber	— 0 10	— load.
On Deck deals, Short deals, Deal ends	R. s. gr. about 0 23½	per load.
Lath wood	— 1 0	— fathom.
Clapboards	— 2 0	— shock of 60 pieces
Oak plank, Oak ends	— 1 10	— load
Staves	— 13 10	— mille pipe.
Black or spruce beer	0 7½	— last of 11 kegs.
Feathers	— 2 0	— 100 lbs.

N. B. — The Prussian pound is about 3½ per cent. heavier than the English pound. The expenses of sending goods down are taken at about an average rate; but if the whole or the greater part of the cargo were loaded in the Fairwater or roads, the expenses would be somewhat more.

Port Charges. — The charges on a ship of 200 lasts, or about 300 tons burden, are —

	R. s. gr.	Rf. g
Harbour money - - - -	88	26 8
Ditto in gold (say in Fred. d'ors, reckoned at 5 r., in which this must be paid) -	- 14	6 8
River money - - - -	- 0	0 0
Commercial contribution - - -	- 3	10 0
Expedition expenses - - -	- 13	10 0
Captain's allowance for expenses on shore	- 16	20 0
Tracking the ship into the harbour (Fairwater) - - -	- 2	0 0
Ballast money, &c. - - -	- 10	24 0
Pilot to the ballast wharf - -	- 4	0 0
Ditto moving the ship in Fairwater -	- 2	15 0
Police passport - - - -	- 3	5 0
Clearing the vessel in and out - -	- 16	20 0
Making 27l. 6s. 6d. sterling, at the exchange of 6 r. 28 s. gr. - - -	- 175	17 4

The charges on the ships of all countries having reciprocity treaties with Prussia (which is generally the case) are the same, only Dantzic captains receive no allowance for shore expenses. River or stream money is only paid by vessels that bring goods to town, or load in the Motlau (above the blockhouse): if a ship remain in the Fairwater or Vistula, the river money is levied on the craft carrying the goods, and falls on the latter.

Dantzic is a favourable place for ships careening and repairing, and for obtaining supplies of all sorts of sea stores at a reasonable rate.

There belonged to the port in 1842, 80 ships, measuring 14,880 lasts. They are employed in foreign trade. The port has no fishery, and no coasting trade worth mentioning. The wages of Dantzic seamen vary from 30s. to 32s. per man per month.

Custom-house Regulations. — The shipmaster must, within 24 hours after arrival in port, make a declaration of the cargo on board, and of the ship's provisions, and he incurs a severe penalty if the declaration do not prove correct. The ship's hatches (if goods are on board) are sealed on arrival, and an additional declaration is accepted before they are opened; but no *later* declaration, supplementary, or explanatory of the first, and not submitting the goods to investigation by the officers, is received or allowed. If the shipmaster be unable to make a complete declaration on arrival, a Custom-house officer is put on board, who remains until the ship is unloaded, at an expense to her of about 2s. per day and night. The cargo can only be discharged in presence of a customs officer.

The shipmaster, and not the receiver of the goods, is made responsible, if the *contents* of the packages do not correspond with his declaration; and he is only exonerated from this by solemnly averring, on making the declaration, that the contents are unknown to him. An evident mistake or oversight is treated as rigorously as an intentional fraud.

On commencing to *load*, the shipmaster receives a blank loading list, in which he must daily note the articles he takes on board, or he is liable to fine; but this regulation is not very rigidly enforced. On clearing out, this list is compared with the goods entered by the vessel, when the sea passport is given.

Ballast can be discharged only at stated places, on pain of the shipmaster being fined.

It is material, however, to observe, that the whole Custom-house business of the shipmaster is conducted by Custom-house brokers, so that he is never at a loss, being informed by the one he selects what he has to do. Alterations are frequently made in the Custom-house regulations.

The shipmaster receives, on arrival, from the pilot commodore, a copy of the harbour regulations, in his own language, with instructions how to act as to ballast.

Warehousing. — Such goods as pay a higher duty than ¼ a dollar per centner (about 1s. 5½d. for about 113 lbs. English) may be placed in the king's stores (nowhere else), and remain there for 2 years without payment of duty. No allowance is made for waste or damage in these stores. Other goods, not capable of being changed, may be placed in private stores, under the king's lock; but not elsewhere, without permission. No rent is charged for goods in the king's stores, during the first 3 months; afterwards about 1½d. monthly rent is charged for the first, and about 3d. monthly for the second year, per centner of about 113 lbs. English.

In private warehouses, the monthly rent for 10 quarters of wheat or other grain is from about 3½d. to 7d., or more, according as warehouse room is abundant or otherwise. Other goods do not usually pay by the piece, but part of a store is hired for them, and the rent generally comes somewhat higher in proportion.

The cost of rent and turning grain is from 1s. 2d. to 1s. 6d. monthly, for 10 quarters, according to the season of the year and other circumstances; but more when granary room is scarce, and wages high.

Banking Establishments. — There is none such here, excepting a branch of the Royal or Government Bank of Berlin. This was founded partly in the view of receiving deposits of money under litigation in the courts of the province; monies the property of minors and charitable institutions, the former until disposable or placed on good security; and monies belonging to individuals not merchants, and at times, also, those of the latter. Interest is paid on such deposits as follows: viz. —

3 per cent. on sums belonging to minors.
2½ do. do. charitable institutions, churches, and sums deposited by the courts of justice, and
2 do. all other deposits.

The principal is demandable at pleasure, unless otherwise stipulated. The bank makes advances on grain and some other kinds of goods at 5 per cent. interest; discounts bills with 3 signatures, not having more than 2 months to run, at 6 per cent., and sometimes, when money is plenty, at a lower rate. It also makes advances at 4 per cent. on deposits of Fred. d'ors and certain foreign monies; and it occasionally buys bills for account of, and sells bills on, the Berlin bank. It does not issue notes. The amount of its capital is not fixed; but government guarantees its transactions. It is relieved from the payment of postage on money, and it is not required to use the stamps fixed by law, on bills for its deposit transactions, but only those of 10 s. gr. (about 11½d.); while individuals must use stamps for such bills of 5 s. gr. for every 400 r., of not longer date than 3 months, and for every 200 r. of longer date.

On negotiable bills, however, the bank must use the stamps fixed by law, say of 5 s. gr. (about 5½d.) for sums of 50 dol. to 400 dol., and at the same rate for every additional sum between 100 dol. and 400 dol.

Bills from and on foreign places, negotiated at Dantzic, are not subject to the stamp duty.

The affairs of the bank are not made public. Being a government concern, there are no dividends. It is not supposed to be very profitable, at least in the present circumscribed state of trade, although enjoying the advantages of exemption from postage of monies, and paying less stamp duty. It is true, however, that the direct advantage of the lower stamp duty is enjoyed by the borrower.

Credit, Brokerage, &c. — Very few goods are consigned from abroad for sale, for such consignments rarely turn to good account. Imports are seldom sold for cash, but generally a 1, 2, and 3 months' credit, or longer. The discount allowed for cash payments, when sold on time, is usually 6 per cent., but it varies according as money is plentiful or otherwise.

Any person, being a burgher of the town (which any one of good character may become), may transact business as a commission merchant or factor; but brokers must be chosen by the elders of the Corporation of Merchants, approved by the regency of the province, and sworn in by the magistracy of the town.

The usual rates of commission are —

3 per cent. on wood articles } exported,
2 do. other goods }
2 do. goods imported,

with from 1 to 2 per cent. on do. for *del credere*, or guarantee of debts.

The corn factor receives r. 1·7 (about 4s. 9d. sterling) per last (of 60 scheffels) of all grain, from the buyer, and 1 per cent. from the seller.

The rates of brokerage are —

12½ s. gr. (nearly 1s. 9½d.) per 100.
7½ — (— 8·7d.) per 100.
3½ — (— 4·3d.) per 100 r.

1 per mille for bills on Berlin, Warsaw, and Paris.
½ per cent. on monies placed at interest, for a period not less than 6 months, from the borrower, and
1 per mille from the lender.
1 per mille usually for short discounts, from both parties.
1 per cent. on the actual or the computed amount of transactions in public funds, from both parties.
½ per cent. usually (sometimes more or less) for merchandise.

On grain for exportation, the brokerage is recently fixed at 1 per cent., to be paid by the seller, the buyer refunding to him 5 s. gr. per last (of 56½ scheffels).

Burghers, being merchants, may act as brokers, without direct authority, in the purchase from, and sale of goods to, Poles, receiving 1 per cent. on goods bought, and 1 to 2 per cent. on goods sold, according to circumstances.

Bankruptcies are not of frequent occurrence here. Their most prevalent sources at present are speculations in grain. Bankrupts cannot obtain a discharge except by private composition, without which they always remain responsible to each individual creditor, who can attach them at any time, if he can show that they possess property, although their affairs have been settled by judicial authority. This, and the tediousness of settlements in court, make both debtor and creditor desirous of settling by composition; and hence few insolvents are made bankrupt by their affairs being brought into court. It is to be observed, that creditors, having claims by bills in force, must by law be paid to the full, before those with only book claims receive any thing; but to avoid the tardiness of the court, bill creditors here generally agree to let book creditors receive half as much in composition as they themselves get. It is, however, difficult to arrange a composition, as each creditor can make his own terms; and those who hold out, generally get more, at least privately, than the ostensible rate of composition offered by the debtor.

If a private composition cannot be effected, and the insolvent is regularly made bankrupt, by his affairs being put into court, the law prescribes that, if a small portion of the creditors will not accept the dividend with which the greater portion are satisfied, the latter can require the former to consent, or become responsible for the estate producing as much finally; but so many objections may be made, that this compulsive measure is very seldom resorted to. A private composition is, however, generally preferred by all parties, more particularly by the debtor, as being the only means by which he can become entirely free, and get a general discharge.

Honest bankrupts, whose affairs are brought into court, may be freed from personal arrest by faithfully delivering up all their property. Dishonest ones, upon conviction, are punished by being sent to the House of Correction; but they often escape punishment, from the too great laxity in enforcing the laws in criminal matters.

The creditors of a bankrupt estate brought into court, rank under 8 different classes, each prior class enjoying a precedency of claim over those following, to the full amount. The two most considerable classes, in general, are the 6th and 7th, the former being that of the bill, the latter that of the book, creditors.

Taxes, &c. — The duties are in general payable on the gross weight; a fixed allowance being made, in many cases, according to the packages; in others, there is no allowance. The tariff specifies the particular regulations on this point. The tare on goods in single sacks is 4 lbs. per centner (about 113 lbs. English), it being left to the option of the receiver to have the nett weight ascertained.

In trade there are fixed rates of tare only on the following goods; viz.

Potashes, 6 per cent., when sold by a merchant.
Dyewood, ground, 8 to 11 per bale.

Currants	14 per cent.	-	- in whole butts.
——	16 —	-	- half do.
——	18 —	-	- ¼ and ⅛th do.
Figs and raisins	10 —	-	- casks.
Olive oil	16 —	-	- whole and half butts.
——	18 to 20 —	-	- ¼ and ⅛th.
——	16 —	-	- pipes.

Seed oil, latterly the tare is ascertained.
Pepper, English, in double bags, 7 lbs.
— Danish, in bags and mats, 11 lbs.
Orange and lemon peel, 6 per cent., or tare ascertained.
Rice from England or Hamburg, the tare as on the casks, less 2 lbs. per cask on that from England, and in proportion to the weight on that from Hamburg. Danish should give 10 per cent. tare, but the buyers are in general not satisfied with this.
Tallow, 10 per cent., or nett tare.
Tea, Danish bohea, 7 lbs. if in linen and mats.
— 24 lbs. in chests above 100 lbs.
— 22 lbs. — of about 80 lbs.

Most frequently the tare is ascertained.
Vitriol, 10 per cent.
Raw sugar, 12 to 16 per cent. according to the size of the chests.
Candied sugar, tare by invoice, adding in that proportion for the difference in the weight usually heavier.
Syrup in whole casks, 10 per cent.
— in ½ ditto, and barrels, 12 per cent.
On the sale of imports, 1 per cent. on the nett weight (called good weight) is allowed in favour of the buyer.

Insurance. — There are no insurance companies nor private insurers here; but there are agents of insurance companies in Hamburg for ships, and of those of London and other places for houses and lives.

Wages of common Labourers in Dantzic vary from 9d. to 11d. a day, and those of carpenters, masons, &c., from 1s. 6d. to 2s. Wages in all the large Prussian towns are higher than in the small towns of the country, from the price of flour, bread, and butchers' meat being higher in them. This is occasioned partly by the latter being subject to *octrois* or excise duties on entering the great towns, from which the country districts and smaller towns are exempted. The king receives ⅓ of these duties, and the towns the other ⅔. This duty is a great obstacle to the free intercourse of the country.

(We have derived these details from different sources, but principally from *Consular Returns*; *Merk's Report*; and information supplied by the Prussian Government.)

DATES (Ger. *Datteln*; Fr. *Dattes*; It. *Datteri*; Sp. *Datiles*), the fruit of the palm tree (*Phœnix dactylifera* Lin.). This tree is abundant in Egypt, Barbary, Arabia, Persia, and the adjacent countries, particularly on the confines of the desert, and wherever there is sufficient moisture. It is a tall majestic tree; and repeated references are made to it in the sacred writings (Ecclus. xiv. 14.), and in the Koran. Mohammed, in one of his sayings, beautifully compares the upright and generous man to the palm tree. "He stands erect before his Lord; in his every action he follows the impulse received from above, and his whole life is devoted to the welfare of his fellow-creatures." But the veneration in which the palm tree is held in the East is to be ascribed more to its utility than to its beauty. Dates form the principal part of the subsistence of the inhabitants of many parts of Arabia and Barbary, and they are held in the highest estimation wherever they are met with. "They are," says Burckhardt,

" by far the most essential article of food for the lower classes of Medina ; their harvest is expected with as much anxiety, and attended with as much general rejoicing, as the vintage in the south of Europe ; and if the crop fails, which often happens, as those trees are seldom known to produce abundantly for 3 or 4 successive years, or is eaten up by the locusts, universal gloom overspreads the population, as if a famine were apprehended." — (*Travels in Arabia*, vol. ii. p. 214.)

There is an endless variety of dates. Generally, however, they may be described as being somewhat in the shape of an acorn, but usually larger, consisting of a thick fleshy substance, including and freely separating from an oblong stone or kernel, having a furrow on the one side. Their taste is agreeably sweet, accompanied with a slight astringency The new fruit is called by the Arabs *rutob*. When the dates are allowed to remain on the tree till they are quite ripe, and have become soft and of a high red colour, they are formed into a hard solid paste or cake called *adjoue*. This is formed by pressing the ripe dates forcibly into large baskets, each containing about 2 cwt. " In this state," says Burckhardt, " the Bedouins export the adjoue : in the market it is cut out of the basket, and sold by the pound. It forms part of the daily food of all classes of people ; in travelling it is dissolved in water, and thus affords a sweet and refreshing drink. During the monsoon, the ships from the Persian Gulph bring adjoue from Bussorah to Djidda for sale in small baskets weighing about 10 lbs. each : this kind is preferred to every other. Ships bound from Arabia for India take with them a considerable quantity of adjoue, which is readily disposed of amongst the Mohammedans of Hindostan." — (*Travels in Arabia*, vol i. p. 57)

The Arabians and Egyptians use the leaves of the tree in the preparation of bags and baskets ; the boughs, the outer and inner bark of the trunk, and the fleshy substance at the root of the leaves, where they spring from the trunk, have all their respective uses ; and besides this, the kernels of the fruit, notwithstanding their hardness, are used as food for cattle ; they are soaked for two days in water, when they become softened, and are given to camels, cows, and sheep, instead of barley : they are said to be much more nutritive than that grain. There are shops at Medina in which nothing else is sold but date kernels ; and the beggars are continually employed in all the main streets in picking up those that are thrown away. — (*Burckhardt*, vol ii. p 212)

All the refinements of Arabian cookery are exhausted in the preparation of dates ; and the Arabs say that a good housewife will daily supply her lord, for a month, with a dish of dates differently dressed.

Palm trees are raised by shoots ; and Dr Shaw mentions that they arrive at their vigour in about 30 years, and continue so 70 years afterwards, bearing yearly 15 or 20 clusters of dates, each of them weighing 15 or 20 lbs. : after this period, they begin to decline. — (*Travels in the Levant*, p. 142. 4to ed)

The best dates imported into Great Britain are said to come from Tunis, but they are most commonly brought from Smyrna and Alexandria They should be chosen large, softish, not much wrinkled, of a reddish yellow colour on the outside, with a whitish membrane betwixt the flesh and the stone. Those that are dry and hard are of little value

DEALS, or DEAL BOARDS (Ger. *Dielen*, Du. *Deelen* ; Da. *Dæler* ; Sw. *Tiljor* ; Fr. *Planches minces* ; It. *Tavole*, *Piane* ; Rus. *Doski* ; Pol. *Turcice*), a thin kind of fir planks, much used in carpentry : they are formed by sawing the trunk of a tree into longitudinal divisions, of greater or less thickness, according to the purposes they are intended to serve. They are imported from Dantzic, Petersburg, Narva, and many other ports in the Baltic, and from North America ; but those from Christiania, the capital of Norway, are the best, and bring the highest price. They are distinguishable from those produced in the contiguous provinces of Norway ; their superiority has been said to depend principally on their being more perfectly sawed ; but it really depends on the greater care with which the sap-wood and other defective portions of the timber are cut away, and on the quality of the timber.

A Russian standard deal is 12 feet long, 11 inches wide, and 1½ inch thick ; 400 feet of 1½ inch plank make a load.

A Christiania standard deal is 11 feet long, 9 inches wide and 1½ inch thick. There is another standard of Norway deals at Dram, 10 feet long, 9 inches wide, and 1½ inch thick — (See CHRISTIANIA.)

DEBENTURE, a term used at the Custom-house to signify the *certificate* subscribed by the customs officers, and given to the exporter of goods on which a bounty or drawback is allowed, bearing that the exporter has complied with the required regulations, and that he is entitled to such bounty or drawback.

It is enacted by 3 & 4 Will. 4. c. 52. § 86., that no drawback or bounty shall be allowed upon the exportation of any goods, unless entered in the name of the real owner thereof, or of the person who had actually purchased and shipped the same, in his own name and at his own risk, on commission.

Such owner or commission merchant shall make and subscribe a declaration on the debenture that the goods have been actually exported, and are not to be relanded in any part of the U. Kingdom, &c. ; and if such owner or commission merchant shall not have purchased the right to such drawback or bounty, he shall declare under his hand in the entry, and in his oath upon the debenture, the person who is entitled thereto ; and the name of such person shall be inserted in the cocket, and in the debenture, and his receipt on the latter shall be the discharge of such drawback or bounty. — § 87.

For these and the other clauses in the act relating to debentures, see IMPORTATION AND EXPORTATION.

All debentures must be on 5*s* stamps.

Debentures or certificates for bounty on the exportation of linens or sailcloth exempted from duty.

DELFT, or DELF (Ger. *Fayence*, *Unachtes Porzellan* ; Du. *Delfs porcelyn* ; Fr. *Faience*), a coarse species of porcelain originally manufactured at Delft, whence its name. It is now rarely used in this country.

DEMURRAGE, in commercial navigation, is an allowance made to the master or owners of a ship by the freighter, for detaining her in port longer than the period agreed upon for her sailing. It is usually stipulated in charterparties and bills of lading, that a certain number of days, called running or working days, shall be allowed for receiving or discharging the cargo, and that the freighter may detain the vessel for a further specified time, or as long as he pleases, on payment of so much *per diem* for such over-time. When the contract of affreightment expressly stipulates that so many

days shall be allowed for discharging or receiving the cargo, and so many more for overtime, such limitation is interpreted as an express stipulation on the part of the freighter, that the vessel shall in no event be detained longer, and that if detained he will be liable for demurrage. This holds even in cases where the delay is not occasioned by any fault on the freighter's part, but is inevitable. If, for example, a ship be detained, owing to the crowded state of the port, for a longer time than is allowed by the contract, demurrage is due; and it is no defence to an action for demurrage, that it arose from port regulations, or even from the unlawful acts of the Custom-house officers. Demurrage is not, however, claimable for a delay occasioned by the hostile detention of the ship, or the hostile occupation of the intended port; nor is it claimable for any delay wilfully occasioned by the master, or owners, or crew of the vessel. The claim for demurrage ceases as soon as the ship is cleared out and ready for sailing, though she should be detained by adverse winds, or tempestuous weather. — (*Chitty's Commercial Law*, vol. iii. pp. 426 — 431.)

DENARIUS, a Roman coin, estimated by Dr. Arbuthnot to have been worth 7¾*d.*; but its value differed at different periods.

DENIER, a small French coin, of which there were 12 to a sol.

DIAMOND (Ger. Du. Da. and Fr. *Diamant*; Sw. *Demant*, *Diamant*; It. Sp. and Port. *Diamante*; Rus. *Almas*; Pol. *Dyamant*; Lat. *Adamas*; Hind. *Hira*), a precious stone which has been known from the remotest ages. Pliny has described it (*Hist. Nat.* lib. 37. § 4.); but his account is, in many respects, inaccurate. It is found in different parts of India, and in Borneo; it is also found in Brazil, on which, indeed, Europe may be said to be at present entirely dependent for supplies of diamonds. Hitherto, however, it has not been met with any where except within the tropics. It is the most beautiful and most valuable of precious stones. Its most common colours are white and grey of various shades. It occurs also red, blue, brown, yellow, and green. The colours are commonly pale. It is always crystallised, but sometimes so imperfectly that it might pass for amorphous. It is the hardest body in nature. External lustre from splendid to glimmering; internal always splendid. It is brittle; its specific gravity is 3·5. When rubbed, it becomes positively electric, even before it has been cut by the lapidary, which is not the case with any other gem. — (*Thomson's Chemistry.*)

According to Mr. Milburn (*Orient. Com.*), the colour should be perfectly crystalline, resembling a drop of clear spring water, in the middle of which you will perceive a strong light playing with a great deal of spirit. If the coat be smooth and bright, with a little tincture of green in it, it is not the worse, and seldom proves bad; but if there be a mixture of yellow with the green, then beware of it — it is a soft, greasy stone, and will prove bad.

Tests of Diamonds. Cutting, &c. — To ascertain whether any specimen is a true diamond or not, a fine file may be used; and if the surface of the stone be the least abraded or scratched by its action, it is not a diamond. The difference will also appear upon close examination without this instrument; the rays of light easily pass through other gems, but in the diamond they are refracted to the surface, which occasions its superior brilliancy. If the specimen under examination be very minute, it may be placed between 2 half-crowns, or other flat metallic surfaces, and pressed with the thumb and finger: if a diamond it will not be injured; but if otherwise, it will break and fall to powder. On account of the extreme hardness of the diamond, the art of cutting and polishing it was for a long time unknown in Europe. But, in 1456, a young man of the name of Louis Berghen, a native of Bruges, is said to have constructed a polishing wheel for the purpose, which was fed with diamond powder instead of *corundum*, which the Chinese and Hindoos had been long accustomed to employ. Berghen was led to this discovery by observing the action produced by rubbing 2 rough diamonds together. Diamonds are cut into brilliants and rose diamonds: the former being, for the most part, made out of the octahedral crystals, and the latter from the spheroidal varieties. — (*Joyce's Practical Mineralogy*; *Rees's Cyclopædia*, *&c.*)

"*Commercial Value of Diamonds.* — In the great or wholesale trade there is but little fluctuation in the price of those diamonds which may be termed *stones in general demand*. I will begin with brilliants from 1 grain to 2½ grains each. — Such brilliants, double cut, and what may be termed fine, are worth from 7*l.* to 8*l.* per carat. Needy sellers may take 10 per cent. less for cash; but this is the general average price for a lot of 10, 20, or 50 carats of well-made stones, if the quality be good.

"Brilliants, from 2 grains to 3, may be bought in lots, at from 7*l.* 7*s.* to 8*l.* per carat. It is to be understood, that diamonds in a lot are never all quite free from faults; hence there may arise a difference of 10 per cent. in the price. Stones of 3 grains, if fine and perfect, are always in demand, at 8*l.* or 9*l.* per carat.

"Brilliants, from 3 grains to 4, if very fine and well proportioned, are worth from 8*l.* to 9*l.* per carat. Those of a carat each, if very fine and well selected, are worth 9*l.* or 10*l.* Three years ago I offered 12*l.* each for 8, and could not obtain them.

"Brilliants, from 5 grains to 6, if pure, are worth from 13*l.* to 14*l.*; if perfectly fine, and of the full weight of 6 grains, they are worth from 17*l.* to 18*l.* each: I have, for such, paid 20*l.*

"Brilliants, of 2 carats each, are worth from 27*l.* to 30*l.* Stones of this weight, if well proportioned, are considered of a fine size, and well calculated for pins, or the centre of clusters; indeed, well proportioned diamonds, from 6 grains to 2 carats each, are always in demand, and are retailed at from 20*l.* to 35*l.* each, according to their degree of perfection, or as the retailer may think fit to charge them.

"For brilliants of 3 carats, if fine and well formed, from 70*l.* to 80*l.* may be obtained. Stones of this size, and larger, are more liable to capricious fluctuations of price than the smaller ones before named, being chiefly required for the centre stones of saleable necklaces.

"Brilliants of 4 carats, if fine, are worth from 100*l.* to 130*l.* I have sold stones, single cut, a little off *colour*, of this weight, at 80 guineas. I possessed one of 17 grains, perfectly white, having a surface as large as that of a 7 carat stone ought to be; it was, consequently, very thin, but being much in request, on account of its great *spread*, or surface, it was sold for 160*l.*

"Brilliants of 5 carats are not frequently met with in general trade, and are valuable in price; as the dealers exact more if they know that such stones are wanted, than they would in the regular course of business. The prices may be said to vary from 180*l.* to 200*l.*

"Brilliants of 6 carats, as before stated, are not common; they are suitable for centre stones of expensive necklaces, and single stone rings; if perfect and well shaped, they sell for 230*l.* to 250*l.* or more.

"For estimating the value of peculiarly fine diamonds, there is no fixed standard. Rough diamonds, selected as fine, and well formed for cutting, may be estimated as follows: — Square the weight of the stone, multiply the product by 2, and the result will be the value in pounds sterling. Brilliants, if fine, may be estimated by squaring the weight in carats, and multiplying the product by 8, which will give the amount in pounds sterling.

"As a very large property, both in this kingdom and in other countries of Europe, is vested in diamonds, it may be interesting to be informed, that not only the price of these gems has for several years been, upon the whole, gradually rising, but that it is likely to continue on the advance. At the present time, indeed, and for the last few years, there has been a dull sale of diamonds in England, nor did the coronation occasion a demand worth notice; but on the Continent the trade has been steady, and rough diamonds have been constantly rising in price. That this advance will be progressive, may be assumed from the fact, that the best diamond ground now known, the Serro do Frio in Brazil, has assuredly passed the zenith of its prosperity. I went over the greater part of what is yet reserved, and still remains to be worked, and I conceive that there would be no difficulty in calculating the length of time in which the present number of workmen may reduce it to a state of exhaustion, like that of the far-famed Golconda. The average annual produce of future years may be estimated by the amount obtained from that portion which has been already worked. Brazil may be said to furnish Europe with 25,000 or 30,000 carats *per annum* of rough diamonds; which, if reduced to brilliants, may make an influx into the market of 8,000 or 9,000 carats annually." — (*Mawe's Treatise on Diamonds*, 2d ed. pp. 9—11. and p. 50.)

The rule stated by Mr. Mawe, and adopted by the jewellers, for estimating the value of diamonds, (multiply the square of the weight in carats by 2, and the product is the value in pounds sterling,) can only hold in the case of those that are of a small size, or do not weigh more than 20 carats. The value of the largest diamonds, which are exceedingly rare, (*non nisi regibus et his admodum paucis cognitus*, Pliny,) can, it is clear, depend upon nothing but the competition of the purchasers. The diamond belonging to the Emperor of Brazil is the largest in the world. It is still uncut, and weighs 1,680 carats; so that, according to the jewellers' rule, it must be worth the enormous sum of 5,644,800*l.*! It may, however, be doubted, whether his Imperial Majesty would have any disinclination to part with it for the odd sum of 641,800*l.* The famous diamond belonging to the Emperor of Russia, which the jewellers tell us is worth 4,800,000*l.*, did not cost 150,000*l.*

Diamonds are not used exclusively as articles of ornament or luxury. They are frequently employed with great advantage in the arts. "Bad, discoloured diamonds," says Mr. Mawe, "are sold to break into powder, and may be said to have a more extensive sale than brilliants, with all their captivating beauty. In many operations of art they are indispensible; the fine cameo and intaglio owe their perfection to the diamond, with which alone they can be engraved. The beauty of the onyx would yet remain dormant, had not the unrivalled power of the diamond been called forth to the artist's assistance. The carnelian, the agate, or carnigorm, cannot be engraved by any other substance; every crest or letter cut upon hard stone is indebted to the diamond. This is not all; for without it, blocks of crystal could not be cut into slices for spectacles, agate for snuff-boxes, &c."

Diamonds may be landed without report, entry, or warrant. — (3 & 4 *Will.* 4. c. 52. § 2.)

The carat grain used in weighing diamonds is different from the Troy grain, 5 diamond grains being only equal to 4 Troy grains.

DIAPER (Ger. *Drell*; Du. *Drel*; Fr. *Linge ouvré*; It. *Tela tessuta a opere*; Sp. *Manteles alemaniscos*; Rus. *Salfetotschnoe*), a sort of fine flowered linen, commonly used for table-cloths, napkins, &c., brought to the highest perfection in the manufactories in the north of Ireland, in Germany, and Scotland.

DICE (Ger. *Würfel*; Du. *Taarlingen*; Fr. *Dés* (*à jouer*); It. *Dadi*; Sp. *Dados*; Rus. *Kosti*), cubical pieces of bone or ivory, marked with dots on each of their sides from 1 to 6, according to the number of the face. The regulations as to the manufacture and sale of dice are the same as those with respect to CARDS (which see). Every pair of dice is to pay a duty of 20*s.* All pieces of ivory, bone, or other matter used in any game, having letters, figures, spots, or other marks denoting any chance, marked thereon, to be adjudged dice; and if more than 6 chances are signified on any one piece, then such piece to be charged with the full duty of a pair of dice. — (9 *Geo.* 4. c. 18.)

DIMITY (Fr. *Basin*; It. *Dobletto*; Sp. *Dimite*), a species of cross-barred stuff entirely composed of cotton, similar in fabric to fustian.

DISCOUNT, an allowance paid on account of the immediate advance of a sum of money not due till some future period. It is usually said to be of two kinds; viz. discount of bills, and discount of goods; but they are essentially the same.

When a bill of exchange is presented at a banker's for discount, it is the practice to calculate the simple interest for the time the bill has to run, including the days of grace, which interest is called the *discount*; and this being deducted from the amount of the bill, the balance is paid over to the presenter of the bill. This is the method followed by the Bank of England, the London and provincial bankers, and by commercial men in general. But it is, notwithstanding, inaccurate. The true discount of any sum for any given time is such a sum as will in that time amount to the interest of the sum to be discounted. Thus, if interest be *five* per cent., the proper discount to be received for the immediate advance of 100*l.* due 12 months hence is not 5*l.*, but 4*l.* 15*s.* 2½*d.*; for this sum will, at the end of the year, amount to 5*l.*, which is what the 100*l.* would have produced. Those, therefore, who employ their money in discounting, make somewhat more than the ordinary rate of interest upon it; for a person discounting 100*l.* due at the end of a year, advances, supposing interest to be 5*l.* per cent., only 95*l.*; so that, as this 95*l.* produces 100*l.* at the period in question, the interest received has really been 5*l.* 5*s.* 3*d.* per cent.

The rule for calculating discount on correct principles is as follows: —

As the amount of 100*l.* for the given rate and time
Is to the given sum or debt;
So is 100*l.* to the present worth, or
So is the interest of 100*l.* for the given time
To the discount of the given sum.

Mr. Smart has calculated, on this principle, a Table of the discount of 1*l.* for any number of days, at 2, 2½, 3, 3½, &c. to 10 per cent., to 8 decimal places. But the simple interest of the sum being the only thing looked to in practice, such Tables are hardly ever referred to.

Bills in the highest credit are discounted on the lowest terms; the discount increasing according to the suspicions entertained of the punctuality or solvency of the parties subscribing the bills. During the war, the rate of interest, or, which is the same thing, of discount, was comparatively high; but since 1818, the rate of discount upon good bills has seldom been above 4, and has often been as low as 3 and even 2½ per cent.

Discount on merchandise takes place when, after making a purchase of goods at a fixed term of credit, the buyer finds means to make his payment before the expiration of that term, receiving from the seller a discount or allowance, which is commonly a good deal above the current rate of interest. The discount on goods varies, of course, according to the interest of money. During the late war, the loans to government were so large, and the facility of investing money was such, that the discount on goods was often as high as 5 per cent. for 6, and 10 per cent. for 12 months. Now, however, the discount on goods has fallen, with the fall in the rate of interest, to 7 or 7½ per cent. for 12 months; being about double the current interest arising from funded property, or the discount of good mercantile bills.

Long credits and discounts upon goods have, for a lengthened period, been usual in England. This arose from a variety of causes, but principally, perhaps, from the magnitude of our exports to the United States, Russia, and other countries where there is a great demand for capital; but in whatever causes it originated, it has latterly been carried to what seems to be an injurious extent.— (See CREDIT.) In France and Germany, the manufacturers, in general bare of capital, are obliged to stipulate with the merchants for short credits. In Holland the *usage* of the exporting merchants has been to pay either in ready money, or at so short a date as to put discounting out of the question, the manufacturer setting at once the lowest price on his goods.

DIVIDEND, the name given to the payment made to creditors out of the estate of a bankrupt, and to the annual interest payable upon the national debt, and other public funds.

DJIDDA, a town of Arabia, on the Red Sea, about 21 miles from Mecca, of which it is the sea-port, in lat. 21° 29′ N., lon. 39° 14′ E. It is well built; the streets are unpaved, but spacious and airy; the houses high, and constructed, for the most part, of madrepores and other marine fossils. The supply of water is scanty, and its quality indifferent. Small vessels approach close to the quays; but large vessels are obliged to anchor in the roads, about 2 miles off, loading and unloading by means of lighters. The entrance to the roads is difficult, and should not be attempted without a pilot. Djidda is a place of considerable commercial importance. It is the *entrepôt* in which is centred the greater part of the commerce between India, Egypt, and Arabia. Many of its merchants possess large capitals; some of them as much as from 150,000*l.* to 200,000*l.* The trade in coffee brought from Mocha, and other ports in Yemen, is the most considerable, but it is said also to be the most hazardous. The returns are principally made in cash. The trade with India and the Gulph of Persia is safer than the coffee trade, and is very considerable. Djidda has also a good deal of intercourse with the ports of Cosseir, Souakin, and Massouah, on the opposite coast of the Red Sea. The imports from the last two principally consist of slaves, gold, tobacco, dhourra or barley, hides, butter (of which immense quantities are made use of in Arabia), mats, &c.; in return for which the Africans receive Indian goods suitable for their markets, dresses and ornaments for their women, dates (which are not produced in any part of Nubia), iron, &c. The principal article of import from Cosseir is wheat; and not only Djidda, but the whole Hedjaz, or Holy Land of Arabia, is almost entirely dependent upon Egypt for corn. Coffee is the principal article sent in return. Business is transacted at Djidda with ease and expedition. The number of ships belonging to the port is estimated at 250. Owing to the scarcity of timber, none of them are built at Djidda; those belonging to it being either purchased at Bombay or Muscat, or at Mocha, Hodeida, or Suez. For a considerable period each year, before and after the feast of Ramadhan, when pilgrims come from all quarters to visit Mecca, the town is thronged with strangers, and a great deal of mercantile business is transacted. Djidda is at present, and has been for a number of years, under the government of Mohammed Ali, pacha of Egypt. The *moneys*, *weights*, and *measures* of the latter country (for which see ALEXANDRIA), are now generally used in Djidda, the commerce of which has been much improved and extended in consequence

of the comparative security and good order enforced by the pacha. — (We have gleaned these details from the different works of Burckhardt, particularly from his *Travels in Arabia*, vol. i. pp. 1—100.)

DOCKS are artificial basins for the reception of ships. The term has been supposed by some to be derived from the Greek δεκομαι, to receive; but it is obviously no other than the Teutonic *dock*, originally perhaps derived from *dekken*, to cover, enclose, or protect.

Docks are of two sorts — *wet* and *dry*. Wet docks are generally constructed with gates to retain the water. Ships are admitted at high water; and the gates being shut, they are kept constantly afloat. A dry dock is intended for the building, repairing, or examination of ships. The ships to be repaired or examined are admitted into it at high water; and the water either ebbs out with the receding sea, or is pumped out after the gates are shut.

Utility of Docks. — The construction of wet docks has done much to facilitate and promote navigation. A large vessel, particularly if loaded, could not be allowed to come to the ground, or to lie on the beach, without sustaining considerable injury, and perhaps being destroyed; and even the smaller class of vessels are apt to be strained, and otherwise hurt, if they are left dry, unless the ground be very soft. Hence, when large vessels have to be loaded or unloaded where there are no docks, and where the water close to the shore or quay is not sufficiently deep, the work can only be carried on during a particular period of each tide; it being necessary, in order to keep the vessel afloat, that she should leave the shore with the ebbing tide. Attempts have sometimes been made to obviate this inconvenience, by running jetties or piers to such a distance into the sea, that there might always be a sufficient depth of water at their heads: but this can only be done in peculiar situations; and it requires that the ship's position should be frequently changed. It is in most cases, too, impossible properly to protect the cargoes of ships loading or unloading at quays, or on the beach, from depredation. Previously to the construction of the wet docks on the Thames, the property annually pillaged from ships was estimated to amount to 500,000*l.* a year, though this is probably much exaggerated.

I. Docks on the Thames.

1. *East and West India Docks.*
2. *London Docks.*
3. *St. Katherine's Docks.*
4. *Commercial Docks.*
5. *London Port Dues. — Charges on Account of Lights, Pilotage, &c. in the Thames. — Shipping, &c. of London.*

II. Liverpool Docks, Shipping, etc.
III. Bristol Docks, Shipping, etc.
IV. Hull Docks, Shipping, etc.
V. Dundee Docks, Shipping, etc.
VI. Goole Docks, Shipping, etc.
VII. Leith Docks, Shipping, etc.

I. Docks on the Thames.

It is singular that, notwithstanding the obvious utility of wet docks, and the vast trade of the metropolis, there was no establishment of this sort on the Thames till nearly a century after a wet dock had been constructed at Liverpool. The inconvenience arising from the crowded state of the river, at the periods when fleets of merchantmen were accustomed to arrive, the insufficient accommodation afforded by the legal quays and sufferance wharfs, the necessity under which many ships were placed of unloading in the river into lighters, and the insecurity and loss of property thence arising, had been long felt as almost intolerable grievances: but so powerful was the opposition to any change, made by the private wharfingers and others interested in the support of the existing order of things, that it was not till 1793 that a plan was projected for making wet docks for the port of London; and 6 years more elapsed before the act for the construction of the West India Docks was passed.

1. *West India Docks, now conjoined with the East India Docks.*—The West India Docks were the first, and continue to be the most extensive, of the great warehousing establishments formed in the port of London. Their construction commenced in February, 1800, and they were partially opened in August, 1802. They stretch across the isthmus joining the Isle of Dogs to the Middlesex side of the Thames. They originally consisted of an Import and Export Dock, each communicating, by means of locks, with a basin of 5 or 6 acres in extent at the end next Blackwall, and with another of more than 2 acres at the end next Limehouse: both of these basins communicate with the Thames. To these works were added in 1829, the South Dock, formerly the City Canal, which runs parallel to the Export Dock. This canal was intended to facilitate navigation, by enabling ships to avoid the circuitous course round the

Isle of Dogs. It was, however, but little used for that purpose, and is now appropriated to the wood trade, for the greater accommodation of which, a pond of 19 acres has been formed on the south side for the reception of bonded timber. The Export Dock, or that appropriated for ships loading outwards, is about 870 yards in length, by 135 in width; so that its area is near 25 acres; the North or Import Dock, or that appropriated for ships entering to discharge, is of the same length as the Export Dock, and 166 yards wide; so that it contains nearly 30 acres. The South Dock, which is appropriated both to import and export vessels, is 1,183 yards long, with an entrance to the river at each end; both the locks, as well as that into the Blackwall Basin, being 45 feet wide, are large enough to admit ships of 1,200 tons burden. At the highest tides, the depth of water in the docks is 24 feet; and the whole will contain, with ease, 600 vessels of from 250 to 500 tons. The separation of the homeward bound ships, which is of the utmost importance for preventing plunder, and giving additional security to the revenue and the merchant, was, for the first time, adopted in this establishment. The Import and Export Docks are parallel to each other, being divided by a range of warehouses, principally appropriated to the reception of rum, brandy, and other spirituous liquors. There are smaller warehouses and sheds on the quays of the Export and South Docks, for the reception of goods sent down for exportation. The warehouses for imported goods are on the four quays of the Import Dock. They are well contrived, and of great extent, being calculated to contain 160,000 hhds. of sugar, exclusive of coffee and other produce. There have been deposited, at the same time, upon the quays, under the sheds and in the warehouses belonging to these docks, 148,563 hhds. of sugar, 70,875 casks and 433,648 bags of coffee, 35,158 puncheons of rum and pipes of Madeira wine, 14,021 logs of mahogany, 21,350 tons of logwood, &c. The whole area occupied by the docks, warehouses, &c. includes about 295 acres; and the most effectual precautions are adopted for the prevention of fire and pilfering.

This spacious and magnificent establishment was formed by subscription, the property being vested in the West India Dock Company, the affairs of which were managed by 21 directors as a body corporate.

The West India Docks proved a very successful undertaking, and have been highly beneficial to the original shareholders as well as to the trade of the port. All West India ships frequenting the Thames were obliged to use them for a period of 20 years from their completion. The dividend on the Company's stock was limited to 10 per cent.; and after making dividends to the full amount, with the exception of the first half year, they had in 1819 an accumulated fund of near 400,000*l*. But they then diminished their charges, at the suggestion of a committee of the House of Commons; and having been since still more considerably reduced, the surplus has been absorbed. The nearest dock-gate is at Limehouse, and the other about ½ mile farther from town.

The East India Docks, united with those now described in 1838, are situated at Blackwall, about 3¼ miles from the Exchange, and were originally intended for the accommodation of ships employed by the East India Company, or in the East Indian trade; but they are now open to vessels from all parts. There are 2 docks; 1 for ships unloading inwards, and 1 for those loading outwards. The Import Dock contains about 18 acres, and the Export Dock about 9 acres. The entrance basin, which connects the docks with the river, contains about 2¾ acres: the length of the entrance lock is 210 feet, the width of the gates 48 feet clear. The depth of water in the East India Docks is never less than 23 feet; so that they can accommodate ships of greater burden than any other establishment on the river. There is attached to them a splendid quay fronting the river, nearly 700 feet in length, with water sufficient at all times of the tide to float the largest steam ships; and the Export Dock is furnished with a machine for masting and dismasting the largest ships.

Exclusive of the magnificent warehouses attached to the West India Docks, the East and West India Dock Company possess the East India warehouses in Billiter Street, Fenchurch Street, Jewry Street, and Crutched Friars; in which they warehouse and show tea, indigo, silk, drugs, spices, &c.

The capital of both establishments, or of the United Company, amounts to 2,065,668*l*., the dividend on which is at present 5¼ per cent. The management is vested in a board of 32 directors. The consolidation of the establishment was advantageous to the shareholders by reducing the expense of management, and to the public by giving a greater choice of accommodation to vessels frequenting the docks.

The inconvenience of the distance at which these docks are situated from the Exchange has been in a great degree obviated by the opening of the railway to Blackwall, and by the exhibition of samples in the Company's upper warehouses. Still, however, the charge on account of cartage is a little heavier on goods warehoused at the docks of this company than on those warehoused farther up the river. But, on the other hand, ships entering the East India or West India Docks avoid a considerable extent of troublesome, if not dangerous navigation, that must be undertaken by those bound for the London and St. Katherine's Docks.

Rules and Regulations to be observed, and Rates to be paid, by Shipping in the East and West India Docks.

Regulations to be observed by Masters, Pilots, and other Persons having the charge of Ships, Vessels, Lighters, or [illegible], and going out of, the East and [illegible]s, pursuant to Act 2 Will. 4. cap. 52.

The Company's Moorings. — 1. The moorings in the river, within 250 yards of each of the entrances at Blackwall, and that into Limehouse Basin, and within 150 yards of the Limehouse entrance of the South Dock, are reserved for the exclusive use of vessels entering into, or which have recently come out of the Docks.

2. Every master or person in charge of any ship, lighter, barge, boat, or other vessel, of any description whatsoever, ly[illegible]thin the above distance, must *immediately* remove the [illegible]hen required by the dock masters or their assistants; *penalty 5l. for every hour which such vessel may remain.*

3. Pilots must not attempt to place ships inside the buoys, if other ships have previously brought up, but bring them to their berths in due succession on the outside, unless they shall be expressly ordered by the dock master to take a berth inside the tier for the convenience of docking.

All parties creating obstructions will be prosecuted, and the penalties will be rigidly enforced.

Vessels about to enter the Docks. Signals. — 5. The *red* flag on the flag-staff at the entrance, is the signal for ships to prepare. A *blue* flag will be kept flying the whole time proper for docking, when the tide has reached high water mark, that flag will be struck, after which no pilot must shear his vessel in, unless directed so to do by the dock master.

Declaration Book. — 6. When ships have brought up properly the moorings, an officer will deliver the Company's regula[illegible]ery vessel exceeding [illegible] Book her draught of [illegible] Masters must certify in the Declaration Book her draught of water, that she is provided with all necessary articles, viz. warps, ropes, and tackle, to remove and moor her [illegible] that her anchors are [illegible]or shall be before leaving the [illegible] longer the works, the ships therein, or the ve[illegible]self.

Preparing Ships for Sea. — 8. All ships are required to send down top-gallant yards and strike top-gallant masts, and to have their jib and mizen booms rigged close in, bowsprits, martingales, and all outriggers unshipped, if time will permit, and at all [illegible]rpto after entering. Vessels will, however, be answerable for all consequences; but the yards must be topped [illegible] rigging.

Docking Tickets and Orders of Admission. — 9. In fixing the order of admission, and issuing the docking tickets, regard will be had to the state of the tides, and the size and draught of water of each vessel, as well as the time of arrival: the largest ships must necessarily be taken in when the tides are highest, although they may have arrived subsequent to smaller vessels. Loaded vessels must always have the preference over light ships.

10. No ship can be admitted, if neither the master nor pilot is on board.

The doc[illegible] granted.

12. At the proper time for the admission of each ship, notice will be given by hoisting her ticket number at the pier head, provided she has made the signal for being properly [illegible]ed.

13. If any vessel shall attempt to gain [illegible] person in charge, must be responsible for all consequences.

Entering. — 14. When a ship's number is hoisted, she must drop [illegible] ready [illegible] If [illegible] her [illegible] e piers, proper ropes will be sent o[illegible] ask the vessel through the lock: th[illegible] responsible for making these, [illegible] well as the ship's warps; [illegible] be hauled a head by her own warps, and they to be cast off, unless ordered by the dock [illegible] in the basin.

16 [illegible]

17. The owners are answerable for all ships' boats, and none can be admitted into the Import Docks except such as are conveniently stowed on deck.

18. The boats of ships in the South Dock which cannot be securely stowed on deck, must be hauled up on the north bank, or secured afloat in such manner as the dock master may direct, after the ship is moored. Ships, however, which are not lying at a jetty, will be allowed to employ one boat during the [illegible] hours of business, which boat must be obtained [illegible] company's [illegible] has expired.

19. Any boats found afloat [illegible]ny of the docks or ba[illegible] master, and will be detained until the charges occasioned by such removal shall be paid.

20. The hatches of all loaded ships are to be locked down, and the keys delivered to the officer appointed to receive the same.

Western Import Dock. — 21. No person whatever can be allowed to remain in this dock after the established hours of business, except as hereafter mentioned; nor can any person be permitted to have access to vessels therein, excepting the owner, master, or chief officer, without a pass.

22. Passes will be given by the principal of the police, on the application of the captain or chief mate, to admit the ship's apprentices, or other persons, to prepare the ship for discharging, or to do any other work which may be unavoidably necessary. Ships which retain their crews on board, must be removed to the basin after the hour of business, to remain during the night. The Directors have fitted up the ship Waterloo, in the South Dock, for the accommodation of junior officers and apprentices, while their ships are discharging their cargoes in the Import Dock.

Ships discharging in either Docks. — 23. Preparatory to ships being discharged by the Company, the decks must be cleared of articles which would impede the working out of the cargo.

24. Two true copies of the manifest of the cargo must be [illegible] Square, [illegible] every vessel shall enter the docks, or after the cargo shall have been reported at the Custom-house, which shall first happen. Penalty for refusal or neglect, any sum not exceeding 5*l.* — 2 Will. 4. c. 52. s. 84.

25. No manifests will be required for ships discharging by their own crews.

26. No ships can receive their rotation, or be allowed to break bulk, until their cargoes are duly entered; and such cargoes will be landed in due succession, according to the strict order in which the manifests are delivered and entries completed.

27. If such manifest, or bill of lading, or copy, shall be false, or if any bill of lading be uttered by any master, and the goods expressed therein shall not have been *bond fide* shipped on board such ship, or if any bill of lading uttered or produced by any master, shall not have been signed by him, or any such copy shall not have been received or made by him previously to his leaving the place where the goods expressed in such bill of lading, or copy, were shipped, penalty 100*l.* 4 Will. 4. c [illegible] s. 11.

28. It is desirable that all baggage or presents should be sent as promptly as possible to the baggage warehouse, where an answer from the master for the delivery thereof must be lodged. Masters are particularly cautioned against signing such authorities in blank, or allowing themselves t[illegible] enced by importunity of brokers; and it is most desirable that one agent only should be appointed for each ship.

29. Packages of bullio[illegible] specie (whether cargo or priv[illegible] sponsibility, unless, from their being liable to examination or other circumstances, he may be desirous of placing the same in the Company's charge; in which case, such packages, or any other of considerable value, should be particularly specified, and, if bills of lading have been granted for them, inserted in the regular manifest of the ship. The delivery of goods overside will also rest with the master, and he must take such steps as he may think necessary, to protect his owners in respect to [illegible] fre[illegible]

[illegible] e expressly the [illegible]

Rules observed by Ships taking in Cargoes from the Quays. — 31. The taking the ship in and out to and from the quay, to be performed by the crew, as directed by the dock masters.

[illegible] goods to be taken from the slings, and to be by the crew, under the orders of the maste[illegible] nd [illegible] ler and his officers.

31. — 4. The [illegible] o be hauled in [illegible] the basin or Export Dock [illegible] d t[illegible]

35. Goods sent by land carriage will be shipped in either of the docks, on payment of the usual charges.

36. To prevent delay in loading export vessels, the shippers should pay up the rent and charges upon the goods; or where [illegible] ed w[illegible] weighing, &c., make [illegible]

Eastern and Western Import and Export Docks, the Basins, and South Dock. — 37. All vessels entering or lying in these [illegible] [illegible] vided for by the table [illegible] to or from the river, [illegible]ny part of the docks or basins, as directed by [illegible] ver must be provided [illegible] ort them, and should be moved by the dock master, and the owners charged with the expense.

39. Ships having cargoes will be moored at the quays in due rotation. Light ships not taking in goods shall be moored in either of the docks or basins, as the dock masters may judge convenient.

40. While ships are lying at, or moving to or from the quay, all out riggers should be got in and made snug; and sails are by no means to be loose while so moving, or after daylight.

41. No ship must be removed from her berth without notice being given to the dock master, and his assent as to the time of removal being obtained.

42. Craft must be [illegible] internel to the ships from which they are receiving, or to which they may be delivering goods: the charge upon craft which shall not be *bond fide* so engaged, will be the same as the rent upon ships and craft coastwise, and, as usual, not less than one week's rent will be charged. To obviate any doubt as to the time for which they may be fairly entitled to exemption, twenty-four hours will be allowed from the time of entering the dock, for receiving goods; and twenty four hours after being loaded or discharged, for going out of the docks.

43. Convenient receptacles on the quays and craft are provided, wherein all dust, ashes, &c. are to be deposited, and which shall be cleared by the persons appointed by the Company, and by no one else.

44. No vessel can be permitted to take in ballast after daylight, or before day-break.

45. Ships' provisions or stores cannot be permitted to pass the gates without an order signed by the captain or owner.

46. No caulking or plumbers' work can be allowed without special permission, to be obtained from the principal of police.

South Dock Jetties. — 47. Ships landing cargoes in the South

Dock, or taking in goods by land, shall have the preferable use of the jetties.

48. Ships which are fitting out, but have not commenced loading, shall be accommodated as far as possible; but such ships must be removed to make room for vessels about to discharge or take in cargo by land.

49. In other respects, preference will be given to ships intended for sale, over those which are merely laying up; and as between ships which are similarly circumstanced, the priority of their entering the dock shall determine the preference.

50. The captains or commanding officers of ships are cautioned to be attentive and careful to boom off when the ship is fast loading down in the water, or on the approach of neap tides.

Fire and Candle.—51. To vessels lying in the Eastern Import Dock, the Eastern and Western Export Docks, the South Dock, or either of the basins, special licences will be granted, on application to the principal of the police.

52. Every such licence will express the place in which fire may be kept, and the precautions under which it may be used; upon the slightest infringement of the conditions, the penalty prescribed by law will be rigidly enforced.

53. Every application for a licence must be made by the master or owner, specifying the names and capacity of the persons in charge of the ship, and engaging to be responsible for their attention to the regulations.

Opening and shutting the Gates.—54. The gates of the Export and South Docks will be opened at six o'clock in the morning and shut at eight o'clock in the evening, from the 1st of March to the 10th of November; and from the 11th of November to the last day of February, opened at eight in the morning and shut at seven in the evening.

55. Captains and mates may be furnished with tickets, upon applying at the police office, at the Eastern or Western Import Dock, which will entitle them to admission till nine o'clock, p.m., but no person whatever can be allowed to go out after the hour for closing the gates.

Vessels about to leave the Docks.—56. Export vessels should be hauled out in sufficient time to be at the river locks, at Blackwall, at low water; to prevent the inconvenience of hauling down during the time that other vessels are requiring admission, which must have the preference.

57. Vessels can only be let out after high water, upon the special request of the officers in charge of them.

58. Ships going into the river must use their own ropes, as they are out of the dock master's charge when clear of the outer gates.

59. The hours of attendance are from 10th May to 9th November inclusive, eight in the morning to four in the afternoon; from 10th November to 9th May, inclusive, nine in the morning to four in the afternoon; and there is to be no intermission of business during these hours.

60. No holidays are to be kept, except Sundays, Christmas Day, Good Friday, fast days appointed by royal proclamation, and the King's or Queen's birth days.

The foregoing regulations approved and confirmed by the Court of Directors of the East and West India Dock Company.

GEORGE COLLIN,
SECRETARY.

TONNAGE RATES.

Sailing Vessels inwards discharged by the Company.

For docking, mooring, and removing within the docks and basins, unloading the cargo, and the use of the docks, for four weeks from the final discharge*; viz.—

	₸ ton reg. s. d.
Laden with sugar, otherwise than after-mentioned, or other goods packed in bales, bags, baskets, screws, casks, cases, chests, or similar packages, (except oil direct from the fisheries, (class, or ashes), metal in pigs, bars, rods, plates, or similar pieces, wood in planks or billets, such as dyewood, and staves	1 6
And in addition, for every load or ton of blue gum wood or oil in iron tanks	0 6
Laden with chests of sugar, 5 cwt. and upwards, including ship's conperage	2 0
Laden entirely in bulk, with hogsheads and tierces of sugar or molasses from the West Indies, including ship's conperage	2 6
Laden with mahogany, cedar, or other large furniture wood in logs	2 6
Laden entirely with hemp or goods in bulk, or oil direct from the fisheries	1 9
Laden entirely with tallow	1 3
Laden with mixed cargoes, tallow, ashes, or goods in bulk,—	
For every ton of hemp	2 0
For every ton of tallow or ashes	1 3
For every ton in bulk	1 9
The total number of tons charged not to exceed the register tonnage.	
Laden with wood, the growth of the North of Europe, or the North American colonies, viz.—	
Entirely with deals, staves, lath or fire wood	1 9
Entirely, or in part, with timber	1 9
And, in addition, for every load of hardwood or masts	0 6
For every load of pine or fir timber	0 3
Laden with timber from Africa, or like cargoes	3 0
And, in addition, for every load discharged over side	1 0

Sailing Vessels inwards, discharged by their own Crews.

For the use of the docks† for any period from the date of entrance, not exceeding the under-mentioned—

If from Hambro', Bremen, Emden, and the Mediterranean	6 weeks
If from any other port or place	4 weeks

	s. d.
Arriving from any port or place not otherwise specified	0 9
Arriving from any port in the United Kingdom, or European port outside the Baltic, between the North Cape and Ushant	0 6
Delivering part of a cargo, and not remaining beyond one week per ton delivered	0 6

Exceptions.

Sloops and craft coastwise, with bricks, and vessels with broken granite, or paving stones, not remaining beyond one week	0 3
Colliers entering to await the sale of their cargoes, not remaining beyond two weeks	0 3

Other vessels than colliers, coastwise, on landing goods in the docks equal to one third of their register tonnage to be exempted from payment of the tonnage rate, but rent to commence after one clear day from the final landing of the goods.

Vessels entirely corn laden, discharged in the docks, in lieu of tonnage rate, not remaining beyond two weeks,

100 tons register and upwards	each 21 0
Under 100 tons register	each 10 6

If corn vessels quit without unloading, rent to commence after one clear day from the date of entrance.

Vessels two-thirds laden with corn will be charged the usual tonnage rates on the other part of their cargoes, in proportion to their register tonnage.

If vessels to which the above exceptions apply load outwards, they will be charged the usual rate of 6*d.* per ton register.

Sailing Vessels outwards, or light Vessels, other than Steam Vessels.

Entering to load or lay up, not having discharged their import cargoes in the docks,—	
The use of the docks for any period not exceeding four weeks from the date of entering*	0 6

Vessels entering to load from the Import Warehouses only.

	₸ ton on the gross weight shipped.
For the use of the dock for one week (see conditions, p. 470.)	0 6

The number of tons charged not to exceed the register tonnage.

Exceptions.

Vessels under 100 tons register loading corn or deals, fir timber, and like wood goods, and ships, from the Export or South Docks, which will be allowed to load without any addition to the rate to which they may be liable for the use of the docks.

Steam Vessels.

	₸ ton register.
Entering to lay up, or to repair or fit their machinery,—	
For the use of the docks for any period not exceeding four weeks from the date of entering	0 9
Charge for getting out, landing, lifting, or shipping boilers and heavy machinery:—	
Under two tons per ton	5 0
Two tons and not exceeding ten tons	7 6
Exceeding ten tons	10 0
Rent, per week, for boilers, funnels, cylinders, and the like	0 3
Do. for plates, shafts, and other gearing	0 1

Dock Rent.

For remaining over the periods specified,—	
Sailing vessels per week	0 1
Steam vessels laying up, repairing, or fitting machinery	0 1½

All vessels which re-enter after having been out for repair, will be allowed their privilege without reckoning the time they remained out.

For the more expeditious discharge of vessels, every assistance may be obtained in clearing the decks, or stiffening them; coopering water casks and shipping them, when filled. Should the Company's moveable machinery be desired, it will be lent upon application to the superintendent. The following charges will be made for such services.

For Labourers hired to work under the directions of the commanding officer of the ship, each man per day, of the regulated hours of attendance	3 6

And not less than ¼ day to be charged. Overtime will be charged in proportion.

Articles loaded, shipped, or struck down by the dock cranes or jiggers, under 2 tons per ton	1 0
Two tons, and under 5 tons	1 8
And not less than one ton to be charged.	
The use of the floating engine for washing ships, including the attendance of the man in charge, per day	20 0

And not less than one day to be charged.

Whenever assistance is required for removing within the docks, it will be furnished by the dock master on the following terms, viz.:—

A boat with warp and two hands	10 6
A boat with warp and four hands	15 0

And for every additional hand employed, either on board or in the boats, 6*d.* per hour.

The warps are only lent in aid of the ship's warps.

Water, from the East London Water Works.

Supplied from the tank per ton	1 0
Filtered	2 0

* The use of the docks is allowed for six weeks from the date of entrance, for vessels from Hambro', Bremen, Emden, or the Mediterranean; and when the discharge by the Company of any vessel is postponed by desire of the owners, six weeks only are allowed free of rent.

† The expense of mooring, unmooring, and removing, is *not included*.

Table of Charges, for masting or dismasting at the Mast Building.

For Ships of	Main Mast.		Fore Mast.		Mizen Mast.		Bowsprit.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1,000 to 1,500 tons	9	0 0	8	2 0	3	12 0	4	10 0
800 — 1,000 —	6	15 0	6	6 0	3	3 0	3	12 0
650 — 800 —	4	0 0	3	12 0	2	0 0	2	0 0
500 — 650 —	3	4 0	2	16 0	1	12 0	1	12 0
300 — 500 —	2	12 0	2	5 0	1	6 3	1	6 3
under 300 —	1	17 6	1	13 9	1	2 6	1	2 6

For putting on or taking off Tops.

For Ships of	Main Mast.	Fore Mast.	Mizen Mast.
	£ s. d.		£ s. d.
1,000 to 1,500 tons	0 15 0		0 10 0
800 — 1,000 —	0 10 0	0 10 0	0 5 0
500 — 800 —	0 7 6	7 6	0 5 0
under 500 —	in proportion		

The prices of the above table are for each operation, which includes the use of masting-falls and slings.

Freight Books. — Abstract of cargoes, for the purpose of making up freight accounts, are supplied, on application at the Dock-house, Billiter Square, at the following charges: —

	s. d.
Each abstract, containing the weights, measurement or quantities, of ten marks or parcels, or under	2 0
of eleven to twenty, ditto	3 6

Upwards of twenty, each mark or parcel, 2*d.*; but not to exceed 10*s.* 6*d.*, including an abstract of the certificates of damage.

Rates and Charges must be paid before the vessels leave the docks, either at the docks or at the Dock-house in London.

Schedule of Rates on Goods inwards.

The Landing Rate is charged upon the gross weight, and includes landing, wharfage, weighing or gauging, and housing, or piling on the quays, or loading therefrom, original warrants, accounts of landing weights or gauges, and strengths of spirits, surveying and furnishing certificates of damage. Goods not intended to be warehoused will be allowed four clear days from the final weighing of the parcel for removal, in default of which they will be housed or piled. If intended for immediate transhipment, they may remain on the quay, subject to the same regulations as goods prepared for shipment, paying rent as if housed at landing.

The prime or consolidated Rate includes all expenses for landing, wharfage, weighing or gauging at landing; coopering or mending for housing; marking, sampling, housing, weighing for actual delivery and delivering; furnishing landing and delivery weights, or gauges and strengths; surveying and furnishing certificates of damage, and rent for twelve weeks from the date of the ship's commencement of discharge, excepting where it is otherwise stated. It is charged upon the nett weight, and on all goods to which it is affixed, unless notice be given by the importers, of their desire to have them placed under the landing rate.

Re-weighing, when not otherwise specified,	one third of landing-rate.
Rehousing,	do.
Unpiling,	do.
Repiling,	do.
Unhousing or unpiling and loading,	do.
Wharfage and shipping,	two-thirds of landing-rate.
Unloading and housing piling,	do.
Unhousing or unpiling, wharfage, and shipping	the same as the landing-rate.

The Warehouse Rent is chargeable on the gross weight, from the date of the ship's breaking bulk, or from first landing from craft; when goods sold from the landing scale are housed, the rent will be charged from the final weighing of the parcel.

A week's rent will be charged for any fraction of a week.

Before transfer by the Company, or delivery of any goods can take place, the charges on the quantity to be transferred or delivered must be paid.

Table of Rates and Charges on Goods imported into the East and West India Docks.

N. B. — The rates in these Tables will be charged on all goods imported or received into the Docks, on and after the 1st of December, 1839; and from that date, on all goods which may remain in the warehouses or on the quays, as far as regards rent and future operations, but they are not to be retrospective.

Goods Imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	s. d.	*Per*
Agates - - package	-	1 6	0 3	
Alkali - - ton	-	4 6	0 3	
Alkanet root - cwt.	-	0 6	1 0	ton
Almonds, in large casks or serons - - ton	-	4 6	0 4	
in boxes or barrels - cwt.	-	0 6	2 0	100 boxes
			1 3	100 half boxes
			0 3	cask 3½ cwt. and under 5 cwt.
			0 2	barrel 2½ cwt. and under 3½ cwt.
			0 1	½ ditto 1½ cwt. and under 2½ cwt.
			0 0½	½ ditto under 1½ cwt.
shell - - cwt.	-	0 9	0 2	large bale
			0 1½	ordinary bale
			0 1	½ bale
Aloes, in gourds - cwt.	-	0 4½	0 0½	
in chests or casks cwt.	-	0 4	0 0½	
Alum - - ton	-	3 6	0 3	
Alva marina, in bales press-packed - ton	-	3 0	0 4	
in bags not press-packed ton	-	5 0	0 6	
Amber and beads - package	-	1 6	0 1	box or case
rough - - ton	-	5 0	0 7	
Ambergris, in boxes or kegs package	-	1 6	0 3	
Amethysts, case or package	-	1 6	0 3	
Anchovies - cwt.	-	0 9	4 2	100 casks under 1½ cwt.
			2 6	100 barrels
			1 3	100 kegs
Angelica root - ton	-	5 0	0 3	hogshead
			0 2	tierce
			0 1	barrel
Anniseed - - ton	-	5 0	0 6	
star - - ton	-	7 6	0 10	
Annatto, in casks - ton	-	7 0	0 7	
mats, small chests, or baskets - cwt.	-	1 7½	4 2	100 small packages
Antimony - cwt.	-	0 3	0 4	ton
ore - - ton	-	3 6	0 2	
When loose, filling and weighing, on rehousing or delivery, 2*s.* per ton.				
Apples - - hogshead	-	1 6	0 3	
tierce	-	1 0	0 1½	
box, basket, or barrel	-	0 6	0 0½	
Arangoes - - chest	-	1 6	0 2	
box	-	1 6	0 1	
Argol - - ton	-	5 0	0 4	ton, in casks
			2 6	100 bags or cases, 2 cwt. and under 4 cwt. each
			1 6	100 do. under 2 cwt. each
Arrowroot, in casks - cwt.	1 0	0 4½	0 7	ton
in boxes or chests - cwt.	1 6	0 4½	0 7	ton
Arsenic - - cwt.	-	0 3	0 4	ton
Assafœtida - cwt.	-	0 6	0 0½	

Goods Imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	s. d.	*Per*
Ashes - - ton	-	3 0	0 3	ton, from Black Sea
			0 2	cask, from other parts of Russia
			0 0½	cask, from America
unhousing, wharfage, and shipping, 2*s.* per ton.				
Asphaltum, medicinal - ton	-	5 0	0 6	
Asses or mules, landing and wharfage - each	-	3 0	-	Unhousing, Wharfage, and Shipping. s. d.
Bacon - - hogshead	-	2 0	0 3	1 6
bale	-	0 6	0 1	0 6
side	-	0 2½	0 0½	0 1½
middles, 3 cwt. - tierce	-	0 8½	0 1	0 6
ditto, 1 to 2 cwt. - cask	-	0 6	0 0½	0 4
Baggage, examined on the quay, packages not exceeding 15 in. square, or 28 lb. weight - package	0 6	-	0 0½	
under 2 cwt. - package	1 0	-	0 0½	
2 cwt. & upwards, package examined within the warehouse, packages not exceeding 15 in. square, or 28 lbs. weight, package above 28 lbs. and under 1 cwt. - package	1 6	-	0 1½	
	1 6	-	0 0½	
	2 6	-	0 1	
1 cwt. and upwards ditto	3 0	-	0 2	
2 cwt. and upwards ditto	3 6	-	0 3	
Bags, empty - score	-	0 4	0 0½	
from corn vessels — same as mats.				
Balsam, in jars, bottles, or canisters, single or in cases cwt.	-	1 1½	0 0½	jar, bottle, or canister
			0 1	case of 5 do. or under
			0 1½	case of 6 do. & under 10
			0 2	case of 10 do. & under 15
barrels - - cwt.	-	0 6	0 2	barrel, 3 cwt. & upwards
			0 1½	do. 2 cwt. & under 3 cwt.
			0 1	do. under 2 cwt.
A separate charge will be made for cooper's attendance at landing and delivery.				
Canada - - package	-	1 6	0 1	
Bamboo. See *Canes.*				
Barilla, loose - ton	-	3 6	0 2	
Filling and weighing on rehousing or delivery, 2*s.* per ton.				
Unhousing, wharfage, and shipping, 3*s.* per ton.				
in serons, cases, chests, mats, or bags - ton	-	3 3	0 2	
Unhousing, wharfage, and shipping, 2*s.* 6*d.* per ton.				

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Bark, Jesuits' or Peruvian	cwt.	-	1 0	0 7	ton
Eleutheria or Cascarilla	cwt.	-	0 9	1 3	ton
oak, or tanners', in bags or loose	ton	-	5 0	0 4	
Filling and weighing on rehousing or delivery, *2s.* per ton.					
in cases about 1½ cwt.	cwt.	-	0 6	0 1	case
in casks	ton	-	3 0	0 4	ton
Baskets	bale	-	3 0	0 3	
	¾ bale	-	2 3	0 2	
	½ bale	-	1 6	0 1½	
large bundle		-	1 0	0 1	
small bundle		-	0 6	0 1½	
Beads, jet, or other kinds, except amber, coral, and cornelian	package	-	1 6	0 1	
Beans, in bags	bag	-	0 6	0 1	
Beef and pork	tierce	-	0 8½	0 0½	
	barrel	-	0 5½	3 0	100
tub, kit, or half barrel		-	0 3½	2 0	100
Beer, spruce	barrel	-	0 9	0 0½	
	firkin	-	0 3	1 6	100
	keg	-	0 1½	0 9	100
Bees' wax. See *Wax.*					
Benjamin. See *Gum.*					
Berries, juniper	ton	-	8 0	5 0	100 bags, 2 to 4 cwt. each
				2 6	100 do. under 2 cwt. each
yellow or bay	ton	-	5 0	0 4	
Betel nuts	ton	-	5 0	0 4	
Biscuits	cwt.	-	0 3	0 2	puncheon
				0 1	bag or barrel
				0 0½	keg
Blankets	bale	-	1 0	0 1	
Black lead	ton	-	3 9	0 3	
Block tin. See *Tin.*					
Bones	1,000	-	3 0	0 2	
in bags	bag	-	0 6	0 0½	
in casks	ton	-	3 0	0 3	
Books	cwt.	-	1 0	0 3	chest
				0 2	bale or box
Boots and shoes - hogshead		-	1 6	0 3	
case or tierce		-	1 0	0 2	
Boracic acid	ton	-	5 0	0 4	
Borax, rough or refined	ton	-	5 0	0 10	
Bottles, glass, empty	gross	-	3 0	0 1	
Brandied fruit, case	3 doz.	-	0 9	0 1½	
ditto	2 doz.	-	0 6	0 1	
Brass	ton	-	5 0	0 2	
Brimstone, loose	ton	-	3 6	0 2	
Filling and weighing on rehousing or delivery, *2s.* per ton.					
Unhousing, wharfage, and shipping, *3s.* per ton.					
in casks, cases, or baskets	ton	-	3 3	0 3	ton, in casks
				0 1	case, about 2 cwt.
				0 0½	box or basket, 1 cwt.
				0 0½	box or basket, 56 lb.
Unhousing, wharfage, and shipping, *2s. 6d.* per ton.					
Bristles, in packages	ton	-	7 0	0 6	
Bronze	case	-	1 6	0 2	
	box	-	1 0	0 1	
Bugles	ton	-	5 0	0 9	
Bullion - cask or case		-	1 6		
small package		-	1 0		
parcel not exceeding *5l.* in value		-	0 6		
Burr stones	each	-	0 1½	0 9	100
Butter, foreign.					
Friesland or Holstein, — landing, wharfage, housing or loading, and furnishing landing weights, to the importer	¼ cask	-	0 3	4 0	100
	⅛ cask	-	0 3	2 0	100
Loading from the warehouse, 1*d.* per cask.					
Weighing on delivery, if required, and furnishing delivery weights to the buyer, 1*d.* per cask.					
Emden or Holland, — landing, wharfage, housing or loading, and furnishing landing weights	firkin	-	0 3	2 0	100
Loading from the warehouse, ½*d.* per firkin.					
Weighing on delivery, when required, ½*d.* per firkin.					
Irish	score firkins	-	3 0	2 0	100
Weighing upon delivery, cask or firkin, 1*d.*					
Unhousing, wharfage, and shipping, cask or firkin, 1½*d.*					
Cables, chain	ton	-	5 0	0 5	
hempen	ton	-	10 0	0 4	
coir	ton	-	12 6	0 5	
Calicoes	bale	-	1 3	0 1½	
Cambric	package	-	2 6	0 4	
Camels' hair	cwt.	-	0 10½	0 2	bale or case
Camphor	cwt.	-	0 6	0 0½	cwt.
Cane juice. See *Molasses.*					
Canella alba	cwt.	1 8	0 6	0 0½	

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Canes, common rattan,	1,000	3 0	1 3	0 1	
split rattans	cwt.	1 3	0 6	0 10	ton
ground	1,000	7 6	3 0	0 2	
bamboo, Jumboo, wanghees, walking sticks,	1,000	7 6	3 0	0 2	
Malacca	1,000	-	5 0	0 0½	100
reed, in bundles, 25 each	100 bundles	-	6 3	1 6	
reed, in bundles, 60 each	100 bundles	-	12 6	3 0	
Cantharides	cwt.	-	1 0	0 6	case or cask, 8 cwt. and upwards
		-	-	0 4	case or cask, 4 cwt. and under 8 cwt.
		-	-	0 3	case or cask, under 4 cwt.
Caoutchouc. See *In. Rubber.*					
Capers	cwt.	-	0 3	0 6	butt
		-	-	0 4	puncheon
		-	-	0 3	hogshead
		-	-	0 1	barrel
Cardamoms	cwt.	-	0 6	0 1½	chest
		-	-	1 3	ton, in bags
Cards, playing	case	-	1 6	0 2	chest
		-	-	0 1	box
	small ditto	-	1 0	0 1	
Carpets, 70 square yards and upwards	bale	-	2 0	0 4	
under 70 sq. yrds. ballot		-	1 4½	0 2	
Carraway seed	ton	-	5 0	0 5	
Cashew nuts	cwt.	-	0 6	0 0½	
Casks landed empty, or cask cases, if not delivered within 6 days (including delivery), butt, pipe, or punch.		-	0 8	0 1	
smaller cask or case		-	0 4	0 0½	
If taken away within 6 days, half the above charges and no rent.					
Wine or spirits, small ullage, including turning over contents, storing and delivery	each	-	1 0	0 1	
Cassia lignea	cwt.	-	0 6	0 0½	
buds	cwt.	-	0 6	0 0½	
fistula	cwt.	-	0 6	0 0½	
Castor seed	cwt.	-	0 3	0 0½	
Castor oil. See *Oil.*					
Castorum, keg or small box		-	1 0	0 1	
Catlings	case or chest	-	1 0	0 2	
Caviare	package	-	0 6	0 1	
Chairs	each	-	0 3	0 0½	
case containing 12		-	1 6	0 3	
case containing 6		-	1 0	0 2	
Chaises or carriages, with 4 wheels	each	-	10 6	1 6	
2 wheels	each	-	7 6	1 0	
Chalk, French	ton	-	5 0	0 6	
Charcoal, animal	ton	-	3 6	0 3	
Chassum	bale	-	1 6	0 1	
Cheese	ton	-	4 0	1 0	
tubs or cases	cwt.	-	0 6	0 1	tub or case
		-	-	1 6	100 small ditto
Chekang	cwt.	-	1 0	0 0½	
Chestnuts	bushel	-	0 2½	4 0	100 sacks
		-	-	2 0	100 bags
		-	-	4 2	100 barrels
Chicoree, under 1½ cwt. case or cask		-	0 6	0 0½	
1½ and under 3 cwt. case or cask		-	0 9	0 0½	
3 cwt. and under 5 cwt. case or cask		-	1 0	0 1	
5 cwt. & above, case or csk.		-	1 6	0 2	
Chillies	cwt.	-	0 6	0 7	ton
China root	cwt.	-	0 6	0 0½	
China ware	case	-	1 6	0 3	
	small case	-	1 0	0 2	
	box	-	1 0	0 1	
Chiranga root	cwt.	-	1 0	0 0½	
Chirayita	cwt.	-	0 8½	0 3	cask or case
Chocolate	box	-	0 9	0 2	
Cinnabar	cwt.	-	2 4	0 0½	
Cinnamon. See *Management Rates.*					
Citron, in salt	pipe	-	1 6	0 4	
	hogshead	-	1 0	0 3	
Cooper's attendance in addition.					
candied. See *Succades.*					
Clay figures	case	-	1 6	0 2	
	middling case	-	1 0	0 1½	
	small case	-	0 9	0 1	
Clocks, wooden	chest	-	2 0	0 2	
French, containing 2, case		-	2 6	0 2	
1, case		-	1 6	0 1	
Cloth, woollen, case or large bale		-	2 0	0 3	
ordin. do. from 8 to 12 pcs.		-	1 6	0 2	
small do. under 8 pieces		-	1 0	0 1½	
Cloves	cwt.	-	0 8½	0 0½	
Clover and lucerne seed, in bags	ton	-	3 9	0 3½	
in casks	ton	-	4 6	0 3½	
Coaches. See *Chaises, &c.*					
Cobalt	ton	-	5 0	0 5	
Cochineal	cwt.	3 0	0 9	0 1½	
Cocoa nuts	100	3 4	1 6	0 3	
Cocoa, in casks	cwt.	1 6	0 6	0 6	ton
in bags	cwt.	1 2	0 6	0 6	ton

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*Per*		
Cocque de perle - chest	-	1 0	0 2	
Coculus Indicus - cwt.	-	0 6	0 0½	
Cod fish. See *Fish.*				
Codilla, of hemp or flax, ton when sold from landing scale, to importer - ton	-	5 0	0 6	
to buyer - - ton	-	1 0	0 6	
When housed, weighing, 2*s.* per ton; loading, 3*s.* per ton.				
Unhousing, wharfage, and shipping, 5*s.* per ton.				
Coffee, in casks - cwt.	1 6	0 6	0 6	ton
in bales - - cwt.	1 2	0 6	0 6	ton
in bags, bulked - cwt.	1 2	0 6	0 6	ton
in bags, not bulked - cwt.	1 0	0 6	0 6	ton
Coir, unwrought, press-packed - - ton	-	3 0	0 4	
Rope, under 6 in. in girth ton	-	6 3	0 4	
Yarn - - ton	-	5 0	0 4	
Cables. See *Cables.*				
Coloquintida - cwt.	-	0 10½	0 3	cask or case, 3 cwt. and upwards
			0 2	cask or case, 1 cwt. and under 3 cwt.
			0 1	do. or case, under 1 cwt.
Colours, painters', —				
9 cwt. and above - cask	-	2 6	0 2	
6 and under 9 cwt. - cask	-	2 0	0 2	
3 and under 6 cwt. - cask	-	1 6	0 1½	
1 and under 3 cwt. - cask	-	1 0	0 1	
under 1 cwt. - cask	-	0 6	0 0½	
Columbo root - cwt.	-	0 1½	0 0½	
Copper, copper ore, and copper nails - ton	-	5 0	0 2	
Wharfage and shipping copper slabs, when piled on the quay, 3*s.* 4*d.* per ton.				
Copperas - - ton	-	5 0	0 6	
Coquilla nuts - 1,000	-	1 3	0 1	
Coral, fragments - cwt.	-	0 7½	0 3	case or cask
beads - case or chest	-	1 6	0 2	
box	-	1 0	0 1	
Cordage, hempen, under 6 inches - - ton	-	5 0	0 4	
Cordials. See *Spirits* and *Wine.*				
Coriander seed - ton	-	5 0	0 5	
Cork - - ton	-	6 0	1 0	
Unhousing, wharfage, and shipping, 1*s.* per ton.				
manufactured - cwt.	-	2 0	0 2	hog-head
			0 1	bag, 1 cwt.
			0 0½	bag, 56 lbs.
Cornelians and beads, chest or box - -	-	1 6	0 2	chest
			0 1	box
Corn. See *Grain.*				
Corpse - - each	-	15 0		
Cortex winteranus - cwt.	1 6	0 6	0 0½	
Cotton piece goods - bale	-	1 3	0 1½	
trunk	-	0 9	0 1	
other cotton goods, large case	-	2 6	0 4	
bale	-	1 6	0 2	
box or small case	-	1 0	0 1½	
Cotton wool, press-packed, cwt.	-	0 3	0 5	ton
not press-packed - cwt.	-	0 4½	0 6	ton
West India, press-packed, cwt.	0 9			
not press-packed - cwt.	1 0			
Cotton yarn or thread, cwt.	-	0 5½	0 1	bale
			0 0½	ballot
fringe - case, about 5 cwt.	-	2 0	0 2	
10 cwt.	-	4 0	0 4	
Cowhage - - cwt.	-	0 6	0 0½	
Cowries - - ton	-	5 0	0 3	
Cows, landing and wharfage each	-	10 0		
Cranberries - hogshead	-	1 0	0 1½	
barrel	-	0 9	0 1	
keg	-	0 6	0 1	
Cream of tartar - ton	-	5 0	0 6	ton
Crystal beads - package	-	1 6	0 2	
rough - ton	-	5 0	0 7	
Cubebs - - cwt.	-	0 6	0 0½	
Cubic nitre. See *Saltpetre.*				
Cummin seed - cwt.	-	0 6	0 0½	
Currants, 23 cwt. and upwards - - butt	-	4 6	0 6	
15 and under 23 cwt. butt	-	3 0	0 4	
9 do. 15 do. pipe	-	2 3	0 3	
5 do. 9 do. carot.	-	1 6	0 2	
2½ do. 5 do. barrel	-	0 9	0 0½	
under 2½ cwt. half-barrel	-	0 6	0 0½	
Dates, 3 cwt. and upwards cask or case	-	1 6	0 1½	
2 and under 3 cwt. do.	-	1 0	0 1½	
1 do. 2 do. do.	-	0 9	0 0½	
under 1 cwt. do.	-	0 6	0 0½	
Deer, landing and wharfage each	-	5 0		
Divi divi - - cwt.	-	0 6	0 0½	
Dragon's blood - cwt.	-	0 6	0 0½	

Unhousing and Loading.
s. d.
1 0
0 8
0 6
0 4
0 2
0 2

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Dripstones - each	-	0 9	0 0½	
Drugs not otherwise enumerated - - cwt.	-	0 9	0 0½	
Dye flower - - ton	-	5 0	0 6	
Earth, fullers' - ton	-	3 9	0 4	
Eau de Cologne, 450 bottles and above - case	-	1 6	0 4	
200 and under 450 bottles case	-	1 0	0 2	
do. 200 bottles case	-	0 6	0 1	
Eggs - - box	-	0 6	0 1	
Elephants' teeth - cwt.	-	0 10½	0 1	
Emery stone. See *Stone.*				
Essences, 1 cwt. and above case	-	2 0	0 4	
under 1 cwt. - case	-	1 6	0 2	
Extract from oak bark cwt.	-	0 3	0 1½	cask above 4 cwt.
			0 1	do. 4 cwt. and under
Rhatania or Jesuits' bark cwt.	-	0 9	0 1	
Fans - - case	-	1 6	0 1½	
box	-	1 0	0 1	
Feathers, bed - cwt.	-	0 10½	0 3	bale, 3 to 5 cwt.
			0 2	do. from Ireland
			0 2	bag, 2 cwt. and under 3 cwt.
			0 1½	do. 1½ cwt. and under 2 cwt.
			0 1	small bale
Ostrich - - package	-	1 6	0 2	
Vulture, above 2 cwt. bale or cask	-	2 6	0 3	
not exceeding 2 cwt. bale or cask	-	1 6	0 2	
not exceeding 56 lbs. bag	-	0 6	0 0½	
Figs, 3 qrs. to 1¼ cwt. chest	-	0 3	2 0	100
about 56 lbs. half-chest	-	0 3	1 3	100
¼-chests or drums, about 28 lbs. - score	-	2 6	1 5	ton
½, ¼, or ⅛-drums, or tapnets - score	-	1 6	1 5	ton
Fish, cod, dried - ton	-	4 6	0 4	
herrings or mackerel, tierce	-	1 0	3 0	100
barrel	-	0 6	1 6	100
stock or sturgeon 1000	-	0 0	0 4	1000 stock
			1 0	100 kegs sturgeon
			2 6	100 barrels
not otherwise described tierce	-	1 0	5 0	100
barrel	-	0 6	2 6	100
box	-	0 3	1 6	100
roes - - barrel	-	0 9	3 0	100
salmon - - tierce	-	0 6	5 0	100
kit	-	0 1½	1 6	100
Flax - - ton	-	5 0	0 5	
when sold from landing-scale to importer ton	-	3 6		
Do. to buyer - ton	-	1 6		
Unhousing, wharfage, and shipping, 1*s.* 6*d.* per ton.				
Flour, including delivery, by land or water ton	-	4 9	0 2½	
Repiling, 1*s.* per ton.				
Weighing on delivery, if required, per barrel, sack, or chest, 1*d.*; per ½-barrel, or ½-chest, ½*d.*				
Weighing on board for transhipment, 2*s.* per ton.				
Flowers, artificial case	-	1 0	0 1	
box	-	0 9	0 0½	
Flower roots. See *Roots.*				
Frankincense - cwt.	-	0 8½	0 0½	
Fruit. See each kind.				
Furs. See *Skins.*				
Furniture, very large pckge.	-	4 6	0 4	
ordinary package	-	3 0	0 3	
middling package	-	2 0	0 2	
intermediate package	-	1 0	0 1½	
small package	-	0 6	0 1	
Galangal - - cwt.	-	0 6	0 0½	
Galbanum - - cwt.	-	0 6	0 0½	
Galls - - cwt.	-	0 3½	0 0½	
Gamboge - - cwt.	-	0 6	0 0½	
Gentian root - cwt.	-	0 3	0 0½	
Ginger, W. India, casks cwt.	1 6	0 6	0 6	ton
in bags - - cwt.	1 2	0 5	0 6	ton
East India, bags, &c. cwt.	1 0	0 5	0 6	ton
Preserved. See *Succades.*				
Ginseng root - cwt.	-	0 6	0 1	barrel
Glass - cask or chest	-	1 6	0 3	
case or box	-	1 0	0 2	case
			0 1	box
utensils, 2½ cwt. and upwards - cask or case	-	2 0	0 3	
1 cwt. and under 2½ cwt. cask or case	-	1 6	0 2	
under 1 cwt. cask or case	-	1 0	0 1	
Glue - - ton	-	5 0	0 4	
Goats' hair or beards. See *Wool.*				
Grain and seed, viz.—				
Wheat, barley, rye, maize and other heavy grain; peas, horse or pigeon beans, tares, linseed, &c.				

Unhousing and Landing.
s. d.
0 0½ each
0 6 score
0 6 score

Wheat, rye, maize, and other heavy grain, except barley, peas, horse or pigeon beans, tares | 4*s.* 9*d.* per 100 qrs., not including insurance from fire.

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
				Per
Grain, &c.—*continued.* Per Landing, wharfage, housing and delivering - qr.	s. d. -	s. d. 0 9	s. d.	Barley, 100 qrs. 4s. 9d. not including insurance from fire
Oats and other light grain: Landing, wharfage, housing, and delivering - qr.	-	0 8	3 10	Linseed, do. do. 3s. 10d. 100 qrs., not including insurance from fire
Working out and delivering into craft, 3d. per qr.				
Granilla - - cwt.	3 0	0 9	0 2	barrel or bag
Grapes - - box	-	0 6	5 0	100
jar	-	0 3	2 6	100
Grass, Brazilian - cwt.	-	0 1½	0 6	ton
Grease - - ton	-	5 0	0 3	
Greaves - - ton	-	4 6	0 3	
Guinea grains - cwt.	-	0 6	0 10	
Gum, not otherwise described, loose, or in hogsheads - - ton	-	5 0	0 4	
in serons or bags - ton	-	4 6	0 4	
in cases, barrels, or chests cwt.	-	0 6	0 0½	
in casks or chests from Africa ton	-	4 6	0 4	
Hair, horse, ox, or cow cwt.	-	0 6	0 2	bale 5 cwt. and upwards
			0 1½	bale 3 cwt. and under 5 cwt.
			0 1	bale, case, or box, under 3 cwt.
			0 0½	loose, per cwt.
human - - cwt.	-	1 0	0 2	bale
pigs - - cwt.	-	0 4½	0 1	bale, 2 to 4 cwt.
			0 0½	bale under 2 cwt.
Hams - - hogshead	-	2 0	0 3	
tierce	-	1 6	0 1	
barrel or basket	-	0 6	0 1	
case	-	0 9	0 1	
small case	-	0 6	0 0½	
loose, 100	-	6 3	2 1	
Hartall - - ton	-	5 0	0 4	
Hats, Leghorn - 10 doz.	-	0 6	0 1	10 doz.
			0 2	middling case or package
			0 4	large case or package
chip - tub of 80 doz.	-	1 6	0 2	
beaver, or silk - large case	-	1 6	0 3	
middling case	-	1 0	0 2	
small case	-	0 6	0 1	
linings - small case	-	1 0	0 1	
Hemp - - ton	-	4 6	0 5	
if sold from landing scale, to importer - ton	-	3 6	0 5	
to buyer - ton	-	1 0	0 5	
When housed, weighing, 2s. per ton; loading, 2s. per ton.				
Unhousing, wharfage, and shipping, 4s. per ton.				
Hides, wet salted, landed loose, and requiring to be tied up - - 100	25 0	-		
Including landing, wharfage, housing, taring, tying up each, including cord and weighing for delivery.				
landed in bundles, or loose, not requiring tying up 100	*12 6	-		
* Including landing, wharfage, housing, taring, and weighing for delivery.				

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
				Weighing,* Unpiling, Repiling, Rehousing, or Loading.*
				Per / s. d.
horse, Hambro', dry, loose 100	-	5 6	0 8	100 / 2 6
Not otherwise enumerated. dry or dry salted, loose 100	-	4 9	0 6	100 / 2 1
wet salted, loose - 100	-	9 6	0 10	100 / 4 2
ox, cow, or buffalo, wet salted, loose - 100	-	9 6	0 10	100 / 4 2
ditto, with short horns 100	-	12 6	2 0	doz. / 0 8
Other hides (not enumerated), dry or dry salted, loose.				
average more than 22 lbs. each - - 100	-	9 3	0 10	100 / 4 2
12 lbs. and not exceeding 22 lbs. - - 100	-	6 9	0 8	100 / 3 0
7 lbs. and under 12 lbs. 100	-	4 6	0 6	100 / 2 1
under 7 lbs. - 100	-	3 0	0 4	150 / 2 1
in bales under 4 cwt. bale	-	1 0	0 1	bale / 0 5
4 cwt. & under 6 cwt. bale	-	1 1½	0 2	bale / 0 6
6 cwt. ditto 10 cwt. bale	-	2 3	0 3	bale / 1 0
10 cwt. ditto 15 cwt. bale	-	3 0	0 4	bale / 1 4
15 cwt. ditto 20 cwt. bale	-	4 0	0 5	bale / 1 6

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
				Unhousing, Wharfage, and Shipping.
				Per / s. d.
Hides—*continued.*				
20 cwt. ditto 25 cwt. bale	-	5 0	0 6	bale / 2 0
25 cwt. ditto 30 cwt. bale	-	6 0	0 7	bale / 2 6
In casks, landing rate and rent the same as in bales.				
losh - bale or chest	-	1 6	0 3	chest or bale / 0 8
Hones - - cwt.	-	0 3	0 1	case, 3 to 5 cwt.
Honey, jars - cwt.	-	0 6	0 0½	keg or jar
barrels and kegs cwt.	-	0 4½	0 1	barrel
larger casks - cwt.	-	0 3	0 2	hhd.
			0 3	puncheon
Hoofs - - cwt.	-	0 6	0 5	ton
Hops - - cwt.	-	0 4½	0 2	bag
			0 1	pocket
Horns and horn tips, or plates, ox, cow, or buffalo, loose cwt.	-	*0 10½	0 10	ton, horns
Unhousing, wharfage, and shipping, 7d. per cwt.				
packages - cwt.	-	0 6	0 5	ton, tips or plates
hart, stag, or deer, German 100 pr.	-	*3 0	0 3	
East India, loose - cwt.	-	*0 10½	0 0¾	
bales, under 2 cwt. - bale	-	1 0	0 1	
2 cwt. and above - bale	-	1 6	0 1½	
* Including counting at landing.				
Horses, wharfage - each	-	6 3*		
Jalap - - cwt.	-	0 10½	0 1	bale, about 3 cwt.
			0 0½	bale, about 1½ cwt.
Iceland moss. See *Moss.*				
India rubber, in packages cwt.	-	0 6	0 0½	
loose - - cwt.	-	1 0	0 1	in bottle
			0 0¾	solid
Indigo (not East India) cwt. East India. See *Management Rates.*	1 6	0 9	0 1	seron
Ink, China - cwt.		2 0	0 1	
Inkle - - cwt.		1 0	0 1½	case
			0 1	box or keg
Ipecacuanha - cwt.	-	0 10½	0 0¾	
Iron, bars, rods, or pigs - ton	-	3 4	0 1	Rent is not charged when shipped from the quay within one week from the final weighing.
when landed for transit, and not weighed - ton	-	2 6	0 1	
Weighing, 10d. per ton. Unpiling, wharfage, and shipping (without weighing), 2s 6d. per ton. when shipped from landing scale, including delivery ton	-	4 2		
ore - - ton	-	3 0	0 2	
old - - ton	-	3 4	0 2	
Steam engines, and other heavy machinery, in parts, boilers, cylinders, &c. brought either by land or water.				
pieces under 2 tons ton	-	5 0	0 3	per t... ..., cranks, cylinders, and the like
2 tons and not exceeding 10 tons - ton	-	7 6	0 1	per ton for plates, shafts, and other gearing
exceeding 10 tons ton	-	10 0		
manufactures in packages, not otherwise described ton	-	5 0	0 2	
Isinglass - - cwt.	-	0 10½	0 0¾	
Ivory - - cwt.	-	0 10½	0 1	
Junk, or old rope - ton	-	3 6	0 3	
Jute, press-packed ton	-	3 6	0 3	
Kelp - - ton	-	3 6	0 2	
Filling and weighing on rehousing or delivery, 2s. per ton.				
Knives - - package	-	1 6	0 2	case
			0 1	barrel
			0 0¾	box
Lac dye and lac lake chest	-	1 0	0 1	
Lace - case or box	-	2 6	0 6	
Lacquered ware large case	-	2 6	0 3	
chest	-	1 6	0 2	
box	-	1 0	0 1	
Lard - - bladder	-	0 0¾	0 6	100 bladd
Lavender flowers - cwt.	-	0 6	0 0¾	

* Any weighing chargeable to the importer is to be charged at the rate of one-third of the landing rate; but this rule is not to apply to any other operation, or to any weighing or re-weighing, under any other circumstances.

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	s. d.	Per
Lead - - ton	-	2 6	0 1	
Unpilling, wharfage, and shipping, 1s. 8d. per ton.				
old and ore - - ton	-	3 0	0 2	
black - - - ton	-	3 9	0 3	
white - - ton	-	5 0	0 4	
Leather, foreign, tanned bale	-	1 6	0 2	
demi-bale	-	1 0	0 1½	
loose, ton	-	5 0	0 9	
Irish, tanned, bale under 1 cwt.	-	0 9	0 0½	
bale 1 cwt. and under 2 cwt.	-	1 0	0 1	
bale 2 do. do. 1 cwt.	-	1 6	0 1½	
small or middling crate	-	2 0	0 1½	
large crate	-	2 6	0 2	
Leeches - - package	-	1 6	0 1	
Lemons. See *Oranges*.				
Peel. See *Orange Peel*.				
Limes - - barrel	-	0 8½	0 1	
Lime juice - 100 gallons	-	2 1	0 5	puncheon
Laying up to guage, and coopers' attendance at landing & delivery, form a separate charge.			0 3	hogshead
			0 2	barrel
Linen, sample box, not accompanied by original package - case	-	0 6	0 1	
German - - bale	-	2 3	0 4	
½ bale	-	1 3	0 2	
¼ bale	-	0 8½	0 1	
loose, or bags - roll	-	0 1½	1 0	100
chest	-	2 6	0 4	
½ chest	-	1 3	0 2	
¼ chest	-	0 8½	0 1	
Russia - - bale	-	1 2½	0 2	
Boarded bale or ½ bale, containing 10 pieces	-	0 9	0 1	
¼ bale	-	0 7½	0 1	
crash - - bale	-	1 2½	0 3	
½ bale	-	0 9	0 2	
¼ bale	-	0 7½	0 1	
sail cloth - bolt or roll	-	0 1½	1 0	100
mats, containing 2 pcs. each	-	0 3	2 0	100
Irish - case or bale	-	1 6	0 3	
box or bundle	-	0 9	0 2	
Linen yarn. See *Yarn*.				
Linseed. See *Grain*.				
cakes - - ton	-	3 6	0 3	
Liquorice - - ton	-	6 3	0 1	case or barrel
root, loose or bales ton	-	10 0	1 0	loose
			0 1	bale under 2 cwt.
Maccaroni. See *Vermicelli*.				
Mace - - cwt.	3 0	1 0	0 0½	cwt.
Madder - - ton	-	3 4½	0 6	
roots - - cwt.	-	0 4½	0 2	bale, 5 cwt. and upwards
			0 1½	bale, 3½ cwt. to 5 cwt.
			0 1	bale, under 3½ cwt.
Maiden hair - bale	-	1 0	0 2	
Manna - - cwt.	-	0 10½	0 1	chest or cask
Manganese ore - ton	-	3 6	0 3	
Filling and weighing on rehousing or delivery, 2s. per ton.				
Marbles - - ton	-	5 0	0 4	
Marble baths - each	-	6 0	0 6	
mortars - ton	-	5 0	0 6	
Sculptured works of art, and slabs, according to size and value			0 3	case
			0 2	small case
			0 2	case
rough, cases - cwt.	-	0 6	0 2	
blocks, 4 tons & under, ton	-	6 0	0 3	
above 4 tons, and not exceeding 10 tons - ton	-	10 0	0 3	
above 10 tons - ton	-	20 0	0 3	
Mastic gum - cwt.	-	0 6	0 1	case or chest, about 3 cwt
Matchets - - bale	-	0 6	0 0½	
Mats (bass) - 100	-	1 8½	0 6	100 bundles
Indian - - chest	-	1 0	0 2	
box	-	0 9	0 1	
6 feet long and under, each	-	0 2	0 0½	
above 6 feet long - each	-	0 3	0 1	⅕ bundle of 10 mats
Mats or bags, from corn-vessels - bundle of 10 delivery by land, ½d.	-	0 2	0 6	100 bundles
ditto by water, 1d.				
Meal, including delivery, ton	-	4 9	0 2½	ton, if not cleared within 14 days from breaking bulk
weighing for delivery, 1d. per sack or barrel.				
Melons - - basket	-	0 8	0 1	
Melting pots - cask	-	4 0	0 4	
Minerals (specimens) case	-	1 0	0 2	
Mohair yarn - cwt.	-	0 7½	0 1	bale
Molasses and cane juice, cwt.	0 7	0 3	0 2½	puncheon
			0 1½	hogshead or tierce
			0 0½	barrel or keg
Money. See *Bullion*.				

Delivered into undecked craft per ton of 25 palms, or 12 cubic feet.

	s. d.	Wharfage and Shipping. s. d.
blocks, 4 tons & under, ton	3 0	4 6
above 4 tons, and not exceeding 10 tons - ton	5 0	7 6
above 10 tons - ton	10 0	15 0

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	s. d.	Per
Moss, rock or Iceland ton	-	7 6	0 9	
Mother-o'-pearl, shells ton	-	6 9	0 4	
ware - - chest	-	1 6	0 2	
box	-	1 0	0 1	
Mules, landing and wharfage each	-	3 0		
Munjeet, bales - cwt.	-	0 5	0 0⅜	
bundles - cwt.	-	0 7½	0 0½	
Musk - - chest	-	1 6	0 2	
boxes - - box	-	1 0	0 1	
Muslins - - bale	-	1 3	0 1½	
Myrabolans - cwt.	-	0 1½	0 0⅜	
Myrrh - - cwt.	-	0 6	0 0½	
Musical instruments case	-	3 0	0 3	
box	-	1 6	0 2	
Nails - - cwt.	-	0 3	0 0½	barrel or bag
Nanari - - cwt.	-	1 0	0 0½	seron, above 1 cwt.
			0 0½	seron, 1 cwt. or under
Nankeen - - chest	-	1 3	0 1	
Natron - - ton	-	3 6	0 3	
Filling and weighing, on rehousing or delivery, 2s. per ton.				
Nickel, metallic, refined, and oxide of - ton	-	7 6	0 8	
arsenate of, in lumps, unrefined - - ton	-	5 0	0 4	
Nitrate of soda. See *Saltpetre*.				
Nutmegs - - cwt.	-	0 6	0 0½	cwt.
Nuts, Pistachio - cwt.	-	0 6	0 0½	
other European - bushel	-	0 2½	4 0	100 sacks
			1 0	100 bushels, loose
bag	-	0 4½	2 0	100 bags
barrel	-	0 4½	0 1	barrel
Cassania - - bushel	-	0 2½	1 0	100 bushels
palm - - cwt.	-	0 4½	0 0½	cwt.
Nux vomica - cwt.	-	0 4½	0 0½	
Oakum - - ton	-	5 0	0 4	
Oatmeal. See *Meal*.				
Ochre - - ton	-	3 9	0 4	
Oil, bay - - cask	-	1 0	0 1	
castor - - cwt.	-	0 6	0 0½	cwt.
chemical, 1 cwt. and upwards - package	-	2 0	0 4	
under 1 cwt. package	-	1 6	0 2	
rhodium - - package	-	1 6	0 3	
olive, large jars - cwt.	-	0 6	0 6	each
common jars - cwt.	-	0 8½	0 3	each
half jars - - cwt.	-	0 8½	0 2	each
			0 0½	gallon jar
case, containing 30 quart bottles - - case	-	1 0	0 3½	score cases
salad, half chest of 30 flasks	-	0 6	0 2½	score half chests
palm or cocoa nut, casks not above 30 cwt. ton	-	3 9	0 4	
casks above 30 cwt. ton	-	4 6	0 4	
in iron tanks - ton	-	6 0	0 4	
seed, casks tun	-	6 0	0 6	
duppers, canisters, and like packages - cwt.	-	0 6	0 0½	

	Olive, in casks.	Fish, not Newfoundland	Newfoundland
	s. d.	s. d.	s. d.
Landing, wharfage, and laying up to guage - - - -	4 6	3 0	3 0
Loading ● housing - -	1 6	1 6	1 2
Unhousing and loading - - per tun	1 6	1 6	1 6
Unhousing, wharfage, and shipping, or wharfage and shipping - of 252	4 6	3 0	3 0
Coopers' attendance, if delivered from quay - - - gallons	2 0	2 0	2 0
ditto if housed additional	1 0	1 0	1 0
Searching and filling up to order	1 0	1 0	1 0
*Rent per week - -	0 6	0 4	0 4

* Fourteen days are allowed from the final landing, free of rent, to clear the oil from the quay; if not cleared from the quay within that time, rent will be charged from the date of breaking bulk, and if it remain after the expiration of one calender month from the commencement of the ship's discharge, it will be housed.

Oil cake - ton	-	3 6	0 3
Olibanum. See *Gum*.			
Old rope. See *Junk*.			
Olives, about 12 gal. ½ bar.	-	0 4	0 1
6 gal. ¼ bar.	-	0 3	0 0½
2½ gal. keg	-	0 2½	0 0½
about 5 quarts keg - score	-	1 6	0 2
3 pint jars - score	-	0 9	0 1
large packages - gallon	-	0 0½	0 3 tierce
			0 2 barrel, 30 gallons
			0 1 half-barrel
Onions - - bushel	-	0 6	0 1 basket or barrel
Opium - - - cwt.	-	0 10½	0 1½ chest under 3 cwt.
Oranges and lemons chest	-	0 7½	0 1
box	-	0 5½	0 0½
case	-	1 0	0 1½
buds - - cwt.	-	0 4½	0 3 hogshead
			0 2 tierce
peel - - cwt.	-	0 6	0 0½
trees - large package	-	2 6	0 4
small package	-	1 6	0 2
flowers, in pickle, cask about 10 gallons each	-	0 6	0 0½
flower water - case	-	1 6	0 1
Orchella weed - cwt.	-	0 5½	0 0½
extract of - cwt.	-	0 6	0 2 hogshead

Goods Imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*Per*	*Per*	*Per*
Orchella weed, extract of — *continued.*	*s. d.*	*s. d.*	*s. d.*	
			0 1½	tierce
			0 0½	barrel
Orpiment - - on	-	5 0	0 4	
Orrice root - cwt.	-	0 3	0 3	hogshead
			0 2	tierce
			0 1	barrel or seron
Orsidew - - package	-	1 6	0 3	large case
			0 2	small do.
Ostrich feathers - package	-	1 6	0 2	
Otto of roses - package	-	2 6	0 4	
middling package	-	1 6	0 4	
small package	-	1 0	0 4	
Oxen, landing and wharfage each	-	10 0		
Paddy, in bags - ton	-	3 9	0 3	
Landing, wharfage, and shipping, 3*s.* 9*d.* per ton.				
in bulk - - quarter	-	0 10	0 1	
Working out and delivering into craft, 3*d.* per quarter.				
Paper - - cwt.	-	0 6	0 0½	
hanging - - case	-	1 6	0 3	
rice, under 14 lbs., case or box	-	0 3	0 0½	
Pearl barley - barrel	-	0 6	0 0½	
bag or keg	-	0 3	0 0½	
Peas - tierce or barrel	-	0 9	0 1	each
bag	-	0 1½	2 6	100
In bulk. See *Grain.*				
Pellitory root - cwt.	-	0 6	0 0½	
Pepper, unsifted - cwt.	0 9	0 3	0 6	ton
including ordinary sifting and bagging - cwt.	2 3	-	0 1	bag of 317 lbs.
long, or cayenne cwt.	1 0	0 6	0 7	ton
Pianofortes - each	-	4 6	0 6	
Piccaba - cwt.	-	0 6	0 4	ton
Pickles - dozen bottles	-	0 2½	0 0½	
barrels - - gallon	-	0 0½	0 1	barrel
large bottles or jars, under 2 gallons - gallon	-	0 1½	0 0½	bottle or jar
2 and under 5 do. gallon	-	0 1	0 0½	bottle or jar
5 and upwards - gallon	-	0 0½	0 0½	bottle or jar
Pictures - bale or case	-	4 6	0 6	
middling bale or case	-	3 0	0 4	
small bale or case	-	1 6	0 3	
Extra sizes, according to dimensions and contents.				
Piece goods, not otherwise rated - - bale	-	1 3	0 1½	
Pill boxes, in vats large	-	4 6	0 6	●
small	-	3 0	0 4	
Pimento, casks - cwt.	1 6	0 6	0 6	ton
bags - - cwt.	1 2	0 6	0 6	ton
Pink root - - cwt.	-	0 6	0 2	bale
Pipe bowls, earthenware case	-	1 0	0 1	
Pitch - - ton	-	2 6	3 0	100 barrels
Burgundy - cwt.	-	0 6	0 0½	
Plaster of Paris - ton	-	3 0	0 2	
Plums, Portugal, boxes, doz.	-	0 9	1 0	100
French. See *Prunes.*				
Pomegranate peel - cwt.	-	0 6	0 0½	
Porcelain - - case	-	1 6	0 3	
small case or box	-	1 0	0 2	
Pork, middles, 3 cwt. tierce	-	0 8¼	0 1	
ditto, 1 to 2 cwt. cask	-	0 6	0 0½	
Potatoes - - ton	-	3 6	0 3	
Potash. See *Ashes.*				
Presents, examined on the quay:—packages of small value, and not exceeding 15 in. square, or 28 lbs. weight - package	0 6	-	0 0½	
above do. and under 1 cwt. package	1 0	-	0 0½	
1 cwt. and under 2 cwt. package	1 6	-	0 0½	
2 cwt. & upwards, package	3 0	-	0 1½	
examined within the warehouse :—packages of small value, and not exceeding 15 in. square, or 28 lbs. weight, package	1 6	-	0 0½	
above do. and under 1 cwt. package	2 6	-	0 1	
1 cwt. and under 2 cwt. package	4 0	-	0 2	
2 cwt. & upwards, package	5 0	-	0 3	
Preserves. See *Succades.*				
Prints, engravings, large case	-	1 6	0 2	
middling case	-	1 0	0 1	
small case	-	0 6	0 0½	

Unhousing and Landing.	
s. d.	
0 6	
0 3	
0 2	
0 2	
0 1	chest
0 6	score
0 6	score
0 2	

Goods Imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*Per*	*Per*	*Per*
Pyrolignate of lead - ton	-	5 0	0 5	
Quicksilver, bottles - bottle	-	0 3	0 0½	
small case	-	0 6	0 0½	
Quills - - vat	-	4 6	0 4	
small vat	-	3 0	0 3	
case	-	2 0	0 3	
hogshead or barrel	-	1 6	0 3	
bale	-	0 6	0 2	
Quinine, sulphate of - case	-	0 9	0 1	
Radix contrayervæ - cwt.	-	0 9	0 2	case
Radix senekæ - cwt.	-	0 10½	0 0½	
Rags - - ton	-	3 0	0 3	
when sold from landing scale, to the importer	-	2 0		
to the buyer	-	1 0		

Weighing.		Unhousing and Loading.	
s. d.		*s. d.*	
1 0		0 8	
0 9		0 6	
0 6		0 4	
0 3		0 2	
0 2		0 2	
1 0	100	0 0½	

Goods Imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.	Weighing.		Unhousing and Loading.	
	Per	*s. d.*	*s. d.*	*Per*	*s. d.*		*s. d.*	
Raisins, 12 to 20 cwt. butt	-	3 0	0 4		1 0		0 8	
9 to 12 cwt. - pipe	-	2 3	0 3		0 9		0 6	
5 to 9 cwt. - carroel	-	1 6	0 2		0 6		0 4	
2½ to 4½ cwt. - barrel	-	0 9	0 0½		0 3		0 2	
1½ to 2½ cwt. half-barrel	-	0 6	0 0½		0 2		0 2	
Under 1½ cwt. qr.-barrel	-	0 3	2 0	100	1 0		0 0½	
Denia and Valencia, boxes								
score	-	2 6	1 3	—	0 8	per score.	0 6	per score.
half and quarter-boxes score	-	1 6	1 0	—	0 6	per score.	0 6	per score.
frails or baskets - score	-	1 8	1 0	—	0 6	per score.	0 5	per score.
half and quarter-frails or baskets - score	-	1 0	1 0	—	0 4	per score.	0 4	per score.
Malaga, boxes - score	-	2 0	1 0	—	0 8	per score.	0 6	per score.
half and quarter-boxes score	-	1 6	0 10	—	0 8	per score.	0 6	per score.
Smyrna, drums - score	-	2 6	1 0	—	0 10	per score.	0 6	per score.
half and quarter-drums score	-	1 6	1 0	—	0 6	per score.	0 6	per score.
cases, 1 cwt - score	-	5 0	2 6		0 10	per score.	1 0	per score.
56 lbs. - score	-	2 6	1 3		0 8	per score.	0 9	per score.
28 lbs. - score	-	1 6	1 0		0 6	per score.	0 6	per score.
Cape, under 3 cwt. - cask	-	0 9	0 0½		0 2	per score.	0 2	per score.
3 cwt. to 5 cwt. - cask	-	1 6	0 2		0 4	per score.	0 4	per score.
boxes, about 60 lbs., score	-	3 0	0 4		0 10	per score.	0 9	per score.
Rape cake - ton	-	3 6	0 3					
Rattans, common. See *Canes.*								
Rhatania root - cwt.	-	0 10½	0 0½					
extract - - cwt.	-	0 9	0 1					
Rhubarb - - cwt.	-	0 10½	0 0½					
East India - chest	5 0							
Including starting into bulk, taring, repairing, re-taring, re-filling, nailing down, re weighing, and piling away.								
Rice, casks - ton	13 4	5 0	0 4					
bags - - ton	10 6	5 0	0 3					
Roots, flower - large case	-	1 6	0 1					
small case	-	1 0	0 1					
Madder. See *Madder.*								
Rhatania. See *Rhatania.*								
Sassafras - cwt.	-	0 9	0 2	cask or case				
Winters - cwt.	-	0 9	0 2	cask or case				
Rosin - - ton	-	2 6	0 6	ton, loose				
			3 0	100 barrels				
Rope, old. See *Junk.*								
Rugs - - bale	-	1 6	0 3					
half-bale	-	1 0	0 1½					
smaller do.	-	0 6	0 1					
Rushes - - load	-	1 6	0 3					
for polishing - bundle	-	0 1½	1 0	100 bundles				
Rye, ergot of - cwt.	-	0 6	0 0½					
Sac, saturni - cwt.	-	0 3	0 3	chest				
Safflower - - ton	14 6	5 0	0 6					
Saffron - - cwt.	-	2 0	0 2	bale or case				
Sago - - ton	-	8 6	0 3	ton, bags				
			0 4	ton, boxes				
Sal ammoniac - ton	-	5 0	0 6					
Salmon. See *Fish.*								
Salop - - package	-	1 6	0 2					
Saltpetre - - ton	-	5 0	0 3					
Samples which by law are exempted from duty, *free.*								
Saphora - - package	-	0 6	0 1					
Sarsaparilla - - cwt.	3 0	1 3	0 1	cwt.				
Re-weighing and restowing bales, 4 cwt. and upwards, 1*s.* 6*d.*								
Under 4 cwt., 1*s.*								
Sassafras, bark or root, cwt.	-	0 9	0 2	case or cask				
	-	-	0 1	barrel				
Scaleboards - 100 bundles	-	3 0	0 4					
Scammony - cwt.	-	3 0	0 0½	drum				
Sea-horse and sea-cow teeth cwt.	-	0 10½	0 1					
Seeds, agricultural, or not otherwise rated, bags, ton	-	3 9	0 3½					
chests or casks - ton	-	4 6	0 3½					
forest nuts or acorns, barrel	-	0 9	0 1					
Seed lac - - cwt.	-	0 9	0 0½					
Senna - - cwt.	-	0 4½	0 0½					
Shawls, small box or bale each	-	2 0	0 1½					
large do. - do.	-	3 0	0 2					

Unhousing and Landing.	
s. d.	
0 2	
0 1	
0 2	
0 2	
0 2

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent Per Week.	Rent Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Shaya root, press-packed, ton	-	4 0	0 4	
Shellac - - cwt.	-	0 9	0 0½	
Shot - - ton	-	3 0	0 1½	
Shrub, same as *Spirits*.				
Shurf - - ton	-	5 0	0 2	
Silk, raw or thrown - cwt.	-	1 0	0 2	bale, 2 cwt. and upwards
			0 1½	bale, under 2 cwt.
Raw or thrown, from East Indies or China. See *Management Rates.*				
manufactured, 1 cwt. and upwards - bale or case	-	1 6	0 1½	
under 1 cwt. - bale or case	-	1 0	0 1½	
waste, 4 cwt. and upwards bale	-	2 6	0 1	
2 cwt. & under 4 cwt. bale	-	2 0	0 1	
1 cwt. & under 2 cwt. bale	-	0 9	0 0½	
ribbon - case	-	2 0	0 1	
worm gut - case	-	1 0	0 1	
Skins, beaver - pipe	-	2 0	0 3	
puncheon	-	1 6	0 2	

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent Per Week.	Rent Quantities, &c.	Weighing*, Unpiling, Repiling, Rehousing, or Loading.	Unhousing, Wharfage, and Shipping.
	Per	*s. d.*	*s. d.*	*Per*	*s. d.*	*s. d.*
Calf and kip, 4 cwt. and upwards - bale	-	1 1½	0 1½		0 6	1 6
2 cwt. & under 4 cwt. bale	-	0 9	0 1		0 4	1 0
under 2 cwt. - bale	-	0 6	0 0½		0 3	0 9
calf, wet salted, loose, 100 dry, or dry salted, loose 100	-	2 3	0 5	120	1 0½	3 1½
	-	2 0	0 4	120	0 8½	2 9
kip, wet salted, loose, 100 dry, or dry salted, loose, 100	-	4 6	0 6	120	2 1	6 3
	-	3 0	0 5	123	2 1	4 2
Mogadore, dry salted, loose - dozen	-	0 3	0 0½			
camelion - small bale	-	0 6	0 0½			
carpincho - 100	-	4 2	0 6			
cat or fitch - cask or case	-	1 6	0 3			
chinchilli, bale, cask or case	-	1 6	0 3			
deer or elk, puncheon, hhd. or bale	-	1 6	0 2			
case	-	1 0	0 1			
pack or bundle	-	0 9	0 0½			
loose - - 120	-	3 0	0 4			
dog fish - - bale	-	0 9	0 1			
furs - large bale, case or cask	-	1 6	0 6			
middling bale, case or cask	-	1 0	0 3			
small bale, case or cask	-	0 9	0 2			
goat, Cape. See *Sheep and Goat.*						
Trieste, bale about 8 cwt.	-	2 0	0 3			
Hambro', bale 100 skins and under	-	1 0	0 1			
bale above 100 skins	-	1 6	0 1½			
Mogadore or Turkey, — above 100 skins - bale	-	1 6	0 2	120 skins		
above 60 to 100 skins, bale	-	0 9	0 2	120 skins		
above 30 to 60 skins, bale	-	0 6	0 2	120 skins		
30 and under - bale	-	0 3	0 2	120 skins		
loose - - dozen	-	0 2	0 3	120 skins		
East India, about 100 bale	-	2 0	0 3			
hare and coney, about 1000 skins - - bale	-	2 0	0 4			
about 500 skins and under 1000 - bale	-	1 6	0 3			
under 500 skins - bale	-	1 0	0 2			
large cask	-	2 0	0 6			
middling cask	-	1 6	0 4			
small cask	-	1 0	0 3			
kangaroo - dozen	-	0 0½	0 2	bale		
loose - -	-	-	0 2	120		
kid or lamb, hhd., punch., or bale	-	1 6	0 3			
tierce	-	1 0	0 2			
barrel	-	0 6	0 1			
large bundle	-	1 0	0 2			
ordinary bundle	-	0 9	0 1			
small bundle	-	0 6	0 1			
loose - - dozen	-	0 1	0 3	120		
leopard, lion, & tiger, each	-	0 1½	0 0½			
nutria - - hogshead	-	1 6	0 4			
barrel	-	1 0	0 1			
about 150 doz. skins, bale	-	1 6	0 4			
about 100 doz. skins, bale	-	1 0	0 3			
about 50 doz. skins, bale	-	0 9	0 2			
opossum, about 50 skins, bundle	-	0 6	0 1			
otter, about 100, bale or box	-	1 0	0 1			
Quebec, or Hudson's Bay, case, bale, or puncheon	-	1 6	0 3			
large bundle	-	1 0	0 2			
ordinary bundle	-	0 9	0 1			
small bundle or keg	-	0 6	0 1			
seal - - pipe	-	2 0	0 3			
puncheon or hogshead	-	1 6	0 2			
barrel	-	1 0	0 1			
loose - - 120	-	1 6	0 3			
South Seas, wigs 120	-	1 9	0 6			
middlings - 120	-	1 9	0 4			
smalls or pups 120	-	1 6	0 3			

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Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent Per Week.	Rent Quantities, &c.	Weighing*, Unpiling, Repiling, Rehousing, or Loading.	Unhousing, Wharfage, and Shipping.
	Per	*s. d.*	*s. d.*	*Per*	*s. d.*	*s. d.*
Skins—*continued.* Greenland or Newfoundland, loose - 120	-	1 6	0 2			
sheep, Hambro' - bale	-	1 6	0 2			
sheep and goat, Cape— 100 skins & upwds. bale	-	1 6	0 2		0 8	2 0
75 and under 100 bale	-	1 1½	0 1½		0 6	1 6
50 and under 75 bale	-	0 9	0 1		0 4	1 0
25 and under 50 bale	-	0 4½	0 0½		0 2	0 6
15 and under 25 bale	-	0 3	0 0½		0 1½	0 4½
under 15 - bale	-	0 1½	0 0½		0 0½	0 2½
dry or dry-salted, loose 100	-	1 6	0 3	120	0 8½	2 1
wet salted, loose - 100	-	2 3	0 4	120	1 0½	3 1½
India, loose - 120	-	1 0	0 2			
about 400 sk., large bale	-	2 0	0 3			
small calf, Russia, 100 skins - - bundle	-	0 9	0 1½			
squirrel, about 2000, bale	-	1 6	0 1½			
squirrel tails, about 100,000 bale	-	2 0	0 2			
swan, 150 skins - bale	1 6	0 2				
100 skins - bale	1 0	0 1				
vicunia, loose - 120	1 6	0 3				
Slates, in frames, and pencils, 1 to 2 cwt. - case	-	1 6	0 2			
Slate pencils - ton	-	3 4½	0 3			
Smalts - - ton	-	5 0	0 5			
Snake root - - cwt.	-	0 10½	0 3	hogshead		
			0 2	tierce or bale		
			0 1	barrel or ½ bale		
Soap - - cwt.	-	0 6	0 1	case		
Soda - - ton	-	3 0	0 4			
Soy - - chest	-	1 0	0 2			
casks - - gallon	-	0 1	0 5	puncheon		
			0 3	hogshead		
			0 2	kit or barrel		
Spectacles - - case	-	1 0	0 1			
Spelter - - ton	-	3 0	0 1			
Wharfage and shipping, 2*s.* per ton, when piled on the quay.						
Spirits, rum - 100 galls.	10 0	*3 6	0 2	ton, casks		
* Includes delivery from the quay, either by land or water.			0 8	leager		
			0 6	butt		
			0 3	½ butt		
*** When the spirits are imported in casks made of proper *oak*, the Company engages to be responsible for deficiencies in *measure*, which shall exceed one gallon per cask for each year, or fraction of a year, the goods remain in charge; but the Company will not be answerable for deficiencies arising from the casks being made of other and inefficient materials. Other spirits and wine.—See separate Table.			0 4	pipe		
			0 4	puncheon		
			0 2	hogshead		
			0 1½	barrel or quarter-cask		
				For cooper's care and attendance after the first 12 weeks, for each leager, butt, ½ butt, pipe, or puncheon, 1*d.* per week.		
				Ditto, for each hogshead, barrel, or quarter cask, ½*d.* per week.		
Spetches. See *Hide Cuttings*.						
Sponge - - cwt.	-	0 9	0 3	cask, case, or bale, 1½ cwt. or upwards		
			0 2	cask, case, or bale, under 1½ cwt.		
Squills, loose - ton	-	5 0	0 3			
dried, about 4 cwt. - case	-	1 6	0 1½			
2 cwt. - case	-	1 0	0 1			
bags - cwt.	-	0 6	0 0½	bag		
Starch - - ton	-	5 0	0 6			
Staves-acre - cwt.	-	0 6	0 0½			
Steel - - ton	-	4 6	0 2			
Stick lac - cwt.	-	0 9	0 0½			
Sticks, walking - 1000	-	5 0	0 2			
Stock-fish. See *Fish*.						
Stone, burr - each	-	0 1½	0 9	100		
emery - - ton	-	3 6	0 1			
Pitching and weighing on rehousing or delivery, 2*s.* per ton.						
lithographic - ton	-	5 0	0 6			
pumice, loose - ton	-	7 6	0 8	loose		
			0 4	bricks		
in casks - - ton	-	5 6	0 6			
Turkey or hones cwt.	-	0 3	0 1	cask, 3 to 5 cwt.		
Stores, ship's, warehoused, under 28 lb. - package	0 6	-	0 0½	package		
under 2 cwt. - package	1 0	-	0 0½	package		
2 cwt. and upwards - cwt.	1 6	-	0 1	package		
liquids - - gallon	0 1	-	0 5	tun		
Straw, manufactured, — under 1 cwt. - case	-	0 8	0 0½			
1 cwt. & under 2 cwt. case	-	1 0	0 1			
2 cwt. & under 3 cwt. case	-	1 6	0 1½			
3 cwt. & under 4 cwt. case	-	1 9	0 2			
4 cwt. and upwards - case	-	2 0	0 2			

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Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Straw, unmanufactured, —				
1 cwt. & under 2 cwt. case	-	1 0	0 2	
2 cwt. & under 3 cwt. case	-	1 6	0 3	
3 cwt. upwards - case	-	2 0	0 4	
Sturgeon. See *Fish.*				
Succades, under 28 lbs. gross package	0 6	0 3	0 0½	cwt.
under 56 lbs. gross, pckge.	0 9	0 4½	0 0½	cwt.
56 lbs. to 1 cwt. gross, do.	1 0	0 6	0 0½	cwt.
containing 1 cwt. nett and upwards - cwt.	1 0	0 6	0 0½	cwt
Sugar, in casks - cwt.	0 8	0 3	0 5	ton
baskets - - cwt.	0 7	0 3	0 5	ton
chests, 5 cwt. or above, cwt.	0 7	0 3	0 5	ton
chests, mats, or bags, under 5 cwt. - - cwt.	0 6	0 3	0 4	ton
candy - - cwt.	-	0 4½	0 0½	
Sulphate of zinc - ton	-	5 0	0 5	
Sulphate of potash ton	-	3 0	0 3	
Sumach - ton	-	3 9	0 3	
Sumi, press-packed ton	-	3 6	0 3	
Sweepwashers' dirt, package	-	1 6	0 2	
loose - - ton	-	4 6	0 3	
Filling and weighing, on rehousing or delivery, 2*s.* per ton.				
Tallow, in casks - ton	-	3 6	0 3	ton
sold from the landing scales, to the importer - ton	-	2 4	0 3	ton
to the buyer - ton	-	1 2	0 3	ton
Unhousing, wharfage, and shipping, 2*s. 6d.* per ton. Wharfage and shipping, 2*s. 4d.* per ton.				Three working days from the last day of weighing at the landing-scale, are allowed to clear tallow from the quay: when not so cleared, rent is charged from the date of the ship breaking bulk.
skins - - ton	-	3 9	0 3	
American, Mediterranean, or Cape,—packages or blocks, under 5 cwt., ton	-	5 0	0 6	ton
Unhousing, wharfage, and shipping, 3*s. 6d.* per ton gross.				
Tamarinds. See *Subcades.*				
Tanners' waste. See *Hide Cuttings.*				
Tapes - bale	-	1 6	0 2	
Tapioca - - cwt.	-	0 8½	0 0½	barrel
Tar (52 gallons) - barrel	-	0 3	3 0	100
Tares. See *Grain.*				
Tarras, on estimated weight, ton	-	3 0	0 5	
Tea. See *Management Rules.*				
Terra, japonica - ton	-	5 0	0 3	
sienna - - ton	-	5 0	0 3	
verde - - ton	-	5 0	0 3	
umbra or pozzolano - ton	-	3 6	0 3	
Pozzolano, weighing on board, 1*s.* per ton.				
Thread - - bale	-	1 6	0 2	
Tin - - ton	-	4 0	0 2	
ore - - ton	-	5 0	0 4	
Tincal - - ton	-	5 0	0 10	
Tongues, 3 cwt. tierce	-	0 8½	0 1	
1 to 2 cwt. - cask	-	0 6	0 0½	
loose - - dozen	-	0 3	0 0½	
about 2 dozen - bale	-	0 6	0 1	
reindeer, 12 doz. case	-	1 6	0 1½	
6 dozen - case	-	1 0	0 1	
2 dozen - case	-	0 6	0 0½	
Tonquin beans, under 1 cwt. chest.	-	1 6	0 1½	
in casks - - cwt.	-	1 0	0 1	
Tortoiseshell - cwt.	-	1 0	0 2	case
			0 1	small box
			0 1	cwt. in cask
Toys - large case or vat	-	4 6	0 6	
middling case or vat	-	3 0	0 4	
small case or vat	-	2 0	0 3	
Tow, in bales - cwt.	-	0 4½	0 2	bale, 6 cwt. and upwards
			0 1½	bale, 4 cwt. and under 6 cwt.
			0 1	bale, 4 cwt. and under
Turmeric - - cwt.	1 0	0 3	0 4	ton
Turpentine - ton	-	2 6	3 6	100 tierces
			3 0	100 barrels
			5 0	100 casks, from France
Delivery, by land or water, 1*s.* 8*d.* per ton.				
Scio - - cwt.	-	0 6	0 0½	
Twine - - cwt.	-	0 4½	0 1	mat or bundle
Valerian - - bale	-	1 6	0 2	
Valonia - - ton	-	4 6	0 3	
Filling and weighing, on rehousing or delivery, 2*s.* per ton.				
Vanelloes, case or cannister	-	1 6	0 1½	case or canister
Verdigris - - ton	-	5 0	0 6	
Vermicelli, —				
case under 1 cwt. - cwt.	-	1 0	0 6	case, 6 cwt. and upwards
1 and under 2 cwt. - case	-	1 0	0 4	case, 4 cwt. and under 6 cwt.
2 cwt. and upwards - cwt.	-	0 6	0 2	case, 2 cwt. and under 4 cwt.
			0 1	case, 56 lbs. and under 2 cwt.
			0 0½	box, under 56 lbs.
Vermillion - cwt.	-	2 4	0 0½	
Vinegar - - 100 gal.	-	2 1	0 4	puncheon
Cooper's attendance in addition.			0 2	hogshd., tierce, or barrel
			0 1½	quarter-cask

Goods imported.	Prime Rate Nett.	Landing Rate Gross.	Rent. Per Week.	Rent. Quantities, &c.
	Per	*s. d.*	*s. d.*	*Per*
Vulture feathers, above 2 cwt. - bale or cask	-	2 6	0 3	
not exceeding 2 cwt. - bale or cask	-	1 6	0 2	
small bag, not above 56 lb.	-	0 6	0 0½	
Walnuts - - bushel	-	0 2½	4 0	100 sacks
			2 0	100 bags
Wanghees. See *Canes.*				
Water, mineral, —				
baskets or cases 12 bottles	-	0 3	0 0½	
in bulk - 12 bottles	-	0 2½	0 0½	
Wax, bees' - ton	-	5 0	0 6	
sealing - - cwt.	-	0 9	0 1	
myrtle - - cwt.	-	1 0	0 1	case
Weld - - ton	-	7 6	0 9	
Whalebone - ton	-	7 6	0 4	
fins, from Newfoundland, ton	-	7 6	0 6	
Whetstones - cwt.	-	0 3	0 1½	cask, 3 to 5 cwt.
			0 0½	cask or case about 1 cwt.
Whisk brooms, 100 bundles	-	3 0	0 3	
loose - - 1000	-	3 0	0 4	
bale	-	1 10½	0 3	
half bale	-	1 0	0 1½	
quarter-bale	-	0 9	0 1	
one-eighth bale	-	0 6	0 0½	
manufactured - 100	-	1 6	0 2	
Wine. See *Spirits and Wine* in separate Table.				
Wire, iron - - cwt.	-	0 4½	0 0½	
plated or gilt - cwt.	-	0 8½	0 0½	
Wood - - ton	-	7 6	0 9	
Wood, dye and furniture. See separate Table.				
Wool goods. See the separate Table.				
Wool, sheep, or lambs. The prime rate includes landing, wharfage, housing, but not delivering, 12 weeks' rent from the date of the ship's breaking bulk, landing weights, &c., also mending at landing, taring, making merchantable, lotting, unpiling for show, showing, repiling, mending, filling in, re-weighing, and any other usual operations performed by order of the importer.				
German, about 4 cwt. bale	5 0	-	0 2	bale, 6 cwt. or upwards
cwt.	-	0 4½	0 1½	bale, 4 cwt. and under 6 cwt.
Unhousing and delivery by land or water, and mending at delivery, under the prime rate, per bale of about 4 cwt., 1*s.*			0 1	bale, 3 cwt. and under 4 cwt.
			0 0½	bale, under 3 cwt.
Australian, —				
about 2½ cwt. - bale	4 0	-	0 2	bale, 6 cwt. and upwards
cwt	-	0 4½	0 1½	bale, 4 cwt. and under 6 cwt.
Unhousing and delivery by land or water, per bale of about 2½ cwt., 8*d.*			0 1	bale, 3 cwt. and under 4 cwt.
			0 0½	bale, under 3 cwt.
Spanish, about 2 cwt. bale	4 0	-	0 1	bale, 2½ cwt. and upwards
half-bale	3 0	-	0 0¾	bale, 1½ cwt. and under 2½ cwt.
cwt.	-	0 4½	0 0½	bale, under 1½ cwt.
Unhousing and delivery by land or water, per bale of about 2 cwt., 6*d.* per half-bale, 4*d.*				
Vigonia - - cwt.	-	0 4½	0 3	bale
not otherwise enumerated, cwt.	-	0 4½		
56 lbs. and under - bale	1 0	-	0 0½	
above 56 lbs. and under 1 cwt. - - bale	1 6	-	0 0½	

cwt. qr.		cwt. qr.		s. d.	
1 0	& under	1 2	bale	0 6	
1 2		3 2	bale	0 8	
3 2		5 0	bale	1 0	
5 0		7 2	bale	1 3	
7 2		10 0	bale	1 6	

coney or goats' - cwt.	-	0 6	0 2	bale, 2 cwt. and upwards
			0 1	do. under 2 cwt.
hair or beards - cwt.	-	0 10½	0 2	case
Woollen cloth. See *Cloth.*				
Yarn, in vats, not above 20 cwt. - - ton	-	5 0	0 4	
above 20 cwt. - ton	-	5 3	0 4	
in bales - - cwt.	-	0 4½	0 1½	bale
Zaffres - - ton	-	5 0	0 5	
Zinc. See *Spelter.*				

Rates on Dyers' and Furniture Wood.

Articles.	Prime Rate.	Landing Rate, viz. Landing, Wharfage, Weighing, and Delivering.*	Rent per Week after the first Twelve Weeks.	Rent per Week after the first Year, reckoning from Breaking Bulk.
Dyers' wood, &c.	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Bar wood, Box wood, Brazil wood, large, Cam wood, Cocus wood, Ebony, Fustic, Lignum vitæ, Logwood, Nicaragua, large, Quassia, Sanders wood — per ton under cover	6 6 7 0	4 6	0 1 0 1½	Black ebony from the East Indies, and lignum vitæ. 0 1
Braziletto — per ton	8 0	5 6	0 2	
Brazil wood, small — do.	8 0	5 6	0 2	
Fustic, young — do.	8 0	5 6	0 3	
Nicaragua wood, small — do.	8 0	5 6	0 2	
Sapan — do.	8 0	5 6	0 2	
Sassafras — do.	8 0	5 6	0 3	
Sandal — do.	8 0	5 6	0 3	
Other wood, charged with duty, at — do.				
Mahogany, cedar, jacaranda, rosewood, satin wood, tulip, zebra, &c. — do.	7 0	5 0	0 1½	0 1

* The rates on other descriptions of wood are published in a separate table.

The Rates.

For re-weighing	one-fourth of the landing-rate.
Re-housing	do.
Unpiling	do.
Repiling	do.
Unhousing and loading	do.
Unpiling and loading	do.
Wharfage and shipping	one-half of the landing rate.
Unloading and housing, or piling	do.
Unhousing or unpiling, wharfage and shipping	three-fourths of the landing rate

Special Charges.

	s. d.
Rummaging mahogany timber, and other measured wood, as usual — per ton or load	1 0
Delivering into docked vessels — —	0 6

Management Rates.

These rates are charged upon the gross weight, and when the goods are to be placed upon the landing rate, notice must be given previous to the landing.

Rates.	Bale, averaging 100 lb. gross.
Cinnamon.	*s. d.*
Landing; comprising landing, wharfage, weighing, furnishing landing weights, and delivery from the quay at the docks — From Ceylon	1 6
From Malabar	1 0
Landing and Housing; comprising landing, wharfage, weighing, furnishing landing weights, housing, and delivery. — From Ceylon	2 0
From Malabar	1 4
Management; comprising landing, wharfage, weighing, housing, unpacking, taring, sorting, brushing, repacking, attending show and sale, re-weighing, piling away, furnishing warrants, and delivery	9 0
Note.—An additional charge will be made for chests supplied to contain the small and refuse; also, if imported in cases, a charge for gunny and rope supplied.	
Rent, per week	0 1
Indigo.	Chest.
Landing; comprising landing, wharfage, weighing, furnishing landing weights, and delivery from the quay at the docks	3 0
Landing and Housing; comprising landing, wharfage, weighing, furnishing landing weights, housing, and delivery	4 0
Management; comprising landing, wharfage, weighing, housing, and every operation incidental to preparing for sale, placing on show, showing, extra warehouse room, and attendance while on show, nailing down, lotting, re-weighing, and piling away, and also duty on the deficiences, between the landing weight and first re-weight and delivery	17 6
Ditto; Manilla, or other sorts, no portion of the parcel or mark of which requires raising	14 8
Rent, per week	0 1½

Rates.	Bales. 150 lb. gross and upwds.	Bales. 104 lb. gross and under 150 lb.	Bales. Under 104 lb. gross.
E. India and China Silk.	*s. d.*	*s. d.*	*s. d.*
Landing; comprising landing, wharfage, weighing, furnishing landing weights, and delivery from the quay at the docks	1 6	1 0	0 9
Note.—If the silk is not cleared from the quay the same day it is landed, it will be housed for security, and the landing and housing rate will attach.			
Landing and Housing; comprising landing, wharfage, weighing, furnishing landing weights, housing and delivery	2 8	2 0	1 6
Note.—Sampling or inspection, or taring for customs, may take place on silk, subject to this rate, on payment of the respective charges; but should any further operations be required, the management rate will attach.			
Bengal.			
Management; comprising landing, wharfage, weighing and furnishing landing weights, housing, stripping, taring, new bags and repacking, including unpiling and repiling, first inspection, or first sampling, by importer or his agent, marking, re-weighing, and delivery	8 6	7 6	6 6
Rent, per week	0 1½	0 1½	0 1½
	Bales.		
China.	104 lb. gross and upwds.	Under 104 lb. gross.	
Management; comprising landing, wharfage, weighing and furnishing landing weights, housing, stripping, taring, new bags and repacking, including unpiling and repiling, first inspection or first sampling, by importer or his agent, marking, re-weighing, and delivery	7 6	6 6	
Rent, per week	0 1½	0 1½	

Table of Rates charged on Tea.

Rates, per Package.	200 lbs. gross and upwards.	130 lbs. and under 200 lbs. gross.	80 lbs. and under 130 lbs. gross.	60 lbs. and under 80 lbs. gross.	40 lbs. and under 60 lbs. gross.	30 lbs. and under 40 lbs. gross.	20 lbs. and under 30 lbs. gross.	Exceeding 10 lbs. and under 20 lbs. gross.	10 lbs. gross and under
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Landing; comprising landing, wharfage, weighing, furnishing landing weights, and delivery from the quay at the docks -	1 6	1 3	1 0	0 10½	0 9	0 7½	0 6	0 3	0 1½
Landing and housing: comprising landing, wharfage, weighing, furnishing landing weights, housing, and delivery - -	2 0	1 8	1 2	1 0	1 0	0 10	0 8	0 4	0 2
Management; comprising landing, wharfage, weighing, and furnishing landing weights, housing, ordinary mending, taring, placing on show, extra warehouse room, and attendance while on show, lotting, nailing down, re-weighing and piling away, and delivery -	7 6	5 6	3 8	3 0	2 4	2 0	1 3	1 0	0 6
Rent, per week - - - - -	0 1½	0 1	0 0½	0 0½	0 0½	0 0½	0 0½	0 0½	0 0

Schedule of Rates and Charges on Wines and Spirits.

Schedule of Rates and Charges on Wines and Spirits other than Rum.

Landing and Delivery Rate includes landing, wharfage, laying-up to gauge, coopers' attendance at landing and until delivered, original warrants, accounts of landing gauges, and strengths, and first samples; also the privilege of remaining on the quay fourteen days, from commencing the discharge of the ship or craft. If the goods continue on the quay after the fourteen days, quay-rent will be charged until the expiration of one month, from commencement of discharge from ship or craft, when the landing and housing rate will attach.

Landing and Housing Rate includes landing, wharfage, laying-up to gauge, coopers' attendance at landing until housed, accounts of gauges and strengths, first samples, and sampling at delivery, coopering, housing, and coopers' superintendence for eighteen months.

Rent.—When these wines and spirits are housed, the rent commences, in all cases, from the date of the ship commencing discharge, or first landing from craft.

Coopering, when requisite, at landing, examination, or delivery, for the protection of the property, will be executed without awaiting the proprietor's order, unless he shall give directions to the contrary, and at the rates specified in this table. When racking is necessary, forty-eight hours' notice will be given to the proprietor, with the option of sending his own casks. When the casks are racked for preservation in the vault, within six months from the landing and housing rate attaching, no charge will be made.

Tasting can be permitted only under the proprietor's written order. Tasting by the proprietor, or his clerk, is exempt from charge; the latter, however, must be authorised to sign orders, and be unaccompanied by any other person.

Deficiencies.—When wines and spirits are imported in casks made of proper oak, the Company engages to be responsible for deficiencies in measure, which shall exceed one gallon per cask for each year, or fraction of a year, the goods remain in charge; but the Company will not be answerable for deficiencies arising from the casks being made of other and inefficient materials.

Payment of Charges.—The landing and housing rate on the whole mark or parcel housed, must be paid previous to the issue of warrants, or the transfer, or delivery of any portion. Payment of rent, and other charges, will be required only on the quantity to be delivered or transferred.

Rates on Wines and Spirits other than Rum.

Wines and Spirits in casks.	Unsizeable Casks under ½ Ton of 210 Galls.	Pipes, Butts or Punch.	Hhds.	Thirds.	Qr. Casks.	Half Qr. Casks.	Aums. Double.	Aums. Single.	Aums. Half.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
Landing and delivery rate, on wines and spirits, except rum, by land carriage -	7 0	3 6	2 1	1 9	1 4	1 0	2 6	1 6	1 2
Shipping from the quay, additional -	1 4	0 8	0 5	0 5	0 4	0 3	0 6	0 4	0 3
Quay rent, after 14 days, per week, until the landing and housing rate attaches -	1 0	0 6	0 3½	0 3½	0 2½	0 2	0 4	0 3½	0 2½
Landing and housing rate, on Port, Lisbon, Sherry, Malaga, Marsala, Spanish red, Sicilian and other wines, in wood-bound casks; and sherry in iron-bound casks - -	20 0	10 0	6 0	4 3	3 8	2 10	6 6	4 0	2 10
Ditto on Madeira, Cape, Teneriffe, Canary, Marsala, Sicilian, and other wines in iron-bound casks - - - - -	16 0	8 0	4 10	3 8	2 10	2 1	5 6	2 9	2 0
Ditto on claret - - - -	-	-	5 0	4 0	3 0				
Ditto on spirits (except rum) - - -	18 0	9 0	5 5	3 10	3 3	2 6			
*Casks landed with less than the standard number of iron hoops, pay in addition for each hoop deficient - - -	-	0 4½	0 4½	0 4½	0 4½	0 4½	0 4½	0 4½	0 4½
Delivery from the vault, and coopers' attendance - - - - - -	5 0	2 6	1 6	1 3	1 1	0 9	1 9	1 2	0 10
If shipped, additional - - - -	1 4	0 8	0 5	0 5	0 4	0 3	0 6	0 4	0 3
Rent, from the vessel breaking bulk, or first landing from craft, during the first 18 months, including coopers' superintendence per week, on Cape and Marsala -	0 9	0 4½	0 3	0 2½	0 2	0 1½	0 3	0 2	0 1½
On other wines and spirits (rum excepted) -	0 10	0 5	0 3	0 2½	0 2	0 1½	0 3	0 2	0 1½
Coopers' superintendence after that period, per week, additional - -	0 2	0 1	0 0½	0 0½	0 0½	0 0½	0 0½	0 0½	0 0½

* The standard number of iron hoops is as follows, viz.:—Port and Lisbon pipes 10; sherry butts 8; Spanish red, brandy, and Geneva, puncheons 6; aums, hogsheads, and smaller casks, 6.

Wines and Spirits in Cases.	Containing 6 Dozen. Quarts.	Containing 6 Dozen. Pints.	Containing 3 Dozen. Quarts.	Containing 3 Dozen. Pints.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Landing and delivery rate; including landing, wharfage, and loading -	1 6	0 9	0 9	0 6
Landing and housing rate: including landing, wharfage, housing, examining, coopering, and first tasting - - - -	3 6	1 9	1 9	1 0
Examining and coopering - - - - -	1 6	0 9	0 9	0 6
Rent, from the date of the vessel breaking bulk, or first landing from craft, per week - - - - -	0 3	0 1½	0 1½	0 1
Wharfage and shipping, in addition to landing and delivery rate -	0 6	0 3	0 3	0 2
Breaking out and opening for samples, or second tasting, nailing down, and restowing - - - - - - -	0 6	0 6	0 6	0 4
Lotting for public sale - - - - - -	0 2	0 2	0 2	0 2
Unhousing and loading - - - - - -	1 0	0 6	0 6	0 4
Unhousing, wharfage, and shipping - - - - - -	1 6	0 9	0 9	0 6

Dividing 6-dozen cases into two 3-dozen cases, including new ends, unpacking, and repacking, each new case, 3*s.* 3*d.*

Cases containing quantities not specified above, are chargeable in the like proportion.

Bottling.	Magnums.	Quarts.	Pints.
	s. d.	s. d.	s. d.
Consolidated rate for bottling - - - - - per dozen	1 6	1 0	0 10
Unhousing, wharfage, and shipping - - - per dozen	0 4	0 3	0 2
Rent to commence the day after bottling - - per dozen, per week	0 1	0 0½	
per case of 6 dozen, per week	- - -	- -	0 2

Cooperage and extra Charges on Wines and Spirits other than Rum.

	Pipes, Butts, or Punch.*	Hhds.	Thirds.	Quarter Casks.	Half-Qr. Casks.	Anms. Double.	Anms. Single.	Anms. Half.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Trimming, including wood hoops, or boughing off	2 0	1 2	1 0	0 9	0 7	1 6	1 0	0 9
Driving - -	0 10	0 6	0 5	0 4	0 3½	0 6	0 4	0 4
Pitching and turning -	0 3	0 2	0 1½	0 1	0 1	0 2½	0 1½	0 1
Breaking out for coopering	0 6	0 3½	0 3	0 2	0 2	0 6	0 3	0 2
Ditto for delivery, inspection, re-dipping, or racking, and laying up again	1 0	0 7	0 6	0 4	0 3	0 9	0 6	0 4
Filling up - -	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3
Casing or uncasing -	1 6	0 11	0 9	0 6	0 4	1 2	0 9	0 6
Ditto in canvass - -	7 0	5 0	5 0	4 0	3 0	5 6	4 6	3 0
Ditto in cases - -	19 6	12 0	11 0	7 6	5 6	14 0	8 6	5 6
Racking - - -	2 6	1 6	1 3	1 0	0 9	1 9	1 2	0 10
Racking from the lees -	3 6	2 1	1 9	1 6	1 0	2 6	1 9	1 6
Ditto and repairing casks -	15 0	12 6	10 6	9 0	7 0	12 6	9 0	6 0
Ditto and new casks, in bond - - -	27 0	18 0	16 6	13 6	10 6	22 0	14 0	9 6
Ditto and new casks, on the quay - - -	24 0	17 0	15 6	12 6	10 0	20 0	13 6	9 0
Trimming cask cases -	1 0	0 8	0 6	0 4	0 3			
Sampling in the vault, or second sampling on the quay - -	0 6	0 6	0 6	0 6	0 6	0 6	0 6	0 6
Tasting in store, each time	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2
Ditto at public sale -	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1
Painting casks - -	4 0	2 6	2 6	1 9	1 0	3 0	2 0	1 6
Painting the heads, each	1 0	0 9	0 9	0 6	0 6	1 0	0 9	0 6
Bark hoops - - —	1 9	1 4	1 4	1 0	0 9	1 6	1 4	1 0
Iron hoops - - —	0 8	0 8	0 8	0 6	0 5	0 8	0 6	0 6
New heads - - —	3 6	3 0	2 9	2 6	2 3	3 6	3 0	2 6
Overdrawing and brandying, or fining - -	1 0	0 9	0 6	0 6	0 4	0 9	0 6	0 6
Chimes - each 6d.								
Pieces of lead - 9d.								
Rivets - each 1d.								
Phials - do. 6d.								
Tins - do. 1d.								
Ditto marked do. ½d.								

* Unsizeable casks, otherwise rated at 210 gallons to the tun, to be charged in the proportion of 2 pipes or 4 hhds. to the tun.

Vatting Charges.

	s. d.
For unhousing, racking, the use of the vat (remaining one night), refilling and bunging up, — per 100 gallons drawn from the vat	2 8
For remaining in the vat a second night - - - - - - - per 100 gallons ditto	0 6
For each additional night - - - - - - - - - -	0 9
Water for reducing the strength - - - - - - - per puncheon	1 0
Spirits brought in for vatting, by water, for receiving and delivering - - - 100 gallons	2 4
Ditto ditto by land, for receiving and delivering - - - 100 gallons	1 2

Note. — When casks are returned to the vault after refilling from the vat, the Company does not engage to be responsible for any deficiency in measure that does not exceed two gallons per cask for the first year, and one gallon per cask for each succeeding year, or fraction of a year.

Rates and Charges on Rum.

Landing Rate includes landing, wharfage, gauging, housing, loading from the quay, original warrants and accounts of gauges and strengths, surveying and furnishing certificate of damage. Rum not intended to be warehoused, will be allowed four clear days from the final gauging of the parcel for removal. If intended for immediate transhipment, it may remain on the quay seven clear days from that period, and when the export vessel loads in the docks, until the date of her departure, paying rent as if housed at landing.

The prime or consolidated Rate includes all expenses for landing, wharfage, gauging, coopering for housing, marking, sampling, housing and delivery, furnishing gauges and strengths, surveying and furnishing certificate of damage, and rent for twelve weeks from the ship's commencement of discharge. It is charged in all cases, unless notice be given by the importers to place the goods under the landing rate.

Unhousing and loading - one third of landing-rate.
Wharfage and shipping - two-thirds of landing-rate.
Unloading and housing - - do.
Unhousing, wharfage, and shipping } the same as the landing-rate.

Rent is chargeable from the date of the ship breaking bulk, or from the first landing from craft.

Before transfer by the Company, or delivery, the charges on the quantity to be transferred or delivered must be paid.

	Prime Rate.	Landing Rate.	Rent. Per Week.	
	s. d.	s. d.	s. d.	
Rum - - - per 100 galls.	10 0	*3 6	0 8	leager
			0 6	butt
			0 4	half-butt
			0 4	pipe
			0 4	puncheon
			0 2	hogshead
			0 1½	half-barrel or quarter-cask
				For cooper's care and attendance, after the first 12 weeks, for each leager, butt, ½ butt, pipe, or puncheon, 1d. per week.
				Ditto, for each hogshead, barrel, or quarter-cask, ½d. per week.

* Includes delivery from the quay, either by land or water.

*** When rum is imported in casks made of proper oak, the Company engages to be responsible for deficiencies in measure, which shall exceed 1 gallon per cask for each year, or fraction of a year, the goods remain in charge; but the Company will not be answerable for deficiencies arising from the casks being made of other and inefficient materials.

COOPERING AND EXTRA CHARGES ON RUM.

	Per	s.	d.
Sampling, first and second, with vial	cask	1	0
Do. do. without vial	—	0	6
Driving	puncheon or pipe	0	9
	hogshead, barrel, or quarter-cask	0	6
Taking off tins and re-tinning	cask	0	4
Starting bungs and re-bunging	—	0	2
Measuring	puncheon	2	0
	hogshead	1	6
Filling up	cask	0	3
Overdrawing	—	0	3
Racking	—	0	2
Lead patches	each	0	6
Tins, plain	—	0	1
marked	—	0	2
New chimes	—	0	6
Bung, or shive	—	0	1
Taping and sealing, complete	cask	1	0
Ditto, across the bung only	—	0	4
Breaking out and re-stowing	puncheon	1	0
Marking, with scribing-iron or ink	cask	0	1
with paint	—	0	3
with branding-iron	—	0	4
direction, with paint or cutting-in	—	0	6

	New Heads, per Head.	Iron Hoops, per Hoop.		Casks, each.
	Rum.	New.	Old.	
	s. d.	s. d.	s. d.	s. d.
Puncheon, 110 gallons and under	2 9	0 8	0 4	20 0
Half-butt	2 9	0 8	0 4	16 0
Hogshead	2 6	0 8	0 4	13 6
Quarter-cask	2 2	0 4	0 2	
Half quarter-cask	2 2	0 4	0 2	

2. *London Docks.* — These were the next undertaking of this sort set on foot in the Thames. They are situated in Wapping, and were principally intended for the reception of ships laden with wine, brandy, tobacco, and rice. The western dock covers a space of above 20 acres; and the new or eastern dock covers about 7 acres. The tobacco dock lies between the above, and exceeds 1 acre in extent, being destined solely for the reception of tobacco ships. The entire space included within the outer dock wall is 71 acres and 3 roods. The warehouses are capacious and magnificent. The great tobacco warehouse, on the north side of the tobacco dock, is the largest, finest, and most convenient building of its sort in the world. It is fitted to contain 24,000 hhds. of tobacco, and covers the immense space of near *five* acres! This warehouse is wholly under the management of the officers of customs. The vaults, under the tobacco and other warehouses, include an area of the vast extent of about 18¼ acres, and, after allowing for gangways, &c., have stowage for 66,000 pipes of wine and spirits! These docks were opened in 1805. All ships bound for the Thames, laden with wine, brandy, tobacco, and rice (except ships from the East and West Indies), were obliged to unload in them for the space of 21 years: but this monopoly expired in January, 1826; and the use of the docks is now optional.

The entrances to the London Docks were formerly by the basins at Hermitage and Wapping. But a few years ago another entrance was completed from old Shadwell Dock, through what was formerly Milkyard, to the eastern dock. This new entrance is ¼ of a mile lower down than Wapping entrance, and is a most material improvement.

The stock of the Company amounts to 3,238,310*l.* 5*s.* 10*d.* A considerable portion of this vast sum, and of a farther sum of 700,000*l.* borrowed, was required for the purchase of the houses, about 1,300 in number, that occupied the site of the docks. The present dividend is 4 per cent., and a 100*l.* share of the Company's stock is at present (October 1843) worth about 96*l.* 10*s.* The Board of directors consists of 25 members, of whom the Lord Mayor, as conservator of the river Thames, is one.

TONNAGE RATES ON VESSELS USING THE LONDON DOCKS.

Vessels are not permitted to leave the dock until the tonnage dues and other expenses have been paid; for which purpose the register must be produced at the superintendent's office, if British, or a certificate of admeasurement by the proper officer of the customs, if foreign; when a pass will be granted, which must be lodged with the dock master on leaving the dock.

First Class. — Vessels *arriving* from any port in the U. Kingdom, Isle of Man, Jersey, Guernsey, Alderney, Sark, or other European ports outside the Baltic, between the North Cape and Ushant (Hamburg excepted, see *Second Class*), with liberty to reload for any port, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, if cargo discharged by own crew; from the date of final discharge, if cargo discharged by the Dock Company, 1*d.* per register ton per week. If with part of their cargoes, for every ton of goods landed, 6*d.*; and rent, after 1 week from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for any of those places, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Second Class. — Vessels *arriving* from Hamburg, with liberty to reload, for every register ton of the vessel, 6*d.*; and rent after 6 weeks from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for Hamburg, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Third Class. — Vessels *arriving* from any port in the Mediterranean, with liberty to reload for any port, for every register ton of the vessel, 9*d.*; and rent, after 6 weeks from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for any port in the Mediterranean, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 9*d*.; and rent, after 4 weeks from date of entrance, 1*d*. per register ton per week.

Fourth Class. — Vessels *arriving* from any other port or place whatsoever (with the exception of those hereafter enumerated), with liberty to reload, for every register ton of the vessel, 9*d*.; and rent, after 4 weeks from date of entrance, if cargo discharged by own crew; from date of final discharge, if cargo discharged by Dock Company, 1*d*. per register ton per week.

Vessels *loading* for any other port or place whatsoever (with the exception of those hereafter enumerated), not having previously discharged their cargoes in the dock, for every register ton of the vessel, 9*d*.; and rent after 4 weeks from date of entrance, 1*d*. per register ton per week.

Exceptions. — Vessels from Spain, laden with cork or wool, for every register ton of the vessel, 6*d*.; and rent, after the expiration of 3 weeks, 1*d*. per register ton per week.

Vessels to or from the whale fisheries, for every register ton of the vessel, 1*s*.; and rent, after the expiration of 6 weeks, 1*d*. per register ton per week; for every tun of oil delivered into craft, 6*d*.

Vessels (excepting coasters, for which see *First Class*) landing part of their cargoes, for every ton of goods landed, 9*d*.; and rent, after 1 week from date of entrance, 1*d*. per register ton per week.

Vessels loading part of their cargoes, for every ton of goods taken on board from the quays or by craft, 9*d*.; and rent, after 1 week from date of entrance, 1*d*. per register ton per week.

Vessels two thirds laden with corn will be charged dock dues on the proportion which the other part of the cargo bears to the register tonnage.

No tonnage rates will be charged on vessels wholly corn-laden, but they will be charged for docking and undocking as under: —

Vessels of 100 tons and upwards, 1*l*. 1*s*.
Do. under 100 tons, 10*s*. 6*d*.

with liberty to remain in the dock, without further charge, for 24 hours after final discharge. Rent, after the expiration of that period, 1*d*. per register ton per week. Should the vessel load outwards, the usual tonnage rates, according to the port of destination, will be charged, instead of the rate for docking and undocking.

Vessels coal-laden, for docking and undocking, 21*s*. each; for every ton of coals landed, 6*d*.; for every ton of coals transhipped, 6*d*.; and rent, after 1 week, 1*d*. per register ton per week.

Vessels which enter the docks light, and load out, pay dues according to their ports of destination, instead of those on light vessels.

Light vessels entering the dock to lie up, for every register ton of the vessel, 6*d*.; and rent, after 4 weeks from date of entrance, 1*d*. per register ton per week.

Whenever required, the Company will discharge the cargo of a vessel upon the following terms; viz.

Cargoes consisting, either in the whole or in part, of hogsheads or tierces of sugar (including ship cooperage), 1*s*. 9*d*. per register ton.

Cargoes consisting of sugar in chests, 5 cwt. and upwards (including ship cooperage), 1*s*. 3*d*. per register ton.

Cargoes consisting of sugar in bags or chests, under 5 cwt., or other goods (not being oil direct from the fisheries, tallow, hemp, ashes, corn, wood goods, pitch, tar, hay, or straw), contained in casks, bales, serons, chests, cases, bags, baskets, mats, bundles, or similar packages; also, spelter or metal in pigs, bars, rods, plates, &c., 9*d*. per register ton.

Cargoes consisting of mahogany timber, or other wood, in logs, 1*s*. 9*d*. per register ton.

Blue gum wood, or large timber, additional for every load delivered, 6*d*.

Cargoes consisting of hemp only, or merchandise, in bulk, 1*s*. per register ton.

Cargoes consisting of tallow only, 6*d*. per register ton.

Mixed cargoes; hemp, 1*s*. 3*d*. per ton of goods; tallow, 6*d*. per ditto; ashes, 6*d*. per ditto.

Mixed cargoes, part being in bulk, on the latter, 1*s*. per ton of goods.

(No charge made for excess beyond the register tonnage.)

Vessels which leave the docks for repairs are not charged rent while absent.

Memoranda. — Registers of ships inwards and outwards are kept in the superintendent's office.

The wicket gates at the north-west principal entrance, at Wapping, and on the east side of the eastern dock, are opened and closed as under: —

From 22d Sept. to 20th Oct. both inclusive, opened at 6 o'clock, closed at 6 o'clock.
21st Oct. 20th March — 7 — 6

Visiters are not admitted on Sundays.

No person is permitted to quit a vessel after the wicket gate is closed.

The hours for the commencement of business, and opening and closing the barrier gate, are,

From 1st March to 31st Oct., both inclusive, opened at 8 o'clock, closed at 4 o'clock.
1st Nov. 28th Feb. — 9 — 4

Lodgment of Manifest. — Masters of ships are required to deliver at the superintendent's office, within 12 hours after the arrival of the vessel in the dock, or reporting at the Custom-house, (which shall first happen,) a true copy of the manifest or report of the cargo, signed by themselves.

Discharge of Vessels. — Vessels are not to break bulk, without the permission of the superintendent, until the whole of the cargo has been entered at the Custom-house.

Upon application of the master, the Company will pass a warehousing entry for such goods as the owners or consignees may have neglected or refused to enter within 48 hours; and will also land goods not entered within 7 days; both periods to be computed from the date of the report.

Labourers or lumpers are not allowed to work on board vessels, on the quays, or in the warehouses, unless engaged by the Company; but may be hired of the Company, to work under the direction and responsibility of the master, the charge being 3*s*. 6*d*. per day for each man: and should not a sufficient number be employed for the timely discharge of the cargo, additional hands will be provided by the Company, at the expense of the vessel.

The decks are to be speedily cleared of such articles as may impede the discharge; and the master, mate, or some person duly authorised by the owners, is to remain on board during the unloading.

Stops for Freight. — Goods landed will be detained for the freight, on due notice in writing, by the owner, master, or other person interested therein; and will not be delivered, nor warrants granted for them, until orders shall have been given for the release of the goods, or the freight deposited with the Company; nor can a stop be received after the goods have been transferred in the Company's books, or a warrant has been granted for them.

Goods delivered into craft to be landed elsewhere, cannot be detained for freight.

Vessels leaving the dock for repairs are not charged rent whilst absent; nor is any charge made for ballast, chalk, or flints, received from or delivered into craft.

Water is supplied from the reservoir, and delivered into the ships' boats, at 1*s*. per tun, on application to the dock master.

Abstracts of cargoes, for the purpose of making up freight accounts, will be supplied on application at the comptroller's office, at the following charge: —

	s.	*d*.
If the goods have 10 marks or under	2	0
11 to 20 marks	3	6
21 and upwards, 2*d*. each mark or parcel.		

•Steam boats are furnished by the Company, in certain cases, to vessels (not laden with corn or timber)

proceeding to these docks, arriving from N. and S. America, the West India Islands, the Cape of Good Hope, and all ports to the eastward thereof, upon application to the secretary, the superintendent, or the agent of the Company.

Regulations regarding Goods and the Rates and Charges thereon.

Rent is charged on goods from the day on which the importing vessel breaks bulk. If goods be landed by a duty paid, a sight, or a warehousing entry, and taken away within 3 days, no rent is payable; but if they remain on the quay after that time, quay rent or watching is charged for such longer period.

Goods landed by Dock Order. — Before goods which have been landed by the Company for want of entry, can be delivered or transferred, the bill of lading must be lodged at the warehouse, and the goods entered at the Custom-house: and such goods are subject to an additional charge for porterage.

Orders for transfer or delivery (the forms of which may be obtained at the comptroller's office), unless the goods are to be delivered from the landing scale, cannot be accepted until the goods have been landed.

Neither can orders for transfer be received, until the charges due on the goods composing the whole of the entry have been paid; goods landed under the consolidated rate, and wines and spirits, excepted.

Orders for delivery cannot be acted upon, unless signed by the party in whose name the goods stand in the Company's books, or by a person duly authorised to sign them: and should any interlineation, erasure, or alteration have been made in an order, it can only be accepted with the initials of the party set against such alteration.

Payment of Charges and Deposit Accounts. — The only persons authorised to receive money are, the collectors at the superintendent's office, and wine and spirit department; the deputy warehouse-keeper at the tobacco warehouse; the dock master (for water furnished to vessels in the dock); and the warehouse-keeper at the eastern dock; except for consolidated rates, which may be paid at the London Dock House, in New Bank Buildings.

Deposit accounts may be opened at the superintendent's office.

If the order does not specify the party by whom the charges due at the date of the order or transfer are to be paid, the amount thereof will be placed to the deposit account of the party transferring.

Warrants and Transfers. — Warrants for goods in general, are granted on written application at the dock, in favour of such person as the party in whose name they stand in the Company's books may direct. The first are issued free of charge; on all subsequent warrants and transfers, the charges are as follow: —

For each warrant or transfer containing	s.	d.	For each warrant or transfer containing	s.	d.
1 or 2 packages	0	1	26 to 30 packages	0	8
3 4	0	2	31 35	0	9
5 to 7	0	3	36 40	0	10
8 10	0	4	41 45	0	11
11 15	0	5	46 and upwards	1	0
16 20	0	6	and for goods in bulk, per ton	0	2
21 25	0	7			

The contents of one warrant may be divided into warrants for smaller quantities, at the will of the holder.

Whenever housing, taring, weighing, dipping, rehousing, or counting of goods is required, the operation must be performed before a warrant can be issued; and if reweighing, &c. be required, a new one must be obtained.

Applications for duplicate warrants, in consequence of the originals being lost or mislaid, must be addressed to the secretary, at the London Dock House, who will make known the conditions on which the Company will issue them.

Weights and Goods. — Duplicates are furnished, upon reasonable cause for requiring them being assigned.

Second Samples of Goods. — Orders for second samples, if the goods are for "exportation only," are issued at the comptroller's office, the proprietor paying the customs duty thereon.

Empty Casks and Packages, if not removed from the dock within 7 days, are sold by the Company, and the proceeds paid to the owners, after deducting the sale charges and other expenses.

RATES AND CHARGES ON CIGARS AND TOBACCO.

Cigars.	Chests containing from 500 to 600 lbs.	Boxes containing: Above 300 and not exceeding 400 lbs.	Above 200 and not exceeding 300 lbs.	Above 100 and not exceeding 200 lbs.
	s. d.	s. d.	s. d.	s. d.
Import rate; including landing, wharfage, housing, weighing *gross*; and examining, or sampling, one side	8 0	4 0	2 9	2 3
both sides	10 0	5 0	3 9	3 0
Unpacking, weighing nett, repacking (when in bundles*), and coopering * If loose, an extra charge is made. Garbling, or sorting, is also an extra charge.	10 6	4 0	2 9	2 0
Examining, or resampling, one side	4 0	1 0	1 0	1 0
both sides	6 0	2 6	2 0	2 0
Unhousing, wharfage, and shipping	3 0	2 0	2 0	1 6
Ditto, and loading	1 0	1 0	0 9	0 6
Transferring	0 2	0 2	0 2	0 2
Boxes or chests, not of the above specified weights, charged in proportion.				

Tobacco.	s. d.		s. d.
Landing charges and coopering, weighing, sampling, and making merchantable at landing scale, per 100 lbs. nett	0 6	Warrant, 1 hogshead	0 6
On delivery for exportation, including coopering, per 100 lbs. nett	0 2½	2 —	0 9
Ditto, if resampled, ditto	0 3	3 —	1 0
Unhousing and loading, per hogshead	1 0	Any quantity exceeding 3 hogsheads, 2d. per hogshead additional.	
Resampling	2 0	Transfer, per hogshead	0 2
Weighed gross when an average tare is taken, importer's charge	2 6		

RATES AND CHARGES ON WINES AND SPIRITS.

The Landing and Delivery Rate includes landing, wharfage, laying up to gauge, watching, cooper's attendance at landing, delivery, and while on the quay; the privilege of lying on the quay 14 days from the vessel breaking bulk, or the first landing from craft; original warrants, gauges, strengths of spirits, and first samples.

The Landing and Housing Rate includes landing, wharfage, laying up to gauge, cooperage, cooper's attendance at landing and housing, superintendence in the vaults for the first 18 months; original

warrants, gauges, strengths of spirits, and first samples. This rate attaches after the expiration of one calendar month from the ship breaking bulk, or the first landing from craft.

Note. — Merchants requiring wines or spirits to be housed within the time allowed (one calendar month), are particularly requested to leave a written order to that effect, when this rate will become immediately chargeable.

The Consolidated Rate on Rum includes landing, wharfage, housing, cooper's attendance, coopering, furnishing original warrants, gauges, strengths, first samples, and 12 weeks' rent from the ship breaking bulk, or the first landing from the craft.

Rent attaches to Wines and Spirits, charged with the landing and delivery rate, after 14 days; charged with the landing and housing rate, from the ship breaking bulk, or the first landing from craft; on rum charged with the consolidated rate, after 12 weeks from the ship breaking bulk.

Note. — Rent is in all cases calculated from the date of the ship breaking bulk, or the first landing from craft, such day being included in the term.

Racking. — Forty-eight hours' notice will be given when racking is necessary, to enable the proprietor to send his own casks, or they will be supplied by the Company, at the prices stated herein. The proceeds of the racked casks, when sold, will be paid to the proprietors, upon application, after deducting the expenses of sale, &c.

No charge is made on wines and spirits racked in the vaults within 6 months from the period of the landing and housing rate attaching, those for exportation or to be sent coastwise excepted.

Tasting is not permitted without a written order, the usual charge for which is not made when the tasting is by the proprietor or his clerk, (authorised to sign delivery and all other orders,) provided he is not accompanied by any other person.

Coopering and Repairs, &c., when required for the preservation of the property on landing, examination, or delivery, will be performed, unless directions are received from the proprietor to the contrary, and charged at the rates specified herein; and any work required to be performed, not particularly described, will be charged at a proportionate rate.

Unsizeable casks, at the rate of 210 gallons per tun, for 2 pipes or 4 hogsheads.

Deficiencies. — The company make good the following deficiencies from whatever cause arising, if the casks are of oak timber, but not otherwise: also, provided the claim be made with 6 months from delivery, viz.:—

Exceeding one gallon each cask, for any period not exceeding one year.

Two gallons, if more than one and not exceeding two years, and in like proportion for each succeeding year.

Payment of Charges. — Previous to warrants being issued, or the transfer or delivery of any wines or spirits taking place, the landing and housing rate on the whole of the mark or parcel *housed*, must be paid; the rent and other charges on the quantity delivered or transferred.

RATES AND CHARGES ON WINES AND SPIRITS IN CASES.

	Containing 6 Dozen.		Containing 3 Dozen.	
	Quarts.	Pints.	Quarts.	Pints.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Landing and delivery rate; including landing, wharfage, and loading	1 6	0 9	0 9	0 6
Landing and housing rate; including landing, wharfage, housing, examining, coopering, and first tasting	3 6	1 9	1 9	1 0
Examining and coopering	1 6	0 9	0 9	0 6
Rent, from the date of ship breaking bulk, per week	0 3	0 1½	0 1½	0 1½
Wharfage and shipping, in addition to landing and delivery rate	0 6	0 3	0 3	0 2
Breaking out and opening for samples, or second tasting, nailing down, and restowing	0 6	0 6	0 6	0 4
Lotting for public sale	0 2	0 2	0 2	0 2
Unhousing and loading	1 0	0 6	0 6	0 4
Unhousing, wharfage, and shipping	1 6	0 9	9 9	0 6
Dividing 6-dozen cases into two 3-dozen cases, including new ends, unpacking, and repacking, each new case, 3*s.* 3*d.*				
Cases containing quantities not specified above, are chargeable in the like proportion.				

3. *St. Katharine's Docks.* — The Company for the construction of these docks was incorporated by the act 6 Geo. 4. c. 105. (local), and they were partially opened on the 25th of October, 1828. They are situated immediately below the Tower, and are consequently the most contiguous of any to the city, the Custom-house, and other places where business is transacted. The capital raised by shares amounts to 1,352,752*l.*; but an additional sum of 700,000*l.* has been borrowed, on the security of the rates, for the completion of the works, and the purchase of a freehold property possessing river frontage from the Tower to the corner of Lower East Smithfield, of the value of upwards of 100,000*l.* but not required for the immediate purpose of the act. A portion of this property has been appropriated as a steam packet wharf, where passengers embark and land without the aid or risk of boat conveyance. The purchase of the numerous houses that stood upon the ground occupied by the docks proved, as in the case of the London Docks, a heavy item of expense. The space included within the outer wall is about 24 acres, nearly 11 of which are water. There are 2 docks communicating by a basin. The lock leading from the river, is 180 feet long, and 45 broad; it is so constructed, that ships of upwards of 600 tons burden may pass in and out 3 hours before high water, so that outward-bound ships have the opportunity of reaching Blackwall before the tide begins to recede. Ships of upwards of 800 tons register are docked and undocked without difficulty, and the depth of water at the entrance exceeds that of any other wet dock in the port of London. Vessels are also docked and undocked by night as well as by day, — an advantage peculiar to this establishment. A clear channel of not less than 300 feet in width is at all times to be kept in the pool; and vessels drawing 18 feet water may lie afloat at low water at the principal buoy off the dock entrance. The warehouses and vaults are upon a very large scale; far more so than one might be disposed to infer from the extent of water. The warehouses are exceedingly well contrived and commodious;

and, owing to their being built partly on pillars (within which what is called the quay work of the other docks is transacted), close to the water's edge, goods are hoisted direct from the hold of the vessel, without its being necessary, as in the West India and London Docks, to land them on quays; so that there is in this way a great saving both of room, time, and labour. The whole establishment is exceedingly complete, and reflects the greatest credit on the public spirit, enterprise, and skill, of those by whom it was projected and executed. The dividend on the company's stock is at present (1843) 5 per cent.

The regulations to be observed by vessels using the St. Katharine's Docks are similar to those enforced in the East and West India Docks; to which, as in the case of the London Docks, we beg to refer.

Table of Tonnage Rates chargeable on Vessels entering the St. Katharine Docks, and also of the Rates for discharging Cargoes landed by the Company, subject to such Revision, from Time to Time, as shall be found expedient.

Vessels Inwards.

On Vessels laden, arriving from	Per Ton Register. s.	d.	Privilege.
First Class. — Any port of the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, Sark, or other European port outside the Baltic, between the North Cape and Ushant	0	6	*Vessels whose cargoes are discharged by the Dock Company.* Use of the Docks to vessels arriving from Hambro', or from any port in the Mediterranean, for 6 weeks from the date of entrance; if arriving from any other port, 4 weeks from the date of final discharge, with liberty to load outwards for any port or place, and to quit the docks for repairs, and re-enter; the period of absence from dock for such purposes not to affect the privilege.
Second Class. — Any other port	0	9	*Vessels whose cargoes are discharged by their crews.* The like privilege, but to commence from the date of entrance.

	Per Ton Register. s.	d.
Rent, in each case, after the expiration of the privilege, per week	0	1
For partial remissions and exemptions on vessels partly laden, or arriving from Spain or Portugal, wool or cork laden, or vessels with corn, see annexed Table.		
Rates for discharging Cargoes by the Company. Cargoes, consisting, in the whole or in part, of sugar in hogsheads or tierces, including ship cooperage	1	9
Cargoes, consisting of sugar in chests of 5 cwt. and upwards, including ship cooperage	1	3
Cargoes, consisting of sugar in bags, mats, or chests under 5 cwt., or other goods (not being hemp, tallow, ashes, wood goods, corn, pitch, tar, hay, or straw), contained in casks, bales, serons, chests, cases, bags, baskets, or similar packages; also spelter, or metal in pigs, bars, rods, plates, &c.	0	9
Cargoes, consisting of hemp only, or merchandise in bulk, wholly or in part tallow only	1	0
	0	6

Mixed cargoes of	s.	d.
hemp	1	3
tallow	0	6
ashes	0	6

Blue gum wood, or large timber, additional for every load delivered 0 6

No charge upon excess landed beyond a ship's register tonnage.

Oil, additional for every tun delivered into craft 0 6

Per ton of goods, charge in no case to exceed the register tonnage of the vessel.

Vessels Outwards, entering the Docks without Cargoes.

	Per Ton Register. s.	d.	Privilege.
Loading for any port enumerated in the Import Table in first class	0	6	Use of dock to load 4 weeks from date of entrance
Do. do. 2d do.	0	9	
Vessels loading in part, or quantity taken on board according to their port of destination, as above classified	as above		Use of dock to load 1 week from entrance

Rent after expiration of the privilege, 1d. per ton register per week.

TABLE *of special Regulations, Remissions, and Exemptions, and Miscellaneous Charges applicable to Vessels inwards, not being fully laden, or laden with the Articles enumerated, or entering the Docks light, &c.*

No tonnage rate will be charged on vessels wholly corn laden, whose cargoes shall be landed in the docks; but a charge will in such case be made for docking and undocking, as under:

	£	s.	d.
Vessels of 100 tons and upwards	1	1	0
Vessels under 100 tons	0	10	6

with liberty to remain in dock without further charge for 24 hours after final landing. Rent, after expiration of that period, 1d. per ton register per week. Should the vessel load outwards, the usual tonnage rates, according to the port of destination, will be charged, instead of the rate for docking and undocking. The Dock Company reserve the power of refusing the admission of ships laden entirely with corn.

Other vessels, not being fully laden at the time of entering the docks, will be charged tonnage rate only on the proportion of cargo brought in; the amount of rate to be determined by the port from whence the vessel has arrived; and if discharged by the Company, rates for unloading in addition, according to the description of the cargo and quantity so discharged. Rent, after 1 week, 1d. per ton register per week.

Vessels laden with cork or wool from Spain or Portugal will be charged only 6d. per ton register. Rent, after 3 weeks from date of entrance, 1d. per ton register per week.

	£	s.	d.
Light vessels entering the dock to lie up, will be charged, for any period not exceeding 4 weeks, per ton register	0	0	6
Rent per week, after the expiration of the 4 weeks, on the register tonnage, per ton	0	0	1

Vessels two thirds laden with corn will be charged tonnage rate only on the proportion which the other part of the cargo bears to the register tonnage.

Vessels chiefly laden with wood goods, pitch, tar, hay, straw, or intending to discharge the whole of their cargoes into lighters, will only be permitted to enter or depart the docks, subject to such terms as shall be first mutually agreed upon between the owners and the Dock Company.

Miscellaneous Charges.

	s.	d.
For labourers hired of the Company, to work on board, and who shall be under the directions and responsibility of captains or owners of vessels, both or either (which rule applies to all over-board deliveries), a charge will be made for each man per day, of	3	6
Thames water supplied to vessels by the Company per tun	1	0

For an abstract of a ship's cargo inwards, and weights thereof, for the purpose of making up freight accounts, the following charge will be made:—

	s.	d.	
If the goods have 10 marks, or under	2	0	each mark or parcel.
11 marks to 20 marks	3	6	
21 marks and upwards	0	4	

N. B. — The dock-dues, rent, &c. of most articles landed, warehoused, or shipped at the different docks, being, in general, nearly identical, the reader is referred for an account of the same to the Table under the head *E. and W. India Docks.*

4. *Commercial Docks.* — Exclusive of the previously mentioned docks, which are all on the north side of the river, there are on the south side the *Commercial Docks*, opposite to the west end of the West India Docks. These docks are of large extent; the space included within the outer wall being about 49 acres, of which nearly 38 acres are water. They are principally intended for the reception of vessels with timber, corn, and other

bulky commodities. They have but little accommodation for warehousing; and their establishments are not constructed so as to entitle them to bond all goods. The Surrey Canal Company also admits vessels to be docked in the basin of their canal.

5. London Port Dues; Charges on account of Lights, Pilotage, &c. in the Thames; Shipping, &c. of London.

It is highly desirable that expert pilots, brilliant lights, and every other means that it is possible to devise, should be afforded to render navigation safe and expeditious. But to secure these advantages, it is indispensable that the charges on their account should be moderate. If they be otherwise, navigators are not unfrequently tempted to resort to what are less expensive, though less secure, channels. This principle has not, however obvious, been always kept sufficiently in view either in this or in other countries. During the latter years of the war, and down to 1825, the charges on account of docks, lights, pilotage, &c. on ships in the Thames, and most other British ports, were exceedingly heavy; and would, no doubt, had they been maintained, have materially injured our commerce. Instead, also, of encouraging the resort of foreign ships to our ports, a contrary policy was adopted; the charges laid on them being usually about double those laid on British ships. This regulation was intended to promote the employment of the latter; but, as it led to reprisals in other countries, its real influence is believed to have been quite different; while, by driving away foreigners, it injured the trade of the country, and prevented our ports from becoming, what they are so well fitted to be, the emporiums of the world. We are glad, however, to have to state, that the circumstances now alluded to have been materially, or rather wholly, changed within the last 20 years. In 1825, the various dock monopolies expired; and a very great reduction has since been made in the charges on account of the docks, which, as already seen, are now very moderate indeed.

Exclusive of the dock duties, certain *port* or *tonnage duties* were imposed on ships frequenting the port of London, by the acts 39 Geo. 3. c. 69., 43 Geo. 3. c. 124., &c., partly to pay the harbour masters, provide mooring chains, &c., and partly to create a fund for the improvement of the port, and in particular for defraying the cost of making a navigable canal across the Isle of Dogs. But this canal having been sold (*ante*, p. 468.) for 120,000*l.* to the West India Dock Company, under the 10 Geo. 4. c. 130., and the sums advanced by the public for the improvement of the port having been repaid, it was judiciously resolved to reduce the port duties to the lowest rates capable of defraying the necessary expenses. This was effected by the 4 & 5 Will. 4. c. 32., which imposes the following tonnage duties on vessels in the port: —

	Per Ton. *d.*
1st Class. — For every ship or other vessel trading coastwise between the port of London and any port or place in Great Britain, Ireland, the Orkneys, Shetland, or the Western Islands of Scotland, there shall be paid for every voyage in and out of the said port	¼
2d Class. — For every ship, &c., entering inwards or clearing outwards from or to Denmark, Norway, or Lapland (on this side of the North Cape), or from Holstein, Hamburg, Bremen, or any other part of Germany bordering on or near the Germanic Ocean, or from or to Holland, or any other of the United Provinces, or Brabant, Antwerp, Flanders, or any other part of the Netherlands, or from or to France (within Ushant), Guernsey, Jersey, Alderney, Sark, or the Isle of Man, there shall be paid for every, &c., as above	¼
3d Class. — For every ship, &c. entering inwards or clearing outwards from or to Lapland (beyond the North Cape), Finland, Russia (without or within the Baltic Sea), Livonia, Courland, Poland, Prussia, Sweden, or any other country or place within the Baltic Sea, there shall be paid for every, &c., as above	¼
4th Class. — For every ship, &c. entering inwards or clearing outwards from or to France (between Ushant and Spain), Portugal, Spain (without the Mediterranean), or any of the Azores, Madeira, or Canary Islands, or any of the United States of America, or of the British colonies or provinces in North America or Florida, there shall be paid for every, &c., as above	½
5th Class. — For every ship, &c. entering inwards or clearing outwards from or to Greenland, Gibraltar, France, or Spain (within the Mediterranean), or any country, island, port or place within or bordering on or near the Mediterranean or Adriatic Sea, or from the West Indies, Louisiana, Mexico, South America, Africa, East India, China, or any other country, island, port, or place within or bordering on or near the Pacific Ocean, or from any other country, island, port, or place whatsoever to the southward of 25 degrees of north latitude, there shall be paid, &c., as above	¾

Exemptions. — Ships of war, and ships the property of her Majesty or any of the royal family. — Any vessel coming to or going coastwise from the port of London, or to any part of Great Britain, unless such vessel shall exceed 45 tons. — Any vessel bringing corn coastwise, the principal part of whose cargo shall consist of corn. — Any fishing smacks, lobster and oyster boats, or vessels for passengers. — Any vessel or craft navigating the Thames above and below London Bridge, as far as Gravesend only. — Any vessel entering inwards or outwards in ballast.

Owing to the distance of London from the sea, and the rather intricate navigation at the mouth of the river, the charges on account of lights and pilotage must necessarily be pretty heavy. They have, however, been very materially reduced of late years. The charges on account of the lights under the management of the Trinity House have been diminished, in almost every instance, at least one third; and in many instances as much as a half, and sometimes even more, since 1823. — (See LIGHT-HOUSES.) The practice of imposing discriminating light and pilotage dues on foreign vessels is still kept up; but owing to the general establishment of reciprocity treaties with foreign powers, the grievance thence arising has become rather nominal than real, and at present affects very few of the foreign vessels coming to our ports.

The act 6 Geo 4. c. 125. made a reduction of 8 per cent. in the charges authorised to be demanded by the pilots licensed by the Trinity House for the port of London; and

foreign vessels, privileged as British vessels, have been relieved from the additional or surplus rate of 25 per cent. payable to the Trinity pilots, as well as to those licensed by the Lord Warden of the Cinque Ports.—(See PILOTAGE.)

The oppressive and troublesome charges in the port of London, imposed on alien goods under the names of package, scavage, &c. — (see PACKAGE) — were put an end to in 1833. At present, therefore, we believe we are warranted in affirming that, considering its distance from the sea, the public charges on shipping in the port of London are quite as reasonable as in any other port of the empire, or of the world. But we are inclined to think that further reductions may still be effected, particularly in the article pilotage.

The following accounts show the nature and amount of the various charges that are at present incurred by vessels in the port of London: —

Account of Charges on a Ship of about 480 Tons entering and departing the Port of London laden both ways, supposing every thing to be conducted with strict Economy, and excluding any Charge on account of extraordinary Despatch or superior Accommodation.

	From and to Calcutta or New York. £ s.	s. d.
Reporting ship and appointment		3 3 0
Pilotage from the Downs -	15 ft. 11 4 5 / 4 12 0	15 16
	17 ft. 12 14 4 / 5 10 6	4 10
Boarding the pilot at sea - - - -		4 0 0
Watermen, boat, and kedge from Gravesend -		2 0 0
London port dues inwards, $\frac{2}{3}d.$ per ton, and entry, 21*s.* -		1 16 0
Ditto outwards, $\frac{2}{3}d.$ per ton, and entry, 21*s.* - -		2 11 0
Trinity dues and lights inwards, $6\frac{1}{2}d.$ per ton - -		13 10 0
Dock dues in and out, 1*s.* 6*d.* per ton, including discharging cargo		36 0 0
Trinity dues and lights outwards, $5\frac{2}{3}d.$ per ton - -		11 10 0
Dungeness light in and out, 1*d.* per ton - - -		2 0 0
Clearing outwards and victualling bill - - -		3 3 0
Steam boat to Gravesend (optional) - -		10 0 0
Pilotage to the Downs - - - -	15 ft.	12 8 6
	17 ft.	14 14 6

Putting the pilot on shore, unless landed in the ship's boat, by agreement, sometimes 1*l.* often 3*l.* or 5*l.*, according to weather and distance.

Account of Charges on a Ship of about 480 Tons entering and departing the Port of London laden both ways, supposing every thing to be conducted with strict Economy, and excluding any Charge on account of extraordinary Despatch and superior Accommodation.

	From and to Jamaica. £ s. d.
Reporting ship and appointment - - - - - -	4 4 0
Pilotage from the Downs, according to draught of water.	
Boarding the pilot at sea, according to distance from Downs.	
Waterman, boat, and kedge from Gravesend, 21*s.* to 30*s.*	
London port dues inwards, $\frac{2}{3}d.$ per ton.	
Ditto outwards, $\frac{2}{3}d.$ per ton.	
Dock dues in and out—	
N.B.—W. I. Dock dues, if laden with sugar, 2*s.* 6*d.* per ton / Ditto, if not unloaded, but enters the Export Dock for loading outwards, 6*d.* per ton — For 4 weeks, and then 1*s.* per ton per week.	
Trinity dues and lights inwards, $6\frac{1}{2}d.$ per ton.	
Trinity dues and lights outwards, $6\frac{1}{2}d.$ per ton.	
Clearing outwards and victualling bill - - - - -	4 10 0
Steam-boat to Blackwall (optional).	
Pilotage to the Downs, according to draught of water.	
Putting the pilot on shore, unless landed in the ship's boat, from 1*l.* to 3*l.*, according to weather, &c.	

The following tabular statement will serve to illustrate the progress of the foreign trade and navigation of London: —

Number and Tonnage of Vessels entering the Port of London from Foreign Parts, with Cargoes and in Ballast, distinguishing between British and Foreign Ships.

Years.	British.		Foreign.		Years.	British.		Foreign.	
	Ships.	*Tons.*	*Ships.*	*Tons.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*
1700	839	80,010	496	76,995	1825	3,989	785,565	1,743	302,122
1750	1,498	198,023	184	36,346	1826	3,495	675,026	1,586	215,254
1790	2,254	431,890	1,116	149,205	1827	4,012	769,162	1,534	221,008
1791	2,184	419,374	1,256	149,053	1828	4,084	767,212	1,303	195,929
1792	2,489	451,148	1,186	152,245	1829	4,108	784,070	1,300	215,605
1793	2,348	478,105	1,193	177,019	1830	3,910	744,229	1,268	207,500
War.					1831	4,140	780,988	1,557	269,159
1814				269,834	1832	3,274	640,057	886	154,514
1815				275,375	1833	3,421	678,289	1,061	175,883
1816	No Returns.			115,463	1834	3,786	735,693	1,280	216,063
1817				131,617	1835	3,780	740,255	1,057	188,893
1818				272,656	1836	3,845	772,046	1,465	255,875
1819				158,882	1837	4,079	821,788	1,547	240,135
1820	3,354	655,239	856	122,619	1838	4,366	893,925	1,727	277,902
1821	3,000	585,994	571	89,073	1839	4,880	988,867	2,375	357,163
1822	3,230	603,167	597	106,099	1840	4,547	931,660	2,221	354,156
1823	3,031	611,451	865	161,705	1841	4,642	999,259	1,999	317,608
1824	3,132	607,106	1,643	264,098	1842	4,767	1,002,453	1,640	281,468

Amount of Shipping, &c. belonging to the Port of London. — According to the official accounts, there belonged to this port, on the 31st of December, 1842, 2,883 sailing vessels: of these 2,254, of the aggregate burden of 577,493 tons, were respectively above 50 tons register, while 629, of the aggregate burden of 20,607 tons, were respectively under 50 tons register. There then also belonged to the port 239 steam vessels of the burden of

47,265 tons. The crews of these ships, including steamers, amounted to above 35,000 men and boys! In 1819, the gross customs duty collected in the port of London amounted to 7,749,463*l.*; in 1832, it amounted to 9,434,854*l.*; and in 1841, it had increased to 11,757,262*l.* 7*s.* 9*d.*! So vast an amount of shipping and commerce was never previously concentrated in any single port. London may be truly said to be *universi orbis terrarum emporium.* May her prosperity be as lasting as it is great!

An Account of the Number and Tonnage of Coasting Vessels that have entered the Port of London, in each Year from 1833 to 1841, both inclusive.

Years.	General Coasters, including Colliers.		Irish Traders.		Total.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
1833	18,242	2,368,653	1,094	148,568	19,336	2,517,221
1834	19,026	2,445,895	1,043	147,962	20,069	2,593,857
1835	19,508	2,604,906	1,163	160,076	20,471	2,764,982
1836	19,717	2,656,869	1,048	154,009	20,765	2,810,878
1837	20,201	2,743,854	1,121	167,882	21,322	2,911,736
1838	20,333	2,727,741	1,259	180,435	21,592	2,908,176
1839	20,205	2,686,621	907	142,080	21,112	2,828,701
1840	20,613	2,701,058	1,006	149,755	21,619	2,850,813
1841	21,581	2,843,368	1,345	187,345	22,726	3,030,713

An Account of the Number and Tonnage of Vessels which entered the Port of London with Cargoes from Foreign Parts, distinguishing the Countries whence they arrived, in 1842.

Countries.	British.		Foreign.		Countries.	British.		Foreign.	
	Sh.	*Tons.*	*Sh.*	*Tons.*		*Sh.*	*Tons.*	*Sh.*	*Tons.*
Russia	334	79,441	78	26,063	Morea and Greek Islands	59	5,565		
Sweden	36	6,913	89	21,815	Egypt	26	6,196		
Norway	1	151	128	41,726	Tripoli, Barbary, and Morocco	16	1,863		
Denmark	3	756	104	6,940	Foreign possessions in Africa	-	-	1	120
Prussia	253	38,397	218	46,060	Ditto Asia	17	5,366	1	587
German States	158	45,578	173	15,682	China	56	26,118		
Netherlands	518	93,617	303	37,651	United States of America	19	6,263	71	35,589
France	567	93,608	303	18,124	Foreign West Indies	36	7,268	29	6,376
Portugal, Azores, and Madeira	284	29,158	2	255	Foreign continental colonies in America	144	32,788	16	3,644
Spain and Canaries	240	24,619	31	3,578					
Italian States	227	38,179	64	15,600	Total	3,053	553,605	1,614	278,190
Ionian Islands	23	3,125							
Turkey and continental Greece	56	8,836	3	580					

An Account of the Number and Tonnage of Vessels which entered the Port of London with Cargoes from the Colonies and Dependencies of England during 1842.

	Ships.	Tons.		Ships.	Tons.
Gibraltar	7	1,104	Falkland Isles	1	92
Malta	44	8,540	Whale fisheries	13	4,039
British possessions in Africa	160	35,785	Isles of Guernsey, Jersey, and Man	517	51,768
Ditto Asia	342	139,609			
America, British northern colonies	290	114,442	Total	1,703	447,897
British West Indies	329	92,518			

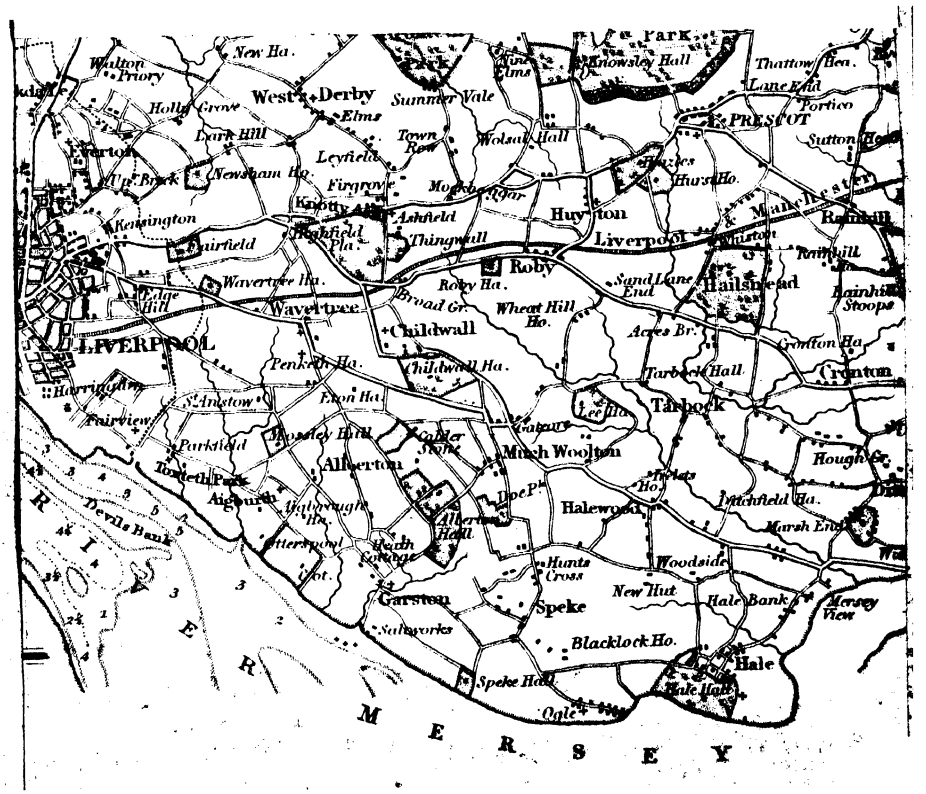
For an account of the rates of pilotage in the Thames, see PILOTAGE.

II. LIVERPOOL DOCKS, SHIPPING, &c.

The rapid rise of the port of Liverpool to its present consequence, though no doubt principally owing, like that of the town itself, to the astonishing increase of manufactures and population, in the extensive district of which it is the grand emporium, is also, in part, owing to the facilities that have been given to navigation and commerce by the construction of wet and dry docks. The entrance to the æstuary of the Mersey is a good deal encumbered with sand banks, and is crossed by a bar, which, however, has at low water spring tides, where deepest, 11 feet water; and as the tide rises 21 feet at neap, and 31 feet at spring tides, there is water for the largest ships; the channels too being indicated by light-vessels, and well marked with buoys, there is no difficulty in making the port. In fact, since the opening of the Victoria Channel (by dredging) in October 1839, vessels of the largest size cross the bar at first quarter flood; 14,000 vessels passed through this channel in 12 months from its opening.

But the land around being low, ships in the river are exposed to risk from gales of wind; and to obviate this inconvenience, and to facilitate their loading and unloading, the docks have been constructed, which constitute the great glory of the town. The first wet dock in the British empire (now filled up) was opened here in 1708, a second about half a century after, and since that period many more have been constructed on a very magnificent scale, and furnished with all sorts of conveniences, so that the aggregate area of those now in use amounts to about 100 acres, and the quay-space is nearly 7¼ miles in length. The following table shows the water area and length of quay space, with the date of construction of the different docks. (See opposite page.)

Among these the King's Dock, being contiguous to the King's tobacco warehouse, receives the vessels from Virginia and other parts laden with tobacco; the Queen's and Brunswick docks are occupied by ships laden with timber from Honduras, Canada, and the Baltic; the Canning Dock receives coasting vessels which exchange corn and provisions for colonial produce. Salthouse Dock accommodates ships from the Levant, Irish traders, and English coasting vessels; the Trafalgar Dock is appropriated partly to the use of coasting vessels and partly of steamers; and the Coburg and Clarence


Walton Priory
New Ha.
West Derby
Holly Grove
Elms
Summer Vale
Town Row
Leyfield
Lark Hill
Newsham Ho.
Firgrove
Knotty Ash
Ashfield
Thingwall
Kensington
Fairfield
Richfield Pla.
Waverree Ha.
Ridge Hill
Waverree
Childwall
Childwall Ha.
Penkridge Ha.
Broad Gr.
Roby
Roby Ha.
Wheat Hill Ho.
Huyton
Liverpool
Knowsley Park
Knowsley Hall
Thatto Heath
Lane End
Portico
PRESCOT
Sutton Ho.
Hurstes
Hurst Ho.
Whiston
Rainhill
Rainhill Stoops
Sand Lane End
Hailsmead
Acres Br.
Gerston Ha.
Crenton
Tarbock Hall
Tarbock
Lea Ho.
Much Woolton
Halewood
Hough Gr.
Mitchfield Ha.
Marsh End
Woodside
Hale Bank
Mersey View
Hale
Hale Hall
Ogle
Speke Hall
Blacklock Ho.
Speke
New Hut
Hunts Cross
Garston
Saltworks
Allerton
Allerton Hall
Mossley Hill
Calmar Stone
Grafton
Dove Pl.
Aigburth
Aigburth Ha.
Toxteth Park
Parkfield
Fairview
St. Anston
Harrington
Liverpool Dock
Devils Bank
RIVER
MERSEY

Docks.	Area of Water.		Quay Space.		Date of Completion.
I. Dry Docks.	*Acres.*	*Yards.*	*Miles*	*Lin. yds.*	
Prince's Basin	4	1549	-	509	1821
Seacombe's do.	-	1805	-	188	- -
George's do.	3	1852	-	455	1788
Old Dock Gut	1	2897	-	447	1716
Queen's Basin	5	191	-	601	1796
George's Ferry do.	-	1344	-	160	- -
South Ferry do.	-	2927	-	205	- -
Total	15	2885	1	805	- -

Docks.	Area of Water.		Quay Space.		Date of Completion.
II. West Docks.	*Acres.*	*Yards.*	*Miles*	*Lin.yrds.*	
Prince's Dock	11	3889	-	1613	1821
George's do.	5	2593½	-	1001	1788
Canning do.	3	4575	-	500	
Salthouse do.	4	3663	-	759	1753
King's do.	7	3896	-	875	1788
Queen's do.	10	3101½	-	1255	1796
Union do.	2	3505½	-	497	1832
Coburg do.	4	2198	-	747	1832
Albert do.	10?	- -	-	- -	
Clarence do.	6	273	-	914	1830
Trafalgar do.	6	2645	-	1020	1840
Victoria do.	5	4199	-	827	1840
Waterloo do.	6	1153	-	993	1834
Brunswick do.	12	2744	-	1092	1832
Do. Half tide Basin	1	3388	-	491	
South Basin	1	469	-	393	
Total	101	3532½	-	- -	

Docks are used exclusively for the accommodation of steamers, the latter being appropriated to those from America and the Mediterranean. All these works are defended on the side next the river by a strong sea-wall upwards of 2¼ miles in length. Every precaution is taken to prevent the accumulation of mud in the docks by the use of steam-dredging machines; and strict rules, enforced by a vigilant police force, are established to maintain good order, and prevent both fire and depredations.

The docks are all constructed on the estate of the corporation, and are managed by commissioners appointed by act of parliament. The bonding and other warehouses do not, however, belong to the dock estate, but are private property. Most of them are in the immediate vicinity of the docks, but some are at a considerable distance; and there is not, in this respect, the same accommodation, or the same security against fire and depredations, in the Liverpool as in the London docks, where, the warehouses being built along the dock-quays, goods are loaded and unloaded with the greatest possible facility, and are subsequently under efficient protection. It is probable, however, that the numerous and destructive fires that have lately taken place amongst warehouses in Liverpool, and the consequent rise in the premium of insurance, will lead to some material changes in the present system. And, in fact, the Albert Dock, a new and extensive dock now (1843) in the course of being formed, is to have warehouses round the quays, and is to be conducted by the dock trust, on the same plan as the London docks.

The difference in the situation of the warehouses here and in the metropolis, leads to a difference in the mode of discharging and loading ships in each: in London this is done by the servants of the different dock companies; whereas in Liverpool it is effected by undertakers, called *lumpers*. Individuals who follow this business engage to discharge a ship for a specific or *lump* sum, from 2 guineas, perhaps, up to 20, according to the size and description of cargo, having the requisite number of common labourers (chiefly Irishmen) to do the work; the lumper being master and superintendant: these labourers are generally paid day wages, but sometimes the job is a joint concern among the whole.

A West India ship of 500 tons would be discharged by lumpers for from 10*l.* to 15*l.*: a cotton ship of the same burden for 4*l.* to 6*l.* By discharging is merely meant putting out the cargo on the quay; the proprietors of the goods employ their own porters to weigh, load, and warehouse the property; they likewise employ their own coopers, where cooperage is required.

The expense of loading a West India ship of 500 tons *outwards* would not be half as much as that of discharging inwards, because they very seldom take a full cargo *outwards*. The average does not, perhaps, exceed a *third*. Hence the total expense of a West India ship of 500 tons, coming into and going out of the port of Liverpool, may be estimated as follows: —

	£	s.	d.		£	s.	d.
Pilotage inwards, 17 feet @ 9*s.*	7	13	0	Pilotage outwards, 15 feet @ 4*s.*	3	0	0
Boat hire, warping, &c.	10	6		Boat hire assisting out	0	10	6
Lumpers' discharging	15	0	0				

Besides these, there is the charge for the various light-houses in St. George's Channel, which, however, cannot be called an expense peculiar to Liverpool.

Goods cost generally 6*d.* a ton every time they are moved. The hire of labourers for loading does not properly belong to the ship, being paid by the owner of the goods. Landing and putting into warehouse costs about 6*d.* a ton, exclusive of cartage. The owner of the vessel merely puts the goods on the quay.

Commerce. — Though now of such paramount importance, little more than two centuries have elapsed since this great emporium was correctly described as "the little creek of Liverpool," being then merely a dependency of Chester! And so late as 1709, it had only about 8,000 inhab., and 84 ships, of the burden of 5,789 tons! The progress of the town in the interval, in commerce, and in the accumulation of wealth and

population, has been quite unprecedented in the history of industry. It is not, however, difficult to discover the causes of the all but apparently miraculous progress of Liverpool. A good deal must be ascribed to the enterprise, sagacity, and persevering industry of her merchants; but she is, no doubt, mainly indebted for her rise and the vast magnitude of her commerce, to her fortunate position, and, above all, to the increase of manufactures in Manchester and the surrounding district. The situation of Liverpool necessarily renders her a principal seat of the trade between Ireland and Great Britain; and as the population and trade of the former increased, it could not fail proportionally to increase the trade of this port. The gradual filling up of the Dee, and the consequent decline of Chester as a harbour, has also proved of no little advantage to Liverpool, by rendering her the great mart for the salt of Nantwich, and other places in Cheshire, the exportation of which to foreign parts employs a great amount of shipping. Unquestionably, however, Liverpool would never have attained to half her present size or importance, but for the cotton manufacture. But being the port through which Manchester, Oldham, Bury, Bolton, Ashton, and other great seats of that manufacture, could most conveniently obtain supplies of the raw material, and export their manufactured products, she has increased with every increase in this great department of industry; and it is no exaggeration to affirm, that the creative influence of the wonderful inventions and discoveries of Hargreaves, Arkwright, Crompton, Cartwright, and the other founders and improvers of the cotton manufacture, has been, though not so direct, quite as powerful, in the docks and warehouses of Liverpool as in the mills of Manchester.

The congenerous businesses of the slave trade and privateering appear to be the only departments of an exotic character, and not bottomed on any natural facility, that have ever been carried on to any great extent from Liverpool. The slave trade began in 1723; and was prosecuted vigorously and successfully down to the abolition of the trade in 1806, when it employed 111 ships, of the burden of 25,949 tons. It was apprehended by many that the abolition of this nefarious, though lucrative, traffic, would be a severe blow to the prosperity of the port. But so rapid was the increase of the legitimate and more natural branches of her trade, that it was but little felt at the time, and was very soon forgotten.

It is probable that the acquaintance with the slave trade may have given a stimulus to privateering; but, at all events, it was carried on to a great extent from Liverpool, both in the American and last French wars, especially in the former. In 1779, no fewer than 120 privateers belonged to the port, carrying each from 10 to 20 guns.

The following tables give a complete view of the progress of the trade of Liverpool.

Account of the Entries of Vessels, and of the Amount of Dock Dues, in each Year, from 1757, with the Tonnage of the Ships in the Liverpool Docks, since 1800.

Year.	No. of Vessels.	Dock Dues. £ s. d.	Year.	No. of Vessels.	Tonnage.	Dock Dues. £ s. d.
1757	1,371	336 15 0	1800	4,746	450,060	23,379 13 6
1758	1,453	2,403 6 3	1801	5,060	459,712	28,365 8 3½
1759	1,281	2,372 12 2	1802	4,781	510,691	28,192 9 10
1760	1,245	2,330 6 7	1803	4,791	494,521	28,027 13 7
1761	1,319	2,382 0 2	1804	4,291	448,761	26,157 0 11
1762	1,307	2,526 19 6	1805	4,618	467,482	33,361 13 1
1763	1,752	3,141 1 5	1806	4,676	507,825	44,560 7 3
1764	1,625	2,780 3 4	1807	5,741	662,309	62,851 5 10
1765	1,930	3,455 8 4	1808	5,925	516,856	40,638 10 4
1766	1,908	3,653 19 2	1809	6,023	594,601	47,580 19 3
1767	1,701	3,615 9 2	1810	6,729	754,391	65,782 1 0
1768	1,808	3,566 14 9	1811	5,616	611,190	54,752 18 5
1769	2,054	4,004 5 0	1812	4,599	446,788	44,403 7 11
1770	2,073	1,142 17 2	1813	5,341	547,426	50,177 13 2
1771	2,087	4,203 19 10	1814	5,706	548,957	59,741 2 4
1772	2,259	4,552 5 4	1815	6,440	709,819	76,915 8 8
1773	2,214	4,725 1 11	1816	6,888	754,243	92,646 10 9
1774	2,258	4,580 5 5	1817	6,079	653,425	75,889 16 4
1775	2,291	5,384 4 9	1818	6,779	754,690	98,538 8 3
1776	2,216	5,064 10 10	1819	7,849	867,318	110,127 1 8
1777	2,361	4,610 4 9	1820	7,276	805,033	94,412 11 10
1778	2,292	4,649 7 7	1821	7,810	839,848	94,556 9 1
1779	2,374	4,957 17 10	1822	8,136	892,902	102,403 17 4
1780	2,261	3,528 7 9	1823	8,916	1,010,819	115,783 1 6
1781	2,512	3,915 4 1	1824	10,001	1,180,914	130,911 11 6
1782	2,496	4,249 6 3	1825	10,837	1,223,820	128,691 19 8
1783	2,816	4,840 8 3	1826	9,601	1,128,518	131,000 19 0
1784	3,098	6,597 11 1	1827	9,502	1,225,515	151,472 14 3
1785	3,429	8,411 5 3	1828	10,703	1,311,111	141,369 15 7
1786	3,228	7,508 0 1	1829	11,383	1,387,957	147,327 4 11
1787	3,567	9,199 18 8	1830	11,214	1,411,964	151,329 17 10
1788	3,677	9,206 13 10	1831	12,537	1,592,436	183,455 4 3
1789	3,619	8,901 10 10	1832	12,928	1,540,057	170,047 6 11
1790	4,323	10,037 6 2½	1833	13,964	1,690,461	182,980 16 4
1791	4,045	11,645 6 6	1834	15,444	1,692,870	191,729 17 8
1792	4,485	13,213 17 8½	1835	13,941	1,768,426	198,627 18 9
1793	4,129	12,480 5 5	1836	14,959	1,947,613	221,994 10 9
1794	4,265	10,678 7 0	1837	15,038	1,958,984	173,853 10 1
1795	3,948	9,368 16 4	1838	14,820	2,026,206	146,290 3 11
1796	4,738	12,377 7 7	1839	15,445	2,158,691	156,555 1 6
1797	4,428	13,319 12 8	1840	15,998	2,445,708	178,190 14 0
1798	4,478	12,057 18 3	1841	16,108	2,425,461	175,506 8 5
1799	4,518	14,049 15 1	1842	16,458	2,425,319	177,231 15 5
			1843	16,606	2,145,278	188,286 2 1

In September, 1836, a great reduction was made in the dock dues; and they were then entirely taken off all goods arriving coastwise, or from Ireland.

It is extremely difficult, or rather, we should say, quite impossible, to form any correct estimate of the total amount of the trade of Liverpool. Probably, however, the aggregate annual value of the imports and exports does not fall much short of the amazing sum of 40,000,000*l.*, if it do not exceed that amount! In 1834, it was estimated as follows by Mr. Myers, an extensive and intelligent merchant of the town.

Exports.	£	Imports.	
Woollens - - -	4,000,000	Irish trade	5,000,000
Cotton stuffs and yarn	12,000,000	Raw cotton	5,000,000
Linens - - -	1,000,000	Other articles	5,000,000
Hardware - - -	1,200,000		
Earthenware - -	350,000		£ 15,000,000
Silk - - - -	150,000		
Salt and other articles	1,000,000		
	£ 19,700,000		

We subjoin a statement, compiled by the best authorities, exhibiting a view of the quantities and values of the leading articles of Irish produce imported into Liverpool.

Account of the Quantities, Prices, and Values of the following Articles of Irish produce imported into Liverpool during each of the Five Years ending December, 1842.

Years.	Beef.			Pork.			Butter.			Bacon and Hams.		
	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.
	Tierces.		£	*Barrels.*		£	*Cwts.*		£	*Cwts.*		£
1838	11,342	120*s.*	68,052	22,798	80*s.*	91,192	243,040	80*s.*	972,160			
1839	10,109	120*s.*	60,714	35,895	68*s.*	122,043	217,499	90*s.*	1,113,745			
1840	12,724	120*s.*	76,344	33,851	60*s.*	101,555	226,213	90*s.*	1,017,958			
1841	9,475	120*s.*	56,850	19,373	76*s.*	73,616	198,490	80*s.*	793,960	79,754	42*s.* 5½*d.*	169,513
1842	6,922	95*s.*	32,879	17,911	55*s.*	49,255	195,289	80*s.*	781,156	78,515	42*s.* 3*d.*	165,918

Years.	Lard.			Flax.			Wool.			Cattle.		
	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.
	Cwts.		£	*Tons.*		£	*Lbs.*		£	*No.*		£
1838	-	- -	-	591	46*l.*	27,186	4,062,240	16*d.*	270,816	102,337	13*l.*	1,330,381
1839	-	- -	-	1,167	50*l.*	58,350	2,701,440	16*d.*	180,096	104,897	13*l.*	1,363,661
1840	-	- -	-	918	45*l.*	41,310	3,361,680	13*d.*	182,091	87,217	13*l.*	1,133,821
1841	20,497	44*s.* 5*d.*	45,496	704	46*l.*	32,384	3,490,560	11*d.*	159,984	91,992	12*l.*	1,103,90
1842	18,516	46*s.* 8½*d.*	43,231	748	45*l.*	33,660	2,501,280	10½*d.*	109,431	84,441	11*l.*	928,85

Years.	Sheep and Lambs.			Pigs.			Horses.			Wheat.		
	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.
	No.		£	*No.*		£	*No.*		£	*Qrs.*		£
1838	201,371	30*s.*	302,056	216,443	45*s.*	487,027	5,337	15*l.* 10*s.*	83,055	154,749	56*s.*	433,431
1839	214,908	30*s.*	322,363	284,835	45*s.*	640,879	5,654	15*l.*	84,810	64,333	60*s.*	192,999
1840	221,796	28*s.*	310,514	182,016	45*s.*	409,536	4,074	15*l.*	61,110	60,631	54*s.*	163,703
1841	170,486	26*s.*	221,631	147,511	45*s.*	331,922	1,832	15*l.*	27,480	115,125	56*s.*	322,350
1842	147,675	23*s.*	169,826	189,233	40*s.*	378,466	1,070	15*l.*	16,050	82,417	48*s.*	197,801

Years.	Barley.			Oats.			Rye.			Beans.		
	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.
	Qrs.T		£	*Qrs.*		£	*Qrs.*		£	*Qrs.*		£
1838	22,151	29*s.*	32,558	345,185	21*s.*	362,444	779	29*s.*	1,129	10,870	36*s.*	19,566
1839	7,317	40*s.*	14,634	254,098	24*s.* 6*d.*	311,270	615	37*s.* 6*d.*	1,153	4,401	40*s.*	8,802
1840	18,937	35*s.*	33,139	241,928	25*s.*	302,410	237	34*s.* 8*d.*	411	6,130	42*s.*	12,873
1841	15,884	30*s.*	23,826	294,452	22*s.* 9*d.*	334,939	180	30*s.*	270	1,049	40*s.*	2,098
1842	6,557	30*s.*	9,836	215,356	20*s.*	215,356	71	29*s.* 10*d.*	106	4,038	35*s.*	7,168

Years.	Peas.			Malt.			Oatmeal.			Flour.		
	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.	Quantities.	Average Prices.	Values.
	Qrs.		£	*Qrs.*		£	240 *lbs.*		£	280 *lbs.*		£
1838	979	33*s.*	1,615	1,792	50*s.*	4,480	320,340	25*s.* 6*d.*	408,443	282,322	47*s.*	663,456
1839	962	38*s.*	1,827	451	58*s.* 3*d.*	1,315	216,375	34*s.*	367,837	104,655	53*s.*	277,335
1840	448	40*s.*	896	2,249	67*s.* 6*d.*	7,596	234,803	34*s.*	399,165	32,177	50*s.*	80,442
1841	151	40*s.*	302	2,426	56*s.*	6,792	381,068	27*s.* 6*d.*	523,968	70,043	48*s.*	168,103
1842	50	34*s.* 5*d.*	86	407	50*s.*	1,017	276,430	24*s.*	331,716	77,217	46*s.*	177,599

Annual Values of the Total Irish Produce imported into Liverpool during Five Years, as follows:—

1838.	1839.	1840.	1841.	1842.
£ 5,559,047	£ 5,073,830	£ 4,334,864	£ 4,499,188	£ 3,649,428

N.B.—About 500,000*l.* may be added to each of the above annual values, on account of the imports of hides, linen, eggs, poultry, feathers, &c., of which it is difficult to get any account. A good deal of the wool that was formerly exported from Ireland to Liverpool, and thence to the Continent, is now shipped direct for the latter.

Four-fifths of the trade between the United Kingdom and the United States now centres in Liverpool; and she has a large share of the trade with South America and the West Indies. She also carries on a considerable trade with the East Indies and China, though in this department she is far surpassed by London. Indeed, the ships and products of Liverpool are to be found in every port in every part of the world accessible to merchantmen.

An Account of the principal Articles of East and West Indian and other Produce imported into Liverpool during each of the 5 Years ending the 31st December, 1843; with the Stocks on hand on the 31st December, each Year. — (From the *Brokers' Returns*.)

Article.	Imports.					Stock on hand 31st December.				
	1839.	1840.	1841.	1842.	1843.	1839.	1840.	1841.	1842.	1843.
Ashes, Canadian - - barrels.	12,600	9,500	13,000	14,560	18,200	Pot 7,700 / Pri 2,300	3,500 / 1,700	2,400 / 1,600	2,200 / 1,300	4,000 / 2,500
Brimstone - - - tons	6,730	18,000	2,050	4,125	16,350	4,600	16,200	4,900	1,300	6,000
Cassia lignea - - cases	1,550	1,100	1,190	3,375	880	900	500	110	330	none
Cocoa - - brls. & bags	750	5,120	3,175	910	1,250	200	1,500	2,060	1,030	410
Coffee, W. India, Br. Plant. casks	6,240	6,445	5,135	4,340	4,275	1,600	2,200	1,700	1,480	1,340
Do. and Ceylon - brls. & bags	3,250	4,335	4,160	7,295	8,070	- -	1,800	2,900	4,650	2,950
E. India and Cape casks & bags	2,200	38,730	19,070	15,870	9,210	12,000	26,100	27,000	18,500	5,000
Foreign - - - —	14,610	5,780	7,020	29,360	32,225	- -	1,000	3,150	14,700	13,000
Dyewoods, logwood - - tons	14,000	14,550	17,500	10,220	12,000	1,300	1,150	3,380	2,150	2,800
Fustic - - - —	7,400	7,000	5,900	6,955	7,900	1,500	1,200	1,210	1,215	1,500
Nicaragua wood - - —	900	1,720	675	510	1,085	3,450	3,400	2,780	1,650	1,500
Ginger, West India - brls. & bags	1,600	1,015	650	490	370	2,000	1,960	1,800	1,700	1,370
East India - bags & pockets	36,500	7,180	6,400	2,110	1,040	Tons 650	500	500	270	150
Gum, Arabic - - cases	2,050	1,740	1,065	1,205	840	750	1,200	500	360	300
Hides, ox and cow - - number	363,000	315,500	172,700	508,100	357,395	12,000	16,800	42,300	102,600	59,000
East India - - —	443,000	325,800	451,000	215,700	576,000	58,000	20,000	87,000	80,000	250,000
Horse, Buenos Ayes - - —	37,000	29,600	76,600	66,800	35,150	360	none	18,600	15,200	8,000
Indigo, East India - - chests	1,450	1,880	1,835	1,105	1,325	650	1,150	1,360	280	670
Spanish - - - serons	2,200	1,175	750	710	1,075	80	130	50	250	140
Lac dye - - - chests	1,540	1,490	905	1,300	515	1,500	2,500	3,000	2,400	1,750
Shell - - - —	5,590	4,020	4,785	1,200	1,690	4,500	3,200	5,900	2,250	2,000
Linseed - - - quars.	18,064	18,400	24,300	24,400		none	300	7,000	6,000	
Madder, Dutch - - casks	3,150	1,540	645	810	780	250	350	80	150	120
French - - - —		3,575	2,210	1,950	3,075	100	400	500	160	140
Madder roots - bales, &c.	11,300	12,400	11,445	9,825	10,700	2,200	900	1,080	150	220
Molasses - - - casks	8,200	7,500	12,315	8,280	11,270	1,400	2,400	2,150	750	4,200
Olive oil - - - tuns	3,480	3,400	4,500	5,900	5,700	600	300	650	2,600	3,100
Palm oil - - - tons	14,300	12,270	18,350	16,480	16,235	6,500	4,200	6,200	6,550	3,800
Pepper, East India - bags & pockets	24,000	13,550	28,550	15,500	8,125	26,000	15,000	25,000	13,000	8,000
Pimento - - brls. & bags	1,000	1,000	545	2,280	1,400	5,500	3,000	1,700	1,600	1,100
Rice, East India - - bags	96,000	77,800	88,000	105,650	107,350	20,000	6,500	20,000	30,000	8,000
Rum, West India - - punch.	8,000	7,300	5,740	6,260	5,270	4,500	4,800	3,600	2,400	3,450
East Indies - - —	4,000	800	1,575	1,000	2,995	2,800	500	600	600	200
Foreign - - - —		30	570	225	620		300	250	-	350
Saltpetre, East India - bags	58,000	28,300	38,950	38,875	65,250	22,000	14,800	9,500	7,500	21,000
Nitrate of soda - - —	25,000	55,000	70,900	60,400	96,200	17,000	4,000	13,800	21,900	25,000
Sugar, Brit. Plant. hhds. & tierces	38,000	29,980	25,920	24,135	25,660	10,000	6,500	3,950	5,525	9,150
East India - - bags	92,000	107,200	240,100	132,000	244,535	22,000	11,500	36,100	25,500	58,000
Mauritius - - —	82,000	93,500	69,180	117,170	43,345	17,000	19,000	15,000	35,570	31,000
Manilla, Java, &c. cases, &c.	8,500	9,030	27,000	27,710	10,920	6,500	14,000	18,000	12,890	19,000
Havannah - - boxes	none	4,200	5,480	8,990	4,830	none	3,900	2,000	1,170	1,500
Brazil - - chests	6,500	7,150	9,860	7,070	6,225	2,000	4,600	1,700	1,275	1,250
Ditto - - brls. &c.	11,800	16,950	15,100	5,170	11,995	7,000	7,600	7,000	5,315	2,500
Other foreign - - —		1,565	630	3,540	3,985		2,000	2,200	3,095	3,000
Sumac - - - bags	51,200	56,200	53,300	55,775	98,700	8,000	9,700	5,700	4,200	11,500
Tar - - - barrels	48,000	42,100	46,250	36,250	48,100	18,700	14,000	15,000	10,000	13,000
Tallow, European - - casks	39,000	23,150	18,000	15,100	20,100	8,500	7,500	6,000	3,800	4,300
American - - —	5,000	5,800	20,700	8,100	8,300	500	700	700	300	1,900
Tobacco - - - hhds.	10,750	10,750	11,000	13,130	13,475	7,200	7,500	9,540	12,750	15,140
Turpentine - - - barrels	70,000	69,600	87,550	109,460	104,100	33,000	10,000	17,000	34,000	37,000

Account of the Quantities (in Packages) of the different Species of Cotton imported into Great Britain from 1833 to 1843, both inclusive; specifying the Quantity imported into Liverpool.

Descriptions of Cotton.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.
	Packages.	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*	*Packages.*
American -	654,786	733,528	763,199	764,707	844,812	1,124,800	814,500	1,237,500	902,500	1,013,514	1,396,839
Brazil - -	163,193	105,646	143,572	148,715	117,005	137,500	99,300	85,300	94,300	87,090	98,697
Mediterranean	3,893	7,277	43,721	34,953	41,193	29,700	33,500	38,000	40,700	19,681	48,809
E. India -	94,698	89,098	117,965	219,493	145,174	107,200	132,900	216,300	273,600	255,437	182,065
W. India, &c.	13,646	17,485	22,796	33,506	27,791	29,400	36,000	22,300	32,900	17,372	17,687
Total imports into Great Britain -	930,216	951,034	1,091,253	1,201,374	1,175,975	1,428,600	1,116,200	1,599,500	1,344,000	1,392,894	1,744,097
Total imports into Liverpool -	840,953	841,474	970,717	1,023,887	1,036,003	1,328,415	1,109,229	1,415,341	1,164,269	1,249,811	1,557,600

The mercantile marine of Liverpool is inferior only to that of London; there having belonged to the port on the 31st of December, 1842, 1,256 sailing vessels of the aggregate burden of 338,458 tons, manned by about 15,000 seamen: of these 125 vessels of the burden of 4,042 tons were under 50 tons each. There then also belonged to Liverpool, 46 steamers of the aggregate burden of 5,005 tons.

The gross customs revenue of Liverpool, in 1843, amounted to 4,121,648*l.* 9*s.* 3*d.*, and in 1841, to 4,140,593*l.* 6*s.* 11*d.*; while that of London, in the latter year, amounted to 11,757,262*l.* 7*s.* 9*d.* But it would be an error to suppose that the trade of the metropolis exceeded that of Liverpool in this proportion. Cotton, wool, and other raw materials for manufactures, on which low duties are paid, form the principal part of the foreign

imports of Liverpool, whereas London imports comparatively few of these articles, her trade being principally in articles of direct consumption, as sugar, tea, coffee, wines, corn, &c., on which high duiies are paid. This circumstance accounts, in part at least, for the comparatively large amount of the customs revenue received in the latter; and, allowing for it, we doubt whether the foreign trade of London very materially exceeds that of Liverpool.

The following table gives a view of the distribution of the foreign and domestic trade of Liverpool in 1842.

An Account of the Number and Tonnage of Vessels which entered inwards and cleared outwards at the Port of Liverpool, in 1842, specifying the Countries from which they came and for which they sailed.

	Foreign.				Foreign.			
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*		*Tons.*
Europe	816	118,656	502	93,415	993	145,928		100,063
Africa		36,248	6	581	110	29,738		690
Asia		74,764			187	82,327		1,598
America, viz. —								
British Northern Colonies	277	123,848			296	118,054		
West Indies	123	31,710			184	48,220		
Foreign West Indies		5,527		1,117	60	13,643	29	8,130
United States		150,929		271,380	173	108,765	448	270,490
South American States		70,262		2,810	274	67,613	18	5,093
Total		591,944		369,303		614,288	1,036	385,664
Fisheries, viz. —								
Isles of Guernsey, Jersey, &c.		4,574		593	32	3,133		
Isle of Man		22,106		70	347	19,584		
Irish Trade				-	3,011	405,960		
Other coasters	4,821	501,955		-	5,284	517,721		
Total	10,544	1,584,144	978	369,966	10,951	1,560,686	1,036	385,664

Lines of Packets. — Few things have conduced more to the progress of the trade of Liverpool, and, we may add, of the empire, than the establishment of a regular communication, by means of packet ships, between this great emporium and other British and foreign ports. The intercourse with the former is principally carried on by means of steamers, which are daily leaving for and returning from Dublin, Glasgow, Belfast, Bristol, and other ports. But the regular intercourse between Liverpool and foreign ports is principally carried on by sailing vessels, which in point of security, expedition, and accommodation for passengers, are not surpassed by any ships to be elsewhere met with. New York being more intimately and extensively connected with Liverpool than any other foreign port, no fewer than 24 packet ships, distributed into *5 lines*, are engaged in the trade with that city; and there are also packet ships which sail regularly for other ports in the United States, and for Rio, the Havannah, &c.

The packet ships for *New York* sail from Liverpool on the 1st, 7th, 13th, 19th, and 25th of each month throughout the year. And they sail on the same days in each month *from* New York for Liverpool.

Cabin passage *to* New York, 25 guineas; from New York, 75 dollars, which includes provisions, beds, &c., but neither wines nor liquors.

The ships, which vary in size from 700 to 1,000 tons burden each, are all American property, and built chiefly in New York, of beautiful workmanship, and fitted up with every convenience for passengers, and in a most expensive and splendid style. Each ship has a separate cabin for ladies; each state room, in the respective cabins, will accommodate *two* passengers; but a *whole* state room may be secured for one individual by paying at the rate of 1½ passage, that is, 37½ guineas.

The Great Western steamer sails from Liverpool to New York about once every six weeks. Fare, 30 guineas *to*, and 100 dollars *from* New York.

Packets for *Philadelphia* sail from Liverpool on the 8th of every month throughout the year; *from* Philadelphia for Liverpool on the 20th of each month. Cabin passage to Philadelphia, 25*l*., from ditto, 100 dollars.

The Philadelphia packets are also American built and owned, being from 500 to 800 tons burden; some of them are as splendid as the New York packets, and are fitted up with every regard to comfort.

There are no regular packets to Boston, but plenty of casual ships. The mail steamers to Boston and Halifax sail on the 4th and 19th of each month, except the months of December, January, February, and March, when there is only one mail on the 3d. Fare, 38 guineas; with the exception of the Hibernia, which starts in opposition to the Great Western, her fare being 30 guineas.

The rate of *steerage* passage varies considerably in the course of the year; depending on the number of ships and the number of passengers going at the time. By the packet ships, it is at present (1843) 3*l*., by casual ships it varies from 2*l*. to 3*l*., current rate 50*s*: it rarely now exceeds 4*l*. For these rates, the ship provides nothing but berths, fire, and water; the passengers provide their own provisions, bedding, &c. The expense of provisions for a poor person, who might wish to be as economical as possible, for the voyage out to the United States, would not be more than from 40*s*. to 50*s*.

The *cabin* passage by the common traders (many of which are little inferior to the packets in equipment and safety) varies from 12*l*. to 20*l*.; no wines being provided at these rates, but provisions, bedding, malt liquor, and spirits.

The rates of *freight* to New York, are —

	By Packets.	By other Ships.
	£ s. d.	s. d. £ s. d.
Fine goods, per ton measurement of 40 cubic feet	2 0 0	15 0 to 1 0 0
Hardware	1 10 0	12 0 — 0 18 0
Coarse low-priced goods	1 10 0	12 0 — 0 16 0
Iron, per ton of 20 cwt.	0 7 6	7 0 — 0 10 0
Coals, do. do. not taken by packets	-	5 0 — 0 6 0
Crates of earthenware, per ton of 40 cubic feet	0 5 0	8 0 — 0 9 0
Salt, per ton of 40 bushels, not taken by packets	-	10 0 — 0 11 0

Dock Dues. — All vessels entering inwards, or clearing outwards, at the port of Liverpool, pay for dock rates and harbour lights:

	s.	d.
From between the Mull of Galloway and St. David's Head, Isles of Man and Anglesea, the ton -	0	2½
From between the Mull of Galloway and Duncansby Head, Orkney Isles, and islands on the western coast of Scotland; between St. David's Head and the Land's End, the Scilly Islands, and the east coast of Ireland, from Cape Clear to Malling Head, the ton -	0	3½
From the east and southern coast of Great Britain, between Duncan's Bay Head and the Land's End, the islands of Shetland, the west coast of Ireland, from Cape Clear to Malling Head, including the islands on that coast, the ton - - - - -	0	5½
From Europe, north of Cape Finisterre, and westward of the North Cape, and without the Cattegat and Baltic Sea, the islands of Guernsey, Jersey, Alderney, Sark, the Faro Isles, and Iceland, the ton - -	0	9
From within the Cattegat and Baltic, the whole of Sweden, the White Sea, eastward of the North Cape, Europe, south of Cape Finisterre, without the Mediterranean, Newfoundland, Greenland, Davis's Straits, Canaries, Western Islands, Madeira, and Azores, the ton - - - - -	1	0
From the east coast of North America, the West Indies, east coast of South America, north of Rio Plata, the west coast of Africa, and islands north of the Cape of Good Hope, all parts within the Mediterranean, including the Adriatic, the Black Sea, and Archipelago, the Islands of St. Helena, Ascension, and Cape de Verd Islands, the ton - - - -	1	6
From South America, south of Rio Plata, the Pacific Ocean, Africa, and Asia, eastward of the Cape of Good Hope, the ton - - - - - -	2	5
Note. — Vessels remaining longer than six months in dock, to pay an addition to the above rates, per month - - - - -	0	2

All vessels arriving at or clearing from the said port are to pay the said rates from or for the most distant port or place from or for which they shall trade; but vessels arriving from any parts in ballast do not pay dockage on entering inwards; and should such vessels proceed to sea again in ballast, then only one half of the dock rates are due, with the whole of the lights; but taking a cargo outwards subjects such vessels to full dock dues.

N. B. — New vessels built in Liverpool are subject only to half the above rates on the first outward clearance.

Floating Light, at the Entrance of the River Mersey. — Towards this light, the following rates are payable:—

All vessels sailing to or from Liverpool, to any port or place between Duncan's Bay Head and the Land's End, on the west side of Great Britain, and between Malling Head and Cape Clear on the east side of Ireland, ½d. per ton.

All vessels sailing to or from Liverpool, to any port or place between Duncan's Bay Head and the Land's End, on the east and southern coast of Great Britain, and between Malling Head and Cape Clear on the west coast of Ireland, ¼d. per ton.

All vessels sailing to or from Liverpool, to any port or place not being within the United Kingdom of Great Britain and Ireland, or the adjacent islands to the northward of the Cape of Good Hope, and the northward of Cape Horn, ½d. per ton.

All vessels sailing to and from Liverpool, to any port or place to the eastward of the Cape of Good Hope, and the westward of Cape Horn, 1d. per ton.

☞ In the day time, from sunrise to sunset, a blue flag, with the letters N. W. in white will be hoisted at the main-mast head, and in thick and foggy weather, either by night or day, a bell will be kept constantly ringing, to prevent vessels from running foul of the light-vessel.

Dock Regulations. Extracts from Acts of Parliament.— Any owner or master, or any person having the command, agency, or consignment of any vessel chargeable with dock duties, refusing to pay the same, is liable to have such vessel or goods seized.

Any person throwing any ballast or rubbish from out of any vessel upon any of the quays, &c., shall immediately cart or carry away the same: penalty 40*s.*

Every ship shall, before she comes within any of the piers, take down all her sails: penalty 5*l.*

Any person having the charge of any vessel in any of the docks, refusing to remove the same, after 24 hours' notice in writing, shall forfeit 20*l.*, and pay the expenses of removal by the water bailiff.

Any person having the command of any vessel moored in the river, refusing to remove the same, when ordered by the water bailiff, shall forfeit 20*l.*

The master or other person having the command of any vessel from which any cannon or gun shall be fired whilst in the port, shall forfeit 10*l.*

Any person making payment of dock duties, who refuses to answer such questions as shall be put to him by the collector, or give a false or untrue answer, shall forfeit 10*l.*

Any master, &c. evading payment of the duties, shall forfeit and pay double the duties evaded; and by 53 Geo. 3. a sum of 20*l.* in addition thereto.

Whenever it shall be necessary, for the purpose of cleaning or repairing the docks, to remove the vessels lying therein, the master, mate, or other person taking the command of such vessel, shall, within 3 days after notice given, remove such ship from such dock, on pain of forfeiting 10*l.*

Any master, &c. refusing to moor and remove the same in docks, according to the direction of the dock master, will forfeit 5*l.*, together with the costs of removal by the dock master.

Any master, &c. acting contrary to the direction of the dock master, will forfeit 20*l.*

Any master, &c. entering and giving false information of the draught of water of any ship to any of the dock masters, shall forfeit 20*l.*

Any master, &c. bringing the same into the entrance basins, when a signal is hoisted on the pier, at the entrance of such basin, signifying that such dock is full of vessels will forfeit 20*l.*

Any master, &c. bringing his vessel into any of the docks, contrary to the directions of the dock master, will forfeit 20*l.*

Every master, or other person, damaging any of the dock gates, bridges, piers, quays, &c. is liable to have the ship seized, and sold to compensate for damage done.

Any person opening or shutting any of the dock gates sluices, or cocks, is liable to forfeit 100*l.*; or opening or shutting any drawbridge, 20*l.*

Any owner, &c. leaving gunpowder, pitch, tar, &c., or combustible matter of any kind, on the quays of the docks, &c., or upon the deck of any vessel lying in any of the docks, for above 48 hours after passing the Custom-house officers, is liable to a penalty of 5*s.* an hour; on neglecting to watch such goods in the night time, to a penalty of 5*l.*

Any master, or other person, having the command of any ship, suffering any fire, candles, or lamp to be lighted and burning on board: penalty 10*l.*

Any owner &c. landing, or causing to be landed and laid, any pumps, boats, anchors, cables, limestones, &c., or other things whatsoever, upon any of the dock quays, shall within 48 hours wholly remove the same from off such quay, or shall forfeit 5*s.* per hour above the 48.

Any person wilfully cutting, damaging, or destroying any cables, &c. by which any vessel in the river or in any of the docks shall be fastened: penalty, 50*l.*

Any person damaging or breaking any lamp, &c. set up near the docks: penalty for each lamp, 5*l.*

Any master, or other person, having the command of any vessel about which any offence shall have been committed, in relation to any of the docks, &c., is liable to the penalty imposed for such offence.

Any owner or master of any ship or vessel giving or offering a bribe to any officer employed in pursuance of the dock acts: penalty 20*l.*

Any owner, consignee, or master of any vessel arriving and departing in ballast without payment of dock duties, is liable to a sum equal to double the amount of dock duty which should have been paid, and the master liable to the penalty of 20*l.* in addition.

Every master, &c. wilfully throwing, casting, or putting any earth, stones, rubbish, &c. out of any ship, &c. into any part of the port: penalty 50*l.*

Any owner, &c. of any vessel laid up for sale, or which shall not be actually employed for two months, not removing the same within 24 hours' notice in writing from the harbour master, or left on board: penalty 5*l.*, and costs of removal.

Any person discharging timber in any dock without having obtained the consent in writing of the chairman or deputy chairman of the dock committee, or of some justice of the peace: penalty 10*l.*

Any person having consent, not removing the same therefrom within 24 hours, liable to a fine of 5*s.* an hour

Any person damaging any ship, &c. in any of the docks, &c. or in the river, and refusing to make compensation, liable to have his goods, or the tackle of the ship, &c. doing the damage, seized.

Any justice of the peace for the county of Chester or borough of Liverpool, upon complaint made to them, may summon persons to appear before him, and may fix the amount to be paid to boatmen, and persons finding and taking possession of anchors, &c. in any part of the port of Liverpool.

Any person throwing, casting, or emptying any ballast, ashes, &c. out of any ship, &c. into the river Mersey, the Rock or Horse Channel, or Formby Channel, to the eastward of the Floating Light, or from any of the piers into the docks or basins, or into the river Mersey: penalty 10*l.*

That every vessel laden with a cargo consisting solely of limestones, paving stones, flintstones, gravel, and chalk, shall be charged tonnage rates as if coming in ballast.

Every owner or master, &c. of any vessel arriving at or departing from the said port, shall produce to the collector, upon demand, at the time of making entry, all books, accounts, &c. in relation to such vessel, or which show the weights and quantities of the goods, &c. In case of dispute, such owner, &c. shall produce a statement in writing, to be verified by oath, and showing the actual weights and quantities of such goods, &c., or the accuracy of the said books, &c.

In case the master, &c. of any vessel from which rubbish, ballast, dirt, or other refuse of any kind shall be landed, shall permit or suffer the same to be so landed, or laid within 3 yards from the margin of any such dock or basin, or of the river Mersey, and shall not cause such rubbish, &c. to be wholly removed from off such quays, &c. within 24 hours after the same shall be so landed or laid: penalty 5*l.*

Any owner, &c. of any boat or vessel, permitting gunpowder, exceeding 10 pounds in weight, to be brought into any of the docks or basins, or any vessel or boat lying therein, without the previous consent in writing of a justice of the peace of the borough of Liverpool: penalty 100*l.*

That upon due proof, on oath, to the satisfaction of any justice of the peace of the borough of Liverpool, or county of Lancaster, that any dealer in marine stores, within the said borough, or Toxteth Park, shall have been guilty of receiving stolen goods, or purchasing or receiving, &c., every such person shall forfeit 20*l.* for the first offence, 30*l.* for the second offence; and after conviction for such second offence, shall not carry on business as such dealer in marine stores within 200 yards from the margin or side of any dock or bash. (exclusive of 40 yards prohibited by a former act) on pain of forfeiting the sum of 10*l.* for every day he, she, or they shall carry on such trade or business.

In case any person or persons giving or accepting any bribe to or from any water bailiff, harbour master, &c. give information thereof, he or they shall be excused from the penalty of 20*l.* imposed by the 51 Geo. 3. for such offence, provided such information be given before any proceeding for punishing the said offence shall have commenced, or any information laid before any justice of the peace against such person in respect of the same.

Justices of the peace may, upon complaint made, summon parties and ascertain and award the amount of recompence for any services rendered by boatmen, &c. to vessels in the said docks or basins, and in case of non-payment, may levy the sum so awarded by distress.

Bye-laws.—1. That the master, &c. who shall permit or suffer any pitch or tar, or any other combustible matter, to be boiled

or heated for the use of such ship or vessel, either on board of such vessel, or within 5 yards of the same, shall forfeit 40*s.* for every offence.

2. That the master, &c. discharging or loading any cotton or other combustible goods on or from any of the quays, who shall permit or suffer any person or persons to smoke or burn tobacco, shall for each offence forfeit 20*s.*; and any other person or persons who shall burn or smoke tobacco or any other thing, amongst cotton or any other combustible goods, lying and being on the quays, shall for each offence forfeit the like penalty of 20*s.*

3. That if the master, &c. shall bring the same into any of the docks, basins, or entrances, with loaded cannon or guns, with gunpowder on board, or, when driven in by stress of weather, shall neglect immediately to discharge the same, or who shall take gunpowder on board, until clear of the docks and pier-heads, shall forfeit 5*l.*

4. That the master, &c. of any vessel, or any other person or persons whomsoever, who shall permit or suffer any rope from such vessel to be made fast to any chain-post or quay-fender, or any rope, chain, or tackle of any description, to be made fast to any of the pillars of any iron or other shed on any of the quays, or to the roof or any other part of such shed, shall for every offence forfeit 40*s.*

5. That the master, &c. of any vessel lying within or up to any of the docks, basins, &c., who shall suffer any ballast, &c. to be taken aboard [illegible] vessel, or thrown, discharged, carried out of the [illegible] without having a canvas nailed to the [illegible] docks or basins, shall for every offence forfeit the sum of 40*s.*

6. That the master &c. of any ship or vessel lying in any of the said docks or basins, or the entrances to the same, who shall suffer any repairs to be done to the outsides of such vessels, without having a canvass of some other safeguard secured from the side of such vessel, and placed or fixed so as to prevent any chips or pieces of wood from falling into the said docks or basins during the whole of such work or repairs, shall for every offence forfeit 40*s.*

7. That the master, &c. of any vessel lying or being within any of the docks, &c. who shall not cause all ballast, &c. discharged from or to be laden on board of any vessel or thrown at least 5 feet from the edge of the quay, or on the outsides of the cart or chain-posts of the said quay, and taken away immediately, shall for every offence forfeit 40*s.*

8. That the master, &c. or other person having the charge or command of every vessel lying within any of the docks or basins, shall have a ship-keeper on deck to attend the vessel every tide, at least 2 hours before the time of high water, and 1 hour after high water, under the penalty of 10*s.*

9. That the master, &c. of any vessel, when hauling into or out of the docks or basins, &c., shall (except when any such vessel be driven by stress of weather) have the yards a-peak, and the sprit-sail yard fore and aft, and the jib-boom run in, within 3 feet from the cap, if practicable; and, after any such vessel shall be brought into any dock or basin, shall have the anchors got in on the forecastle or deck, and shall have the steering-sail booms and irons taken off from the yards, and shall have the main or mizen booms, and the stern or quarter davits rigged in, within 24 hours, under the penalty of 40*s.*

10. That the master or other person having the command of any vessel, who shall, by negligence or otherwise, leave an anchor in the entrance to any of the docks, or upon the strand of the river, without a buoy, for a longer period than one tide, shall for every offence forfeit 5*l.*

1. That the owner, &c. of any vessel who shall refuse to [illegible] top-gallant masts and yards of every such vessel entering any of the repairing or graving docks, shall [illegible]

12. That the owner or driver of any cart, &c., or any other person or persons who shall draw, or cause, or permit, or suffer to be drawn upon or over any of the dock bridges, any anchors, balks, &c., shall for every offence forfeit 40*s.*

Every day, 2 hours before high water, a bell will be rung for 1 minute at each dock, when every ship-keeper is to make his appearance on the deck of his vessel, or incur the penalty of 40*s.*

All merchants and other owners or agents of ships and vessels trading to the port of Liverpool, will be required to enter the names of such vessels, their draught of water, and the date of their arrival at the [illegible] of Liverpool, together with the name of the dock into [illegible]h they are intended to [illegible] brought, in a book kept for that purpose, in the office of the harbour master in Revenue Buildings. And all vessels will thereafter be admitted into the said docks or basins in the order only in which they shall be so entered.

Liverpool Dock Rates.—The following is a Table of the dock duties charged on goods imported into and exported from the port of Liverpool:—

Dock Rates on Goods to be paid on all Goods, Wares, and Merchandise, imported into the Port of Liverpool, from Foreign Countries, or British Colonies, Plantations, or Settlements; or brought Coastwise from Ports or Places in the United Kingdom, including the Islands of Jersey, Guernsey, Alderney, Sark, and Man; or exported from the said Port of Liverpool to Foreign Countries and British Colonies, Plantations, or Settlements.

☞ These rates are subject to a reduction of one-third, and the rates "coastwise" are not now chargeable.

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Acid water and wood acid 100 gals.	0 7	0 3½	0 2	0 2
Acorns - - ton (40 bushels)	2 0	1 0	0 8	0 8
Agate set - - package	1 0	0 6		
Alabaster - - ton	1 0	0 6	0 4	0 4
Ale, beer, and porter - 100 gals.	0 8	0 4	0 5	0 5
bottled - - hogshead	0 6	0 6	0 5	0 5
puncheon or cask	0 4	0 4	0 3	0 4
tierce	0 3	0 3	0 3	0 3
barrel	0 1½	0 1½	0 1½	0 1½
hamper	0 1	0 1	0 1	0 1
Alkali - - - ton	2 0	1 0	0 8	0 8
Alkanet root - - cwt.	0 3	0 1½	0 1	
Almonds - - - ton	2 0	1 0	0 8	
Aloes, Hepatica or Barbadoes, cwt.	0 3	0 1½	0 1	
Socotorina - - —	0 3	0 1½	0 1	
Alum Roch - - ton	1 0	0 6	0 4	0 4
Alva Marina - - cwt.	0 1	0 0½		
Amber - - - —	0 3	0 1½	0 1	
Ambergris - - - —	1 0	0 6	0 4	
Anchor palms - - ton	1 0	[illegible]	0 8	0 8
Anchovies - - cwt.	0 3	[illegible]	0 1	
Angelica - - - —	0 3	0 1½	0 1	
Animals, stuffed - - each	0 6	0 3	0 3	0 3
Annacardium, or Cashew nut bush.	0 1	0 0½	0 0½	
Annatto - - - cwt.	0 3	0 1½	0 1	
Anniseeds - - - —	0 3	0 1½	0 1	
Antimony - - - —	0 3	0 1½	0 1	0 1
Ore of - - - ton	2 0	1 0	0 8	
Apples - - - barrel	0 1½	0 0½	0 0½	0 0½
Aquafortis - - cwt.	0 3	0 1½	0 1	0 1
Argol - - - ton	2 0	1 0	0 8	
Arrowroot and powder - cwt.	0 3	0 1½	0 1	
Arsenate of nickel - - ton	2 0	—	0 8	
Arsenic - - - cwt.	0 3	0 1½	0 1	0 1
Ashes, Barilla - - ton	1 6	0 9	0 6	
pearl and pot - —	2 0	1 0	0 8	
Ashes, black - - —	1 0	0 6	0 4	
bleaching - - —	2 0	1 0	0 8	
common Irish - - —	—	0 6		
soda weed and wood - ton	1 0	0 6		
outwards, in packages. See *Painters' Colours.*				
(sulphate of) - - ton	2 0	1 0		
Asphaltum - - —	2 0	1 0	0 8	
Asphalte rock - - —	0 6	—	0 2	
Assafœtida - - cwt.	0 3	0 1½	0 1	0 1
Bacon - - - ton	2 0	1 0	0 8	0 8
outwards, in packages. See *Beef and Pork.*				
Bagging - - - piece	0 0¼	0 0½	0 0½	0 0½
Ballast of paving or other stones that may be used for making or repairing roads - - ton	0 2	0 1	0 1	0 1

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Balsam of Capivi - cwt.	0 3	0 1½	0 1	
Canada - - —	0 3	0 1½	0 1	
Bark, Angustura - - —	0 6	0 3	0 2	
cork tree, birch, and larch, ton	1 6	0 9	0 6	
cleutheria or cascarilla cwt.	0 6	0 3	0 2	
Jesuits' - - —	0 6	0 3	0 2	
oak - - - ton	1 6	0 9	0 6	
bablah - - —	2 0	1 0	0 8	
Peruvian - - cwt.	0 6	0 3	0 2	
quercitron - - ton	2 0	1 0	0 8	
sassafras - - cwt	0 3	0 1½	0 1	
winteranus - - —	0 6	0 3	0 2	
Basket rods - - bundle	0 0½	0 0¼	0 0½	0 0½
100	0 5	0 2½	0 2½	0 2½
Baskets for joiners' tools. See *Empty Baskets.*				
Bass mats - - 120	0 3	0 1½	0 1	
Bast rope - - ton	1 0	0 6	0 4	
Beads - - - package	0 6	0 3		
Beef or pork - - hogshead	1 0	0 6	-	0 5
puncheon	0 8	0 4	-	0 4
tierce	0 4	0 2	-	0 1½
barrel	0 3	0 1½	-	0 1
half-barrel and smaller packages	0 1½	0 0¾	-	0 0¾
Bee-hives - - dozen	0 1	0 0½	0 0½	0 0½
Beer, spruce - - 32 galls.	0 5	0 2½	0 1½	0 1½
Bees' wax - - cwt.	0 2	0 1	0 1	
Bell metal - - —	0 2	0 1	-	0 1
Bellows, smiths' - - each	-	0 3	-	0 1
Berries, bay, juniper, yellow ton	2 0	1 0	0 8	
Betelnut - - —	2 0	1 0	0 8	
Birdlime - - cwt.	0 3	0 1½	0 1	
Bituma - - - bale	0 1			
Blacking - - hogshead	-	0 6	-	0 5
puncheon	-	0 4	-	0 4
cask	-	0 4	-	0 4
tierce	-	0 3	-	0 3
barrel	-	0 1½	-	0 1½
smaller package	-	0 1	-	0 1
Black jack - - ton	-	0 2	-	0 1
Bladders, containing lard, &c. each	-	-	-	0 0½
Blocks, heel - - gross	-	0 1		
last - - - 100	-	0 6		
ship - - - 100	1 0	0 6	0 3	0 3
Blubber - - - ton	1 6	0 9	0 6	
Blue - - - package	0 3	0 1½	0 1	0 01
Boats - - - each	1 0	0 6	0 6	6
Bobbins - - - cask	-	0 6	-	0 4
bag	-	0 1		
Bone dust - - - ton	1 0	0 6	0 4	0 4
Bones of cattle - - —	1 0	0 6	0 4	0 4

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Bones for manure. See *Bones*.				
Bonnets - - - package	0 6	0 3	- -	0 3
Books - - - —	0 4	0 2	0 3	0 3
Boracic acid - - ton	2 0	1 0	0 8	
Borax or tincal - - cwt.	0 3	0 1½	0 1	
Bottles - - - crate	●	-	-	0 3
of green or common glass, not less than pints - gross	0 3	0 1½	0 3	0 3
in hogsheads. Outwards -	-	-	-	0 5
Boulder stones - - ton	0 8	0 4	0 2	0 2
Bowls of wood - - dozen	-	0 0½	-	0 0½
Bows for cattle - - —	-	0 0½	-	0 0½
Bran - - - ton	1 0	0 6	0 4	0 4
Brandy. See *Spirits*.				
Brass - - - cwt.	0 2	0 1	0 1	0 1
old - - - ton	1 8	0 10	0 6	0 6
in packages. See *list of Unrated Goods*.				
Bread - - - cwt.	0 2	0 1	0 1	0 1
bag or sack	-	-	0 0½	0 0½
in unrated packages - cwt.	-	-	-	0 1
Bricks, bearers, and tiles 1200	1 0	0 6	0 4	0 4
Brimstone - - ton	1 6	0 9	0 6	
Bri tles - - - cwt.	0 6	0 3	0 2	0 2
Broom and brush handles bundle	-	0 0½	-	0 0½
1000	-	0 9		
Broom ties - - bundle	-	0 0½		
Brooms - - - dozen	0 0½	0 0½	-	0 0½
load (18 bundles)	-	1 0		
Brown powder - - ton	2 0	1 0		
outwards, in packages. See *Painters' Colours*.				
Brush heads and stocks - bag	0 1	0 0½	-	0 0½
1000	-	0 6		
Brushes - - - cask	-	-	-	0 4
bundle or box	0 6	0 3	-	0 2
Buckets of wood - - dozen	-	0 0½	-	0 0½
Bugle - - - ton	2 0	1 0	0 8	0 8
Bullion - - - package	0 6	0 3	0 2	0 2
Bull rushes load (63 bundles)	1 0	0 6	0 4	0 4
Burr stones - - 100	1 0	0 6	0 4	0 4
Butter - - cask or firkin	0 1	0 0½	0 0½	0 0½
half-firkin or keg	0 0½	0 0¼	0 0½	0 0½
Cables or cordage - ton	2 0	1 0	0 8	0 8
Cakes, linseed or rape - —	1 0	0 6	0 4	0 4
Calamine - - - —	0 6	0 3	0 2	0 2
Calaminaris lapis - - —	0 6	0 3	0 2	0 2
Callavances - - quarter	0 3	0 1½	0 1	
Calves' velves - - cwt.	0 2	0 1		
Cambric - - - piece	0 1	0 0½	0 0½	0 0½
Camomile flowers - cwt.	0 3	0 1½	0 1	
Camphor - - - —	0 3	0 1½	0 1	
Canalla alba - - - —	0 3	0 1½	0 1	
Candles - - - —	0 2	0 1		
outwards, boxes of 60 lbs. weight, ½*d*.; 30 lbs ½*d*.; under 30 lbs. ¼*d*.				
Candle wick - - cwt.	0 2	0 1		
Cane reeds - - 1200	0 6	0 3	0 2	
Cane or reeds for making brooms package	0 6	0 3		
Cantharides - - cwt.	0 3	0 1½	0 1	
Caoutchouc - - —	0 3	0 1½	0 1	
Capers - - - —	0 3	0 1½	0 1	
Cappillaire - - 100 galls.	0 10	0 5	0 7	0 7
Capsicums - - cwt.	2 0	1 0	0 6	
Cardamoms - - cwt.	0 3	0 1½	0 1	
Carpets. See *Woollens*.				
Carriages and cars - each	-	1 0	-	1 0
for guns - - —	-	0 3	-	0 3
Carts - - - —	-	1 0	-	1 0
handcarts - - —	-	0 6	-	0 6
Cassia buds - - cwt.	0 6	0 3	0 2	
fistula and lignea - —	0 3	0 1½	0 1	
Castor seed - - —	0 3	0 1½	0 1	
Cattle, asses and mules - each	0 6	0 3	0 6	0 6
bulls, cows, and oxen —	0 6	0 3	0 6	0 6
calves - - - —	0 3	0 1½	0 3	0 3
horses - - - —	1 0	0 6	1 0	1 0
lambs and sheep - —	0 1	0 0½	0 1	0 1
swine - - - —	0 1	0 0½	0 1	0 1
Cattlings or harpstrings, &c., pack.	0 6	0 3	0 2	0 2
Caviare - - - ton	3 0	1 6	1 0	
Cement - - - —	1 0	0 6		
outwards, in packages. See *Painters' Colours*.				
Chalk - - - ton	0 4	0 2		
outwards, in packages. See *Painters' Colours*				
French - - package	0 6			
Charcoal - - - ton	1 4	0 8		
outwards in packages. See *Painters' Colours*.				
Cheese - - - ton	1 0	0 6	0 4	
hamper	-	-	-	0 0½
box or other package not described (if loose) cwt.	-	-	-	0 1
	-	-	-	0 0½
boards - - - dozen	-	0 0½	-	0 0½
Chemical oil - - cwt.	0 3	0 1½		
Chesnuts - - - bushel	0 0½	0 0½	0 0½	0 0½
Chicory root - - cwt.	0 1	0 0½		
China. See *Earthenware*.				
root - - - cwt.	0 3	0 1½	0 1	
Chirt stones - - ton	0 8	0 4	0 3	0 2
Chocolate and cocoa paste cwt.	0 3	0 1½	0 1	
Chromate of iron or lead ton	2 0	1 0	0 8	
lime - - - —	1 0	-	0 4	

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Churns of wood - - each	- -	0 2	- -	0 2
Cider - - tun (252 gallons)	2 4	1 2	0 9	0 9
bottled. See *Ale*.				
Cinnabar - - - cwt.	0 6	0 3	0 2	
Cinnamon - - - —	1 0	0 6	0 4	
Citron, preserved - - —	0 6	0 3	0 2	
salted - - - package	0 4	0 2		
Clay, viz. Cambria and pipe ton	0 6	0 3	-	0 4
china and stone - ton	0 8	0 4	-	0 4
firebrick - - —	0 8	0 4	-	0 4
Clocks - - - case	1 0	0 6	-	0 5
Clog soles - - - 1000	-	0 6		
Cloves - - - cwt.	1 0	0 6	0 4	
Coal pit props - (load (50 ft.)	-	0 6		
Coals (Winchester meas.) chald.	-	-	-	0 4
ton	0 4	0 2	-	0 3
Coal dust. See *Charcoal*.				
Cobalt - - - cwt.	1 0	0 6	0 4	
ore - - - —	0 4	0 2	0 2	
Cochineal - - - —	1 0	0 6	0 4	
Cocoa - - - ton	2 0	1 0	0 8	
nut oil - - —	2 0	1 0		
shells - - —	1 0	0 6		
Coculus Indicus - - cwt.	0 3	0 1½	0 1	
Codilla - - - ton	1 0	0 6	0 3	
Coffee - - - —	2 0	1 0	0 8	
Cocoa nuts - - 100	0 3	0 1½	0 1	
Colocynth - - - cwt.	0 3	-	0 1	
Colouring for porter, &c. 100 gals.	0 8	0 4	0 5	0 5
Columba root - - cwt.	0 6	0 3	0 2	
Combs - - - package	-	0 6	-	0 2
Conch shells - - cwt.	0 3	0 1½	0 1	
Copper - - box or tub	-	-	-	0 2
case	-	-	-	0 5
cask	-	-	-	0 4
tierce	-	-	-	0 3
barrel	-	-	-	0 1½
bag or keg	-	-	-	0 1
ton	2 0	1 0	0 8	0 8
old - - - —	1 8	0 10	0 6	0 6
ore - - - —	0 6	0 3	0 2	0 2
dross and slag - - —	0 4	0 2	0 2	0 2
sulphate of - - —	2 0	1 0		
coin - - - package	0 6	0 3	0 2	
Copperas - - - ton	1 0	0 6	0 4	
outwards, in packages. See *Copper*.				
Coral - - - cwt.	0 6	0 3	0 2	
Cordial. See *Spirits*.				
Cord wood - - ton	-	0 3		
Cork - - - —	2 0	1 0	0 8	
Corks - - - bag	0 4	0 2	0 1	0 1
Corn, barley, bere, and big-quarter	0 3	0 1½	0 1	0 1
barley meal - ton	2 0	1 0	0 8	0 8
beans - - quarter	0 3	0 1½	0 1	0 1
corn, Indian - —	0 3	0 1½	0 1	
meal - ton	2 0	1 0	0 8	0 8
malt - - quarter	0 4	0 2	0 1	0 1
oats - - —	0 2	0 1	0 1	0 1
oatmeal - ton	2 0	1 0	0 8	0 8
peas - - quarter	0 3	0 1½	0 1	0 1
rye - - —	0 3	0 1½	0 1	0 1
wheat - - —	0 4	0 2	0 1	0 1
flour - cwt.	0 1½	0 0¾	0 0½	0 0½
Cortex elutheræ - - —	0 6	0 3		
Cotton seed - bushel	0 1	0 0½	0 0½	
in the seed, or unginned cotton 100 lbs.	0 1			
twist, thread, and yarn cwt.	0 4	0 2		
waste - - 100 lbs.	0 3	0 1½	0 1	
wool - - —	0 3	0 1½	0 1	
from India - - —	0 2	0 1		
Cottons, manufactured - package	1 0	0 6	0 3	0 3
Cowries - - - ton	2 0	1 0	0 8	
Cradles - - - each	0 2	0 1	0 1	0 1
Cranberries - 5 gallons	0 1	0 0½	0 0½	0 0½
Crate and crop wood - load	-	0 3		
Cream of tartar - - ton	2 0	1 0	0 8	0 8
Crystal - - - package	0 3	0 1½	0 1	
Cubebs, East India - cwt.	0 6	0 3	0 2	
Cudbears. See *Painters' Colours*.				
Culm - - - ton	0 4	0 2	0 2	0 2
Curiosities, natural or artificial package	0 6	0 3	0 2	0 2
Currants - - - ton	2 0	1 0	0 8	
Dammon. See *Rosin*.				
Divi divi - - - ton	1 6	0 9	0 6	
Dollies - - - each	0 0½	0 0½		
Dragons' blood - - cwt.	0 3	0 1½	0 1	
Drapery, linen or woollen. See *Cottons*.				
drapery - - piece	-	0 0½	-	0 0½
Dried fruit - - keg	0 3			
Drugs - - - cwt.	0 3	0 1½	0 1	
Dyers' ware - - ton	1 6	0 9	0 6	
Earth, black or brown - ton	2 0	1 0		
fullers' - - —	1 0	0 6		
red or yellow - - —	2 0	1 0		
exported in packages. ● See *Painters' Colours*.				
Earthenware, crate or other packg.	0 4	0 2	0 2	0 2
load	3 0	1 6	1 0	1 0
Eau de Cologne - - package	0 6	0 3	0 2	
Eggs - - - 1200	0 6	0 3	0 2	0 2
Emery - - - —	0 2	0 1	0 1	0 1
stones - - —	0 1	0 0½	0 0½	0 0½
Empty bags - - package	- -	- -	- -	0 3

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Empty bags and sacks - score	0 2	0 1	0 1	0 1
barrels - - —	0 10	0 5	0 10	0 10
half barrels and smaller packages - - —	0 5	0 2½	0 5	0 5
baskets and hampers - —	0 2	0 1	0 1	0 1
boxes - - - each	0 0½	0 0½	0 0½	0 0½
load	2 0	1 0		
casks not otherwise described each	0 2	0 1	0 1	0 1
carboys - - —	0 0½	0 0½	0 0½	0 0½
cases, chests, and trunks —	0 1	0 0½	0 0½	0 0½
crates - - - —	0 2	0 1	0 1	0 1
demijohns - - —	0 0½			
half and quarter crates —	0 1	0 0½	0 0½	0 0½
tierces - - —	0 1	0 0½	0 1	0 1
Engines, locomotive - each	2 0	-	0 8	
Epsom salts - - —	2 0	1 0	0 8	
Essence of lemons and limes, pack. and others not enumerated —	0 6	0 3	0 2	
Euphorbium - - cwt.	0 6	0 3	0 2	
Extract of rhatany root - —	0 3	0 1½	0 1	
Peruvian bark - —	0 6	0 3	0 2	
logwood - - —	0 6	0 3	0 2	
Feathers - - cwt.	0 6	0 3	0 2	0 2
ostrich - - 100 lbs.	2 0	1 0	0 8	
Feld spar - - ton	0 6	0 3	0 2	
Felt - - - package	-	0 2	-	
Figs - - - ton	2 0	1 0	0 8	
Filtering stones - - each	0 1	0 0½	0 1	0 1
Fish, dry salted - - ton	1 0	0 6	0 4	0 4
herrings, fresh - 1200	0 3	0 1½		
pickled and salted of all descriptions - - - barrel	0 2	0 1	0 1	
½ barrel	0 1	0 0½	0 0½	
cask	0 4	0 2	0 2	
firkin	0 1	0 0½	0 0½	
box, kit, or half-firkin	0 1	0 0½	0 0½	
hogshead	0 6	0 3	0 3	
pipe or puncheon	0 4	0 2	0 2	
tierce	0 3	0 1½	0 1	
British cured - hogshead	-	-	-	0 6
puncheon	-	-	-	0 4
tierce	-	-	-	0 1½
barrel	-	-	-	0 1
½ barrel	-	-	-	0 0½
and smaller packages	-	-	-	0 0½
Flag stones - - - ton	0 6	0 3	0 3	0 3
Flannel - - - piece	0 1	0 0½		
Flax, rough - - ton	2 0	1 0	0 8	0 8
waste - - —	1 0	0 6	0 6	
Flint, ground - - —	0 8	0 4	0 4	0 4
dried - - —	0 8	0 4	0 4	0 4
stones - - —	0 4	0 2	0 2	0 2
Floor-cloth (containing 1 roll), per bag, mat, or box	-	0 1	-	0 1
Flower-roots, plants, or trees, package	0 4	0 2	0 2	0 2
Flowers, artificial - —	0 6	0 3	0 2	0 2
Forbidden fruit - —	0 3	0 1½	0 1	
Foreign coin. See *Bullion*.				
Free stone - - ton	0 6	0 3	0 3	0 3
Fruit, raw - - package	0 3	0 1½	0 1	
Furniture, household - load	1 0	0 6	-	1 0
package	0 3	0 1½		
box, bundle, mat, or truss	-	-	-	0 2
case, chest, or trunk	-	-	-	0 5
Galangal - - cwt.	0 3	0 1½	0 1	
Galbanum - - —	0 3	0 1½	0 1	
Galls - - —	0 3	0 1½	0 1	
Gamboge - - —	0 3	0 1½	0 1	
Gambree or Terra Japonica ton	1 6	0 9	0 6	
Garden chairs - - each	0 0½		0 0½	
Gentian root - - ton	0 2	0 1	0 1	
Gigs - - - each	-	1	-	1 0
Ginger - - - ton	2 0	1 0	0 8	
preserved - - cwt.	0 3	0 1½	0 1	
Ginseng - - - ton	3 0	1 6	1 0	
Glass - - - cwt.	0 1	0 0½		
broken - - —	0 0½	0 0½		
crown - - package	-	-	-	0 1
flint - - —	-	-	-	0 3
Glauber salts - - ton	2 0	1 0	0 8	0 8
Glue - - - —	2 0	1 0	0 8	0 8
Outwards, in packages. See *Painters' Colours*.				
Spetches - - ton	2 0	1 0	0 8	0 8
Granilla (cochineal refuse) cwt.	0 2	0 1	0 1	
Granite stone - - ton	0 6	-	-	0 2
Grapes - - - package	0 1	0 0½	0 0½	
Grass for making Brushes cwt.	0 1			
Grease or greaves - ton	1 0	0 6	0 4	
Outwards in packages. See *Painters' Colours*.				
Groats - - - barrel	-	-	-	0 1½
cask	-	-	-	0 6
jar or jug	-	-	-	0 0½
tierce	-	-	-	0 3
Grinding stones - each	0 1	0 0½	-	0 0½
Grummets or woodbanks gross	0 2	0 1	-	0 1
Guinea grains - - cwt.	0 6	0 3	0 2	
Gum, ammoniac - - ton	3 0	1 6	1 0	1 0
animi - - —	3 0	1 6	1 0	1 0
Arabic - - —	3 0	1 6	1 0	1 0
cashew - - —	3 0	1 6	1 0	1 0
copal - - —	3 0	1 6	1 0	1 0
elimi - - —	3 0	1 6	1 0	1 0
guaiacum - - —	3 0	1 6	1 0	1 0

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Gum, Senegal - - ton	3 0	1 6	1 0	1 0
tragacanth - - —	3 0	1 6	1 0	1 0
Gunpowder - - 100 lbs.	0 6	0 3	-	0 1½
Gun stocks - - 120	0 3	0 1½		
Gypsum - - ton	0 3	-	0 1	
Haberdashery - - package	1 0	0 6	0 3	0 3
Hair, bull, cow, and ox - cwt.	0 2	0 1	0 1	
goat - - —	0 2	0 1	0 1	
horse - - —	0 2	0 1	0 1	
powder - - package	0 3	0 1½	0 1	
Hammocks - - dozen	0 2	0 1	0 1	0 1
Hams - - - ton	2 0	1 0	0 8	0 8
outwards, in packages. See *Beef and Pork*.				
Hand-scoops - - 100	0 1	0 0½		
Hardens - - - package	1 0	0 6	0 3	0 3
(loose) piece	-	0 0½	-	0 0½
Hardware - - - bundle	0 2	0 1	0 0½	0 0½
keg	0 2	0 1	0 1	0 1
all other packages	0 6	0 3	0 3	0 3
Harrows - - - each	0 6	0 3	0 2	0 2
Hats - - - package	0 6	0 3	0 2	0 2
Hay - - - ton	0 6	0 3	-	0 3
rakes - - - dozen	0 1	0 0½	0 0½	0 0½
Hemp, rough - - ton	2 0	1 0	0 8	
Herrings, per box, not exceeding 1 cubic foot - - each	0 0½			
Hides, dry - - cwt.	0 3	0 1½	0 1	0 0½
wet - - —	0 1½	0 0½	0 0½	0 0½
pieces of, or glue pieces ton	2 0	1 0	0 8	
Honey - - - cwt.	0 2	0 1		
Hoops, mast and truss - 120	0 9	0 4½		
set	-	-	-	0 0½
wood - - - 1200	1 6	0 9	0 6	0 6
Hoofs of cattle - - ton	1 0	0 6	0 4	0 4
Hops - - - cwt.	0 2	0 1	0 1	
bag or pocket	-	-	0 1	0 1
Horn tips - - - cwt.	0 2	0 1	0 0½	
Horns and horn tips - hhd.	-	-	-	0 5
tierce	-	-	-	0 3
horn tips and pieces of horns cwt.	0 2	0 1	0 0½	
shavings - - ton	1 0	0 6		
slugs - - —	1 0	0 6		
Hull, masts, &c. of foreign vessels condemned 1*l.* per cent. on value.				
Hosiery. See *Haberdashery*.				
Hurdles (containing 1 dozen) mat	0 2	0 1	0 1	0 1
Jackscrews - - pair	0 6	0 3	0 2	0 2
Jalap - - - cwt.	0 2	0 1	0 1	
Jars and jugs, containing barley, groats, oatmeal, peas, or other articles of British or Irish growth, produce or manufacture, not otherwise rated - - each	-	-	-	0 0½
Iceland moss, or lichen islandicus cwt.	0 3	0 1½	0 1	
Indigo - - - —	1 0	0 6	0 4	
Ipecacuana root - - —	0 3	0 1½	0 1	
Iron, viz. : —				
bar, bolt, or rod - ton	1 0	0 6	0 8	0 8
broken or old - —	0 9	0 4½	0 4	0 4
cast or pig - - —	0 6	0 3	0 8	0 8
kentledge - - —	0 6	0 3	0 2	-
hoops and sheets - —	1 6	0 9	0 8	0 8
plate and sheet - box	-	-	-	0 0½
nails - - - package	0 2	0 1	-	0 1
ore - - - ton	0 4	0 2	0 2	0 2
wire - - - —	2 0	1 0	0 8	0 8
cask	-	-	-	0 4
if in packages. See *Hardware*.				
wrought - - ton	2 0	1 0	0 8	0 8
outwards, in packages. See *Hardware*.				
Isinglass - - - cwt.	0 3	0 1½	0 1	
Juice, lemon, lime, and orange tun	2 4	1 2	0 9	
Junk - - - ton	1 0	0 6	0 4	0 4
Jute hemp - - - —	1 4			
Ivory - - - cwt.	0 6	0 3	0 2	
Kelp - - - ton	1 0	0 6	0 4	0 4
Lac, gum and stick - cwt.	0 3	0 1½	0 1	
seed and shell - —	0 3	0 1½	0 1	
Lace - - - package	1 0	0 6	0 3	0 3
Lampblack - - ton	2 0	1 0	0 8	
exported in packages. See *Painters' Colours*.				
Lard - - - ton	2 0	1 0	0 8	
exported. See *Beef and Pork*.				
Laths - - - bundle	0 0½	0 0½	0 0½	0 0½
Latten black - - ton	2 0	1 0	0 8	0 8
Lead and lead ore —	1 0	0 6	0 8	0 8
black, red, and white —	2 0	1 0	0 8	0 8
powder - - —	2 0	1 0	0 8	0 8
outwards in packages. See *Painters' Colours*.				
Lead shot - - - barrel	-	-	-	0 1½
half-barrel, firkin, or keg	-	-	-	0 1
cask	-	-	-	0 4
ton (in bags)	-	-	-	0 8
Leather, tanned - - cwt.	0 3	0 1½	-	0 1
wrought - - package	-	-	-	0 3
Leeches - - - —	0 6	0 3	0 2	0 2
Lemons - - case or chest	0 2	0 1	0 1	
box or other package	0 1	0 1	0 1	
Lime - - - hhd.	-	0 6	-	0 3
keg.	-	0 0½	-	0 0½
puncheon, cask, or tierce		-	-	0 3

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Lime, acid - - - tun	1 0			
loose - - - ton	-	0 2½		
Limes - - - package	0 3	0 1½	0 1	
Limestones - - - ton	0 2	0 1	0 1	0 1
Linen cloth - - package	1 0	0 6	0 3	0 3
piece	0 1	0 0½	-	0 3
crate	-	-	-	0 3
rags - - - cwt.	0 4	0 2		
thread yarn - - cwt.				
exported. See *Cotton Manufactures.*				
Liquor. See *Printers' Liquor.*				
Liquorice paste - - ton	2 0	1 0	0 8	
Litharge - - - —	2 0	1 0	0 8	0 8
outwards in packages. See *Painters' Colours.*				
Maccaroni - - cwt.	0 6	0 3	0 2	
Mace - - - —	1 0	0 6	0 4	
Machines, viz.: —				
bark mills - - each	-	0 6	-	0 6
binnacles - - —	-	0 6	-	0 6
brewing - - —	-	0 6	-	0 6
coffee fanners - - —	-	0 6	-	0 6
cooking apparatus - —	-	0 6	-	0 6
copying - - —	-	0 2	-	0 2
corn - - - —	-	0 6	-	0 6
filtering - - —	-	0 6	-	0 6
fire engines - - —	-	0 6	-	0 9
guns - - - —	-	0 6	-	0 6
linseed cribbles - —	-	0 6	-	0 6
malt mills - - —	-	0 6	-	0 6
mangles - - - —	-	0 6	-	0 6
packing presses - —	-	0 6	-	0 6
paper moulds - - —	-	0 6	-	0 6
sawing - - - —	-	0 6	-	0 6
sedans - - - —	-	0 6	-	0 6
shower baths - - —	-	0 6	-	0 6
soap cutters - - —	-	0 3	-	0 3
straw cutters - - —	-	0 6	-	0 6
tin - - - —	-	0 6	-	0 6
turning lathes - - —	-	0 3	-	0 3
turnip drills - - —	-	0 2	-	0 2
and other packages of machinery each	1 0	0 6	-	0 6
Machinery (loose) - ton	2 0	1 0	0 8	0 8
exported in packages. See *Wrought Iron.*				
Madder - - - ton	2 0	1 0	0 8	
roots - - - —	1 6	0 9	0 6	
Magnesia - - - cwt.	0 3	0 1½	0 1	
Manganese - - ton	1 0	0 6	0 4	0 4
exported in packages. See *Painters' Colours.*				
Manna - - - cwt.	0 3	0 1½	0 1	
Manure - - - ton	0 2	0 1	-	0 1
Marble - - - —	1 0	0 6	0 4	0 4
sculptured (loose pieces) —	2 6	1 3	0 10	
package	1 0	0 6	-	
Marmalade - - cwt.	1 0	0 6	0 4	
Mastich - - - —	0 3	0 1½	0 1	
Matchets - - package	-	-	-	0 3
Mats - - - 120	0 3	-	0 1	0 1
Meat pies - - package	0 6			
Melons (loose) - - 100	1 0			
Mill boards - - 120	-	0 6		
stones - - each	1 0	0 6	0 4	0 4
Millinery. See *Haberdashery.*				
Mineral waters - package	0 6	0 3	0 2	
Molasses - - ton	1 6	0 9	0 6	
cask or puncheon	-	-	-	0 4
Morels - - - cwt.	0 4	0 2	0 2	
Mother of pearl shell —	0 3	0 1½	0 1	
Mum - - - tun	2 4	1 2	0 9	
Munjeet. See *Madder.*				
Muriate of lime - ton	1 0	0 6	0 4	0 4
potash - - —	1 0	0 6	0 4	0 4
soda - - —	1 0	0 6	0 4	0 4
magnesia, same as other muriates.				
Musical instruments - package	1 0	0 6	-	0 6
Muskets - - case or chest			-	0 3
package	0 6	0 3	-	0 3
Mustard - - - cwt.	0 2	0 1	-	
keg	-	-	-	0 1
half-keg	-	-	-	0 0½
all other packages	-	-	-	0 2
Myrabulums - - ton	1 6	0 9	-	
Nails - - - package	0 2	0 1	0 1	0 1
Natron - - - ton	2 0	1 0	0 8	
Nests of trunks - - each	-	-	-	0 5
Nixon sal - - - ton	2 0	1 0	0 8	0 8
Nutmegs - - - —	1 0	0 6	0 4	
Nuts - - - bushel	0 0½	0 0½	0 1	0 1
—— 1000	0 3			
Nux vomica - - cwt.	0 3	0 1½	0 1	
Oakum - - - ton	1 0	0 6	0 4	0 4
Oatmeal shudes or dust - —		0 2		
Ochre, or oker - - —	2 0	1 0	0	0 8
outwards in packages. See *Painters' Colours.*				
Oil, animal - - tun	1 0	0 6		
castor - - cwt.	0 3	0 1½	0 1	
chemical - - —	0 3	0 1½		
cocoa nut - - tun	2 0	1 0	0 8	
cod - - - —	1 9	0 10	0 7	
dubbing - - —	2 4	1 2	0 9	
linseed and olive - —	2 4	1 2	0 9	
in flasks - - chest	0 1½	0 0½	0 0½	

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Linseed oil in flasks, box or half-chest	0 0½	0 0½	0 0½	
palm - - - ton	1 6	0 9	0 6	
peppermint - - package	0 6	0 3		
rape - - - tun	2 4	1 2	0 9	
salad. See *Olive Oil in Flasks.*				
spermaceti - - tun	2 4	1 2	0 9	
seal - - - —	1 9	0 10	0 7	
train or whale - —	1 0	0 10	0 7	
of vitriol - - —	3 0	1 6	1 0	1 0
Oils of all kinds boiled or manufactured since their importation				
butt or pipe	-	-	-	0 6
puncheon or cask	-	-	-	0 4
hhd.	-	-	-	0 2
barrel	-	-	-	0 1½
bottle, jar, jug, or can	-	-	-	0 0½
Olives. See *Pickles.*				
Onions - - - package	0 2	0 1	0 1	0 1
(loose) - - - bushel	0 1	0 0½	0 1	0 1
Opium - - - cwt.	0 3	0 1½	0 1	
Orange peel - - —	0 3	0 1½	0 1	
Oranges - - case or chest	0 2	0 1	0 1	
box or other package	0 1	0 1	0 1	
Orchilla weed - - ton	3 0	1 6	1 0	
Orchill - - - —	1 0	-	0 4	
Orice root - - - cwt.	0 3	0 1½	0 1	
Osnaburgs. See *Linens.*				
Packing boards - - dozen	0 0½	0 0½		
Paddy, or rice in the husk quarter	0 3	0 1½	0 1	
Paint and painters' colours and materials - - ton	2 0	1 0	0 8	
chest or case	-	0 6	-	0 5
hhd.	-	0 6	-	0 5
tierce	-	0 6	-	0 3
cask or puncheon	-	0 4	-	0 4
barrel	-	0 2	-	0 1½
box or bundle	-	0 2	-	0 2
keg, jar, or jug	-	0 0½	-	0 0½
Painters' pegs - - 1000	-	0 2		
Palm leaf - - - bale	0 3	0 3		
Palm nuts - - - —	0 3	-	0 1	
Paper - - - —	0 8	0 4		
case or chest	0 8	0 4		
half-bale, bundle, box	0 4	0 2		
ream	0 0½	0 0½	-	0 0½
outwards. See *Stationery.*				
Paving stones - - ton	0 2	0 1	0 1	0 1
Pearl and shelled barley - —	2 0	1 0	0 8	
Pears - - - bushel	0 0½	0 0½	0 0½	0 0½
Pepper, black and white - ton	2 0	1 0	0 8	
Pistachio nuts - - bushel	0 1	0 0½	0 0½	
Pewter - - - ton	2 0	1 0	0 8	
British manufacture, outwards. See *Copper.*				
Pickles - - - gallon	0 0½	0 0½		
box, case, or chest	-	-	-	0 3
barrel	-	-	-	0 1½
keg, jar or jug	-	-	-	0 0½
in brine - - gallon	0 0½			
Pimento - - - ton	2 0	1 0	0 8	
Pin dust - - - —	-	0 6		
Pine apples, loose - score	0 1			
Pink root - - - cwt.	0 3	0 1½	0 1	
Pitch - - - barrel	0 1½	0 0½	0 0½	0 ½
Plaster of Paris - - ton	1 0	0 6	0 4	
Plate and plated ware - package	1 0	0 6	-	0 3
Ploughs, loose - - each	-	0 4	-	0 2
Pomegranates. See *Oranges.*				
Potatoes - - - ton	0 6	0 3	-	0 3
exported in packages barrel	-	-	-	0 1
hamper	-	-	-	0 0½
Pozzolano - - ton	1 0	0 6		
Preserved ginger - - cwt.	0 3	0 1½	0 1	
Preserves - - - —	0 4	0 2		
outwards. See *Pickles.*				
Printers' liquor - 100 galls.	0 7	0 3½	0 3½	0 3½
Prints or pictures - case or box	0 6	0 3	0 3	0 3
Prunelloes - - - cwt.	0 2	0 1	0 1	
Prunes - - - ton	2 0	1 0	0 8	
Pumice stone - - —	1 0	0 6	0 4	
Quasia wood - - —	2 0	1 0		
Querne stone - - each	0 9	0 4½	0 3	0 3
Quicksilver - - package	0 3	0 1½	0 1	
Quills - - - 1200	0 1	0 0½		
package	-	-	0 3	0 3
Radix contrayervæ - cwt.	0 3	0 1½	0 1	
serpentariæ - - —	0 3	0 1½	0 1	
Rags - - - ton	1 0	0 6	0 4	0 4
Raisins - - - —	2 0	1 0	0 8	
Rhatany root, or radix rhatania cwt.	0 3	0 1½	0 1	
Rhubarb - - - —	0 3	0 1½	0 1	
Rice - - - ton	1 6	0 9	0 6	
Riddles - - - bundle	-	-	-	0 0½
Rock moss - - ton	2 0	1 0	0 8	
Rosin - - - —	1 6	0 9	0 6	
barrel	-	-	-	0 1½
Rotten stone. See *Pumice Stone.*				
Rum. See *Spirits.*				
Rushes - load (63 bundles)	1 0	0 6	0 4	0 4
Saccarum saturni - cwt.	0 3	0 1½	0 1	
Saddlery. See *Wrought Leather.*				
Safflower - - - ton	2 0	1 0	0 8	
Saffron - - - package	0 6	0 3	0 2	
Sago - - - ton	1 6	-	0 6	0 6
Sailcloth - - - package	1 0	0 6	0 3	0 3
Sails - - - each	0 6	0 3	0 2	0 2

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Sal ammoniac - - ton	2 0	1 0	0 8	-
gem - - - —	2 0	1 0	0 8	-
Salep - - - cwt.	0 3	0 1½	0 1	-
Saltpetre - - - ton	1 6	0 9	0 6	-
firkin	-	-	-	0 0½
Salt, rock - - - ton	-	-	-	0 3
white - - - —	1 0	0 6	0 4	0 4
Salts, Epsom - - - —	2 0	1 0	-	-
Sand for Ironfounders and Glass-blowers - - ton	-	0 1	-	-
silversmiths' - - cask	-	0 6	-	-
Sanguis draconis - - cwt.	0 3	0 1½	0 1	-
Sarsaparilla - - - —	0 2	0 1	0 1	-
Sassafras - - - ton	1 6	0 9	0 6	-
Sandars wood, white and yellow cwt.	0 3	0 1½	0 1	-
Sausages - - - package	0 2	0 1	0 1	0 1
Sawdust - - 16 bushels	-	-	-	0 0½
Scammony - - - cwt.	1 0	0 6	0 4	-
Scythe stones - - dozen	0 0½	0 0½	0 0½	0 0½
Scythes - - - bundle	-	-	-	0 0½
Seeds, anniseeds - - cwt.	0 3	0 1½	0 1	0 1
canary - - - ton	2 0	1 0	0 8	0 8
carraway - - cwt.	0 3	0 1½	0 1	0 1
castor - - —	0 3	-	-	-
cinnamon - - —	0 3	-	-	-
clover or trefoil - -	0 3	0 1½	0 1	0 1
coriander - - -	0 3	0 1½	0 1	0 1
cummin - - -	0 3	0 1½	0 1	-
flax or linseed - - qr.	0 3	0 1½	0 1	0 1
furze - - 100 bush.	2 0	1 0	0 8	0 8
garden - - - cwt.	0 3	0 1½	0 1	0 1
hemp and rape - quarter	0 3	0 1½	0 1	-
mustard - - ton	2 0	1 0	0 8	0 8
rye grass - 100 bush.	2 0	1 0	0 8	0 8
Senna - - - ton	2 0	1 0	0 8	-
Shaddocks - - - package	0 3	0 1½	0 1	-
Shakes hhd., punch., or tierce	0 1	0 1	-	0 1
barrel, ½ barrel, or ¼ cask	0 0½	0 0½	-	0 0½
Sheathing - - - ton	1 0	0 6	-	-
Shovels or spades - - bundle	-	0 0½	0 0½	0 0½
Sheep pelts - - - cwt.	-	0 0½	-	-
Shumac - - - ton	1 6	0 9	0 6	-
Sieves - - - dozen	0 1	0 0½	0 0½	0 0½
Silk, raw or thrown - 100 lbs.	1 0	0 9	0 4	-
waste - - - —	0 4	-	0 1	-
manufactured - package	1 0	0 6	0 3	0 3
Silkworm gut - - —	1 0	0 6	-	-
Silver ore - - - ton	1 0	0 6	-	-
Silversmiths' sand - keg	0 6	0 3	-	-
Skins, kip and calf, dry - cwt.	0 3	0 1½	0 1	0 0½
wet - —	0 1½	0 0½	0 0½	0 0½
badger, bear, beaver, deer, elk, ermine, fisher, fox, leopard, lion, martin, otter, panther, seal (fur), tiger - score	0 1	-	0 2	5-6ths off this rate outwards.
cat, chinchilli, husse, mink, raccoon, seal (hair) - 120	0 1	-	0 2	
goat, fitch, kid, lamb, musquash, nutria, sheep, swan 120	0 0½	-	0 2	
coney, hare, mole - —	5-6ths of a penny	0 0½	0 0½	
Skates - - - package	0 6	0 3	0 2	0 2
Slate pencils - - —	0 6	0 3	-	0 2
Slate and slate slabs - ton	0 6	0 3	-	0 2
Slates - puncheon or cask	-	-	0 4	0 4
writing - - package	-	0 3	-	0 3
Slime - - - ton	-	0 2	-	-
Slops. See *Haberdashery*.				
Smalts - - - cwt.	0 2	0 1	0 1	-
Smart sticks - - 1200	1 6	0 9	0 6	-
Snuff - - - ton	2 0	1 0	0 8	0 8
Soap - - - —	2 0	1 0	0 8	0 8
Soda, carbonate of - cwt.	0 3	0 1½	-	-
Soda water - - package	0 6	-	0 2	-
outwards. See *Pickles*.				
Sodo, or solder - - ton	2 0	1 0	0 8	-
Soot - - - package	-	-	-	0 2
Spectacles - - - —	0 6	0 3	0 3	0 3
Speltre - - - —	2 0	1 0	0 8	-
Spermaceti - - cwt.	0 3	0 1½	0 1	-
Spinnel - - - bale	0 3	0 1½	0 1	-
Spirits - - 100 gallons	0 10	0 5	-	-
pipe	-	-	0 6	0 6
puncheon	-	-	0 4	0 4
hogshead	-	-	0 2	0 2
of salts - - bottle	0 2	0 1	0 1	0 1
of turpentine - - tun	2 4	-	-	-
Sponge - - - cwt.	0 6	0 3	0 2	-
Sprats - - - 1000	-	0 0½	-	-
Spruce beer - - 32 gall.	0 5	0 3	0 2	-
Squills - - - cwt.	0 3	0 1½	0 1	-
Starch - - - ton	2 0	1 0	0 8	-
boxes (60 lbs.), each	-	-	-	0 1
boxes (30 lbs.), each	-	-	-	0 0½
British manufacture, outwards. See *Painters' Colours*.				
Stationery - - - package	0 4	0 2	-	0 3
Steel - - - ton	1 6	0 9	0 6	0 6
Straw bonnets. See *Haberdashery*.				
Straw and straw plait - package	0 6	0 3	0 2	0 2
Sturgeon - - - —	0 1	0 0½	0 0½	0 0½
Succades and sweetmeats - cwt.	1 0	0 6	0 4	-
Succory - - - —	0 1	0 0½	-	-
Sugar - - - ton	2 0	1 0	0 8	-

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
	s. d.	s. d.	s. d.	s. d.
Sugar, refined - hogshead	-	-	-	0 5
tierce	-	-	-	0 3
barrel	-	-	-	0 1½
puncheon	-	-	-	0 4
candy - - - cwt.	0 2	0 1	0 1	-
Sulphur vivium - - ton	1 6	0 9	0 6	0 6
Talc - - - cwt.	0 3	0 1½	0 1	-
Tallow - - - ton	2 0	1 0	0 8	-
Tamarinds - - - cwt.	0 3	0 1½	0 1	-
Tanners' waste - - ton	0 4	0 2	-	-
Tapes - - - package	0 6	0 3	-	-
British manufacture, outwards. See *Linens*.				
Tapioca - - - cwt.	0 3	0 1½	0 1	-
Tar - - - barrel	0 1½	-	0 0½	-
coal - last of 12 barrels	-	-	-	0 8
water - - - barrel	0 2	0 1	0 1	0 1
Tarras - - - bushel	0 0½	0 0½	-	-
Tea - - - 100 lbs.	0 3	0 1½	0 1	-
Teazles - - - 1000	0 0½	-	-	-
Terrapins - - - barrel	0 2	-	-	-
Terra Japonica - - ton	1 6	0 9	0 6	-
senna - - - —	2 0	1 0	0 8	-
umbra - - - —	2 0	1 0	-	-
Tessera - - - —	1 0	0 6	-	-
Tincal - - - cwt.	0 3	0 1½	0 1	-
Thread, linen - - —	0 4	0 2	-	-
British manufacture, outwards. See *Cottons*.				
Thrumbs - - - bag	0 3	0 1½	0 1	0 1
Tin, of all kinds - - ton	2 0	1 0	0 8	-
British manufacture, outwards. See *Copper*.				
plates - - - box	-	-	-	0 0½
Tobacco pipes - - —	-	0 1	-	0 1
½ box	-	-	-	0 0½
¼ box	-	-	-	0 0½
Tobacco and stalks - cwt.	0 1	0 0½	0 0½	0 0½
Tongues - - - package	0 1	0 0½	0 0½	0 0½
Tonquin beans - - —	0 3	-	-	-
Tortoise-shell - - cwt.	0 6	0 3	0 2	-
Tow - - - ton	1 0	0 6	0 4	0 4
Toys - - - package	0 6	0 3	0 3	0 3
Treenails - - - 1200	0 6	0 3	0 2	-
Trees, loose, or in pots, or tubs only - - each	0 1	-	-	-
Tripe. See *Beef and Pork*.				
Trucks - - - —	0 4	0 2	0 2	0 2
Truffles - - - cwt.	1 0	0 6	0 4	-
Turmeric - - - —	0 1	0 0½	0 0½	-
Turf - - - ton	-	0 3	-	-
Turnips - - - —	-	0 3	-	0 3
Turpentine - - —	1 6	0 9	0 6	-
Twine - - - cwt.	0 2	0 1	-	-
British manufacture, outwards. See *Cottons*.				
Twist, cotton or yarn - cwt.	0 4	0 2	-	-
British manufacture, outwards. See *Cottons*.				
Types - - - box	0 4	0 2	0 2	0 2
Umbrellas - - - package	-	0 6	-	-
Valerian - - - cwt.	0 2	0 1	0 1	-
Valonia - - - ton	1 6	0 9	0 6	-
Vencloes - - - cwt.	1 0	0 6	0 4	-
Varnish - - - ton	1 6	0 9	0 6	-
Vegetable extract, for tanning leather - - cwt.	0 1	0 0½	-	-
Vegetable substance for tanning leather - - - ton	2 0	1 0	-	-
Venice turpentine - - cwt.	0 3	0 1½	0 1	-
Verdigris - - - ton	2 0	1 0	0 8	-
Vermicelli - - - cwt.	0 6	0 3	0 2	-
Vermillion - - - —	0 6	0 3	0 2	-
Vinegar and verjuice - tun	2 4	1 2	0 9	-
pipe	-	-	-	0 6
cask	-	-	-	0 4
hogshead	-	-	-	0 2
½ hogshead	-	-	-	0 1
Vitriol, white - - - tun	2 0	1 0	0 8	-
oil of - - - —	2 6	1 3	0 10	-
Waste, braziers' - - ton	2 0	1 0	0 8	0 8
buttonmakers' - - —	1 0	0 6	0 4	0 4
furriers' - - —	0 4	0 2	0 2	0 2
soapers', and all other manure except lime - - —	0 2	0 1	-	0 1
tanners' - - —	-	0 2	-	-
vitriol - - —	-	0 2	-	-
Wearing apparel. See *Haberdashery*.				
Weld - - - ton	1 6	-	0 6	-
Whalebone fins - - cwt.	0 2	0 1	0 1	0 1
Wheelbarrows - - each	0 4	0 2	0 2	0 2
Whetstones - - box	0 1	0 0½	-	-
cask	0 1	0 0½	-	-
Whips - - - package	1 0	0 6	0 4	0 4
Whipsticks - - bundle	0 1	0 0½	0 0½	0 0½
Whiting - - - ton	1 0	0 6	0 4	-
outwards, in packages. See *Painters' Colours*.				
Windowframe - case or package	-	0 6	-	0 3
Wine - - - tun	2 4	1 2	0 9	-
bottled - - - barrel	-	-	0 1½	0 1½
6-dozen case, each	-	-	-	0 2
3 dozen case —	-	-	-	0 1
cask	-	-	0 4	0 4
hogshead	-	-	0 5	0 5
puncheon	-	-	0 4	0 4

Articles.		Inwards. Foreign.	Inwards. Coastwise.	Outwards. Foreign Goods.	Outwards. British or Irish Goods.
		s. d.	s. d.	s. d.	s. d.
Wine, bottled	tierce	- -	- -	0 3	0 3
Wood, viz. anchor stocks	each	0 3	0 1½	0 1	0 1
axe handles	120	0 3	0 1[illegible]	1	0 1
battens, viz. 6 ft. to 20 ft. long	120	1 0	0 6	0 4	
above 21 ft. long	—	1 6	0 9	0 4½	
batten ends	—	0 5	0 2½	0 2	
beech poles	load	1 0	0 6	0 4	
boards, viz. beech, birch, pine, and poplar	120	2 0	1 0	0 8	
clap	—	1 0	0 6	0 4	
oak, above 15 ft.	—	3 0	1 6	1 0	
under 15 ft.	—	2 0	1 0	0 8	
pipe. See *Staves*.					
wainscot, above 15 ft.	—	3 0	1 6	1 0	
under 15 ft.	—	2 0	1 0	0 8	
coal pit props	load	- -	0 6		
crate and cropwood	—	- -	0 3		
deals, viz. under 21 ft.	120	2 0	1 0	0 8	
exceeding 21 ft.	—	3 0	1 6	1 0	
deal ends	—	1 0	0 6	0 4	
fir, quarter, or balks, viz.: —					
under 8 in. square	—	2 0	1 0	0 8	
8 in. sq. and above	load	0 9	0 4½	0 3	
fire wood	fathom	0 4	0 2		
lathwood	—	0 6	0 3	0 2	
masts, viz. 6 in. and under 8 in.	each	0 3	0 1½	0 1	
8 in. and under 12 in.	—	0 6	0 3	0 2	
12 in. and upwards. See *Fir Timber*.					
oak knees, viz. under 8 inches square	120	2 6	1 3	0 10	
8 inches square and upwards	load	1 0	0 6	0 4	
oar rafters and oars	120	1 0	0 6	0 4	
old wood	load	0 6	0 3	0 2	
planks, viz. beech, birch, oak and poplar	120	2 6			
pine	—	2 0	1 0	0 8	
spars, viz. under 22 ft. long	—	1 0	0 6	0 4	
22 ft. long and upwards	—	2 0	1 0	0 8	
spruce knees, viz. under 8 in.	120	2 0	1 0	0 8	
8 inches and upwards	load	0 9	0 4½	0 3	
staves, above 1½ in. thick, not exceeding 36 in. long	120	0 3	0 1½	0 1	
exceeding 36 in., and under 60 in.	120	0 6	0 3	0 2	
exceeding 60 in. long	—	0 9	0 4½	0 3	
not above 1¼ in. thick, not exceeding 36 in. long	120	0 1	0 0½	0 0½	
exceeding 36 in., and under 60 in.	120	0 2	0 1	0 1	
exceeding 60 in. long	—	0 3	0 1½	0 1	
timber, viz. fir	load	0 9	0 4½	0 3	
teak or oak	—	1 0	0 6	0 4	
pine	—	0 9	0 4½	0 3	
all other timber	—	0 9	0 4½	0 3	
ufers, viz. under 24 ft. long	120	2 0	1 0	0 8	
24 ft. long or upwards	—	3 0	1 6	1 0	
wainscot logs	load	1 6	0 9	0 6	
wedges	1200	1 6	0 9	0 6	0 3
Wood—*continued*.					
wheel spokes and fellies	1200	1 6	0 9	0 6	0 3
barwood	ton	1 6	0 9	0 6	
beech and birch planks	120	2 6	1 3		
boxwood	ton	1 6	0 9	0 6	
Brazil and Brazilletto	—	2 0	1 0	0 8	
camwood	—	2 0	1 0	0 8	
cedar wood	—	1 6	0 9	0 6	
ebony	—	1 6	0 9	0 6	
fustic	—	1 6	0 9	0 6	
Guinea wood	—	1 6	0 9	0 6	
gumwood planks	load	0 9	0 4½		
	120	2 0	1 0		
gunstocks	—	0 3	0 1½		
handspikes	—	0 3	0 1½		
hulls of vessels, *ll.* per cent. on value.					
lignum vitæ	ton	1 6	0 9	0 6	
logwood and mahogany	—	1 6	0 9	0 6	
Nicaragua wood	—	2 0	1 0	0 8	
rose wood	—	2 0	1 0	0 8	
red and red sandars	—	1 6	0 9	0 6	
sapan	—	2 0	1 0	0 8	
Wood	—	3 0	1 6	1 0	
Wool	—	2 0	1 0	0 8	
Woollens	package	1 0	0 6	0 3	0 3
	piece	0 1	0 0½		
Wrappers	package	- -	0 3		
Yams	—	0 3	0 1	0 1	
Yarn, bay	cwt.	0 2	0 1	0 1	
cotton or twist	—	0 4	0 2		
grogram	—	0 2	0 2		
linen	—	0 4	0 2		
mohair	—	0 2	0 1	0 1	
worsted	—	0 2	0 1		
Yeast	package	1 0	0 6	0 2	0 2
Zaffres, a species of cobalt of inferior value	cwt.	0 4	0 2	2 2	

Articles (exported in packages) which are not before particularised and not otherwise rated, viz.: —

Articles.	Foreign.	British.
	s. d.	s. d.
Hogshead	0 5	0 5
Puncheon	0 4	0 4
Cask not otherwise described	0 4	0 4
Tierce	0 3	0 3
Trunk, chest, or bale	0 3	0 3
Box	0 3	0 3
Crate	0 2	0 2
Barrel and half-barrel	0 1½	0 1½
Firkin and keg	0 1	0 1
Hamper and half-hamper	0 1	0 1
Basket, bag, or bundle	0 1	0 1

Eightpence per ton on hams refers only to British or foreign, shipped in bulk: when packed, to pay on the packages only.

Pilots' Act.

At a meeting of the commissioners, held within the Town-hall, on Tuesday, the 21st of November, 1826, under the authority of an act passed in the fifth year of the reign of George IV. intitled, "An tAct for the better Regulation and Encouragement of Pilots for the conducting of Ships and Vessels into and out of the Port of Liverpool," the following rates of pilotage were fixed upon: —

For British Vessels trading to Foreign Parts.

INWARD.

	Per foot. s. d.
From the length of the west end of Great Ormshead, bearing S. by W., or before Penman Bachan be shut in with Great Ormshead, at the rate of	9 0
From the eastward of Great Ormshead, as above	8 0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the road of Hoylake only, or from the buoy of the Fair Way in Formby Channel	4 0

OUTWARD.

Whether through the Rock or Formby Channel - 4 0

No British vessel, trading to foreign parts, inward or outward-bound, is to refuse a pilot; but if such vessel have passed the Brazil Buoy in the Rock Channel or the Middle Patch Buoy in Formby Channel, or if a pilot boat fall in with a vessel in the Narrows of the Channels in stormy weather, that she cannot board her without imminent danger, the pilot shall then lead the way, and in either case, be entitled to such pilotage as shall be awarded by the committee at their next meeting.

For Alien Ships and Vessels.

	Per foot. s. d.
From the length of Great Ormshead, as above, at the rate of	12 0
From the eastward of Great Ormshead, as above	11 0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the road of Hoylake only, or from the buoy of the Fair Way in Formby Channel	5 6

OUTWARD.

Whether through the Rock or Formby Channel - 7 0

An alien vessel inward or outward-bound, is not to refuse a pilot as circumstances are described for English foreign vessels as above.

For Coasting Vessels, and those trading to and from Ireland, the Islands of Faro or Ferro, Jersey, Guernsey, Alderney, Sark, and Man.

INWARD.

	s. d.
From the length of Great Ormshead, as above, at the rate of	4 6
From the eastward of Great Ormshead, as above	4 0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the road of Hoylake only, or from the buoy of the Fair Way in Formby Channel	2 0

OUTWARD.

Whether through the Rock or Formby Channel - 2 0

No coasting vessel to pay for less than eight feet of water, nor any vessel to pay for odd inches, under half a foot. No coasting vessel, inward or outward-bound, of the burden of 100 tons or upwards, (unless she be in ballast,) is to refuse a pilot, as the master or owner, &c. must pay the full pilotage if one be offered. No vessel to be deemed a coaster unless she has been six months in that trade.

EXTRA PAY.

	Per day. £ s. d.
In the river, exclusive of the day coming from sea, the day of docking, and the day of going to sea, for the pilot's attendance, if required by the master, owner, &c.	0 5 0
And if the attendance of a pilot boat be requested, as above	2 2 0

The pilotage from sea into Hoylake is one-half inward, and from Hoylake out to sea one-half outwards.

Notwithstanding the pilot or the boat be not employed a whole day, to be paid for a day.

So far includes all the rates and prices for pilotage and extra pay.

The pilots' committee beg leave to recommend to the merchants of Liverpool, &c. that when a pilot conducts a ship or vessel into port to their satisfaction, to employ the same pilot to take the vessel out again; and if he should be absent on duty, that one belonging to the same boat be employed.

PILOTS' RULES AND REGULATIONS.

Any person acting as a pilot in the port of Liverpool, without a licence, to forfeit 20*l.*

Pilots refusing to conduct ships, or assist ships in distress, to forfeit 10*l.*, and lose their licence.

Masters in coasting trade, in ballast, or under the burden of 100 tons, may pilot their own vessels.

Masters of vessels forcibly taking pilots beyond the limits of the port, shall forfeit not exceeding 20*l.*, nor less than 5*l.*

Pilots misbehaving, to have their licences recalled; and if they act afterwards, to be liable to the same penalties as if they were not pilots.

Vessels liable to pay pilotage coming into port, to display a signal for a pilot, under a penalty of 5*l.*

Reward for pilots assisting ships in distress, to be settled by the committee.

Compensation to be made to pilots for taking vessels out of the port, which have been forced back, to be fixed by the committee.

Ships forced back after parting with the pilot, and piloted out again from Hoylake, to pay one-half the prices.

Every master to give the pilot a true account of the draught of water of his ship, and pilot authorised to admeasure.

Pilots to obey the orders of the harbour and dock masters.

No vessel to be brought round the Rock, or into the docks, in the night-time.

The first pilot boat on turn at the westward, to carry a green and white light horizontally, and the second, third, fourth, and fifth, a green light only.

At a meeting of the pilot committee held on the 3d of September, 1835, it was ordered—

That henceforth no pilot be allowed to lay a vessel aground without a written order from either the master or owner: penalty 5*l.*

At a meeting of the pilot committee held 3d November, 1836, it was ordered—

That in future every master of the pilot boats sending a pilot branched only for 12 or 14½ feet to take charge of vessels drawing more than 12 or 14½ feet, to be fined in a sum not exceeding 5*l.*

III. BRISTOL DOCKS, SHIPPING, ETC.

The great rise of tides in the Bristol Channel, and in the river Avon, on which Bristol is situated, in lat. 51° 27′ 6″ N. long. 2° 35′ 28″ W., enables the largest ships to come up to the town; but to obviate the risks and damage to which they were formerly exposed by grounding at ebb tide, a floating harbour equivalent to a dock, was commenced in 1804, by changing the channel of the river. It extends about 3 miles, from the entrance at Rownham, to the dam above Bristol Bridge, occupying the old bed of the Avon, and the bed of that branch of the Frome that lies between St. Augustine and St. Stephen's quays. The present extent of quay frontage is 6000 feet, but the limits admit of any further extension that an increased trade might require. The act authorising the formation of the harbour (43 Geo. 3. c. 140.) enacts that there shall be 21 feet water in a sufficient number of berths, but the mud being suffered to accumulate so as considerably to reduce this depth occasioned much complaint. This defect has now, however, been in a great degree obviated. A new channel was formed for the river, and the harbour finished in 1809, at an expense of 594,000*l.* There are two basins for the temporary accommodation of vessels entering or leaving; one at Rownham for large ships, the other below the iron bridge at Bedminster, for coasters. There are also a floating and a dry dock, founded by the Merchant Venturers in 1769: to the former of these timber ships are compelled to resort, if they do not discharge at some private wharf. Further down the river are several private docks, where ship building to some extent is carried on. Vessels frequently load and discharge cargoes in Kingroad, at the mouth of the river, by means of lighters; the Great Western steam ship is obliged to do this, the entrance to the floating harbour not being wide enough to admit her, but the harbour dues are payable whether ships enter it or not. The tide in the Avon sets with great rapidity, especially between the high precipitous rocks of Clifton and Leigh, which seem rent asunder to admit its passage: in Kingroad its rise at springs is between 48 and 49 feet, at neaps above 23 feet: at the gates of the floating harbour its rise is from 4 to 5 feet less than at the tide gauge in Kingroad.

Bristol early possessed, and continues to enjoy, a large share of the trade with the West Indies; and among her foreign imports the most important are those of sugar, molasses, rum, coffee, tea, and cocoa; the next most important are those of tobacco, timber, wine, brandy, tallow, fruits, wool, hemp, dye stuffs, oil, saltpetre, hides, &c. The exports consist principally of the produce of the various manufactures of the city, with salt, coals, and culm, in part the produce of the neighbourhood; and cotton, linen, and woollen goods. In 1842 the declared value of exports amounted to 259,531*l.* 17*s.* 6*d.* (see Table), 244 ships, of 37,183 tons burden; having in the same year entered inwards from foreign parts, and 122 ships, of 24,022 tons burden, having cleared outwards for ditto; the customs duties being then also 965,255*l.* Bristol carries on an extensive and growing trade with Ireland, from which she imports corn, butter, bacon, potatoes, cattle, horses, sheep, pigs, salmon, &c. She sends in return, tea, raw and refined sugar, cheese, wrought iron, tin plates, copper, glass, woollen, and leather. In 1842, there arrived from Ireland, 452 vessels, of 79,060 tons, and cleared for it, 308 vessels of 68,871 tons. The imports, coastwise, consist mostly of iron, tin, coal, salt, agricultural produce, and foreign produce, brought from other ports under bond. The exports are chiefly foreign and colonial produce (especially groceries, spirits, and wines), and the various manufactures of the city. There belonged to the port in 1842, 277 sailing vessels, of the burden of 40,325 tons, but of these 94 were small vessels of about 30 tons each. During the same year there belonged to the port 27 steamers, of the aggregate burden of 3,174 tons. A steam communication for the conveyance of goods and passengers to Ireland was established in 1826, and has led to a great increase of the trade with that part of the empire. Bristol has also had the honour of being the first port in the empire to establish a regular communication by steam with the United States. The first voyage by the Great Western steam-ship was performed in 1838. The Great Britain, now (1843) building, is the largest steam-ship in the world. Her hull is of iron, her burden upwards of 3000 tons, and her engines of 1000 horse power.

The decline in the comparative importance of Bristol, as a trading emporium, has been chiefly manifested by contrasting its progress with that of Liverpool. The average customs duties of Bristol for the seven years ending with 1757, amounted to 155,189*l.*; those of Liverpool for the same period, to 51,136*l.* In 1784, the customs of Bristol had risen to 334,909*l.*, a great increase: but those of Liverpool had advanced, in the same year, to 648,684*l.* One of the chief causes that have been commonly assigned for this comparative slowness of progress is the excess of local taxation; the town and harbour dues having been much heavier than those of any other of the larger ports. The municipal report of 1835 gives the proportion of local taxation charged on 23 principal articles, imported in 1831, in Bristol and three other ports; as—Bristol, 1*l.*; London, 10*s.* 4*d.*; Liverpool, 11*s.* 5*d.*; Hull, 7*s.* 3*d.*; Gloucester, 6*s.* 2*d.* Since 1835, however, the rates have been considerably reduced, and the mayor's dues wholly abolished. In 1834, the

entire local taxation (including the dock rates, 23,800*l.*) was estimated at 91,000*l.* It is now probably about 80,000*l.*

But, notwithstanding this greater weight of local taxation must have operated seriously to the injury of Bristol, too much stress has been laid upon it in accounting for the slower progress of the trade of the port. The real causes of the rapid rise of Liverpool, Glasgow, and some other sea-port towns is to be found, not in the lowness of their port charges, or in any peculiar advantages they individually enjoy, but in their having become the ports of the great manufacturing districts. The extraordinary growth of Liverpool is a consequence of the still more extraordinary growth of the cotton manufacture. Her rise has been dependent upon, and consequent to, the rise of Manchester, Bolton, Blackburn, &c.

The charges on ships entering Bristol are as follow: —

For every vessel on entering into the port of Bristol, except barges or other vessels passing or going to or from the Bath River Navigation, or Kennet and Avon Canal, or re-shipping or discharging their cargoes to be again laden, and pass or go up the said navigation or canal, but not discharging any part of their cargoes at the quays of Bristol for sale, the several rates or duties, according to the register tonnage of such vessels, following, viz.: —

	℔ ton. £	s.	d.
First Class. — For every vessel trading from Africa, Honduras, Surinam and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, and the Southern Whale Fishery -	0	3	0
Second Class. — For every vessel trading from the British Colonies, Portugal, Prussia, Russia, Spain without the Straits, and Sweden - - -	0	2	0
Third Class. — For every vessel trading from Flanders, France without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand -	0	1	0
Fourth Class. — For every vessel trading from Ireland, the Isle of Man, and Scotland - - -	0	0	8
Fifth Class. — For every vessel employed as a coaster, except as aforesaid, not including vessels from Cardiff, Newport, and other ports to the eastward of the Holmes, at each entering into the said port -	0	0	6
For vessels from Cardiff, Newport, and other ports to the eastward of the Holmes (except as aforesaid), being market boats or vessels, having one third part at least of the lading consisting of coal, scruff, tin, iron, tin plates, grain, copper, bricks, stones, coal, tar, slate, bark, timber, or wood, and not exceeding 75 tons burden, each voyage - - -	0	5	0
——— if exceeding 75 tons burden, each voyage -	0	7	6
For all other vessels from Cardiff, Newport, and other ports to the eastward of the Holmes (except as aforesaid), if under 40 tons burden, each voyage -	0	7	6
——— if of 40 tons and under 75 tons burden, each voyage - - -	0	12	6
——— if 75 tons and under 100 tons burden, each -	0	16	
——— if 100 tons burden or upwards, each voyage	1	1	

The following is an estimate of the various expenses incurred by a West India ship of 500 tons, entering and discharging at Bristol: —

Inwards. — Anchorage, moorage, and lights about 6*d.* ℔ ton. — Dock dues 3*s.* ℔ do. — Pilotage 15*l.* to 25*l.* — Warner, 1*l.* 1*s.* — Mayor and quay wardens' fees, 2*l.* 5*s.* — Cranage, about 30*l.* — Labour discharging, 30*l.* to 40*l.* — Coopers' charges, from 50*l.* to 100*l.* The two last items depend greatly on the *condition* the cargo is in.

Outwards. — Lights, about 4*d.* ℔ ton. — Pilotage, 15*l.* to 20*l.*

Produce of the Dock Duties on Tonnage and Goods at Bristol, since 1835.

	Tonnage Rates. £	s.	d.	Rates on Goods. £	s.	d.	£	s.	d.
1835	14,478	18	8	7,452	18	6	21,931	17	2
1836	14,826	16	8	6,878	10	11	21,705	7	7
1837	15,328	10	8	7,917	9	8	23,246	0	4
1838	14,906	17	8	7,440	2	10	22,347	0	6
1839	17,999	7	2	7,536	9	4	25,535	16	6
1840	18,415	19	0	7,697	7	9	26,113	6	9
1841	15,857	18	8	6,242	11	11	22,100	10	7
1842	16,291	17	0	6,330	14	6	22,622	11	6

Account of the Number of Ships and their Tonnage, distinguishing between British and Foreign, which have entered inwards at Bristol, since 1836 (exclusive of coasters).

	British.		Foreign.		Total.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
1836	299	56,082	50	9,333	349	65,415
1837	351	71,060	35	4,897	386	75,957
1838	325	63,587	41	6,034	366	69,621
1839	396	79,858	116	12,982	512	92,840
1840	428	90,969	78	13,779	506	104,748
1841	329	66,259	51	8,135	380	74,394
1842	356	63,227	46	8,893	382	72,120

Account of the Exports from the Port of Bristol, of the principal Articles of British and Irish Produce and Manufacture.

	£	s.	d.
1836 valued at -	- 267,803	19	4
1837 - - -	- 299,687	1	5
1838 - - -	- 339,748	12	10
1839 - - -	- 417,100	0	0
1840 - - -	- 329,101	0	0
1841 - - -	- 366,488	6	0
1842 - - -	- 259,531	17	6

An Account of the Duties of Customs at the Port of Bristol, since 1836.

	Duties inwards.			Duties outwards.			Total Receipts.		
1836	1,111,316	3	1	1,466	5	11	1,112,812	9	0
1837	1,185,109	13	6	1,702	10	6	1,151,812	4	
1838	1,167,606	11	1	1,886	2	4	1,169,572	13	
1839	1,087,071	0	0	2,404	0	0	1,089,475	0	
1840	1,025,413	0	0	1,747	0	0	1,027,160	0	0
1841	1,044,893	0	0	1,907	0	0	1,046,800	0	0
1842	964,494	0	0	761	0	0	965,255	0	0

Value of the Imports from Ireland into Bristol in the undermentioned Years, estimated from Official Documents by Robert Bruce, Esq.

	1839.		1841.	
	£		£	
Woollens, cottons, and linen -	110,620	96,310	136,130	47,990
Grain, flour, potatoes, &c. -	108,873	129,685	91,100	73,980
Meat, butter, poultry, eggs, &c.	131,467	181,042	130,800	136,560
Horses, cows, sheep, and pigs -	685,625	434,033	383,800	424,350
Porter, wine, and spirits -	21,717	50,743	42,100	42,080
Merchandise feathers, &c. -	30,278	23,842	2,250	2,600
	1,088,680	915,655	786,180	727,560

Some of these must be considered as merely approximate values, but in most cases it is believed the amounts are rather *under* than *over* stated.

Previously to the year 1752 there was no pilotage in the Bristol Channel, the only charge of the kind being from Kingroad (at the mouth of the River Avon) to the quay; but in August, 1752, the Society of Merchant Venturers resolved that, owing to the unskilfulness of the Combe pilots, and the accidents frequently occurring to vessels bound to Bristol, a gratuity ought to be given, to encourage pilots of this port to meet vessels coming from sea, as far to the westward as possible. Several merchants signed an agreement, authorising the payment of the charges settled by the society; but the taking a pilot on board in the channel, remained perfectly optional with the masters of vessels until 1807, when the municipal corporation saw fit to include in the wharfage act certain compulsory provisions, which made it imperative on all vessels sailing in the Bristol Channel (except coasters and Irish traders) to take the first pilot on board who came alongside; and the master was to surrender the charge of the vessel into the hands of the pilot so offering himself. By the same act the regulation and licensing of pilots is confided solely to the corporation, who also assumed the power of regulating the sums which pilots shall charge for their services; but these powers the corporation has delegated to the merchant venturers, who now exercise them.

IV. Hull Docks, Shipping, etc.

There are three considerable docks in Hull; occupying, inclusive of their wharfs, quays, &c., an area of above 28 acres. The first of these docks was constructed in 1775, and the last in 1829. An act was passed last session of parliament (1843) for constructing a new dock to the east of the town. The old harbour, in the bed of the river Hull, which passes through the centre of the town, affords considerable accommodation for shipping; it is in contemplation to throw gates across its mouth, which will make it equivalent to another dock. Hull is the next port in the empire, after Bristol, or perhaps

Liverpool; for, although the customs duty collected in Hull be inferior to that of Bristol, it having amounted, in 1841, to only 667,241*l.* nett, she has a larger amount of shipping. In 1842, there belonged to the port 305 ships of 50 tons and upwards, having an aggregate burden of 65,637 tons, with 155 vessels of less than 50 tons; making a total of 460 ships and 71,637 tons, exclusive of 22 steamers, of the burden of 2,914 tons.

The commerce of Hull depends principally on her advantageous situation. She is the principal emporium of the extensive and fertile counties on the æstuary of the Humber, and of those traversed by the numerous and important rivers, including the Trent, Don, Ouse, &c., that have their embouchure in it. The natural facilities for internal communication thus enjoyed by Hull, have been greatly extended by artificial means. She is now united, partly by rivers and partly by canals, with Sheffield, Leeds, Manchester, Liverpool, &c.; so that she has become not merely the principal port for the W. Riding of Yorkshire, but also for a considerable portion of the trade carried on between Lancashire and the northern parts of the Continent. The great articles of export are cotton stuffs and twist, woollen goods, hardware, and earthenware, &c. The principal articles of import are wool, bones, timber, hemp and flax, corn, and seeds, madder, bark, turpentine, skins, &c. The rise of Goole has not been nearly so injurious to the trade of Hull as might have been supposed: and though she may, perhaps, sustain some injury from the privilege of bonding having been conferred on Gainsborough, her superior facilities for trade and navigation will always ensure for her a decided superiority over the other ports on the Humber and its affluents. Hull used to be very largely engaged in the N. whale fishery; but here, as every where else, that branch of industry has dwindled to almost nothing, only 2 vessels having left the port for the fishery in 1842. It is said, however, by those best acquainted with the town, that it has gained rather than lost by this decline. The risk and uncertainty of the whale-fishery made it little better than a gambling speculation, and tended to diffuse habits among the ship-owners and others connected with the port, that were not very consistent with the sober and steady exercise of industry. A regular intercourse is kept up, by steam packets, between Hull and London, and Hull and several of the Continental ports.

Harbour and Dock Dues.

	s.	d.
Vessels coming to or going between the port of Kingston upon Hull and any port to the N. of Yarmouth, in Norfolk, or any port to the southward of Holy Island, per ton	0	2
Vessels coming to or going between the port of Kingston-upon-Hull and any port between the N. Foreland and Shetland, on the east side of England, except as above	0	3
Vessels trading between the port of Kingston-upon-Hull and any other port in Great Britain, not before described	0	6
Vessels trading between the port of Kingston-upon-Hull and any port in the Baltic Seas, and all other ports above the Sound	1	3
Vessels trading between the port of Kingston upon-Hull and any port in Denmark, Sweden, or Norway below Elsinore, or any port in Germany, Holland, Flanders, France to the eastward of Ushant, Ireland, the Islands of Guernsey and Jersey	0	10
Vessels trading between the port of Kingston-upon-Hull and any island or port of Europe to the westward of Ushant, without the Straits of Gibraltar	1	3
Vessels trading between the port of Kingston-upon-Hull and every port in the W. Indies, N. or S. America, Africa, Greenland, or any place to the E. of the North Cape of Norway, all places within the Straits of Gibraltar, and all islands and places in the ocean to the S. of Cape St. Vincent, not herein-before mentioned	1	9
Vessels coming to or going (with merchandise) from any of the above-named ports, pay double the rates, tonnage, or duties, above mentioned, unless the said vessels belong to British owners.		
Vessels sailing coastwise or otherwise, and coming into the said haven in ballast to be laid up (coasting duty included)	0	6

The same rate of charges is made on vessels using the old harbour or roads.

The above rates are vested in the Dock Company, and are paid at the time of such vessel's entry inwards, or clearance or discharge outwards; or, in case any vessel shall not enter as aforesaid, then at any time before such vessel shall proceed from the port, at the Custom-house; so as no vessel shall be subject or liable to the payment of the rates or duties more than once for the same voyage, both out and home, notwithstanding such vessel may go out and return with a cargo.

Vessels forced into the port by the enemy, or by receiving damage at sea, or otherwise, and shall discharge in order to repair such damage, and reload the goods so discharged, are exempted from the above rates and duties, unless they make use of the dock or basin.

Vessels which come and go coastwise from any port in Great Britain, to or from any place up the rivers Trent or Ouse, within the limits of the port of Hull, to or from any other place up the said rivers Trent or Ouse, or from any other river which falls into the said rivers, or which shall trade between any such port in Great Britain and any such place as aforesaid within or up the said rivers, are also exempted from the above rates and duties, and may come into or go out of the said basin or dock, or any part of the harbour called Hull haven; or shall use the basin or dock, or quays within the harbour; or shall unload or put on shore, or load or take on board, any goods, wares, or merchandise, or any part of the cargo of any vessel, within any part of the river Humber.

N.B.—All ships coming to the port have to pay dock dues whether they make use of the docks or not. Goods inwards pay no dock dues unless landed upon quays or wharfs belonging to the Company. Goods outwards pay no dock dues.

Dues payable to the Corporation of Hull.

On Vessels entering inwards and outwards.

Anchorage. — Alien vessels under 100 tons burden, 1*s.* 6*d.*; 100 and under 200 tons, 2*s.*; 200 and upwards, 3*s.*

Jettage. — Under 100 tons, 13*s.* 6*d.*; if loads out more, 3*s.* 6*d.*; 100 and under 200 tons, 17*s.*; if loads out more, 5*s.*; 200 tons and upwards, 1*l.*; if loads out more, 7*s.*

Boulage. — For each pound sterling of the freight inwards, 2*d.*; and among the officers, per ship, 3*s.*

Ballast. — For each ton taken outwards, 2*d.*

			Anchorage.		Jettage. In.		Jettage. Out.	
			s.	d.	s.	d.	s.	d.
British vessels under	45	tons burden	1		1	6	1	0
—	40 and not	45	—		2	0	1	0
		50	1	6	2	0	1	6
—	50	— 100	1	6	2	6	2	6
—	100	— 150	2	0	3	6	3	6
—	150	— 200	2	0	4	6	4	0
—	200	— 250	2	6	5	0	5	0
—	250	— 300	2	6	6	0	6	0
—	300 and upwards		2	6	6	0	6	6

Freemen are exempt from anchorage, but freemen, as well as non-freemen, pay jettage. The charge for jettage is not made unless with goods landed at or taken in at Hull, or within the harbour.

British ships pay no hostage, and nothing for ballast.

Buoyage. — British vessels under 20 tons, 2*s.*; 20 tons and under 30, 2*s.* 6*d.*; and 6*d.* additional for every 10 tons. Foreign vessels under 65 tons, 11*s.*; 65 tons and under 135, 14*s.*; 135 tons and under 170, 17*s.*; 170 tons and under 180, 1*l.*; and 1*s.* additional for every 10 tons.

Ballast. — Sand, 1*s.* 4*d.* per ton; but vessels, by going a mile or two up the river, may get chalk for rather less, which is more valuable when discharged.

Depth of Water. — The access to the docks are either from the river Humber, or from the river Hull. The lock from the Humber into the Humber dock is capable of admitting, at spring tides, vessels drawing 26½ feet; and at neap tides, from 18 to 20 feet. The lock from the old harbour into the old dock is always 6 feet short of the water at the other lock: these depths depend much on the state of the winds and other natural causes.

Rates of Pilotage at Hull.

		Per Foot.
The distance at sea where the North Ness of Dimlington bears westsouth-west, to the northward of Kilnsea North Cliff.	Hawke Roads or Grimsby Roads Whitebooth Roads The port of Kingston-upon-Hull	
The distance at sea where Kilnsea North Cliff bears west-north-west to the northward of the New Sand Buoy or the Floating Light Vessel at the entrance of the River Humber.	Hawke Roads or Grimsby Roads Whitebooth Roads The port of Kingston-upon-Hull	
The said new Sand Buoy or the Floating Light Vessel at the entrance of the River Humber, to the eastward of the point where the Spurn High Lighthouse bears north-east.	Hawke Roads or Grimsby Roads Whitebooth Roads The port of Kingston-upon-Hull	
The Spurn High Light-house bearing north-east.	Hawke Roads or Grimsby Roads Whitebooth Roads The port of Kingston-upon-Hull	
The Hawke Roads, the buoy of the Burcome or Grimsby Roads. Whitebooth Roads.	Whitebooth Roads The port of Kingston-upon-Hull	

Rates and Port Charges.

Towage.

The steam-boats are the property of private parties. Towage as may be agreed on.

Berthage.	s.	d.
Vessels drawing 13 feet water and upwards	9	0
Vessels drawing 10 feet water and upwards, and not exceeding 13 feet	7	0
Vessels drawing under 10 feet water	4	0

For detention on board Vessels performing Quarantine.

Vessels having British registers, or the owners subjects of the Queen of Great Britain	s. d. 5 0 per diem.
Vessels belonging to aliens	7 0 —

Exclusive of the day on which the vessel shall enter into Quarantine, and of the day of her release therefrom.

For Attendance on board Vessels at anchor in any of the Roadsteads of the Humber.

For every day of 24 hours' attendance - 5*s.* per diem.

Part of a day's attendance, same as for a whole day.

Vessels from foreign ports must employ the regular pilots. Vessels coastwise are under no restriction, and usually employ one of those class of persons named dusters, whose charge varies from 10*s.* to 12*s.* as may be agreed on.

WATER BAILIFF'S DUES, PAYABLE TO THE CORPORATION OF HULL, ON CERTAIN GOODS IMPORTED AND EXPORTED.

	s.	d.
Hemp, flax, tow, and cordage, each - per ton	0	8
Iron in bars - per 60 bars	0	4
Timber: — fir, plank, and oak, each - per load	0	4
Deals - per 120	1	0
Deal ends - per 120	0	6
Balks, middle	3	0
small	2	0
Ufers, double	1	0
single	0	6
Capravens	0	6
Handspikes	0	4
Staves, 60 to 72 inches	0	4
50 to 60 inches	0	3
36 to 50 —	0	1
Oars	0	6
Battens	0	4
Batten ends	0	2
Logs, wainscot	2	4
Boards, do.	0	4
paling, or outside slabs	0	2
clap	0	6
piped	3	0
Spars, cant	0	4
boom, 4 to 6 Inches	2	0
Masts, great - per load	0	4
8 to 12 inches - each	0	2
6 to 8 do.	0	
Pitch and tar, each (½*d.* per barrel, or) - per last	0	
Turpentine (½*d.* per barrel, or)	0	
Tobacco - per hhd.	0	
Corn - per qr.	0	

Exempt, if the sole property of freemen in British ships.

Account of the Quantities of the principal Articles of Foreign Produce imported into Hull in 1840, 1841 and 1842.

Goods.	1840.	1841.	1842.
Bones	22,181 tons	24,363 tons	27,866 tons
Bark, oak	5,145 —	5,953 —	7,558 —
Corn, wheat	260,567 qrs.	362,641 qrs.	247,740 qrs.
Barley	127,134 —	24,595 —	7,424 —
Oats	69,500 —	11,924 —	44,685 —
Beans	38,602 —	27,069 —	6,585 —
Peas	37,894 —	25,689 —	11,261 —
Tares	4,600 —	7,235 —	5,028 —
Cake, oil	1,696 tons	2,016 tons	7,840 tons
Linseed	6,101 —	7,053 —	5,023 —
Rape	5,642 —	4,033 —	2,907 —
Flax	352 —	450 —	283 —
Dutch and Flemish	1,453 —	4,995 —	2,767 —
Baltic	3,472 —	3,556 —	4,093 —
Hides	— —	— —	2,069 cwts.
Wet	— —	— —	4,884 —
Dry	— —	— —	6,519 —
Ox and cow, wet	— —	3,207 cwts.	294 —
dry	372 cwts.	3,005 —	8,282 —
Horse, wet	— —	520 —	1,518 —
dry	5,728 —	1,630 —	35 —
Hemp	118 tons	32 tons	36 tons
Petersburg	1,346 —	722 —	716 —
Riga	1,171 —	1,026 —	785 —
Iron bars	3,619 tons and 261,407 bars	7,235 tons and 354,226 bars	1,733 tons and 320,549 bars
Madders	1,353 tons	1,271 tons	747 tons
Oil, train	32 tons	33 tuns	51 tuns
Olive	1,561 —	677 —	559 —
Skins	— —	— —	182 cwts.
Kid and Calf, wet	4,488 cwts.	4,091 cwts.	1,512 —
dry	11,919 —	9,559 —	2,523 —
Seed, line	201,000 qrs.	126,480 qrs.	195,592 qrs.
Seed, rape	6,802 lasts	7,621 lasts	6,373 lasts
clover	2,122 tons	1,600 tons	1,768 tons
Spruce beer	465 barrels	1,172 barrels	393 barrels
Tar	764 lasts	343 lasts	366 lasts
Turpentine	16,474 barrels	20,402 barrels	16,688 barrels
Tallow	1,915 tons	730 tons	725 tons
Wool	14,551,642lbs.	15,779,154lbs.	11,564,973lbs
	775 bales	2,697 bales, and 50 bags	2,909 bales and 43 bags
Russia	466,365 lbs.	594,205 lbs.	403,357 lbs.
	73 bales	and 120 bales	and 9 bales
Yarn, raw linen	16 tons	half a ton	20 tons
Worsted	385 lbs.	2,500 lbs.	5,108 lbs. 6 ba and 3 cases
Zaffers	277 tons	200 tons	161 tons
Wood, timber, fir, Foreign	12,908 pieces	10,497 pieces	6,989 pieces
Colonial	22,006 —	11,116 —	6,707 —
Oak	2,013 —	1,138 —	788 —
Hardwood	7,351 —	5,896 —	3,238 —
Deals, foreign	505,7 cts.	540,2 cts.	269,5 cts.
Colonial	492,6 —	451,9 —	328,8 —
Deal ends, foreign	61,1 —	65,7 —	23,3 —
Colonial	49,1 —	27,8 —	26,2 —
Battens, foreign	227,0 —	189,1 —	90,5 —
Colonial	65,8 —	91,0 —	50,5 —
Lathwood, foreign	658 fath.	697 fath.	661 fath.
Colonial	561 —	588 —	214 —
Masts, foreign	877 No.	209 No.	541 No.
Colonial	721 —	26 —	1 —
Spars, foreign	16,2 cts.	13,0 cts.	92 cts.
Colonial	2 —	14½ —	1 —
Staves, foreign	132,8 —	114,8 —	69,0 —
Colonial	109,4 —	61,2 —	17,3 —
St. John's	29,2 —	27,5½ —	61 —
Wainscot logs	1,502 logs	1,100 logs	1,546 logs

Account of the Number of Vessels, with the Amount of their Tonnage, that entered Inwards at the Port of Hull in 1841, specifying the Ports from which they cleared, and the Nations to which they belonged.

Ports from which the Vessels cleared.	British. *Ships.*	British. *Tons.*	Foreign. *Ships.*	Foreign. *Tons.*
Russia, viz.: —				
North ports	207	50,896	52	14,163
Ports on the Black Sea	14	3,422		
Sweden	49	8,892	90	11,327
Norway	—	—	40	5,773
Denmark	3	310	333	22,819
Prussia	62	7,750	159	25,589
Germany, viz.: —				
Mecklenburg	1	191	26	3,046
Hanover	10	712	100	5,098
Oldenburg	—	—	46	2,305
Hanse Towns	277	55,076	82	11,227
Holland	161	20,700	122	8,699
Belgium	24	2,374	38	2,620
France	77	6,565	23	1,381
Portugal	14	1,101	1	82
Azores	15	1,035		
Spain	21	2,177	2	263
Italy, viz.: —				
Sardinian territories	1	144		
Tuscany	5	754	1	128
Naples and Sicily	8	972		
Austrian territories	5	885	7	1,578
Malta	7	865		
Ionian Islands	2	257		
Turkey	15	3,669		
Egypt	3	488		
East India Company's territories	3	1,232		
Canada	38	14,384		
New Brunswick	64	25,720		
Nova Scotia	8	2,211		
Honduras	1	279		
United States	7	2,497	7	3,001
Brazil	1	388		
Rio de la Plata	2	510		
Greenland fisheries	2	615		
Guernsey, Jersey, &c.	3	223		
Total	1,110	223,294	1,129	119,099

Nations to which the Vessels in the foregoing Account belonged.	*Ships.*	*Tons.*
United Kingdom	1,110	223,294
Russia	37	12,953
Sweden	78	9,691
Norway	68	8,938
Denmark	318	23,843
Prussia	120	23,209
Germany	288	23,714
Holland	134	9,721
Belgium	26	2,041
France	20	1,218
Italian states	3	860
United States of America	7	3,001
Total	2,239	342,393

An Account of the Greenland and Davis's Straits Whale Fishery, carried on from Hull, from 1772 to 1842, both inclusive; specifying the Number of Ships sent out, the Number lost, the Number that returned clean or without any Cargo, and the Imports of Oil and Bone.

Year.	Ships sent out.	Lost.	Clean.	Tuns of Oil, Old Measure.	Tons of Bone.	Year.	Ships sent out.	Lost.	Clean.	Tuns of Oil, Old Measure.	Tons of Bone.
1772	9	- -	-	391	19	1808	30	3	-	4,458	220
1773	9	- -	2	265	14	1809	28	1	1	4,321	210
1774	8	1	-	466	23	1810	34	- -	-	5,020	230
1775	10	3	5	68	3	1811	43	1	-	5,398	250
1776	9	- -	-	230	13	1812	49	- -	-	6,386	320
1777	9	- -	-	349	15	1813	55	- -	10	3,457	160
1778	8	- -	2	171	9	1814	58	- -	1	7,326	330
1779	4	1	-	332	7	1815	58	1	2	3,746	188
1780	4	- -	-	311	15	1816	55	- -	1	5,151	264
1781	3	- -	-	261	13	1817	68	1	2	4,711	245
1782	4	- -	-	270	11	1818	64	1	-	6,199	304
1783	4	- -	-	268	15	1819	65	4	1	5,183	254
1784	9	- -	-	379	22	1820	62	1	-	8,086	402
1785	14	- -	1	604	36	1821	61	9	1	5,888	322
1786	21	1	-	945	43	1822	40	- -	1	3,112	164
1787	30	1	2	1,085	56	1823	41	3	-	5,490	297
1788	35	- -	2	1,042	47	1824	36	- -	-	3,459	160
1789	31	2	3	853	43	1825	36	- -	4	2,838	120
1790	24	2	1	832	42	1826	32	1	-	2,195	140
1791	21	1	6	545	17	1827	30	- -	-	4,581	260
1792	20	- -	3	900	45	1828	30	1	-	5,297	316
1793	18	- -	1	845	41	1829	33	1	-	3,976	236
1794	18	1	-	710	35	1830	33	6	8	1,271	68
1795	14	- -	1	1,148	57	1831	32	- -	-	1,829	91
1796	18	1 taken	-	1,678	77	1832	30	2	-	4,503	251
1797	21	- -	-	1,741	87	1833	27	1	-	5,021	284
1798	23	- -	-	2,159	100	1834	27	1	-	2,696	146
1799	27	2	-	2,082	110	1835	23	5	-	436	26
1800	24	2	-	1,718	90	1836	15	1 beset in ice, 8 returned next year	8	145	No return.
1801	26	- -	1	2,156	100	1837	12*	- -	2	230	do.
1802	36	- -	-	2,872	140	1838	6	1	-	594	37
1803	40	- -	2	2,183	110	1839	6	- -	-	371	24
1804	43	3	-	4,817	200	1840	4	- -	2	43	3
1805	40	1 taken, 1 lost	-	5,174	250	1841	2	- -	-	52	3
1806	40	3 taken	-	3,380	170	1842	2	- -	-	46	No return.
1807	37	2 lost	-	4,316	200						

Imperial Measure.

* Including the ship beset in the ice the previous year.

V. Dundee Docks, Shipping, &c.

Dundee, on the N side of the Frith of Tay, lat. 56° 28′ N., long. 2° 57′ 30″ W., 9 miles W. from Buttanness Point (on which there are two first-class light-houses, with *fixed* lights), has increased with extraordinary rapidity since the termination of the late war, and is now become the principal seat of the British linen manufacture, and has a very extensive trade. Down to 1815, the harbour was on a humble scale, and adapted only to a very limited commerce. Only one small pier existed. But in the year referred to, an act was obtained for separating the harbour from the other branches of the burgh revenue, for constructing an entirely new harbour, on a scale commensurate with the growing importance of the place, and for investing the management in a board of commissioners. Additional acts were obtained in 1830 and 1836; and the result of the measures thus set on foot has been, that Dundee can already boast of the completion of two wet docks, King William's, of 6¼, Earl Grey's, of 5¼, and of a tide harbour, of 4¾ acres, connected with them. The breadth of the lock of the former, to which is attached a splendid graving dock, is 40 feet; and that of the latter, which is fitted to admit steamers, 55 feet. A crane, reaching 28 feet from the face of the quay wall on which it is placed, and capable of raising 30 tons, is erected at this dock, so that every facility is afforded for taking out and putting in the boilers, &c. of the largest steam vessels. There is also a Morton slip attached to the tide harbour, on which three vessels may be placed at once. The vessels are hauled up by a steam-engine of 16 horse power: a ship of 800 tons may be placed on the slip; one of the Dundee steamers, the Perth, weighing, without her boilers, 596 tons, was lately repaired on it.

A wet dock of 14½ acres is now being constructed, the lock of which will be 60 feet. The harbour plan also embraces another wet dock of 9¼ acres, and the tide harbour between these docks will be of the extent of 11 acres. The quays are wide and spacious, affording berthage for above 65 vessels; and there are extensive and convenient carpenters' and other yards for ship building. The accommodation for the building and repairing of vessels is not surpassed in any port of the kingdom.

These splendid works had cost, in May, 1839, no less than 447,248*l.* 1*s.* 6½*d.*, of which 365,150*l.* 18*s.* 0½*d.* had been expended on the works, and 82,097*l.* 3*s.* 6*d.* paid as interest of money borrowed. The amount of shore dues and rents collected up to May, 1839, was 233,675*l.* 13*s.* 6*d.*, and the sum borrowed 213,572*l.* 8*s.* The sum allowed to be borrowed on the credit of the harbour is 230,000*l.* The revenue of the harbour from Martinmas, 1764, to 15th of July, 1815, when it was put under a parliamentary commission, was only 38,696*l.* 3*s.* 4½*d.*, and during this period the sum expended in maintaining it was 9,468*l.* 10*s.* 9*d.* The shore dues in 1765 yielded 126*l.*,

1775, 140*l.* 5*s.*; 1785, 490*l.*; 1795, 965*l.*; 1805, 1,272*l.* 10*s.*; 1814, 1701*l.* 10*s.* 3*d.* Their amount in the following years is seen in the Table below.

It is essential also to bear in mind, that while the income has rapidly increased, the rates of charge have been very considerably reduced. The customs revenue in the undermentioned years has been —

Years.	Revenue.	Years.	Revenue.
1792	£6,341 17 4	1839	£92,557 18 10
1833	48,647 12 1	1840	63,346 8 9
1837	76,150 1 3	1841	48,138 1 9
1838	78,026 15 4		

N.B. — This falling off in the customs duties was occasioned by the commercial difficulties in which the town was then involved, but which, happily, have now all but disappeared.

The number and tonnage of vessels belonging to the port at different periods has been —

Years.	No. of Vessels.	Tonnage.
1832	274	32,867
1837	318	41,501
1839	325	44,882

And on the 31st day of December, 1842, there belonged to the port 340 sailing vessels, of the aggregate burden of 51,448 tons: of these 279 were of the average burden of about 173 tons, while 61 were under 50 tons. There then also belonged to the port 9 steam-packets, 3 of which, engaged in the trade with London, are very fine vessels, and are splendidly fitted up for the accommodation of passengers.

Table showing the Size and Berthage of the Docks finished and projected at Dundee.

Name of Dock.	Acres.	Berthage in Feet.	Depth of Water. Springs.	Depth of Water. Neaps.	Remarks.
			ft. in.	ft. in.	
Earl Grey's dock	5½	2,645	18 8	13 6	These tides are an average of 8 years.
King William's dock	6¼	2,555	16 2	11 0	
Victoria dock	14½	3,550	18 8	13 6	The south wall of this dock is finished, the rest partly so.
Projected dock (east)	9½	2,645	18 8	13 6	
West tide harbour	4¾	1,580	18 8	13 6	
East tide harbour	11	2,010	18 8	13 6	Considerably advanced, and when it is finished it will contain 2190 ft. berthage.
Graving dock *	270 feet in length, 70 feet wide at top of walls, 35 feet at bottom				
Patent slip *	600 feet in length, capable of taking up a ship of 800 tons, worked by an engine of 16 horse power.				
Width of entrance — K. W. D.	40 feet length of lock, 160 feet betwixt the gates.				
Ditto E. G. D.	55 do. 215 do.				
Ditto Vic. D.	60 feet, — not finished.				

* The Graving dock and Patent slip are capable of taking 3 vessels on each at one time, each vessel being 350 tons.

The docks are accommodated with three sheds, having 15,400 sq. of floor, and seven cranes.

Imports. — The staple articles are flax and hemp, from foreign countries, and coals and lime, coastwise.

Exports. — Linens and linen yarn.

There was a progressive increase of trade at this port from 1815, being the commencement of the harbour improvements, down to the depression in 1839, from which it is now (1843) recovering.

An Account of the Dundee Harbour Revenue, from the Commencement of the Act for improving the Harbour, July 4th, 1815, to May 31st, 1843.

Periods.		Shore Dues. Scale by which levied.	Collected by the Trustees.	Received under Lease.	Total Share Dues.	Miscellaneous. Rental.	Graving Dock Dues.	Patent Slip Dues.	Shed Dues.	Crane Dues.	Sundries.	Total Miscellaneous.	Total Revenue.
			£	£	£	£	£	£	£	£	£	£	£
July 1815 to July	1816	75	4,411	- -	4,411	-	-	-	-	-	-	- -	4,411
1816	1817	100	5,908	- -	5,908	140	-	-	-	-	-	140	6,048
1817 to May	1818	100	- -	5,021	5,021	85	-	-	-	-	-	85	5,106
1818	1819	100	- -	5,605	5,605	140	-	-	-	-	-	140	5,745
1819	1820	100	- -	5,505	5,505	116	66	-	-	-	-	182	5,787
1820	1821	100	- -	5,910	5,910	101	196	-	-	-	-	297	6,207
1821	1822	100	- -	5,910	5,910	163	171	-	-	-	-	334	6,244
1822	1823	87½	7,145	- -	7,145	162	347	-	-	-	13	502	7,647
1823	1824	87½	8,379	- -	8,379	215	381	-	-	-	13	609	8,988
1824	1825	75	8,478	- -	8,478	305	285	-	-	-	27	617	9,095
1825	1826	75	- -	8,055	8,055	302	324	-	-	-	468	1,094	9,149
1826	1827	75	7,841	- -	7,841	389	411	-	-	-	40	840	8,681
1827	1828	75	9,622	- -	9,622	274	387	-	-	-	17	678	10,300
1828	1829	75	10,134	- -	10,134	488	417	-	-	-	134	1,039	11,173
1829	1830	75	11,231	- -	11,231	221	414	-	-	77	108	820	12,051
1830	1831	100	10,599	- -	10,599	346	483	-	-	76	-	905	11,504
1831	1832	80	9,386	- -	9,386	689	418	-	-	62	-	1,169	10,555
1832	1833	80	9,229	- -	9,229	467	519	-	-	65	11	1,062	10,291
1833	1834	80	9,933	- -	9,933	517	370	-	-	95	18	1,000	10,933
1834	1835	80	10,935	- -	10,935	471	406	-	-	79	33	989	11,924
1835	1836	80	12,774	- -	12,774	764	444	-	-	119	317	1,644	14,418
1836	1837	100	15,597	- -	15,597	831	410	-	61	87	140	1,559	17,156
1837	1838	100	13,262	- -	13,262	1,045	390	116	118	63	266	1,998	15,260
1838	1839	100	16,004	- -	16,004	1,376	624	200	173	92	603	3,068	19,072
1839	1840	100	14,047	- -	14,047	1,100	556	242	165	82	618	2,763	16,810
1840	1841	100	15,360	- -	15,360	1,541	588	334	189	295	585	3,532	18,892
1841	1842	100	15,088	- -	15,088	1,631	564	264	183	152	330	3,124	18,212
1842	1843	100	14,062	- -	14,062	1,722	579	295	140	108	360	3,204	17,266
			239,425	36,106	275,531	15,601	9,760	1,451	1,022	1,449	4,101	33,384	308,915

Statement of Imports and Exports in the Years 1816 and 1839.

Articles.		1816.	1839.	Increase, 1839.
Imports.				
Flax and hemp	tons	3,620	32,462	28,842
Coals	—	33,212	158,249	125,037
Lime	bolls	22,128	59,377	37,249
Exports.				
Linens	pieces	144,398	717,070	572,672
Yarns	tons	none.	4,811	4,811

The export of yarn continues to increase, the quantity shipped during the year ending May, 1843, being 7,817 tons.

The number of vessels which entered the port of Dundee in 1839 was 4,305; registered tonnage, 281,992.

Statement of Tonnage Dues on Vessels entering the Harbour of Dundee.

	s.	d.
1. For all vessels navigating to the southward of the Tropic of Capricorn, per register ton	1	6
2. Between the Equator and the Tropic of Capricorn	1	3
3. Between the Tropic of Cancer and the Equator	1	0
4. To or from any port in North America, Greenland, Davis's Straits fisheries, and all within the Straits of Gibraltar	0	8
5. To or from any port to the north of Drontheim, in Norway, or from Azores, Madeira, or Teneriffe Islands	0	7
6. To or from any port between Gibraltar and Dunkirk, including Dunkirk, and from any port in the Baltic	0	5
7. To or from any port in Great Britain or Ireland, including the islands of Guernsey, Jersey, Alderney, Sark, Man, the Shetland Islands, and Orkneys	0	3
8. All vessels loaded with coals or lime only, from any port in Great Britain, &c., excepting Scotland	0	2
9. All vessels loaded with coals or lime only, from any port in Scotland	0	1½
10. All vessels employed in the River Tay, carrying goods and entering the precincts of the port or harbour of Dundee, per register ton	0	1½
11. All steam-vessels from any port in Great Britain, or places enumerated in No. 7., carrying passengers and their luggage exclusively	0	2
12. All steam vessels employed in the River Tay, carrying passengers and their luggage exclusively, and vessels trading from the harbour, or carrying passengers to any part within the precincts	0	1
13. All steam vessels carrying goods and passengers, to pay the same rates as sailing vessels.		

VI. Goole Docks, Shipping, etc.

The port of Goole, on the Ouse, a little above its junction with the Humber, about 22 miles more inland than Hull, has a considerable trade. Previously to 1820, Goole was but an insignificant hamlet. It communicates by means of canals with Liverpool, Manchester, Leeds, Wakefield, &c. Though so remote from the sea, vessels drawing 15 or 16 feet water, may, by taking advantage of the flood, reach Goole in safety. It has 2 wet docks and a basin. The first, or *ship dock*, is 800 feet long by 200 in breadth. The second, or *barge dock*, is 900 feet long by 150 in width, and is intended for the accommodation of the small craft which ply upon the canals and rivers. The warehouses at Goole are extensive and convenient; and it has been admitted to the privileges of a bonding port. There belonged to it, in 1842, 381 registered ships, of the burden of 24,281 tons, the majority of them being under 50 tons. The net customs revenue received at Goole in 1841 amounted to 59,810*l.*

VII. Leith Docks, Shipping, etc.

Leith, which may be called the port of Edinburgh, has 2 wet docks, containing more than 10 acres of water room, and capable of accommodating 150 such ships as frequent the port. There are also 3 dry docks contiguous to the wet docks.

These docks appear to have cost in all about 285,000*l.*, of which 265,000*l.* was borrowed from government. Very large sums have also been expended in the extension of the pier, now 3,000 feet in length, and in other works for the improvement of the port. The grand object of these works has been the deepening of the water in the harbour or channel leading to the docks; but after all that has been effected, the harbour is all but dry at low water, and there are only 19 feet water at the extremity of the pier at high-water spring tides, and 12 feet at neap tides. In fact, no vessel of above 700 tons burden can approach the harbour at the highest tides; and as the docks do not admit vessels of more than 400 tons, if vessels of larger burden enter the port they must ground at ebb tide. A late act provides that 125,000*l.* may be conditionally expended in further improving the harbour; but it is all but certain that the physical disadvantages under which it labours can never be successfully overcome; that Leith can never be anything better than a very indifferent tide harbour; and that the expenditure of further sums upon it would be a very questionable proceeding.

The harbour of Edinburgh should, in fact, have been constructed more to the W., at Trinity or Granton. Indeed, after much opposition on the part of Leith and Edinburgh, a bill was carried through parliament in 1837, for the construction of a low water pier at Trinity, ½ m. W. of the harbour of Leith; but various circumstances, which it is unnecessary to notice, make it pretty certain that no effort will be made to carry that measure into effect. Luckily, however, the Duke of Buccleuch has been for some years engaged in the construction of a low water pier on his estate of Granton, 1 m. W. of Leith; an undertaking of great national importance, and worthy of an individual of great wealth and public spirit. This splendid work, by far the greatest of its kind that has been attempted in Scotland, will, when completed, secure for Edinburgh all the advantages of a deep water harbour, accessible at all times. The pier, which is constructed in the most approved manner, is to project into the sea about 1700 feet, shaped like a T, with its head to the N., having harbours and landing-places on both sides. It has been partially open for about 5 years, but its business has hitherto been principally confined to the accommodation of steamers. The duke has erected, contiguous to the pier, a large edifice for a hotel, with warehouses and other buildings; and there can be little doubt that, in no very lengthened period, the principal part of the shipping business carried on at Leith will be transferred to Granton. The latter communicates, by an excellent road, with the New Town of Edinburgh.

But notwithstanding these unfavourable circumstances, the commerce of Leith, from its being the port of Edinburgh, is very considerable, and has been slowly but steadily improving. It carries on a limited trade with Australia, the E. and W. Indies, China, the Mediterranean, Canada, and the United States; but its chief foreign trade is with Holland and the N. of Europe. With regard to its domestic trade, there are three companies, who have altogether 18 vessels trading with London; and there are other companies which have vessels trading with Hull, Newcastle, Liverpool, Greenock, Glasgow, Aberdeen, Montrose, Wick, Helmsdale, Orkney, Shetland, Dundee, Stirling, &c. The communication by steam with London is twice a week during the entire year, but more vessels sail in summer than in winter. There is also a communication by steam with Newcastle and Hull twice a week; with Stirling twice a day; the opposite coast of Fife 3 times a day; and a regular communication with every important place on the E. of Scotland, from Lerwick in Shetland, and Kirkwall in Orkney, to Berwick-upon-Tweed. The steamers sail from Leith, Newhaven, the chain pier at Trinity, or Granton, but now mostly from the latter. Leith formerly sent 8 or 10 vessels to the Greenland whale fishery, but such has been the decline of the business that she no longer sends a single ship.

Account of the Vessels, with their Tonnage, that entered the Port of Leith from Foreign and Colonial Ports in the undermentioned Years.

Years.	British Vessels.	Tons.	Foreign Vessels.	Tons.	Years.	British Vessels.	Tons.	Foreign Vessels.	Tons.
1811	125	17,645	311	45,723	1839	224	39,433	253	21,426
1817	209	28,698	47	7,212	1840	294	48,524	416	38,330
1832	283	43,216	170	17,156	1841	337	51,348	588	49,892
1835	204	35,365	168	17,937	1842	269	44,541	281	23,654
1838	263	42,609	202	17,324					

Gross Amount of Customs' Dues collected at Leith during the following Years.

Years.	£	s.	d.	Years.	£	s.	d.
1836	514,974	3	5	1840	602,999	6	3
1837	525,402	19	3	1841	604,098	16	5
1838	511,970	6	8	1842	569,684	1	4
1839	573,685	13	7				

There belonged to Leith, in 1842, 140 vessels of 50 tons and upwards, and 105 of less than 50 tons, the aggregate burden of the former being 21,839, and of the latter 3,123 tons, exclusive of 6 large and 7 small steamers. The entries coastwise (exclusive of steamers) in the same year were 2,747 ships of the burden of 147,518 tons.

The *Dock Rates* at Leith are as follow: —

	₰ ton. s.	d.
For every ship or vessel, from any port between Buchanness and Eyemouth, including the great canal and the river Clyde, as far down as Greenock, coming by the canal	0	4
—— from any other port in Great Britain and Ireland	0	8
—— from Norway, Sweden, Denmark, Holstein, Hamburg, Bremen, Holland, and Flanders, that is, without the Baltic, and no further south than Dunkirk	0	10½
—— from the Baltic, all above the Sound, Onega, Archangel, Jersey or Guernsey, Portugal, France, and Spain, without the Straits of Gibraltar, Newfoundland, Madeira, or Western Islands	1	1½
—— from within the Straits of Gibraltar, or from America	1	4
—— from the West Indies, Asia, Africa, or the Cape de Verd Islands	1	8
—— from Greenland, or Davis's Straits	2	0
But if such ship or vessel shall make a second voyage, she shall be credited in the charge for such second voyage	0	4
For all ships and vessels (excepting those from Greenland or Davis's Straits) remaining in the dock above 3 calendar months, for each after-month, or any part thereof	0	2¼

	₰ ton. s.	d.
For all foreign vessels from any of the before-mentioned ports or places, the aforesaid respective rates and one half more.		
For all loaded vessels not breaking bulk, and for all vessels in ballast which do not take in goods, coming into the present harbour, provided they do not make use of any of the docks, nor remain in the harbour above 4 weeks, one half of the aforesaid rates or duties.		
For every ship or vessel going from the port of Leith to any other port in the Frith of Forth, to take in a part of a cargo, and return to Leith, upon her return	0	2
No ship or vessel shall be subjected in payment of the aforesaid rates and duties for more than 8 voyages in any 1 year.		
Flag, or Light Dues. — Every vessel, of whatever burden, from foreign ports	2	6
Every vessel of 40 tons burden and upwards, to pay for each coasting voyage	2	6
Beacon and anchorage, per ton	0	1½
This duty is only charged upon four fifths of the register		

DOG (Fr. *Chien*; Ger. *Hund*; It. *Cane*; Lat. *Canis familiaris*). Of this quadruped, emphatically styled "the friend and companion of man," there is a vast variety of species. But to attempt to give any description of an animal so well known, would be quite out of place in a work of this kind; and we mention it for the purpose principally of laying the following account before our readers, with a remark or two with respect to Asiatic dogs.

An Account of the Number of Dogs entered, and for which duty was paid in Great Britain, in the Year 1841; distinguishing the Number of Packs of Hounds, and the Number of each Description of Dog, the Rate of Duty on each, and the aggregate Amount paid.

Description of Dogs.	Rates of Duty.	Total Number.	Amount of Duty.
Greyhounds			
Pointers, hounds, setting dogs, spaniels, terriers, lurchers, & other dogs, where persons keep two or more dogs	0 14 0	108,470	
Other dogs; persons keeping one only	0 8 0	185,180	
Total, exclusive of packs of hounds			
Packs of hounds			

Cuvier, the great French naturalist, says, "The dog is the most complete, the most remarkable, and the most useful conquest ever made by man: every species has become our property; each individual is altogether devoted to his master, assumes his manners, knows and defends his goods, and remains attached to him until death; and all this proceeds neither from want nor constraint, but solely from true gratitude and real friendship. The swiftness, the strength, and the scent of the dog have created for man a powerful ally against other animals, and were, perhaps, necessary to the establishment of society. He is the only animal which has followed man through every region of the earth."

It is singular, however, that neither Cuvier, nor any one of those by whom his statements have been copied, should have mentioned that this account is applicable only to Europe. All Mohammedan nations regard the dog as impure, and will not touch it without an ablution. The same is also the case with the Hindoos. From the Hellespont to the confines of Cochin-China, dogs are unappropriated, and have no master. They prowl about the towns and villages; and though they are naturally more familiar, they are in no respect more domesticated, than the carrion crows, kites, vultures, &c. which assist them in performing the functions of scavengers. In China and Cochin-China, the dog is eaten as food; its flesh being, with the exception of that of the hog, the most common in their markets.

The unnecessary multiplication of dogs, particularly in large cities, is a very great nuisance: coming, as they often do, into the possession of those who are without the means of providing for them, they are frequently left to wander about in the streets; and from ill usage, want of food and of proper attention, are apt, during hot weather, to become rabid. In several districts of the metropolis the nuisance has attained to a formidable height; and it is singular, considering the numerous fatal occurrences that

have taken place, that no efforts should have been made to have it abated. It has grown to its present excess, partly from too many exemptions being granted from the duty, and partly from a want of care in its collection: but besides lessening the number of the former, and more rigidly enforcing the latter, it would be proper to enact that all dogs found wandering in the streets without masters should be destroyed.

DOWN (Ger. *Dunen, Flaumfedern;* Du. *Dons;* Fr. *Duvet;* It. *Penna matta, Piumini;* Sp. *Flujel, Plumazo;* Rus. *Puch;* Lat. *Plumæ*), the fine feathers from the breasts of several birds, particularly those of the duck kind. That of the eider duck is the most valuable. These birds pluck it from their breasts and line their nests with it. Mr. Pennant says that it is so very elastic, that a quantity of it weighing only ¾ of an ounce, more than fills the crown of the largest hat. That found in the nest is most valued, and termed *live down;* it is much more elastic than that plucked from the dead bird, which is comparatively little esteemed. The eider duck is found on the western islands of Scotland, but the down is principally imported from Norway and Iceland.

DRAGON'S BLOOD. See BALSAM.

DRAWBACK, a term used in commerce to signify the remitting or paying back of the duties previously paid on a commodity on its being exported.

A drawback is a device resorted to for enabling a commodity affected by taxes to be exported and sold in the foreign market on the same terms as if it had not been taxed at all. It differs in this from a bounty,—that the latter enables a commodity to be sold abroad for *less* than its natural cost, whereas a drawback enables it to be sold exactly at its natural cost. Drawbacks, as Dr. Smith has observed, "do not occasion the exportation of a greater quantity of goods than would have been exported had no duty been imposed. They do not tend to turn towards any particular employment a greater share of the capital of the country than would go to that employment of its own accord, but only to hinder the duty from driving away any part of that share to other employments. They tend not to overturn that balance which naturally establishes itself among all the various employments of the society; but to hinder it from being overturned by the duty. They tend not to destroy, but to preserve, what it is in most cases advantageous to preserve—the natural division and distribution of labour in the society."—(p. 221.)

Were it not for the system of drawbacks, it would be impossible, unless when a country enjoyed some very peculiar facilities of production, to export any commodity that was more heavily taxed at home than abroad. But the drawback obviates this difficulty, and enables merchants to export commodities loaded at home with heavy duties, and to sell them in the foreign market on the same terms as those fetched from countries where they are not taxed.

Most foreign articles imported into this country may be warehoused for subsequent exportation. In this case they pay no duties on being imported: and, of course, get no drawback on their subsequent exportation.

Sometimes a drawback exceeds the duty or duties laid on the article; and in such cases the *excess* forms a real bounty of that amount, and should be so considered.

It is enacted by the act 3 & 4 Will. 4. c. 52., that no drawback or bounty shall be allowed upon the exportation from the U. Kingdom of any goods, unless such goods shall have been entered in the name of the person who was the real owner thereof at the time of entry and shipping, or of the person who had actually purchased and shipped the same, in his own name and at his own liability and risk, on commission, according to the practice of merchants, and who was and shall have continued to be entitled in his own right to such drawback or bounty, except in the cases herein-after provided for.—§ 86.

No drawback shall be allowed upon the exportation of any goods, unless such goods be shipped within 3 years after the payment of the duties inwards thereon. And no debenture for any drawback or bounty upon the exportation of any goods, shall be paid after the expiration of 2 years from the shipment of such goods; and no drawback shall be allowed upon any goods which, by reason of damage or decay, shall have become of less value for home use than the amount of such drawback; and all goods so damaged which shall be cleared for drawback shall be forfeited; and the person who caused such goods to be so cleared shall forfeit 200*l.*, or treble the amount of the drawback, at the option of the commissioners of customs.—§ 90.

No drawback or bounty shall be allowed upon goods exported and cleared as being press-packed, unless the quantities and qualities of the same be verified by oath of the master packer thereof, or, in case of his unavoidable absence, by oath of his foreman.—§ 93.

No goods cleared for drawback or bounty, or from any warehouse, shall be carried to be put on board ship for exportation, except by a person authorised for that purpose by licence of the commissioners of customs.—§ 94.—(See IMPORTATION AND EXPORTATION.)

DUBBER, a leathern vessel, bottle, or jar, used in India to hold oil, ghee, &c. Barrels, as already observed—(see BARRELS),—are entirely a European invention. Liquids, in Eastern countries, are for the most part packed for exportation in leathern vessels. Dubbers are made of thin untanned goat skins; and are of all sizes, from a quart up to nearly a barrel.

DUNNAGE, in commercial navigation, loose wood, consisting of pieces of timber, boughs of trees, faggots, &c., laid in the bottom and against the sides of the ship's hold. either, 1st, by raising the cargo when she is loaded with heavy goods, to prevent her from becoming too stiff—(see BALLAST); or, 2d, to prevent the cargo, should it be

susceptible of damage by water, from being injured in the event of her becoming leaky. A ship is not reckoned seaworthy unless she be provided with proper and sufficient dunnage.—(*Falconer's Marine Dictionary; Abbott (Lord Tenterden) on the Law of Shipping*, part iii. c. 3.)

E.

EARNEST, in commercial law, is the sum advanced by the buyer of goods in order to bind the seller to the terms of the agreement. It is enacted by the 17th section of the famous Statute of Frauds, 29 Cha. II. c. 3., that "no contract for the sale of any goods, wares, and merchandises, for the prices of 10*l.* sterling or upwards, shall be allowed to be good, except the buyer shall accept part of the goods so sold, and actually receive the same, or give something in *earnest* to bind the bargain, or in part payment, or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged by such contract, or their agents thereunto lawfully authorised."

As to what amounts to sufficient earnest, Blackstone lays it down, that "if any part of the price is paid down, if it is but a penny, or any portion of the goods is delivered by way of earnest, it is binding." To constitute earnest, the thing must be given as a token of ratification of the contract, and it should be expressly stated so by the giver.—(*Chitty's Commercial Law*, vol. iii. p. 289.)

EARTHENWARE (Ger. *Irdene Waaren*; Du. *Aardegoed*; Fr. *Vaisselle de terre Poterie*; It. *Stoviglie, Terraglie*; Sp. *Loza de barro*; Rus. *Gorschetschniie possodü*; Pol. *Glinianœ naczynia*), or crockery, as it is sometimes termed, comprises every sort of household utensil made of clay hardened in the fire. Its manufacture is, in England, of very considerable importance; and the improvements that have been made in it since the middle of last century have contributed powerfully to its extension, and have added greatly to the comfort and convenience of all classes.

"There is scarcely," it has been well observed, "any manufacture which is so interesting to contemplate in its gradual improvement and extension as that of earthenware, presenting, as it does, so beautiful a union of science and art, in furnishing us with the comforts and ornaments of civilised life. Chemistry administers her part, by investigating the several species of earths, and ascertaining as well their most appropriate combinations as the respective degrees of heat which the several compositions require. Art has studied the designs of antiquity, and produced from them vessels even more exquisite in form than the models by which they have been suggested. The ware has been provided in such gradations of quality as to suit every station from the highest to the lowest. It is to be seen in every country, and almost in every house, through the whole extent of America, in many parts of Asia, and in most of the countries of Europe. At home it has superseded the less cleanly vessels of pewter and of wood, and, by its cheapness, has been brought within the means of our poorest housekeepers. Formed from substances originally of no value, the fabrication has induced labour of such various classes, and created skill of such various degrees, that nearly the whole value of the annual produce may be considered as an addition made to the mass of national wealth. The abundance of the ware exhibited in every dwelling-house is sufficient evidence of the vast augmentation of the manufacture, which is also demonstrated by the rapid increase of the population in the districts where the potteries have been established."—(*Quarterly Review.*)

For the great and rapid extension of the manufacture we are chiefly indebted to the late Mr. Josiah Wedgwood, whose original and inventive genius enabled him to make many most important discoveries in the art; and who was equally successful in bringing his inventions into use. The principal seat of the manufacture is in Staffordshire, where there is a district denominated the Potteries, comprising a number of villages, and a population which is supposed to amount, at this moment, to above 80,000, by far the greater proportion of which is engaged in the manufacture. There are no authentic accounts of the population of this district in 1760, when Mr. Wedgwood began his discoveries; but the general opinion is, that it did not at that time exceed 20,000. The village of Etruria, in the Potteries, was built by Mr. Wedgwood The manufacture has been carried on at Burslem, in the same district, for several centuries.

The canals by which Staffordshire is intersected have done much to accelerate the progress of the manufacture. Pipe-clay from Dorsetshire and Devonshire, and flints from Kent, are conveyed by water carriage to the places where the clay and coal abound; and the finished goods are conveyed by the same means to the great shipping ports, whence they are distributed over most parts of the globe.

It is estimated that the value of the various sorts of earthenware produced at the Potteries may amount to about 1,700,000*l.* a year; and that the earthenware produced at Worcester, Derby, and other parts of the country, may amount to about 750,000*l.*

more; making the whole value of the manufacture 2,450,000*l.* a year. The consumption of gold at the Potteries is about 700*l.* a week, and of coal about 9,000 tons a week.

The earthenware manufacture has increased considerably since 1814, but it is not possible to state the exact ratio. The prices of the different sorts of earthenware are said to have fallen 25 per cent. during the last 20 years. Wages have not fallen in the same proportion; but we are assured that a workman can, at the present day, produce about *four* times the quantity he did in 1790.

We subjoin an

Account of the Quantities and Declared Values of the Earthenware exported from the United Kingdom during each of the Five Years ending with 1841, specifying the Countries to which it was shipped, and the Quantity and Value of that shipped for each.

Countries.	1837.		1838.		1839.		1840.		1841.	
	Quantities.	Decl. Value.	Quantities.	Decl. Value.	Quantities.	Decl. Value.	Quantities.	Decl. Value.	Quantities.	Decl. Value.
	Pieces.	£	*Pieces.*	£	*Pieces.*	£	*Pieces.*	£	*Pieces.*	£
Russia	252,722	4,155	189,391	3,745	210,021	4,260	185,215	4,052	213,754	3,916
Denmark	932,744	13,941	837,174	11,165	1,366,218	14,421	1,446,371	14,183	1,367,374	13,867
Germany	2,008,994	21,314	1,514,981	19,187	2,058,438	22,355	1,705,351	23,837	2,128,471	25,669
Holland	2,021,282	27,013	2,336,850	27,871	2,259,039	25,250	2,301,353	28,905	2,101,144	24,610
Spain and Balearic Islands	439,054	3,643	506,186	4,289	345,229	3,381	1,027,537	8,802	772,280	6,152
Italy and Italian Islands	1,279,563	16,057	981,610	15,897	818,865	13,078	981,780	14,650	769,222	13,539
Turkey	503,206	5,409	388,119	6,264	418,428	6,113	652,315	8,180	297,472	4,011
Western coast of Africa	432,769	3,462	367,082	3,822	481,620	5,562	408,984	4,356	388,873	5,092
Cape of Good Hope	425,356	5,499	948,945	10,267	610,190	7,299	210,511	3,546	310,191	4,766
E. I. Company's territory and Ceylon	1,385,703	19,509	1,559,980	25,281	1,758,456	27,312	1,629,355	24,851	1,611,759	29,932
Sumatra, Java, and other Islands in the Indian Seas	454,290	5,412	733,533	9,402	483,337	4,958	1,113,757	8,235	898,620	8,359
British Settlements in Australia	614,950	6,689	1,256,162	13,621	1,885,623	21,490	2,112,380	27,383	1,148,531	16,175
British North American Colonies	3,463,988	37,063	2,446,631	25,773	2,637,506	34,825	3,978,462	44,875	4,076,014	41,682
British West Indies	3,216,858	40,195	2,217,948	27,727	3,631,732	41,799	2,829,641	33,134	2,056,369	26,523
Cuba and other Foreign West Indies	2,505,790	26,183	2,431,556	24,243	1,982,526	20,472	2,592,722	27,068	2,288,693	20,555
United States of America	16,725,595	212,639	21,718,950	313,749	35,099,426	400,164	41,502	179,933	18,892,080	225,479
Brazil	4,965,046	43,217	4,573,137	35,275	4,028,388	35,010	5,199,780	40,025	5,568,992	38,183
Isles of Guernsey, Jersey, Alderney, and Man, — (Foreign goods)	344,082	4,002	439,987	4,926	382,973	4,095	302,809	3,662	348,090	4,142
All other countries	6,366,663	69,813	5,926,846	68,840	6,688,803	76,345	6,511,024	73,447	8,053,374	87,347
Total	48,366,457	565,238	51,405,068	651,544	67,126,814	771,173	50,533,949	573,184	53,150,903	600,759

The above account sets the preponderance of the U. States as a market for earthenware in a very striking point of view. We have been assured that it is necessary to add ¼ to the declared value of the exports, to get their true value.

EAST INDIA COMPANY, a famous association, originally established for prosecuting the trade between England and India, which they acquired a right to carry on exclusively. Since the middle of last century, however, the Company's political have become of more importance than their commercial concerns.

East Indies, a popular geographical term not very well defined, but generally understood to signify the continents and islands to the east and south of the river Indus, as far as the borders of China, including Timor and the Moluccas, but excluding the Philippine Islands, New Guinea, and New Holland. China and the Philippine Islands were, however, included within the limits of the East India Company's peculiar privileges.

I. East India Company (Historical Sketch of).
II. East India Company (Constitution of).
III. East Indies (State of Society in, growing Demand for English Goods, Trade, Colonisation, etc.).
IV. East Indies (Extent, Population, Military Force, Revenue, etc. of British).

I. East India Company (Historical Sketch of).

The persevering efforts of the Portuguese to discover a route to India, by sailing round Africa, were crowned with success in 1497. And it may appear singular, that, notwithstanding the exaggerated accounts that had been prevalent in Europe, from the remotest antiquity, with respect to the wealth of India, and the importance to which the commerce with it had raised the Phœnicians and Egyptians in antiquity, the Venetians in the middle ages, and which it was then seen to confer on the Portuguese, the latter should have been allowed to monopolise it for nearly a century after it had been turned into a channel accessible to every nation. But the prejudices by which the people of most European states were actuated in the sixteenth century, and the peculiar circumstances under which they were placed, hindered them from embarking with that alacrity and ardour that might have been expected in this new commercial career.

Soon after the Portuguese began to prosecute their discoveries along the coast of Africa, they applied to the pope for a bull, securing to them the exclusive right to and possession of all countries occupied by infidels, they either had discovered, or might discover, to the south of Cape Non, on the west coast of Africa, in 27° 54′ north latitude: and the pontiff, desirous to display, and at the same time to extend, his power, immediately issued a bull to this effect. Nor, preposterous as a proceeding of this sort would now appear, did any one then doubt that the pope had a right to issue such a bull, and that all states and empires were bound to obey it. In consequence, the Portuguese were, for a lengthened period, allowed to prosecute their conquests in India without the interference of any other European power. And it was not till a considerable period after the beginning of the war, which the blind and brutal bigotry of Philip II. kindled in the Low Countries, that the Dutch navigators began to display their flag on the Eastern Ocean, and laid the foundations of their Indian empire.

The desire to comply with the injunctions in the pope's bull, and to avoid coming into collision, first with the Portuguese, and subsequently with the Spaniards, who had conquered Portugal in 1580, seems to have been the principal cause that led the English to make repeated attempts, in the reigns of Henry VIII. and Edward VI., and the early part of the reign of Elizabeth, to discover a route to India by a north-west or north-east passage; channels from which the Portuguese would have had no pretence for excluding them. But these attempts having proved unsuccessful, and the pope's bull having ceased to be of any effect in this country, the English merchants and navigators resolved to be no longer deterred by the imaginary rights of the Portuguese from directly entering upon what was then reckoned by far the most lucrative and advantageous branch of commerce. Captain Stephens, who performed the voyage in 1582, was the first Englishman who sailed to India by the Cape of Good Hope. The voyage of the famous Sir Francis Drake contributed greatly to diffuse a spirit of naval enterprise, and to render the English better acquainted with the newly opened route to India. But the voyage of the celebrated Mr. Thomas Cavendish was, in the latter respect, the most important. Cavendish sailed from England in a little squadron, fitted out at his own expense, in July, 1586; and having explored the greater part of the Indian Ocean, as far as the Philippine Islands, and carefully observed the most important and characteristic features of the people and countries which he visited, returned to England, after a prosperous navigation, in September, 1588. Perhaps, however, nothing contributed so much to inspire the English with a desire to embark in the Indian trade, as the captures that were made, about this period, from the Spaniards. A Portuguese East India ship, or carrack, captured by Sir Francis Drake, during his expedition to the coast of Spain, inflamed the cupidity of the merchants by the richness of her cargo, at the same time that the papers found on board gave specific information respecting the traffic in which she had been engaged. A still more important capture, of the same sort, was made in 1593. An armament, fitted out for the East Indies by Sir Walter Raleigh, and commanded by Sir John Borroughs, fell in, near the Azores, with the largest of all the Portuguese carracks, a ship of 1,600 tons burden, carrying 700 men and 36 brass cannon; and, after an obstinate conflict, carried her into Dartmouth. She was the largest vessel that had been seen in England; and her cargo, consisting of gold, spices, calicoes, silks, pearls, drugs, porcelain, ivory, &c., excited the ardour of the English to engage in so opulent a commerce.

In consequence of these and other concurring causes, an association was formed in London, in 1599, for prosecuting the trade to India. The adventurers applied to the queen for a charter of incorporation, and also for power to exclude all other English subjects, who had not obtained a licence from them, from carrying on any species of traffic beyond the Cape of Good Hope or the Straits of Magellan. As exclusive companies were then very generally looked upon as the best instruments for prosecuting most branches of commerce and industry, the adventurers seem to have had little difficulty in obtaining their charter, which was dated the 31st of December, 1660. The corporation was entitled "The Governor and Company of Merchants of London trading into the East Indies:" the first governor (Thomas Smythe, Esq.) and 24 directors were nominated in the charter; but power was given to the Company to elect a deputy governor, and, in future, to elect their governor and directors, and such other office-bearers as they might think fit to appoint. They were empowered to make by-laws; to inflict punishments, either corporal or pecuniary, provided such punishments were in accordance with the laws of England; to export all sorts of goods free of duty for 4 years; and to export foreign coin, or bullion, to the amount of 30,000*l.* a year, 6,000*l.* of the same being previously coined at the mint; but they were obliged to import, within 6 months after the completion of every voyage, except the first, the same quantity of silver, gold, and foreign coin that they had exported. The duration of the charter was limited to a period of 15 years; but with and under the condition that, if it were not found for the public advantage, it might be cancelled at any time upon 2

years' notice being given. Such was the origin of the British East India Company,—the most celebrated commercial association of ancient or modern times, and which has now extended its sway over the whole of the Mogul empire.

It might have been expected that, after the charter was obtained, considerable eagerness would have been manifested to engage in the trade. But such was not the case. Notwithstanding the earnest calls and threats of the directors, many of the adventurers could not be induced to come forward to pay their proportion of the charges incident to the fitting out of the first expedition. And as the directors seem either to have wanted power to enforce their resolutions, or thought it better not to exercise it, they formed a subordinate association, consisting of such members of the Company as were really willing to defray the cost of the voyage, and to bear all the risks and losses attending it, on condition of their having the exclusive right to whatever profits might arise from it. And it was by such subordinate associations that the trade was conducted during the first 13 years of the Company's existence.

The first expedition to India, the cost of which amounted, ships and cargoes included, to 69,091*l.*, consisted of 5 ships, the largest being 600 and the smaller 130 tons burden. The goods put on board were principally bullion, iron, tin, broad cloths, cutlery, glass, &c. The chief command was intrusted to Captain James Lancaster, who had already been in India. They set sail from Torbay on the 13th of February, 1601. Being very imperfectly acquainted with the seas and countries they were to visit, they did not arrive at their destination, Acheen in Sumatra, till the 5th of June, 1602. But though tedious, the voyage was, on the whole, uncommonly prosperous. Lancaster entered into commercial treaties with the kings of Acheen and Bantam; and having taken on board a valuable cargo of pepper and other produce, he was fortunate enough, in his way home, to fall in with and capture, in concert with a Dutch vessel, a Portuguese carrack of 900 tons burden, richly laden. Lancaster returned to the Downs on the 11th of September, 1603.—(*Modern Universal History*, vol. x. p. 16.; *Macpherson's Commerce of the European Powers with India*, p. 81.)

But notwithstanding the favourable result of this voyage, the expeditions fitted out in the years immediately following, though sometimes consisting of larger ships, were not, at an average, materially increased. In 1612, Captain Best obtained from the court at Delhi several considerable privileges; and, amongst others, that of establishing a factory at Surat; which city was, henceforth, looked upon as the principal British station in the west of India, till the acquisition of Bombay.

In establishing factories in India, the English only followed the example of the Portuguese and Dutch. It was contended, that they were necessary to serve as *depôts* for the goods collected in the country for exportation to Europe, as well as for those imported into India, in the event of their not meeting with a ready market on the arrival of the ships. Such establishments, it was admitted, are not required in civilised countries; but the peculiar and unsettled state of India was said to render them indispensable there. Whatever weight may be attached to this statement, it is obvious that factories formed for such purposes could hardly fail of speedily degenerating into a species of forts. The security of the valuable property deposited in them furnished a specious pretext for putting them in a condition to withstand an attack; while the agents, clerks, warehousemen, &c. formed a sort of garrison. Possessing such strong holds, the Europeans were early emboldened to act in a manner quite inconsistent with their character as merchants; and but a very short time elapsed before they began to form schemes for monopolising the commerce of particular districts, and acquiring territorial dominion.

Though the Company met with several heavy losses during the earlier part of their traffic with India, from shipwrecks and other unforeseen accidents, and still more from the hostility of the Dutch, yet, on the whole, the trade was decidedly profitable. There can, however, be little doubt, that their gains, at this early period, have been very much exaggerated. During the first 13 years, they are said to have amounted to 132 per cent. But then it should be borne in mind, as Mr. Grant has justly stated, that the voyages were seldom accomplished in less than 30 months, and sometimes extended to 3 or 4 years: and it should further be remarked, that, on the arrival of the ships at home, the cargoes were disposed of at long credits of 18 months or 2 years; and that it was frequently even 6 or 7 years before the concerns of a single voyage were finally adjusted.—(*Sketch of the History of the Company*, p. 13.) When these circumstances are taken into view, it will immediately be seen that the Company's profits were not, really, by any means so great as has been represented. It may not, however, be uninstructive to remark, that the principal complaint that was then made against the Company did not proceed so much on the circumstance of its charter excluding the public from any share in an advantageous traffic, as in its authorising the Company to export gold and silver of the value of 30,000*l.* a year. It is true that the charter stipulated that the Company should import an equal quantity of gold and silver within 6 months of the termination of every voyage: but the enemies of the Company contended that this condition was not complied

with; and that it was, besides, highly injurious to the public interest, and *contrary to all principle*, to allow gold and silver to be sent out of the kingdom. The merchants and others interested in the support of the Company could not controvert the reasoning of their opponents, without openly impugning the ancient policy of absolutely preventing the exportation of the precious metals. They did not, however, venture to contend, if the idea really occurred to them, that the exportation of bullion to the East was advantageous, on the broad ground of the commodities purchased by it being of greater value in England. But they contended that the exportation of bullion to India was advantageous, because the commodities thence imported were chiefly re-exported to other countries from which a much greater quantity of bullion was obtained than had been required to pay for them in India. Mr. Thomas Mun, a director of the East India Company, and the ablest of its early advocates, ingeniously compares the operations of the merchant in conducting a trade carried on by the exportation of gold and silver to the seed time and harvest of agriculture. "If we only behold," says he, "the actions of the husbandman in the seed time, when he casteth away much good corn into the ground, we shall account him rather a madman than a husbandman. But when we consider his labours in the harvest, which is the end of his endeavours, we find the worth and plentiful increase of his actions." — (*Treasure by Foreign Trade*, p. 50. ed. 1664.)

We may here remark, that what has been called the *mercantile system* of political economy, or that system which measures the progress of a country in the career of wealth by the supposed balance of payments in its favour, or by the estimated excess of the value of its exports over that of its imports, appears to have originated in the excuses now set up for the exportation of bullion. Previously to this epoch, the policy of prohibiting the exportation of bullion had been universally admitted; but it now began to be pretty generally allowed, that its exportation might be productive of advantage, provided it occasioned the subsequent exportation of a greater amount of raw or manufactured products to countries whence bullion was obtained for them. This, when compared with the previously existing prejudice — for it hardly deserves the name of system — which wholly interdicted the exportation of gold and silver, must be allowed to be a considerable step in the progress to sounder opinions. The maxim, *ce n'est que le premier pas qui coute*, was strikingly verified on this occasion. The advocates of the East India Company began gradually to assume a higher tone, and, at length, boldly contended that bullion was nothing but a commodity, and that its exportation should be rendered as free as that of any thing else. Nor were these opinions confined to the partners of the East India Company. They were gradually communicated to others; and many eminent merchants were taught to look with suspicion on several of the previously received dogmas with respect to commerce, and were, in consequence, led to acquire more correct and comprehensive views. The new ideas ultimately made their way into the House of Commons; and, in 1663, the statutes prohibiting the exportation of foreign coin and bullion were repealed, and full liberty given to the East India Company and to private traders to export them in unlimited quantities.

But the objection to the East India Company, or rather the East India trade, on the ground of its causing the exportation of gold and silver, admitted of a more direct and conclusive, if not a more ingenious reply. How compendious soever the ancient intercourse with India by the Red Sea and the Mediterranean, it was unavoidably attended with a good deal of expense. The productions of the remote parts of Asia, brought to Ceylon, or the ports on the Malabar coast, by the natives, were there put on board the ships which arrived from the Arabic gulph. At Berenice they were landed, and carried by camels 250 miles to the banks of the Nile. They were there again embarked, and conveyed down the river to Alexandria, whence they were despatched to different markets. The addition to the price of goods by such a multiplicity of operations must have been considerable; more especially as the price charged on each operation was fixed by monopolists, subject to no competition or control. Pliny says, that the cost of the Arabian and Indian products brought to Rome when he flourished (A. D. 70), was increased a hundred fold by the expenses of transit — (*Hist. Nat.* lib. vi. c. 23.); but there can be little or no doubt that this is to be regarded as a rhetorical exaggeration. — (See *antè*, p. 18.) There are good grounds for thinking that the less bulky sorts of Eastern products, such as silk, spices, balsams, precious stones, &c., which were those principally made use of at Rome, might, supposing there were no political obstacles in the way, be conveyed from most parts of India to the ports on the Mediterranean by way of Egypt, at a decidedly cheaper rate than they could be conveyed to them by the Cape of Good Hope.

But at the period when the latter route to India began to be frequented, Syria, Egypt, &c. were occupied by Turks and Mamelukes; barbarians who despised commerce and navigation, and were, at the same time, extremely jealous of strangers, especially of Christians or infidels. The price of the commodities obtained through the intervention of such persons was necessarily very much enhanced; and the discovery of

the route by the Cape of Good Hope was, consequently, of the utmost importance; for, by putting an end to the monopoly enjoyed by the Turks and Mamelukes, it introduced, for the first time, something like competition into the Indian trade, and enabled the western parts of Europe to obtain supplies of Indian products for about a third part of what they had previously cost. Mr. Mun, in a tract published in 1621, estimates the quantity of Indian commodities imported into Europe, and their cost when bought in Aleppo and in India, as follows: —

Cost of Indian commodities consumed in Europe when bought in Aleppo (or Alexandria).

	£	s.	d.
6,000,000 lbs. pepper cost, with charges, &c. at Aleppo 2*s.* per lb.	600,000	0	0
450,000 lbs. cloves, at 4*s.* 9*d.*	106,[illegible]	10	0
150,000 lbs. mace, at 4*s.* 9*d.*	35,[illegible]	0	0
400,000 lbs. nutmegs, at 2*s.* 4*d.*	46,666	2	4
350,000 lbs. indigo, at 4*s.* 4*d.*	75,833	6	8
1,000,000 lbs. Persian raw silk, at 12*s.*	600,000	0	0
	£1,465,000	19	0

But the same quantities of the same commodities cost, when bought in the East Indies, according to Mr. Mun, as follows: —

	£	s.	d.
6,000,000 lbs. pepper, at 2¼*d.* per lb.	62,500	0	0
450,000 lbs. cloves, at 9*d.*	16,875	0	0
150,000 lbs. mace, at 8*d.*	5,000	0	0
400,000 lbs. nutmegs, at 4*d.*	6,666	13	4
350,000 lbs. indigo, at 1*s.* 2*d.*	20,416	12	4
1,000,000 lbs. raw silk, at 8*s.*	400,000	0	0
	£511,458	5	8

Which being deducted from the former, leaves a balance of 953,542*l.* 13*s.* 4*d.* And supposing that the statements made by Mr. Mun are correct, and that allowance is made for the difference between the freight from Aleppo and India, the result would indicate the saving which the discovery of the route by the Cape of Good Hope occasioned in the purchase of the above-mentioned articles. — (*A Discourse of Trade from England to the East Indies*, by T. M., original ed. p. 10. This tract, which is very scarce, is reprinted in Purchas's Pilgrims.)

In the same publication (p. 37.), Mr. Mun informs us that, from the beginning of the Company's trade to July, 1620, they had sent 79 ships to India; of which 34 had come home safely and richly laden, 4 had been worn out by long service in India, 2 had been lost in careening, 6 had been lost by the perils of the sea, and 12 had been captured by the Dutch. Mr. Mun further states, that the exports to India, since the formation of the Company, had amounted to 840,376*l.*; that the produce brought from India had cost 356,288*l.*, and had produced here the enormous sum of 1,914,600*l.*; that the quarrels with the Dutch had occasioned a loss of 84,088*l.*; and that the stock of the Company, in ships, goods in India, &c., amounted to 400,000*l.*

The hostility of the Dutch, to which Mr. Mun has here alluded, was long a very formidable obstacle to the Company's success. The Dutch early endeavoured to obtain the exclusive possession of the spice trade, and were not at all scrupulous about the means by which they attempted to bring about this their favourite object. The English, on their part, naturally exerted themselves to obtain a share of so valuable a commerce; and as neither party was disposed to abandon its views and pretensions, the most violent animosities grew up between them. In this state of things, it would be ridiculous to suppose that unjustifiable acts were not committed by the one party as well as the other; though the worst act of the English appears venial, when compared with the conduct of the Dutch in the massacre at Amboyna, in 1622. While, however, the Dutch Company was vigorously supported by the government at home, the English Company met with no efficient assistance from the feeble and vacillating policy of James and Charles. The Dutch either despised their remonstrances, or defeated them by an apparent compliance; so that no real reparation was obtained for the outrages they had committed. During the civil war, Indian affairs were necessarily lost sight of: and the Dutch continued, until the ascendancy of the republican party had been established, to reign triumphant in the East, where the English commerce was nearly annihilated.

But notwithstanding their depressed condition, the Company's servants in India laid the foundation, during the period in question, of the settlements at Madras and in Bengal. Permission to build Fort St. George was obtained from the native authorities in 1640. In 1658, Madras was raised to the station of a presidency. In 1645, the Company beg[illegible]o establish factories in Bengal; the principal of which was at Hooghly. These were, for a lengthened period, subordinate to the presidency at Madras.

No sooner, however, had the civil wars terminated, than the arms and councils of Cromwell retrieved the situation of our affairs in India. The war which broke out between the long parliament and the Dutch, in 1652, was eminently injurious to the latter In the treaty of peace, concluded in 1654, it was stipulated that indemnification

should be made by the Dutch for the losses and injuries sustained by the English merchants and factors in India. The 27th article bears, "that the Lords, the states-general of the United Provinces, shall take care that justice be done upon those who were partakers or accomplices in the massacre of the English at Amboyna, as the republic of England is pleased to term that fact, provided any of them be living." A commission was at the same time appointed, conformably to another article of the treaty, to inquire into the reciprocal claims which the subjects of the contracting parties had upon each other for losses sustained in India, Brazil, &c.; and, upon their decision, the Dutch paid the sum of 85,000*l.* to the East India Company, and 3,615*l.* to the heirs or executors of the sufferers at Amboyna. — (*Bruce's Annals*, vol. i. p. 489.)

The charter under which the East India Company prosecuted their exclusive trade to India, being merely a grant from the Crown, and not ratified by any act of parliament, was understood by the merchants to be at an end when Charles I. was deposed. They were confirmed in this view of the matter, from the circumstance of Charles having himself granted, in 1635, a charter to Sir William Courten and others, authorising them to trade with those parts of India with which the Company had not established any regular intercourse. The reasons alleged in justification of this measure, by the Crown, were, that "the East India Company had neglected to establish fortified factories, or seats of trade, to which the king's subjects could resort with safety; that they had consulted their own interests only, without any regard to the king's revenue; and in general, that they had broken the condition on which their charter and exclusive privileges had been granted to them."—(*Rym. Fœdera*, vol. xx. p. 146.)

Courten's association, for the foundation of which such satisfactory reasons had been assigned, continued to trade with India during the remainder of Charles's reign; and no sooner had the arms of the Commonwealth forced the Dutch to desist from their depredations, and to make reparation for the injuries they had inflicted on the English in India, than private adventurers engaged in great numbers in the Indian trade, and carried it on with a zeal, economy, and success, that monopoly can never expect to rival. It is stated in a little work, entitled *Britannia Languens*, published in 1680, the author of which has evidently been a well-informed and intelligent person, that during the years 1653, 1654, 1655, and 1656, when the trade to India was open, the private traders imported East India commodities in such large quantities, and sold them at such reduced prices, that they not only fully supplied the British markets, but had even come into successful competition with the Dutch in the market of Amsterdam, "and very much sunk the actions (shares) of the Dutch East India Company."— (p. 132.) This circumstance naturally excited the greatest apprehensions on the part of the Dutch Company; for, besides the danger that they now ran of being deprived, by the active competition of the English merchants, of a considerable part of the trade which they had previously enjoyed, they could hardly expect that, if the trade were thrown open in England, the monopoly would be allowed to continue in Holland. A striking proof of what is now stated is to be found in a letter in the third volume of *Thurlow's State Papers*, dated at the Hague, the 15th of January, 1654, where it is said, that "the merchants of Amsterdam have advice that the Lord Protector intends to dissolve the East India Company at London, and to declare the navigation and commerce of the East Indies free and open: which doth cause great jealously at Amsterdam, *as a thing that will very much prejudice the East India Company in Holland.*"

Feeling that it was impossible to contend with the private adventurers under a system of fair competition, the moment the treaty with the Dutch had been concluded, the Company began to solicit a renewal of their charter; but in this they were not only opposed by the free traders, but by a part of themselves. To understand how this happened, it may be proper to mention that Courten's association, the origin of which has been already noticed, had begun, in 1648, to found a colony in Assuda, an island near Madagascar. The Company, alarmed at this project, applied to the council of state to prevent its being carried into effect; and the council, without entering on the question of either party's rights, recommended them to form a union; which was accordingly effected in 1649. But the union was, for a considerable time, rather nominal than real; and when the Dutch war had been put an end to, most of those holders of the Company's stock who had belonged to Courten's association joined in petitioning the council of state that the trade might in future be carried on, not by a joint stock, but by a *regulated* company; so that each individual engaging in it might be allowed to employ his own stock, servants, and shipping, in whatever way he might conceive most for his own advantage. — (*Petition of Adventurers*, 17th of Nov. 1656; *Bruce's Annals*, vol. i. p. 518.)

This proposal was obviously most reasonable. The Company had always founded their claim to a monopoly of the trade on the alleged ground of its being necessary to maintain forts, factories, and ships of war in India; and that as this was not done by government, it could only be done by a Company. But, by forming the traders with India into a regulated company, they might have been subjected to whatever rules were

considered most advisable; and such special duties might have been laid on the commodities they exported and imported, as would have sufficed to defray the public expenses required for carrying on the trade, at the same time that the inestimable advantages of free competition would have been secured; each individual trader being left at liberty to conduct his enterprises, subject only to a few general regulations, in his own way and for his own advantage. — (See COMPANIES.)

But notwithstanding the efforts of the petitioners, and the success that was clearly proved to have attended the operations of the private traders, the Company succeeded in obtaining a renewal of their charter from Cromwell in 1657. Charles II. confirmed this charter in 1661; and at the same time conferred on them the power of making peace or war with any power or people *not of the Christian religion*; of establishing fortifications, garrisons, and colonies; of exporting ammunition and stores to their settlements duty free; of seizing and sending to England such British subjects as should be found trading to India without their leave; and of exercising civil and criminal jurisdiction in their settlements, according to the laws of England. Still, however, as this charter was not fully confirmed by any act of parliament, it did not prevent traders, or interlopers as they were termed, from appearing within the limits of the Company's territories. The energy of private commerce, which, to use the words of Mr. Orme, "sees its drift with eagles' eyes," formed associations at the risk of trying the consequence at law, being safe at the outset, and during the voyage, since the Company were not authorised to stop or seize the ships of those who thus attempted to come into competition with them. Hence their monopoly was by no means complete; and it was not till after the Revolution, and when a free system of government had been established at home, that, by a singular contradiction, the authority of parliament was interposed to enable the Company wholly to engross the trade with the East.

In addition to the losses arising from this source, the Company's trade suffered severely, during the reign of Charles II., from the hostilities that were then waged with the Dutch, and from the confusion and disorders caused by contests among the native princes; but in 1668 the Company obtained a very valuable acquisition in the island of Bombay. Charles II. acquired this island as a part of the marriage portion of his wife, Catharine of Portugal; and it was now made over to the Company, on condition of their not selling or alienating it to any persons whatever, except such as were subjects of the British crown. They were allowed to legislate for their new possession; but it was enjoined that their laws should be consonant to reason, and "as near as might be" agreeable to the practice of England. They were authorised to maintain their dominion by force of arms; and the natives of Bombay were declared to have the same liberties as natural-born subjects. The Company's western presidency was soon after transferred from Surat to Bombay.

In 1664, the French East India Company was formed; and 10 years afterwards they laid the foundation of their settlement at Pondicherry.

But the reign of Charles II. is chiefly memorable in the Company's annals, from its being the æra of the commencement of the tea trade. The first notice of tea in the Company's records is found in a despatch, addressed to their agent at Bantam, dated 24th of January, 1667-8, in which he is desired to send home 100 lbs. of tea, "the best he can get."— (*Bruce's Annals*, vol. ii. p. 210.) Such was the late and feeble beginning of the tea trade; a branch of commerce that has long been of vast importance to the British nation; and without which, it is more than probable that the East India Company would long since have ceased to exist, at least as a mercantile body.

In 1677, the Company obtained a fresh renewal of their charter; receiving at the same time an indemnity for all past misuse of their privileges, and authority to establish a mint at Bombay.

During the greater part of the reigns of Charles II. and James II. the Company's affairs at home were principally managed by the celebrated Sir Josiah Child, the ablest commercial writer of the time; and in India, by his brother Sir John Child. In 1681, Sir Josiah published an apology for the Company, under the signature of Φιλοπατρις — "A Treatise wherein is demonstrated that the East India Trade is the most National of all Foreign Trades:" in which, besides endeavouring to vindicate the Company from the objections that had been made against it, he gives an account of its state at the time. From this account it appears that the Company consisted of 556 partners; that they had from 35 to 36 ships, of from 775 to 100 tons, employed in the trade between England and India, and from port to port in India — (p. 23.); that the customs duties upon the trade amounted to about 60,000*l.* a year; and that the value of the exports, "in lead, tin, cloth, and stuffs, and other commodities of the production and manufacture of England," amounted to about 60,000*l.* or 70,000*l.* a year. Sir Josiah seems to have been struck, as he well might, by the inconsiderable amount of the trade; and he therefore dwells on the advantages of which it was indirectly productive, in enabling us to obtain supplies of raw silk, pepper, &c. at a much lower price than they would otherwise have fetched.

But this, though true, proved nothing in favour of the Company; it being an admitted fact, that those articles were furnished at a still lower price by the interlopers or private traders.

Sir Josiah Child was one of the first who projected the formation of a territorial empire in India. But the expedition fitted out in 1686, in the view of accomplishing this purpose, proved unsuccessful; and the Company were glad to accept peace on the terms offered by the Mogul. Sir John Child, having died during the course of these transactions, was succeeded in the principal management of the Company's affairs in India by Mr. Vaux. On the appointment of the latter, Sir Josiah Child, to whom he owed his advancement, exhorted him to act with vigour, and to carry whatever instructions he might receive from home into immediate effect. Mr. Vaux returned for answer, that he should endeavour to acquit himself with integrity and justice, and that he would make the laws of his country the rule of his conduct. Sir Josiah Child's answer to this letter is curious: — "He told Mr. Vaux roundly that he expected his orders were to be his rules, and not the laws of England, which were a heap of nonsense, compiled by a few ignorant country gentlemen, who hardly knew how to make laws for the good government of their own private families, much less for the regulating of companies and foreign commerce." — (*Hamilton's New Account of the East Indies*, vol. i. p. 282.)

During the latter part of the reign of Charles II. and that of his successor, the number of private adventurers, or interlopers, in the Indian trade, increased in an unusual degree. The Company vigorously exerted themselves in defence of what they conceived to be their rights; and the question with respect to the validity of the powers conferred on them by their charter was at length brought to issue, by a prosecution carried on at their instance against Mr. Thomas Sandys, for trading to the East Indies without their licence. Judgment was given in favour of the Company in 1685. But this decision was ascribed to corrupt influence; and instead of allaying, only served to increase the clamour against them. The meeting of the Convention Parliament gave the Company's opponents hopes of a successful issue to their efforts; and had they been united, they might probably have succeeded. Their opinions were, however, divided — part being for throwing the trade open, and part for the formation of a new company on a more liberal footing. The latter being formed into a body, and acting in unison, the struggle against the Company was chiefly carried on by them. The proceedings that took place on this occasion are amongst the most disgraceful in the history of the country. The most open and unblushing corruption was practised by all parties. — "*It was, in fact, a trial which side should bribe the highest; public authority inclining to one or other as the irresistible force of gold directed.*" — (*Modern Universal History*, vol. x. p. 127.) Government appears, on the whole, to have been favourable to the Company; and they obtained a fresh charter from the Crown in 1693. But in the following year the trade was virtually laid open by a vote of the House of Commons, "that all the subjects of England had an equal right to trade to the East Indies, unless prohibited by act of parliament." Matters continued on this footing till 1698. The pecuniary difficulties in which government was then involved, induced them to apply to the Company for a loan of 2,000,000*l.*, for which they offered 8 per cent. interest. The Company offered to advance 700,000*l.* at 4 per cent.; but the credit of government was at the time so low, that they preferred accepting an offer from the associated merchants, who had previously opposed the Company, of the 2,000,000*l.* at 8 per cent., on condition of their being formed into a new and exclusive company. While this project was in agitation, the advocates of free trade were not idle, but exerted themselves to show that, instead of establishing a new Company, the old one ought to be abolished. But, however conclusive, their arguments, having no adventitious recommendations in their favour, failed of making any impression. The new Company was established by authority of the legislature; and as the charter of the old Company was not yet expired, the novel spectacle was exhibited of two legally constituted bodies, each claiming an exclusive right to the trade of the same possessions!

Notwithstanding all the pretensions set up by those who had obtained the new charter during their struggle with the old Company, it was immediately seen that they were as anxious as the latter to suppress every thing like free trade. They had not, it was obvious, been actuated by any enlarged views, but merely by a wish to grasp at the monopoly, which they believed would redound to their own individual interest. The public, in consequence, became equally disgusted with both parties; or, if there were any difference, it is probable that the new Company was looked upon with the greatest aversion, inasmuch as we are naturally more exasperated by what we conceive to be duplicity and bad faith, than by fair undisguised hostility.

At first the mutual hatred of the rival associations knew no bounds. But they were not long in perceiving that such conduct would infallibly end in their ruin; and that while one was labouring to destroy the other, the friends of free trade might step in and

procure the dissolution of both. In consequence, they became gradually reconciled; and in 1702, having adjusted their differences, they resolved to form themselves into one company, entitled *The United Company of Merchants of England trading to the East Indies.*

The authority of parliament was soon after interposed to give effect to this agreement. The United Company engaged to advance 1,200,000*l.* to government without interest, which, as a previous advance had been made of 2,000,000*l.* at 8 per cent., made the total sum due to them by the public 3,200,000*l.*, bearing interest at 5 per cent.; and government agreed to ratify the terms of their agreement, and to extend the charter to the 25th of March, 1726, with 3 years' notice.

While those important matters were transacting at home, the Company had acquired some additional possessions in India. In 1692, the Bengal agency was transferred from Hooghly to Calcutta. In 1698, the Company acquired a grant from one of the grandsons of Aurengzebe, of Calcutta and 2 adjoining villages; with leave to exercise judiciary powers over the inhabitants, and to erect fortifications. These were soon after constructed, and received, in compliment to William III., then king of England, the name of Fort William. The agency at Bengal, which had hitherto been subsidiary only, was now raised to the rank of a presidency.

The vigorous competition that had been carried on for some years before the coalition of the old and new Companies, between them and the private traders, had occasioned a great additional importation of Indian silks, piece goods, and other products, and a great reduction of their price. These circumstances occasioned the most vehement complaints amongst the home manufacturers, who resorted to the arguments invariably made use of on such occasions by those who wish to exclude foreign competition; affirming that manufactured India goods had been largely substituted for those of England; that the English manufacturers had been reduced to the cruel necessity either of selling nothing, or of selling their commodities at such a price as left them no profit; that great numbers of their workmen had been thrown out of employment; and, last of all, that Indian goods were not bought by British goods, but by gold and silver, the exportation of which had caused the general impoverishment of the kingdom! The merchants and others interested in the India trade could not, as had previously happened to them in the controversy with respect to the exportation of bullion, meet these statements without attacking the principles on which they rested, and maintaining, in opposition to them, that it was for the advantage of every people to buy the products they wanted in the cheapest market. This just and sound principle was, in consequence, enforced in several petitions presented to parliament by the importers of Indian goods; and it was also enforced in several able publications that appeared at the time. But these arguments, how unanswerable soever they may now appear, had then but little influence; and in 1701, an act was passed, prohibiting the importation of Indian manufactured goods for home consumption.

For some years after the re-establishment of the Company, it continued to prosecute its efforts to consolidate and extend its commerce. But the unsettled state of the Mogul empire, coupled with the determination of the Company to establish factories in every convenient situation, exposed their affairs to perpetual vicissitudes. In 1715, it was resolved to send an embassy to Delhi, to solicit from Furucksur, an unworthy descendant of Aurengzebe, an extension and confirmation of the Company's territory and privileges. Address, accident, and the proper application of *presents*, conspired to ensure the success of the embassy. The grants or patents solicited by the Company were issued in 1717. They were in all 34. The substance of the privileges they conferred was, that English vessels wrecked on the coasts of the empire should be exempt from plunder; that the annual payment of a stipulated sum to the government of Surat should free the English trade at that port from all duties and exactions; that those villages contiguous to Madras formerly granted and afterwards refused by the government of Arcot, should be restored to the Company; that the island of Diu, near the port of Masulipatam, should belong to the Company, paying for it a fixed rent; that in Bengal, all persons, whether European or native, indebted or accountable to the Company, should be delivered up to the presidency on demand; that goods of export or import, belonging to the English, might, under a *dustuck* or passport from the president of Calcutta, be conveyed duty free through the Bengal provinces; and that the English should be at liberty to purchase the lordship of 37 towns contiguous to Calcutta, and in fact commanding both banks of the river for 10 miles south of that city. — (*Grant's Sketch of the History of the East India Company*, p. 128.)

The important privileges thus granted were long regarded as constituting the great charter of the English in India. Some of them, however, were not fully conceded; but were withheld or modified by the influence of the emperor's lieutenants, or soubahdars.

In 1717, the Company found themselves in danger from a new competitor. In the course of that year some ships appeared in India, fitted out by private adventurers from

Ostend. Their success encouraged others to engage in the same line; and in 1722, the adventurers were formed into a company under a charter from his Imperial Majesty. The Dutch and English Companies, who had so long been hostile to each other, at once laid aside their animosities, and joined heartily in an attempt to crush their new competitors. Remonstrances being found ineffectual, force was resorted to; and the vessels of the Ostend Company were captured, under the most frivolous pretences, in the open seas and on the coasts of Brazil. The British and Dutch governments abetted the selfish spirit of hostility displayed by their respective Companies. And the emperor was, in the end, glad to purchase the support of Great Britain and Holland to the pragmatic sanction, by the sacrifice of the Company at Ostend.

Though the Company's trade had increased, it was still inconsiderable, and it is very difficult, indeed, when one examines the accounts that have from time to time been published of the Company's mercantile affairs, to imagine how the idea ever came to be entertained that their commerce was of any considerable, much less paramount, importance. At an average of the 10 years ending with 1724, the total value of the British manufactures and other products annually exported to India amounted to only 92,410*l.* 12*s.* 6*d.* The average value of the bullion annually exported, during the same period, amounted to 518,102*l.* 11*s.* 0*d.*; making the total annual average exports 617,513*l.* 3*s.* 10*d.*; — a truly pitiful sum, when we consider the wealth, population, and industry of the countries between which the Company's commerce was carried on; and affording, by its smallness, a strong presumptive proof of the effect of the monopoly in preventing the growth of the trade.

In 1730, though there were 3 years still unexpired of the Company's charter, a vigorous effort was made by the merchants of London, Bristol, and Liverpool, to prevent its renewal. It has been said that the gains of the Company, had they been exactly known, would not have excited any very envious feelings on the part of the merchants; but, being concealed, they were exaggerated; and the boasts of the Company as to the importance of their trade contributed to spread the belief that their profits were enormous, and consequently stimulated the exertions of their opponents. Supposing, however, that the real state of the case had been known, there was still enough to justify the utmost exertions on the part of the merchants; for the limited profits made by the Company, notwithstanding their monopoly, were entirely owing to the misconduct of their agents, which they had vainly endeavoured to restrain; and to the waste inseparable from such unwieldy establishments.

The merchants, on this occasion, followed the example that had been set by the petitioners for free trade in 1656. They offered, in the first place, to advance the 3,200,000*l.* lent by the Company to the public, on more favourable terms; and, in the second place, they proposed that the subscribers to this loan should be formed into a *regulated* company, for opening the trade, under the most favourable circumstances, to all classes of their countrymen.

It was not intended that the Company should trade upon a joint stock, and in their corporate capacity, but that every individual who pleased should trade in the way of private adventure. The Company were to have the charge of erecting and maintaining the forts and establishments abroad; and for this, and for other expenses attending what was called the enlargement and preservation of the trade, it was proposed that they should receive a duty of 1 per cent. upon all exports to India, and of 5 per cent. upon all imports from it. For ensuring obedience to this and other regulations, it was to be enacted, that no one should trade to India without licence from the Company; and it was proposed that 31 years, with 3 years' notice, should be granted as the duration of their peculiar privilege.

"It appears from this," says Mr. Mill, "that the end which was proposed to be answered, by incorporating such a company, was the preservation and erection of the forts, buildings, and other fixed establishments, required for the trade of India. This company promised to supply that demand which has always been held forth as peculiar to the India trade, as the grand exigency which, distinguishing the traffic with India from all other branches of trade, rendered monopoly advantageous in that peculiar case, how much soever it might be injurious in others. While it provided for this real or pretended want, it left the trade open to all the advantages of private enterprise, private vigilance, private skill, and private economy, — the virtues by which individuals thrive and nations prosper. And it gave the proposed company an interest in the careful discharge of its duty by making its profits increase in exact proportion with the increase of the trade, and, of course, with the facilities and accommodation by which the trade was promoted.

"Three petitions were presented to the House of Commons in behalf of the proposed company, by the merchants of London, Bristol, and Liverpool. It was urged that the proposed company would, through the competition of which it would be productive, cause a great extension of the trade; that it would produce a larger exportation

of our own produce and manufactures in India, and reduce the price of all Indian commodities to the people at home; that new channels of traffic would be opened in Asia and America, as well as in Europe; that the duties of customs and excise would be increased; and that the waste and extravagance caused by the monopoly would be entirely avoided."— (*Mill's India*, vol. iii. p. 37.)

But these arguments did not prevail. The Company magnified the importance of their trade; and contended that it would be unwise to risk advantages already realised, for the sake of those that were prospective and contingent. They alleged that, if the trade to India were thrown open, the price of goods in India would be so much enhanced by the competition of different traders, and their price in England so much diminished, that the freedom of the trade would certainly end in the ruin of all who had been foolish enough to adventure in it. To enlarge on the fallacy of these statements would be worse than superfluous. It is obvious that nothing whatever could have been risked, and that a great deal would have been gained, by opening the trade in the way that was proposed. And if it were really true that the trade to India ought to be subjected to a monopoly, lest the traders, by their competition should ruin each other, it would follow that the trade to America — and not that only, but every branch both of the foreign and home trade of the empire — should be surrendered to exclusive companies. But such as the Company's arguments were, they seemed satisfactory to parliament. They, however, consented to reduce the interest on the debt due to them by the public from 5 to 4 per cent., and contributed a sum of 200,000*l.* for the public service. On these conditions it was agreed to extend their exclusive privileges to Lady-day, 1766, with the customary addition of 3 years' notice.

For about 15 years from this period, the Company's affairs went on without any very prominent changes. But notwithstanding the increased importation of tea, the consumption of which now began rapidly to extend, their trade continued to be comparatively insignificant. At an average of the 8 years ending with 1741, the value of the British goods and products of all sorts, exported by the Company to India and China, amounted to only 157,944*l.* 4*s.* 7*d.* a year! And during the 7 years ending with 1748, they amounted to only 188,176*l.* 16*s.* 4*d.* And when it is borne in mind that these exports included the military stores of all sorts forwarded to the Company's settlements in India and at St. Helena, the amount of which was, at all times, very considerable, it does appear exceedingly doubtful whether the Company really exported, during the entire period from 1730 to 1748, 150,000*l.* worth of British produce as a legitimate mercantile adventure! Their trade, such as it was, was entirely carried on by shipments of bullion; and even its annual average export, during the 7 years ending with 1748, only amounted to 548,711*l.* 19*s.* 2*d.* It would seem, indeed, that the Company had derived no perceptible advantage from the important concessions obtained from the Mogul emperor in 1717. But the true conclusion is, not that these concessions were of little value, but that the deadening influence of monopoly had so paralysed the Company, that they were unable to turn them to account; and that, though without competitors, and with opulent kingdoms for their customers, their commerce was hardly greater than that carried on by some single merchants.

In 1732, the Company were obliged to reduce their dividend from 8 to 7 per cent., at which rate it continued till 1744.

The opposition the Company had experienced from the merchants, when the question as to the renewal of their charter was agitated, in 1730, made them very desirous to obtain the next renewal in as quiet a manner as possible. They therefore proposed, in 1743, when 23 years of their charter were yet unexpired, to lend 1,000,000*l.* to government, at 3 per cent., provided their exclusive privileges were extended to 1780, with the usual notice. And, as none were expecting such an application, or prepared to oppose it, the consent of government was obtained without difficulty.

But the period was now come, when the mercantile character of the East India Company — if, indeed, it could with propriety be, at any time, said to belong to them — was to be eclipsed by their achievements as a military power, and the magnitude of their conquests. For about two centuries after the European powers began their intercourse with India, the Mogul princes were regarded as amongst the most opulent and powerful of monarchs. Though of a foreign lineage — being descended from the famous Tamerlane, or Timur Bec, who overran India in 1400 — and of a different religion from the great body of their subjects, their dominion was firmly established in every part of their extensive empire. The administration of the different provinces was committed to officers, denominated soubahdars, or nabobs, intrusted with powers, in their respective governments, similar to those enjoyed by the Roman prætors. So long as the emperors retained any considerable portion of the vigour and bravery of their hardy ancestors, the different parts of the government were held in due subordination, and the soubahdars yielded a ready obedience to the orders from Delhi. But the emperors were gradually debauched by the apparently prosperous condition of their affairs.

Instead of being educated in the council or the camp, the heirs of almost unbounded power were brought up in the slothful luxury of the seraglio; ignorant of public affairs; benumbed by indolence; depraved by the flattery of women, of eunuchs, and of slaves; their minds contracted with their enjoyments; their inclinations were vilified by their habits; and their government grew as vicious, as corrupt, and as worthless as themselves. When the famous Kouli Khan, the usurper of the Persian throne, invaded India, the effeminate successor of Tamerlane and Aurengzebe was too unprepared to oppose, and too dastardly to think of avenging the attack. This was the signal for the dismemberment of the monarchy. No sooner had the invader withdrawn, than the soubahdars either openly threw off their allegiance to the emperor, or paid only a species of nominal or mock deference to his orders. The independence of the soubahdars was very soon followed by wars amongst themselves; and, being well aware of the superiority of European troops and tactics, they anxiously courted the alliance and support of the French and English East India Companies. These bodies, having espoused different sides, according as their interests or prejudices dictated, began very soon to turn the quarrels of the soubahdars to their own account. Instead of being contented, as hitherto, with the possession of factories and trading towns, they aspired to the dominion of provinces; and the struggle soon came to be, not which of the native princes should prevail, but whether the English or the French should become the umpires of India.

But these transactions are altogether foreign to the subject of this work; nor could any intelligible account of them be given without entering into lengthened statements. We shall only, therefore, observe that the affairs of the French were ably conducted by La Bourdonnais, Dupleix, and Lally, officers of distinguished merit, and not less celebrated for their great actions than for the base ingratitude of which they were the victims. But though victory seemed at first to incline to the French and their allies, the English affairs were effectually retrieved by the extraordinary talents and address of a single individual. Colonel (afterwards Lord) Clive was equally brave, cautious, and enterprising; not scrupulous in the use of means; fertile in expedients; endowed with wonderful sagacity and resolution; and capable of turning even the most apparently adverse circumstances to advantage. Having succeeded in humbling the French power in the vicinity of Madras, Clive landed at Calcutta in 1757, in order to chastise the soubahdar, Surajah ul Dowlah, who had a short while before attacked the English factory at that place, and inhumanly shut up 146 Englishmen in a prison, where, owing to the excessive heat and want of water, 123 perished in a single night. Clive had only 700 European troops and 1,400 Sepoys with him when he landed; but with these, and 570 sailors furnished by the fleet, he did not hesitate to attack the immense army commanded by the soubahdar, and totally defeated him in the famous battle of Plassey. This victory threw the whole provinces of Bengal, Bahar, and Orissa into our hands; and they were finally confirmed to us by the treaty negotiated in 1765.

Opinion has been long divided as to the policy of our military operations in India; and it has been strenuously contended, that we should never have extended our conquests beyond the limits of Bengal. The legislature seems to have taken this view of the matter; the House of Commons having resolved, in 1782, "that to pursue schemes of conquest and extent of dominion in India are measures repugnant to the wish, the honour, and the policy of this nation." But others have argued, and apparently on pretty good grounds, that, having gone thus far, we were compelled to advance. The native powers, trembling at the increase of British dominion, endeavoured, when too late, to make head against the growing evil. In this view they entered into combinations and wars against the English; and the latter having been uniformly victorious, their empire necessarily went on increasing, till all the native powers have been swallowed up in its vast extent.

The magnitude of the acquisitions made by Lord Clive powerfully excited the attention of the British public. Their value was prodigiously exaggerated; and it was generally admitted that the Company had no legal claim to enjoy, during the whole period of their charter, all the advantages resulting from conquests, to which the fleets and armies of the state had largely contributed. In 1767, the subject was taken up by the House of Commons; and a committee was appointed to investigate the whole circumstances of the case, and to calculate the entire expenditure incurred by the public on the Company's account. During the agitation of this matter, the right of the Company to the new conquests was totally denied by several members. In the end, however, the question was compromised by the Company agreeing to pay 400,000*l.* a year for 2 years; and in 1769, this agreement, including the yearly payment, was further extended for 5 years more. The Company, at the same time, increased their dividend, which had been fixed by the former agreement at 10, to 12½ per cent.

But the Company's anticipations of increased revenue proved entirely visionary. The rapidity of their conquests in India, the distance of the controlling authority at home,

and the abuses in the government of the native princes, to whom the Company had succeeded, conspired to foster a strong spirit of peculation among their servants. Abuses of every sort were multiplied to a frightful extent. The English, having obtained, or rather enforced, an exemption from those heavy transit duties to which the native traders were subject, engrossed the whole internal trade of the country. They even went so far as to decide what quantity of goods each manufacturer should deliver, and what he should receive for them. It is due to the directors to say, that they exerted themselves to repress these abuses. But their resolutions were neither carried into effect by their servants in India, nor sanctioned by the proprietors at home; so that the abuses, instead of being repressed, went on acquiring fresh strength and virulence. The resources of the country were rapidly impaired; and while many of the Company's servants returned to Europe with immense fortunes, the Company itself was involved in debt and difficulties; and, so far from being able to pay the stipulated sum of 400,000*l.* a year to government, was compelled to apply, in 1772, to the Treasury for a loan!

In this crisis of their affairs, government interposed, and a considerable change was made in the constitution of the Company. The dividend was restricted to 6 per cent., till the sum of 1,400,000*l.*, advanced to them by the public, should be paid. It was further enacted, that the court of directors should be elected for 4 years, 6 members annually, but none to hold their seats for more than 4 years at a time; that no person was to vote at the courts of proprietors who had not possessed his stock for 12 months; and that the amount of stock required to qualify for a vote should be increased from 500*l.* to 1,000*l.* The jurisdiction of the Mayor's Court at Calcutta was in future confined to small mercantile cases; and, in lieu of it, a new court was appointed, consisting of a chief justice and 3 principal judges appointed by the Crown. A superiority was also given to Bengal over the other presidencies, Mr. Warren Hastings being named in the act as governor-general of India. The governor-general, councillors, and judges were prohibited from having any concern whatever in trade; and no person residing in the Company's settlements was allowed to take more than 12 per cent. per annum for money. Though strenuously opposed, these measures were carried by a large majority.

At this period (1773) the total number of proprietors of East India stock, with their qualifications as they stood in the Company's book, were as follows: —

	Proprietors.	Stock. £	s.	d.
Englishmen, possessing 1,000*l.* stock and upwards	487	1,018,398	19	11
Foreigners, possessing 1,000*l.* stock and upwards	325	890,940	17	0
Englishmen, possessing 500*l.* stock and upwards	1,246	634,464	1	8
Foreigners, possessing 500*l.* stock and upwards	95	50,226	0	0
Total	2,153	£2,594,029	18	7

Notwithstanding the vast extension of the Company's territories, their trade continued to be apparently insignificant. During the 3 years ending with 1773, the value of the entire exports of British produce and manufactures, including military stores, exported by the Company to India and China, amounted to 1,469,411*l.*, being at the rate of 489,803*l.* a year; the annual exports of bullion during the same period being only 84,933*l.*! During the same 3 years, 23 ships sailed annually for India. The truth, indeed, seems to be, that, but for the increased consumption of tea in Great Britain, the Company would have entirely ceased to carry on any branch of trade with the East; and that the monopoly would have excluded us as effectually from the markets of India and China as if the trade had reverted to its ancient channels, and the route by the Cape of Good Hope been relinquished.

In 1781, the exclusive privileges of the Company were extended to 1791, with 3 years' notice; the dividend on the Company's stock was fixed at 8 per cent.; three fourths of their surplus revenues, after paying the dividend, and the sum of 400,000*l.* payable to government, was to be applied to the public service, and the remaining fourth to the Company's own use.

In 1780, the value of British produce and manufactures exported by the Company to India and China amounted to only 386,152*l.*; the bullion exported during the same year was 15,014*l.* The total value of the exports during the same year was 12,648,616*l.*; showing that the East India trade formed only *one thirty-second* part of the entire foreign trade of the empire!

The administration of Mr. Hastings was one continued scene of war, negotiation, and intrigue. The state of the country, instead of being improved, became worse; so much so, that in a council minute by Marquis Cornwallis, dated the 18th of September, 1789, it is distinctly stated, "*that one third part of the Company's territory is now a jungle for wild beasts.*" Some abuses in the conduct of their servants were, indeed, rectified; but, notwithstanding, the nett revenue of Bengal, Bahar, and Orissa, which, in 1772, had amounted to 2,126,766*l.*, declined, in 1785, to 2,072,963*l.* This exhaustion of the country, and the expenses incurred in the war with Hyder Ally and France, involved

the Company in fresh difficulties; and being unable to meet them, they were obliged, in 1783, to present a petition to parliament, setting forth their inability to pay the stipulated sum of 400,000*l.* a year to the public, and praying to be excused from that payment and to be supported by a loan of 900,000*l.*

All parties seemed now to be convinced that some further changes in the constitution of the Company had become indispensable. In this crisis, Mr. Fox brought forward his famous India Bill; the grand object of which was to abolish the courts of directors and proprietors, and to vest the government of India in the hands of 7 commissioners appointed by parliament. The coalition between Lord North and Mr. Fox having rendered the ministry exceedingly unpopular, advantage was taken of the circumstance to raise an extraordinary clamour against the bill. The East India Company stigmatised it as an invasion of their chartered rights; though it is obvious that, from their inability to carry into effect the stipulations under which those rights were conceded to them, they necessarily reverted to the public; and it was as open to parliament to legislate upon them as upon any other question. The political opponents of the government represented the proposal for vesting the nomination of commissioners in the legislature, as a daring invasion of the prerogative of the Crown, and an insidious attempt of the minister to render himself all-powerful, by adding the patronage of India to that already in his possession. The bill was, however, carried through the House of Commons; but, in consequence of the ferment it had excited, and the avowed opposition of his Majesty, it was thrown out in the House of Lords. This event proved fatal to the coalition ministry. A new one was formed, with Mr. Pitt at its head; and parliament being soon after dissolved, the new minister acquired a decisive majority in both Houses. When thus secure of parliamentary support, Mr. Pitt brought forward his India Bill, which was successfully carried through all its stages. By this bill a Board of Control was erected, consisting of 6 members of the privy council, who were "to check, superintend, and control all acts, operations, and concerns, which in anywise relate to the civil or military government, or revenues, of the territories and possessions of the East India Company." All communications to or from India, touching any of the above matters, were to be submitted to this Board; the directors being ordered to yield obedience to its commands, and to alter or amend all instructions sent to India as directed by it. A secret committee of 3 directors was formed, with which the Board of Control might transact any business it did not choose to submit to the court of directors. Persons returning from India were to be obliged, under very severe penalties, to declare the amount of their fortunes; and a tribunal was appointed for the trial of all individuals accused of misconduct in India, consisting of a judge from each of the Courts of King's Bench, Common Pleas, and Exchequer; 5 members of the House of Lords, and 7 members of the House of Commons; the last being chosen by lot at the commencement of each session. The superintendence of all commercial matters continued, as formerly, in the hands of the directors.

During the administration of Marquis Cornwallis, who succeeded Mr. Hastings, Tippoo Saib, the son of Hyder Ally, was stripped of nearly half his dominions; the Company's territorial revenue was, in consequence, greatly increased; at the same time that the permanent settlement was carried into effect in Bengal, and other important changes accomplished. Opinion has been long divided as to the influence of these changes. On the whole, however, we are inclined to think that they have been decidedly advantageous. Lord Cornwallis was, beyond all question, a sincere friend to the people of India; and laboured earnestly, if not always successfully, to promote their interests, which he well knew were identified with those of the British nation.

During the 3 years ending with 1793, the value of the Company's exports of British produce and manufactures fluctuated from 928,783*l.* to 1,031,262*l.* But this increase is wholly to be ascribed to the reduction of the duty on tea in 1784, and the vast increase that, consequently, took place in its consumption. —(See article Tea.) Had the consumption of tea continued stationary, there appear no grounds for thinking that the Company's exports in 1793 would have been greater than in 1780, unless an increase had taken place in the quantity of military stores exported.

In 1793, the Company's charter was prolonged till the 1st of March, 1814. In the act for this purpose, a species of provision was made for opening the trade to India to private individuals. All his Majesty's subjects, residing in any part of his European dominions, were allowed to export to India any article of the produce or manufacture of the British dominions, except military stores, ammunition, masts, spars, cordage, pitch, tar, and copper; and the Company's civil servants in India, and the free merchants resident there, were allowed to ship, on their own account and risk, all kinds of Indian good, except calicoes, dimities, muslins, and other piece goods. But neither the merchants in England, nor the Company's servants or merchants in India, were allowed to export or import except in Company's ships. And in order to insure such conveyance, it was enacted, that the Company should annually appropriate 3,000 tons of shipping for

the use of private traders; it being stipulated that they were to pay, in time of peace, *5l.* outwards, and *15l.* homewards, for every ton occupied by them in the Company's ships; and that this freight might be raised in time of war, with the approbation of the Board of Control.

It might have been, and, indeed, most probably was, foreseen that very few British merchants or manufacturers would be inclined to avail themselves of the privilege of sending out goods in Company's ships; or of engaging in a trade fettered on all sides by the jealousy of powerful monopolists, and where, consequently, their superior judgment and economy would have availed almost nothing. As far, therefore, as they were concerned, the relaxation was more apparent than real, and did not produce any useful results.* It was, however, made use of to a considerable extent by private merchants in India; and also by the Company's servants returning from India, many of whom invested a part, and some the whole, of their fortune, in produce fit for the European markets.

The financial difficulties of the East India Company led to the revolution which took place in its government in 1784. But, notwithstanding the superintendence of the Board of Control, its finances have continued nearly in the same unprosperous state as before. We have been favoured, from time to time, with the most dazzling accounts of revenue that was to be immediately derived from India; and numberless acts of parliament have been passed for the appropriation of surpluses that never had any existence except in the imagination of their framers. The proceedings that took place at the renewal of the charter, in 1793, afford a striking example of this. Lord Cornwallis had then concluded the war with Tippoo Saib, which had stripped him of half his dominions: the perpetual settlement, from which so many benefits were expected to be derived, had been adopted in Bengal; and the Company's receipts had been increased, in consequence of accessions to their territory, and subsidies from native princes, &c., to upwards of *eight* millions sterling a year, which, it was calculated, would afford a future annual surplus, after every description of charge had been deducted, of 1,240,000*l.* Mr. Dundas (afterwards Lord Melville), then president of the Board of Control, availed himself of these favourable appearances, to give the most flattering representation of the Company's affairs. There could, he said, be no question as to the permanent and regular increase of the Company's surplus revenue; he assured the House that the estimates had been framed with the greatest care; that the Company's possessions were in a state of prosperity till then unknown in India; that the abuses, which had formerly insinuated themselves into some departments of the government, had been rooted out; and that the period was at length arrived, when India was to pour her golden treasures into the lap of England! Parliament participated in these brilliant anticipations, and in the act prolonging the charter it was enacted, 1st, That 500,000*l.* a year of the surplus revenue should be set aside for reducing the Company's debt in India to 2,000,000*l.*; 2dly, That 500,000*l.* a year should be paid into the exchequer, to be appropriated for the public service as parliament should think fit to order; 3dly, When the India debt was reduced to 2,000,000*l.*, and the bond debt to 1,500,000., *one sixth* part of the surplus was to be applied to augment the dividends, and the other *five sixths* were to be paid into the Bank, in the name of the commissioners of the national debt, to be accumulated as a *guarantee fund*, until it amounted to 12,000,000*l.*; and when it reached that sum, the dividends upon it were to be applied to make up the dividends on the capital stock of the Company to 10 per cent., if at any time the funds appropriated to that purpose should prove deficient, &c.

Not one of these anticipations was realised! Instead of being diminished, the Company's debts began immediately to increase. In 1795, they were authorised to add to the amount of their floating debt. In 1796, a new device to obtain money was fallen upon. Mr. Dundas represented that as all competition had been destroyed in consequence of the war, the Company's commerce had been greatly increased, and that their mercantile capital had become insufficient for the extent of their transactions. In consequence of this representation, leave was given to the Company to add *two millions* to their capital stock by creating 20,000 new shares; but as these shares sold at the rate of 173*l.* each, they produced 3,460,000*l.* In 1797, the Company issued additional bonds to the extent of 1,417,000*l.*; and notwithstanding all this, Mr. Dundas stated in the House of Commons, on the 13th of March, 1799, that there had been a deficit in the previous year of 1,319,000*l.*

During the administration of the Marquis Wellesley, which began in 1797–8 and terminated in 1805–6, the British empire in India was augmented by the conquest of Seringapatam and the whole territories of Tippoo Saib, the cession of large tracts by

* In his letter to the East India Company, dated the 21st of March, 1812, Lord Melville says: "It will not be denied that the facilities granted by that act (the act of 1793) have not been satisfactory, at least to the merchants either of this country or of India. They have been the source of constant dispute, and they have even entailed a heavy expense upon the Company, without affording to the public any adequate benefit from such a sacrifice."— (*Papers published by E. I. Comp.* 1813, p. 84.)

the Mahratta chiefs, the capture of Delhi, the ancient seat of the Mogul empire, and various other important acquisitions; so that the revenue, which had amounted to 8,059,000*l.* in 1797, was increased to 15,403,000*l.* in 1805. But the expenses of government, and the interest of the debt, increased in a still greater proportion than the revenue, having amounted, in 1805, to 17,672,000*l.*, leaving a deficit of 2,269,000*l.* In the following year the revenue fell off nearly 1,000,000*l.*, while the expenses continued nearly the same. And there was, at an average, a continued excess of expenditure, including commercial charges, and a contraction of fresh debt, down to 1811–12.

Notwithstanding the vast additions made to their territories, the Company's commerce with them continued to be very inconsiderable. During the 5 years ending with 1811, the exports to India by the Company, exclusive of those made on account of individuals in their ships, were as under: —

1807	£952,416	1810	£1,010,815
1808	919,544	1811	1,033,816
1809	866,153		

The exports by the private trade, and the *privilege* trade, that is, the commanders and officers of the Company's ships, during the above-mentioned years, were about as large. During the 5 years ending with 1807-8, the annual average imports into India by British private traders, only, amounted to 305,496*l.* — (*Papers published by the East India Company in* 1813, 4to. p. 56.)

The Company's exports include the value of the military stores sent from Great Britain to India. The ships employed in the trade to *India and China*, during the same 5 years, varied from 44 to 53, and their burden from 36,671 to 45,342 tons.

For some years previously to the termination of the Company's charter in 1813, the conviction had been gaining ground among all classes, that the trade to the East was capable of being very greatly extended; and that it was solely owing to the want of enterprise and competition, occasioned by its being subjected to a monopoly, that it was confined within such narrow limits. Very great efforts were, consequently, made by the manufacturing and commercial interests to have the monopoly set aside, and the trade to the East thrown open. The Company vigorously resisted these pretensions; and had interest enough to procure a prolongation of the privilege of carrying on an exclusive trade to China to the 10th of April, 1831, with 3 years' notice; the government of India being continued in their hands for the same period. Fortunately, however, the trade to India was opened, under certain conditions, to the public. The principal of these conditions were, that private individuals should trade, directly only, with the presidencies of Calcutta, Madras, and Bombay, and the port of Penang; that the vessels fitted out by them should not be under 350 tons burden; and that they should abstain, unless permitted by the Company, or the Board of Control, from engaging in the carrying trade of India, or in the trade between India and China. And yet, despite these disadvantages, such is the energy of individual enterprise as compared with monopoly, that the private traders gained an almost immediate ascendancy over the East India Company, and in a very short time more than *trebled* our trade with India!

In the Report of the committee of the House of Lords on the foreign trade of the country, printed in May, 1821, it is stated, that "the greatly increased consumption of British goods in the East, since the commencement of the free trade, cannot be accounted for by the demand of European residents, the number of whom does not materially vary; and it appears to have been much the greatest in articles calculated for the general use of the natives. That of the cotton manufactures of this country alone is stated, since the first opening of the trade, to have been augmented from *four* to *five* fold (it is now (1843) augmented many hundreds of times). The value of the merchandise exported from Great Britain to India, which amounted, in 1814, to 870,177*l.*, amounted *, in 1819, to 3,052,741*l.*; and although the market appears then to have been so far overstocked as to occasion a diminution of nearly one half in the exports of the following year, that diminution appears to have taken place more in the articles intended for the consumption of Europeans than of natives; and the trade is now stated to the committee, by the best informed persons, to be reviving. When the amount of population, and the extent of the country over which the consumption of these articles is spread, are considered, it is obvious that any facility which can, consistently with the political interests and security of the Company's dominions, be given to the private trader, for the distribution of his exports, by increasing the number of ports at which he may have the option of touching in pursuit of a market, cannot fail to promote a more ready and extensive demand."

Besides the restraints imposed by the act of 1813 on the proceedings of the free traders†,

* This is the amount of the Company's exports only, and the sum is not quite accurate: see *post.*

† These restraints were a good deal modified by the 3 Geo. 4. c. 80., passed in pursuance of the recommendation of the committee quoted above.

they frequently experienced very great loss and inconvenience from the commercial speculations of the East India Company. The latter had commercial residents, with large establishments of servants, some of them intended for coercive purposes, stationed in all the considerable towns; and the Marquis Wellesley has stated, "that the intimation of a wish from the Company's resident is always received as a command by the native manufacturers and producers." It was obviously impossible for a private trader to come fairly into competition with persons possessing such authority, and who were often instructed to make their purchases on any terms. Mr. Tucker, since chairman of the Company, states, in his useful work on Indian finance (published in 1825), that the Company's investments (purchases) in India, during the previous 10 years, might in some instances be said to have been forced; meaning by this, that the goods exported by them from India were sometimes compulsorily obtained from the natives, and sometimes bought at a higher price than they would have brought in a market frequented only by regular merchants. But the truth is, that it was not in the nature of things that the Company's purchases could be fairly made; the natives could not deal with their servants as they would have dealt with private individuals; and it would be absurd to suppose that agents authorised to buy on account of government, and to draw on the public treasury for the means of payment, should generally evince the prudence and discretion of individuals directly responsible in their own private fortunes for their transactions. The interference of such persons would, under any circumstances, have rendered the East India trade peculiarly hazardous. But their influence in this respect was materially aggravated by the irregularity of their appearances. No individual, not belonging to the court of directors, could foresee whether the Company's agents would be in the market at all; or, if there, to what extent they would either purchase or sell. So capricious were their proceedings, that in some years they have laid out 700,000*l.* on indigo, while in others they have not laid out a single shilling: and so with other things. A fluctuating demand of this sort necessarily occasioned great and sudden variations of price, and was injurious alike to the producers and the private merchants. Mr. Mackenzie, late secretary to the government of Bengal, set the mischievous influence of the circumstances now alluded to in the clearest point of view, in his masterly evidence before the select committee of 1832 on the affairs of India; and he further showed, that it was not possible, by any sort of contrivance, to obviate the inconveniences complained of, and that they would unavoidably continue till the Company ceased to have any thing to do with commerce.

But besides being injurious to the private trader, and to the public generally, both in India and England, this trade was of no advantage to the East India Company. How, indeed, could it be otherwise? A company that maintained armies and retailed tea, that carried a sword in the one hand and a ledger in the other, was a contradiction; and, had she traded with success, would have been a prodigy. It was impossible for her to pay that attention to details that is indispensable to the carrying on of commerce with advantage. She may have gained something by the monopoly of the tea trade, though even that is questionable; but it is admitted on all hands, that she lost heavily by her trade to India.* When, therefore, the question as to the renewal of the charter came to be discussed in 1832 and 1833, the Company had no reasonable objection to urge against their being deprived of the privilege of trading. And the act 3 & 4 Will. 4. c. 85.; for continuing the charter till 1854, *terminated the Company's commercial character;* by enacting, that the Company's trade to China was to cease on the 22d of April, 1834 †, and that the Company was, as soon as possible after that date, to dispose of their stocks on hand, and close their commercial business. And the wonderful increase that has since taken place in the trade with the East is the best proof of the sagacity and soundness of the opinions of those by whose efforts the incubus of monopoly was removed.

II. East India Company (Constitution of).

Under the present act, the functions of the East India Company are wholly political. She is to continue to govern India, with the concurrence and under the supervision of the Board of Control, nearly on the plan laid down in Mr. Pitt's act, till the 30th of April, 1854. All the real and personal property belonging to the Company on the 22d of April, 1834, was vested in the Crown, and is held or managed by the Company in trust for the same, subject of course to all claims, debts, contracts, &c. already in

* It is needless now to enter upon the controversy as to the origin of the Company's debt. — (See first edition of this work, p. 507.) It is probable that those who contend that this debt is *wholly attributable* to the Company's commercial operations, have exaggerated their injurious influence. But we do not think that there is any room for doubting, notwithstanding the enormous prices charged on tea, that, for many years previously to the abolition of the monopoly, the Company's trade was, on the whole, productive of nothing but loss.

† For the new regulations as to the China trade, see Canton.

existence, or that may hereafter be brought into existence by competent authority. The Company's debts and liabilities are all charged on India. The dividend, which is 10½ per cent., is paid in England out of the revenues of India; and provision is made for the establishment of a *security fund* for its discharge, The dividend may be redeemed by parliament, on payment of 200*l.* for 100*l.* stock, any time after April, 1874; but it is provided, in the event of the Company being deprived of the government of India in 1854, that they may claim redemption of the dividend any time thereafter upon 3 years' notice. — (3 & 4 *Will.* 4. c. 85.)

Company's Stock— forms a capital of 6,000,000*l.*, into which all persons, natives or foreigners, males or females, bodies politic or corporate (the Governor and Company of the Bank of England only excepted), are at liberty to purchase, without limitation of amount. Since 1793, the dividends have been 10½ per cent., to which they are limited by the late act.

General Courts. — The proprietors in general court assembled are empowered to enact by-laws, and in other respects are competent to the complete investigation, regulation, and control of every branch of the Company's concerns; but, for the more prompt despatch of business, the executive detail is vested in a court of directors. A general court is required to be held once in the months of March, June, September, and December, in each year. No one can be present at a general court unless possessed of 500*l.* stock; nor can any person vote upon the determination of any question, who has not been in possession of 1,000*l.* stock for the preceding 12 months, unless such stock have been obtained by bequest or marriage. Persons possessed of 1,000*l.* stock are empowered to give a single vote; 3,000*l.* are a qualification for two votes; 6,000*l.* for three votes; and 10,000*l.* and upwards for four votes. There were 2,003 proprietors on the Company's books in 1825; of these, 1,494 were qualified to give single votes; 392, two votes; 69, three votes; and 48, four votes. Upon any special occasion, 9 proprietors, duly qualified by the possession of 1,000*l.* stock, may, by a requisition in writing to the court of directors, call a general court; which the directors are required to summon within 10 days, or, in default, the proprietors may call such court by notice affixed upon the Royal Exchange. In all such courts the questions are decided by a majority of voices; in case of an equality, the determination must be by the treasurer drawing a lot. Nine proprietors may, by a requisition in writing, demand a ballot upon any question, which shall not be taken within 24 hours after the breaking up of the general court.

Court of Directors. — The court of directors is composed of 24 members, chosen from among the proprietors, each of whom must be possessed of 2,000*l.* stock; nor can any director, after being chosen, act longer than while he continues to hold stock. Of these, 6 are chosen on the second Wednesday in April in each year, to serve for 4 years, in the room of 6 who have completed such service. After an interval of 12 months, those who had gone out by rotation are eligible to be re-elected for the ensuing 4 years. Formerly, no person who had been in the Company's civil or military service in India was eligible to be elected a director until he had been a resident in England 2 years after quitting the service: but this condition no longer exists; and all civil or military servants of the Company in India, supposing they are otherwise eligible, may be chosen directors immediately on their return to England, provided they have no unsettled accounts with the Company; if so, they are ineligible for 2 years after their return, unless their accounts be sooner settled. — (3 & 4 *Will.* 4. c. 85. § 28.) The directors choose annually, from amongst themselves, a chairman and a deputy chairman. They are required by by-laws to meet once in every week at least; but they frequently meet oftener, as occasion requires. Not less than 13 can form a court. Their determinations are guided by a majority: in case of an equality, the question must be decided by the drawing of a lot by the treasurer; upon all questions of importance, the sense of the court is taken by ballot. The Company's officers, both at home and abroad, receive their appointments immediately from the court; to whom they are responsible for the due and faithful discharge of the trust reposed in them. The patronage is, nevertheless, so arranged, as that each member of the court separately participates therein.

Secret Committee. — The principal powers of the court of directors are vested in a secret committee, forming a sort of cabinet or privy council. All communications of a confidential or delicate nature between the Board of Control and the Company are submitted, in the first instance at least, to the consideration of this committee; and the directions of the Board, as to political affairs, may be transmitted direct to India, through the committee, without being seen by the other directors. The secret committee is appointed by the court of directors, and its members are sworn to secresy.

III. EAST INDIES (STATE OF SOCIETY IN, GROWING DEMAND FOR ENGLISH GOODS, TRADE, COLONISATION, ETC.)

1. *Distinction of Castes in India. Inaccuracy of the Representations as to the Inhabitants being unalterably attached to ancient Customs and Practices.*—We have taken occasion, in the preceding sketch of the history of the East India Company, repeatedly to notice the small extent of the trade carried on by its agency. It was contended, however, that this was to be ascribed, not to the deadening influence of monopoly, but to the peculiar state of the people of India. A notion has long been prevalent in this quarter of the world, that the Hindoos are a race unsusceptible of change or improvement of any sort; that every man is brought up to the profession of his father, and can engage in none else; and that, owing to the simplicity and unalterableness of their habits, they never can be consumers, at least to any considerable extent, of foreign commodities. "What is now in India, has always been there, and is likely still to continue." — (*Robertson's Disquisition*, p. 202.) The Hindoos of this day are said to be the same as the Hindoos of the age of Alexander the Great. The description of them given by Arrian has been quoted as applying to their actual situation. It is affirmed that they have neither improved nor retrograded; and we are referred to India as to a country in which the institutions and manners that prevailed 3,000 years ago may still be found in their pristine purity! The President de Goguet lays it down distinctly, in his learned and invaluable work on the origin of laws, arts, and sciences, that in India "every trade is confined to a particular caste, and can be exercised only by those whose parents professed it."— (*Origin of Laws, &c.* Eng. trans. vol. iii. p. 24.) Dr. Robertson says, that *the station of every Hindoo is unalterably fixed; his destiny is irrevocable*;

and the walk of life is marked out, from which he must never deviate."—(*Disquisition on India*, p. 199.) The same opinions are maintained by later authorities. Dr. Tennant says, that "the whole Indian community is divided into 4 great classes; and each class is stationed between certain walls of separation, which are impassable by the purest virtue, and most conspicuous merit."—(Quoted by *Mr. Rickards*, p. 6.) This unalterable destiny of individuals has been repeatedly assumed in the despatches and official papers put forth by the East India Company; and has been referred to on all occasions by them and their servants, as a proof that the depressed and miserable condition of the natives is not owing to misgovernment, or to the weight of the burdens laid upon them; and that it is in vain to think of materially improving their condition, or of making them acquainted with new arts, or giving them new habits, so long as the institution of castes, and the prejudices to which it has given rise, preserve their ascendancy unimpaired.

But notwithstanding the universal currency which the opinions now referred to have obtained, and the high authority by which they are supported, they are, in all the most essential respects, entirely without foundation! The books and codes of the Hindoos themselves, and the minute and careful observations that have recently been made on Indian society, have shown that the influence ascribed to the institution of castes by the ancients, and by the more early modern travellers, has been prodigiously exaggerated. In the first part of his work on India, Mr. Rickards has established, partly by references to the authoritative books of the Hindoos, and partly by his own observations, and those of Mr. Colebrook, Dr. Heber, and other high authorities, that the vast majority of the Hindoo population may, and, in fact, does engage in all sorts of employments. It has been further shown, that there is nothing in the structure of Indian society to oppose any serious obstacle to the introduction of new arts, or the spread of improvement; and that the causes of the poverty and misery of the people must be sought for in other circumstances than the institution of castes, and the nature of Hindoo superstition.

The early division of the population into the 4 great classes of priests (Brahmins), soldiers (Gshatryas), husbandmen and artificers (Vaisyas), and slaves (Sudras), was maintained only for a very short period. The Hindoo traditions record that a partial intermixture of these classes took place at a very remote epoch; and the mixed brood thence arising were divided into a vast variety of new tribes, or castes, to whom, speaking generally, no employments are forbidden.

"The employments," says Mr. Rickards, "allowed to these mixed and impure castes, may be said to be every description of handicraft and occupation for which the wants of human society have created a demand. Though many seem to take their names from their ordinary trade or profession, and some have duties assigned them too low and disgusting for any others to perform, but from the direst necessity; yet no employment, generally speaking, is forbidden to the mixed and impure tribes, excepting three of the prescribed duties of the sacerdotal class; viz. teaching the *Vedas*, officiating at a sacrifice, and receiving presents from a pure-handed giver; which three are exclusively *Brahminical*."

Mr. Colebrook, who is acknowledged on all hands to be one of the very highest authorities as to all that respects Indian affairs, has a paper in the fifth volume of the *Asiatic Researches*, on the subject of castes. In this paper, Mr. Colebrook states that the *Jatimala*, a Hindoo work, enumerates *forty-two* mixed classes springing from the intercourse of a man of inferior class with a woman of a superior class, or in the *inverse* order of the classes. Now, if we add to these the number that must have sprung from intermixture in the *direct* order of the classes, and the hosts further arising from the continued intermixture of the mixed tribes amongst themselves, we shall not certainly be disposed to dissent from Mr. Colebrook's conclusion, "that the subdivisions of these classes have further multiplied distinctions to an *endless variety*."

Mr. Colebrook has given the following distinct and accurate account of the professions and employments of the several classes at the present day. It forms a curious commentary on the "irrevocable destiny" of Dr. Robertson, and the "impassable walls" of Dr. Tennant.

"A *Brahman*, unable to subsist by his duties, may live by the duty of a soldier; if he cannot get a subsistence by either of these employments, he may apply to tillage and attendance on cattle, or gain a competence by traffic, avoiding certain commodities. A *Cshatrya* in distress may subsist by all these means; but he must not have recourse to the highest functions. In seasons of distress, a further latitude is given. The practice of medicine, and other learned professions, painting, and other arts, work for wages, menial service, alms, and usury, are among the modes of subsistence allowed both to the *Brahman* and *Cshatrya*. A *Vaisya*, unable to subsist by his own duties, may descend to the servile acts of a *Sudra*; and a *Sudra*, not finding employment by waiting on men of the higher classes, may subsist by handicrafts; principally following those mechanical operations, as joinery and masonry, and practical arts, as painting and writing, by which he may serve men of superior classes; and although a man of a lower class is in general restricted from the acts of a higher class, the *Sudra* is expressly permitted to become a trader, or a husbandman.

"Besides the particular occupation assigned to each of the mixed classes, they have the alternative of following that profession, which regularly belongs to the class from which they derive their origin on the mother's side; those at least have such an option who are born in the direct order of the classes. *The mixed classes are also permitted to subsist by any of the duties of a Sudra, that is, by menial service, by handicrafts, by commerce, and agriculture.* Hence it appears, THAT ALMOST EVERY OCCUPATION,

THOUGH REGULARLY IT BE THE PROFESSION OF A PARTICULAR CLASS, IS OPEN TO MOST OTHER CLASSES; and that the limitations, far from being rigorous, do in fact reserve only the peculiar profession of the *Brahman*, which consists in teaching the *Veda*, and officiating at religious ceremonies."

"We have thus," says Mr. Rickards, by whom this passage has been quoted, "the highest existing authority for rejecting the doctrine of the whole Hindoo community 'being divided into four castes,' and of their peculiar prerogatives being guarded inviolate by 'impassable walls of separation.' It is also clear that the intermixture of castes had taken place, to an indefinite extent, at the time when the *Dherma Sastra* was composed, which Sir William Jones computes to be about 880 years B. C.; for the mixed classes are specified in this work, and it also refers, in many places, to past times, and to events which a course of time only could have brought about. The origin of the intermixture is therefore lost in the remotest and obscurest antiquity; and having been carried on through a long course of ages, a heterogeneous mass is every where presented to us, in these latter times, without a single example, in any particular state, or kingdom, or separate portion of the Hindoo community, of that quadruple division of castes, which has been so confidently insisted upon.

"I have myself seen carpenters of five or six different castes, and as many different bricklayers, employed on the same building. The same diversity of castes may be observed among the craftsmen in dockyards, and all other great works; and those who have resided for any time in the principal commercial cities of India must be sensible that every increasing demand for labour, in all its different branches and varieties of old and new arts, has been speedily and effectually supplied, in spite of the tremendous institution of castes, which we are taught to believe forms so impassable an obstruction to the advancement of Indian industry."

2. *Growing Demand for English Goods.* — It is difficult to suppose that the directors of the East India Company should not have been early aware of the fallacy of the opinions as to the fixedness of Indian habits. So far, however, as we know, they did not, in this instance, evince any acquaintance with the discoveries of their servants. On the contrary, in all the discussions that took place with respect to the opening of the trade in 1814, the Company invariably contended that no increase of trade to India could be expected. In a letter of the chairman and deputy chairman to the Right Honourable Robert Dundas, dated 13th of January, 1809, it is stated, that the small demand for foreign commodities in India "results from the nature of the Indian people, their climate and their usages. The articles of first necessity their own country furnishes more abundantly and more cheaply than it is possible for Europe to supply them. The labour of the great body of the common people only enables them to subsist on rice, and to wear a slight covering of cotton cloth; they, therefore, *can purchase none of the superfluities we offer them.* The comparatively few in better circumstances, restricted, like the rest, by numerous religious and civil customs, of which all are remarkably tenacious, find few of our commodities to their taste; and their climate, so dissimilar to ours, renders many of them unsuitable to their use; so that a commerce between them and us cannot proceed far upon the principle of supplying mutual wants. Hence, except woollens, in a very limited degree, for mantles in the cold season, and metals, on a scale also very limited, to be worked up by their own artisans for the few utensils they need, hardly any of our staple commodities find a vent among the Indians; the other exports which Europe sends to India being chiefly consumed by the European population there, and some of the descendants of the early Portuguese settlers; all of whom, taken collectively, form but a small body, in view to any question of national commerce."— (*Papers published by authority of the East India Company*, 1813, p. 21.)

The volume from which we have made this extract contains a variety of passages to the same effect. So confident, indeed, were the Company that they had carried the trade to India to the utmost extent of which it was capable, that it was expressly stated, in resolutions passed in a general court held at the India House, on the 26th of January 1813, "that no large or sudden addition can be made to the amount of British exports to India or China;" that the Company had suffered a loss in attempting to extend this branch of their trade; that the warehouses at home were glutted with Indian commodities for which there was no demand; and that to open the outports to the trade would be no other than "a ruinous transfer of it into new channels, to the destruction of immense and costly establishments, and the beggary of many thousands of industrious individuals."

Luckily, however, these representations were unable to prevent the opening of the trade, and the result has sufficiently demonstrated their fallacy. The enterprise and exertion of individuals has vastly increased our exports to India — to that very country which the Company had so confidently pronounced was, and would necessarily continue to be, incapable of affording any additional outlet for our peculiar products!

The commercial accounts for 1812 and 1813 were unfortunately destroyed by the fire at the Custom-house. The trade to India was opened on the 10th of April, 1814; and in that year the declared or real value of the products exported from Great Britain to the countries eastward of the Cape of Good Hope, excepting China, by the East India Company, was 826,558*l.*, and by the private traders, 1,048,132*l.* In 1817, the Company's exports had declined to 638,382*l.*, while those of the private traders had increased to 2,750,338*l.*; and in 1828, the former had sunk to only 488,601*l.*, while the latter had increased to 3,979,072*l.*, being more than double the total exports to India, as well by the Company as by private traders in 1814! Since then the market has continued progressively to increase. In 1840 the declared value of the exports of British goods

amounted to no less than 6,023,192 : and, notwithstanding the commercial embarrassments in 1841 and 1842, it amounted, in the latter, to *5,169,888* !

The Company stated, and no doubt truly, that they lost a very large sum in attempting to extend the demand for British woollens in India and China, which, notwithstanding, continues very limited. But in their efforts to force the sale of woollens, they seem to have entirely forgotten that we had attained to great excellency in the manufacture of cotton stuffs, the article principally made use of as clothing in Hindostan; and that, notwithstanding the cheapness of labour in India, the advantage we derived from our superior machinery might enable us to offer cotton stuffs to the natives at a lower price than they could afford to manufacture them for. No sooner, however, had the trade been open to private adventurers, than this channel of enterprise was explored; and the result has been, that, instead of bringing cottons from India to England, the former has become *one of the best and most extensive markets for the cottons of the latter*. We question, indeed, whether, in the whole history of commerce, another equally striking example can be produced of the powerful influence of competition in opening new and almost boundless fields for the successful prosecution of commercial enterprise.

In 1814, the first year of the free trade to India, the exports of cotton amounted to 817,000 yards, of which only about 170,000 yards, valued at 17,778*l.*, were exported by the Company! The progress of the trade has since been such that we now export about 150,000,000 yards of cotton stuffs to India, and about 15,000,000 lbs. of twist and yarn!

The demand for several other articles of British manufacture has recently increased, though not in the same unprecedented manner as cotton, with considerable rapidity. Notwithstanding all that has been said as to the immutability of Hindoo habits, the fact is not to be denied, that a taste for European products and customs is rapidly spreading itself over India. And the fair presumption is, that it will continue to gain ground according as education is more diffused, and as the natives become better acquainted with our language, arts, and habits. The authenticity of Dr. Heber's statements cannot be called in question; and there are many passages in different parts of his Journal that might be quoted in corroboration of what has now been stated. Our limits, however, will only permit of our making a very few extracts.

"Nor have the religious prejudices, and the unchangeableness of the Hindoo habits, been less exaggerated. Some of the best informed of their nation, with whom I have conversed, assure me, that half their most remarkable customs of civil and domestic life are borrowed from their Mohammedan conquerors; and *at present there is an obvious and increasing disposition to imitate the English in every thing*, which has already led to very remarkable changes, and will, probably, to still more important. The wealthy natives now all affect to have their houses decorated with Corinthian pillars, and filled with English furniture; they drive the best horses and the most dashing carriages in Calcutta; many of them speak English fluently, and are tolerably read in English literature; and the children of one of our friends I saw one day dressed in jackets and trowsers, with round hats, shoes, and stockings. In the Bengalee newspapers, of which there are two or three, politics are canvassed with a bias, as I am told, inclined to Whiggism; and one of their leading men gave a great dinner, not long since, in honour of the Spanish revolution: among the lower orders the same feeling shows itself more beneficially in a growing neglect of caste."—(Vol. ii. p. 306.)

"To say that the Hindoos or Mussulmans are deficient in any essential feature of a civilised people, is an assertion which I can scarcely suppose to be made by any who have lived with them: their manners are at least as pleasing and courteous as those in the corresponding stations of life among ourselves; their houses are larger, and, according to their wants and climate, to the full as convenient as ours; their architecture is at least as elegant; nor is it true that in the mechanic arts they are inferior to the general run of European nations. Where they fall short of us, (which is chiefly in agricultural implements, and the mechanics of common life,) they are not, so far as I have understood of Italy and the south of France, surpassed in any degree by the people of those countries. Their goldsmiths and weavers produce as beautiful fabrics as our own; and it is so far from true that they are obstinately wedded to their old patterns, that they show an anxiety to imitate our models, and do imitate them very successfully. The ships built by native artists at Bombay are notoriously as good as any which sail from London or Liverpool. The carriages and gigs which they supply at Calcutta are as handsome, though not as durable, as those of Long Acre. In the little town of Monghyr, 300 miles from Calcutta, I had pistols, double-barrelled guns, and different pieces of cabinet work, brought down to my boat for sale, which in outward form (for I know no further) nobody but perhaps Mr. ———— could detect to be of Hindoo origin; and at Delhi, in the shop of a wealthy native jeweller, I found brooches, ear-rings, snuff-boxes, &c. of the latest models (so far as I am a judge), and ornamented with French devices and mottoes."—(Vol. ii. p. 382.)

As Bishop Heber penetrated into the interior of India, he found the same taste as in Calcutta, for European articles and for luxuries, to prevail every where among the natives. Of Benares, he writes as follows:—

"But what surprised me still more, as I penetrated further into it, were the large, lofty, and handsome dwelling-houses, the beauty and apparent richness of the goods exposed in the bazaars, and the evident hum of business. Benares is in fact a very industrious and wealthy, as well as a very holy city. It is the great mart where the shawls of the north, the diamonds of the south, and the muslins of Dacca and the eastern provinces centre; and it has very considerable silk, cotton, and fine woollen manufactories of its own; while English hardware, swords, shields, and spears, from Lucknow and Monghyr, and *those European luxuries and elegancies which are daily becoming more popular in India*, circulate from hence through Bundlecund, Gorruckpoor, Nepaul, and other tracts which are removed from the main artery of the Ganges."—(Vol. i. p. 289.)

Proceeding still further into the interior of the country, and when at Nusseerabad,

distant above 1,000 miles from Calcutta, the bishop continues his Journal in the same strain; viz.: —

"European articles are, at Nusseerabad *, as might be expected, very dear; the shops are kept by a Greek and two Parsees from Bombay: they had in their list all the usual items of a Calcutta warehouse. English cotton cloths, both white and printed, are to be met with commonly in wear among the people of the country, and may, I learned to my surprise, be bought best and cheapest, as well as all kinds of hardware, crockery, writing-desks, &c., at Pallee, a large town and celebrated mart in Marwar, on the edge of the desert, several days' journey west of Joudpoor, where, till very lately, no European was known to have penetrated."—(Vol. ii. p. 36.)

As to the character of the Hindoos, their capacity, and even anxious desire, for improvement, the bishop's testimony is equally clear and decided; and as this is a point of pre-eminent importance, the reader's attention is requested to the following statements.

"In the schools which have been lately established in this part of the empire, of which there are at present 9 established by the Church Missionary, and 11 by the Christian Knowledge Societies, some very unexpected facts have occurred. As all direct attempts to convert the children are disclaimed, the parents send them without scruple. But it is no less strange than true, that there is no objection made to the use of the Old and New Testament as a class-book; that so long as the teachers do not urge them to eat what will make them lose their caste, or to be baptized, or to curse their country's gods, they readily consent to every thing else; and not only Mussulmans, but Brahmins, stand by with perfect coolness, and listen sometimes with apparent interest and pleasure, while the scholars, by the road side, are reading the stories of the creation and of Jesus Christ."—(Vol. ii. p. 290.)

"Hearing all I had heard of the prejudices of the Hindoos and Mussulmans, I certainly did not at all expect to find that the common people would, not only without objection, but with the greatest thankfulness, send their children to schools on Bell's system; and they seem to be fully sensible of the advantages conferred by writing, arithmetic, and, above all, by a knowledge of English. There are now in Calcutta, and the surrounding villages, 20 boys' schools, containing 60 to 120 each; and 23 girls', each of 25 or 30."—(Vol. ii. p. 300.)

"In the same holy city (Benares) I visited another college, founded lately by a wealthy Hindoo banker, and intrusted by him to the management of the Church Missionary Society, in which, besides a grammatical knowledge of the Hindoostanee language, as well as Persian and Arabic, the senior boys could pass a good examination in English grammar, in Hume's History of England, Joyce's Scientific Dialogues, the use of the globes, and the principal facts and moral precepts of the Gospel; most of them writing beautifully in the Persian, and very tolerably in the English character, and excelling most boys I have met with in the accuracy and readiness of their arithmetic."—(Vol. ii. p. 388.)

"The different nations which I have seen in India (for it is a great mistake to suppose that all India is peopled by a single race, or that there is not as great a disparity between the inhabitants of Guzerat, Bengal, the Dooab, and the Deccan, both in language, manners, and physiognomy, as between any four nations in Europe,) have, of course, in a greater or less degree, the vices which must be expected to attend on arbitrary government, a demoralising and absurd religion, and (in all the independent states, and in some of the districts which are partially subject to the British) a laxity of law, and an almost universal prevalence of intestine feuds and habits of plunder. The general character, however, has much which is extremely pleasing to me: they are brave, courteous, intelligent, and most eager after knowledge and improvement, with a remarkable talent for the sciences of geometry, astronomy, &c., as well as for the arts of painting and sculpture. In all these points they have had great difficulties to struggle with, both from the want of models, instruments, and elementary instruction; the indisposition, or rather the horror, entertained, till lately, by many among their European masters, for giving them instruction of any kind; and now from the real difficulty which exists of translating works of science into languages which have no corresponding terms."—(Vol. ii. p. 409.)

Even if our space permitted, it would be unnecessary to add to these extracts. The facts and circumstances now mentioned, must, we think, satisfy every one that there is nothing in the nature of Indian society, in the institution of castes as at present existing, or in the habits and customs of the natives, to hinder them from advancing in the career of civilisation, commerce, and wealth. "It may safely be asserted," says Mr. Hamilton, "that with so vast an extent of fertile soil, peopled by so many millions of tractable and industrious inhabitants, Hindostan is capable of supplying the whole world with any species of tropical merchandise; the production, in fact, being only limited by the demand."

3. *Trade with India.*— We had occasion to animadvert, in the former edition of this work, on the difficulties under which the trade with India then laboured, in consequence of the duties on sugar, rum, and other Indian products, being very much higher than those laid on the same articles when imported from the colonies in the West Indies. It is needless, however, to enlarge on the manifest inexpediency of such policy, or to enter into any lengthened arguments to prove that governments are bound to treat all who are subject to their authority with the same equal and impartial justice. The discriminating duties now referred to have been happily all, or nearly all, abolished, and the products of India and of our other dependencies come into the home market on the same equal terms. The beneficial influence of this wise and liberal policy has been strikingly evinced in the increased imports of sugar and coffee from India. Indeed the only obstacle to the all but indefinite increase in the demand for our manufactures in that extensive dependency consists in the difficulty of obtaining return cargoes suitable for our markets; and the truth is, that the late rapid extension of the demand for British cottons and other goods in India, is principally ascribable to the increased imports of sugar, coffee, and other Indian articles. Commerce, it must never be forgotten, is nothing but an exchange of equivalents; and it is idle to attempt increasing exportation without at the same time increasing importation.

* Nusseerabad, near Ajmere, in the heart of the Rajepoot country.

I.—Account of the Quantities and declared Value of the British and Irish Produce and Manufactures exported from the United Kingdom to the East India Company's Territories and Ceylon, from 1835 to 1840, both included.

Articles.	1835. Quantities.	1835. Declared Value.	1836. Quantities.	1836. Declared Value.	1837. Quantities.	1837. Declared Value.
		£		£		£
Apparel, slops, and haberdashery	-	41,502	-	67,921	-	50,608
Arms and ammunition	-	53,769	-	46,985	-	54,259
Beer and ale — tuns	3,419	64,381	4,610	82,635	4,732	82,124
Books, printed — cwt.	879	25,341	935	29,779	1,122	31,385
Brass and copper manufactures — —	73,377	316,120	67,323	350,292	69,903	328,547
Butter and cheese — —	1,605	5,380	1,905	6,788	857	3,087
Coals, culm, and cinders — tons	10,775	1,784	9,338	5,232	14,163	8,963
Cordage — cwt.	3,629	5,452	4,161	7,647	792	1,451
Cotton manufactures entered by the yd. — yds.	51,777,277	1,338,323	74,280,506	1,972,816	64,213,633	1,528,249
Do. hosiery, lace, and small wares — —	-	30,631	-	47,527	-	30,444
Do. twist and yarn — lbs.	5,399,762	432,821	6,592,310	561,878	8,478,021	602,293
Earthenware of all sorts — pcs.	1,142,847	14,181	1,315,909	16,173	1,385,703	19,509
Glass entered by weight — cwt.	37,139	103,305	47,584	133,539	48,439	98,259
Hardware and cutlery — —	10,748	60,838	12,402	86,671	11,979	79,141
Iron and steel, wrought and unwrought tons	19,392	144,796	11,645	134,893	13,571	137,294
Lead and shot — —	1,642	28,201	756	16,303	837	17,633
Leather, wrought and unwrought — lbs.	52,488	8,083	75,752	10,940	60,931	9,212
Do. saddlery and harness — —	-	8,233	-	11,521	-	8,709
Linen manufactures, entered by the yd. — yds.	432,294	21,790	726,167	39,658	707,899	31,524
Machinery and millwork — —	-	12,524	-	7,556	-	7,409
Painters' colours — —	-	16,458	-	18,079	-	7,151
Plate, plated work, jewellery, and watches —	-	35,273	-	45,403	-	39,563
Silk manufactures — —	-	8,029	-	15,644	-	9,970
Stationery of all sorts — —	-	65,292	-	74,469	-	48,935
Woollen manufactures entered by the piece — — pcs.	41,231	188,694	72,430	293,849	53,194	211,116
Do. ditto by the yard — — yds.	305,946	23,527	364,324	26,317	133,210	10,912
All other articles — —	-	137,964	-	185,530	-	155,275
Total declared value — £	-	3,192,692	-	4,285,829	-	3,612,975

Articles.	1838. Quantities.	1838. Declared Value.	1839. Quantities.	1839. Declared Value.	1840. Quantities.	1840. Declared Value.
		£		£		£
Apparel, slops, and haberdashery	-	61,915	-	77,728	-	90,744
Arms and ammunition	-	46,092	-	74,597	-	103,133
Beer and ale — tuns	4,237	75,544	6,332	110,402	43,377	110,747
Books printed — cwt.	1,156	33,038	1,469	33,083	1,464	32,650
Brass and copper manufactures — —	65,780	303,132	67,406	329,367	78,250	373,876
Butter and cheese — —	1,193	4,145	1,964	7,639	1,725	6,594
Coals, culm, and cinders — tons	18,151	11,282	11,579	7,071	29,345	16,640
Cordage — —	3,377	5,710	3,020	5,598	5,589	11,020
Cotton manufactures entered by the yd. — yds.	80,085,122	1,781,298	100,949,791	2,285,918	145,083,799	2,964,154
Do. hosiery, lace, and small wares — —	-	24,151	-	28,836	-	61,202
Do. twist and yarn — lbs.	10,710,136	640,205	10,613,915	690,916	16,013,708	847,530
Earthenware of all sorts — pcs.	1,559,980	25,281	1,758,456	27,312	1,629,355	24,851
Glass entered by weight — cwt.	57,107	81,160	57,771	70,526	98,870	101,100
Hardware and cutlery — —	10,543	60,563	13,534	70,677	18,843	93,344
Iron and steel, wrought and unwrought tons	13,308	137,707	16,309	190,468	30,894	302,349
Lead and shot — —	793	16,257	2,054	40,050	2,484	44,497
Leather, wrought and unwrought — lbs.	51,241	7,789	92,787	14,366	70,342	8,954
Do. saddlery and harness — —	-	10,489	-	16,634	-	17,421
Linen manufactures entered by the yd. — yds.	866,932	36,220	1,314,044	56,869	1,445,629	69,017
Machinery and millwork — —	-	29,869	-	75,048	-	66,057
Painters' colours — —	-	6,596	-	17,013	-	23,956
Plate, plated work, jewellery, and watches —	-	42,573	-	44,320	-	38,375
Silk manufactures — —	-	11,954	-	14,713	-	16,333
Stationery of all sorts — —	-	48,351	-	63,923	-	68,108
Woollen manufactures entered by the piece — — pcs.	46,777	184,329	58,728	170,106	91,092	271,530
Do. ditto by the yard — — yds.	222,022	16,175	166,531	11,721	146,491	10,676
All other articles — —	-	171,631	-	311,808	-	254,534
Total declared value — £	-	3,876,196	-	4,748,607	-	6,023,192

II.—Account of the Quantities of the Principal Articles of Foreign and Colonial Produce imported into the United Kingdom from the East India Company's Territories and Ceylon, during each of the Eight Years ending with 1841.

Principal Articles.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
Cassia lignea — lbs.	1,667,042	1,540,815	572,777	921,609	313,753	232,196	215,016	971,802
Cinnamon — —	216,679	444,032	583,236	1,028,831	397,300	528,736	293,467	410,868
Cloves — —	126,542	112,891	8,532	19,560	33,363	122,597	36,667	38,752
Coffee — —	8,875,961	5,142,856	9,514,441	9,806,123	7,785,963	9,820,550	16,885,698	15,896,624
Corn, wheat meal & flour cwt.	21,898	15,897	7,172	44,668	18,912	17,532	15,096	38,997
Cotton piece goods, India pcs.	268,877	295,580	368,160	414,450	204,271	348,446	349,961	139,472
Elephants' teeth — cwt.	2,422	2,363	1,854	2,298	2,130	2,686	2,312	2,366
Ginger — —	10,004	4,489	13,589	24,053	26,297	29,626	9,727	5,292
Gum, Arabic — —	7,326	7,675	8,222	9,259	11,056	15,431	9,162	10,664
Lac dye — — lbs.	696,539	528,490	547,053	990,560	1,093,179	1,166,562	1,254,037	1,221,808
Shell lac — —	941,179	1,179,899	1,372,519	2,194,538	2,659,827	3,178,167	2,828,572	3,244,392
Hemp, undressed — cwt.	52,035	40,854	18,380	168,386	107,994	138,301	65,583	79,469
Hides, untanned — —	31,213	41,964	40,883	40,714	37,474	63,533	52,559	86,044
Indigo — — lbs.	3,616,022	3,878,404	7,222,331	5,721,554	6,579,142	4,654,226	6,940,192	7,456,617
Mace — —	24,924	9,941	35,121	29,973	18,237	18,272	14,010	13,973
Madder root — cwt.	3,412	3,266	2,466	4,628	1,601	1,373	565	160
Nutmegs — — lbs.	51,268	67,067	92,405	93,436	64,793	48,799	17,258	35,478
Oil, castor — —	685,457	1,107,115	972,552	957,165	837,143	916,370	1,190,173	869,947
Pepper — —	7,131,133	2,807,014	6,777,892	4,150,534	3,326,990	9,090,898	5,814,756	14,784,497
Rhubarb — —	16,426	33,674	59,380	55,999	56,127	-	5,437	7,990
Rice — — cwt.	276,968	233,041	145,180	352,834	203,896	419,319	320,752	397,535
Do. in the husk — bush.	23,246	29,426	1,704	17,451	13,050	8,938	4,339	1,336
Safflower — — cwt.	6,484	6,517	8,240	7,517	4,970	3,602	5,110	5,429
Sago — — —	25,683	19,101	24,809	15,285	18,172	20,673	51,882	75,847
Saltpetre, and cubic nitre —	257,680	194,119	177,938	222,606	234,048	272,429	183,603	261,552
Seeds, flaxseed & linseed bush.	2,826	127,416	275,168	126,532	78,572	163,958	207,869	199,322
Rape — —	186	240	213	10	1	6,580	19,398	46,191
Senna — — lbs.	412,283	96,681	415,671	289,486	316,750	194,817	63,608	81,474
Silk, raw and waste — —	1,798,637	1,105,297	1,450,222	1,298,037	1,151,399	1,387,944	1,108,465	1,175,508

Table II. — *continued.*

Principal Articles.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
Silk, manufactured, viz. : —								
India bandannas, romals, and handkerchiefs - - pcs.	374,744	381,229	331,652	499,949	485,008	473,481	546,826	363,294
Taffaties, damasks, and other silks - - —	490	773	741	4,503	7,957	4,001	9,747	21,983
Skins, calf & kip, untanned cwt.	2,260	840	10	27	25	3,049	6,834	7,575
Goat, undressed - numb.	78,105	59,454	16,102	4,035	81,631	124,657	28,118	215,695
Kid - - —	4	2,714	3,587	14,533	15,895	22,968	39,590	35,605
Spirits, viz. rum - proof gall.	537	14,068	38,139	67,064	53,309	170,585	311,968	1,006,712
Sugar, unrefined - - cwt.	101,997	137,976	171,758	302,945	474,100	587,142	498,750	1,271,582
Tea - - - lbs.	136,987	1,547,078	308,492	121,387	321,283	129,420	905,476	1,960,728
Tin - - - cwt.	33,611	10,104	17,729	18,544	26,646	12,667	7,347	21,440
Tobacco, unmanufactured lbs.	3,981	10,578	38,851	30,280	126,854	97,927	223,347	80,538
Do. manufactured, & snuff —	2,389	1,169	5,644	15,113	79,249	41,789	35,129	56,483
Wool, cotton - - - —	32,920,865	41,429,011	75,949,845	51,532,072	40,217,734	47,172,939	77,011,859	97,388,153
Sheep's - - - —	67,763	295,848	1,086,393	1,880,741	1,897,266	2,103,546	2,441,370	3,008,664

III. — An Account specifying the Number of Ships and their Tonnage that entered the Ports of the United Kingdom from the East India Company's Territories and Ceylon, and that cleared outwards from the United Kingdom for the same, during each of the 12 Years ending with 1842.

Entered.						Cleared.					
Years.	Ships.	Tonnage.	Years.	Ships.	Tonnage.	Years.	Ships.	Tonnage.	Years.	Ships.	Tonnage.
1831	150	63,566	1837	281	118,755	1831	137	59,721	1837	231	106,927
1832	168	72,895	1838	233	106,001	1832	193	85,260	1838	233	117,824
1833	182	76,820	1839	299	133,294	1833	204	83,769	1839	253	121,865
1834	186	75,461	1840	288	137,883	1834	197	90,833	1840	372	176,028
1835	216	89,149	1841	414	207,075	1835	219	96,157	1841	454	212,103
1836	227	97,034	1842	430	191,378	1836	267	117,784	1842	397	202,101

4. *Colonisation of India.*—Considerable obstacles were long thrown in the way of Europeans establishing themselves in India, and particularly of their acquiring or holding land. This policy was dictated by various considerations; partly by a wish to prevent the extrusion of the natives from the soil, which it was supposed would be eagerly bought up by Europeans, and partly by the fear lest the latter, when scattered over the country, and released from any effectual control, should offend the prejudices of the natives, and get embroiled with them. Now, however, it seems to be the general opinion of those best acquainted with India, that but little danger is to be apprehended from these circumstances; that the few Europeans established in it as Indigo planters, &c. have contributed very materially to its improvement; and that the increase and diffusion of the English population, and their permanent settlement in the country, are at once the most likely means of spreading a knowledge of our arts and sciences, and of widening and strengthening the foundations of our ascendancy. It is obvious, indeed, that the duration of our power in India must depend on a very uncertain tenure, unless we take root, as it were, in the soil, and a considerable portion of the population be attached to us by the ties of kindred, and of common interests and sympathies. In this respect we should imitate the Roman in preference to the Lacedæmonian or Athenian policy. *Quid aliud exitio Lacedæmoniis Atheniensibus fuit, quanquam armis pollerent, nisi quod victis pro alienigenis arcebant?* When, however, the former edition of this work was published, we observed that, looking at the density of population in India, the low rate of wages, the nature of the climate, and other similar circumstances, it seemed very doubtful whether it would ever become the resort of any considerable number of English settlers, at least of such a number as would be sufficient, within any reasonable period, to form any thing like a powerful native English interest. And we have now to state, that these anticipations have been more than realised; and that though the restraints on the settlement of Englishmen in India have been practically at an end since 1834, very few have availed themselves of the privilege. Indeed, as already seen (*antè*, p. 201.), the total number of English-born subjects (exclusive of military) in Calcutta, where they are most numerous, in 1837, amounted to only 3,138! There may, no doubt, though we see little reason to anticipate such a result, be a greater emigration to India in time to come; and to whatever extent it may be carried, it promises to be highly advantageous. "We need not, I imagine," said Lord William Bentinck, "use any laboured argument to prove that it would be infinitely advantageous for India to borrow largely in arts and knowledge from England. The legislature has expressly declared the truth; its acknowledgment has been implied in the daily acts and professions of government, and in all the efforts of humane individuals and societies for the education of the people. Nor will it, I conceive, be doubted, that the diffusion of useful knowledge, and its application to the arts and business of life, must be comparatively tardy, unless we add to precept the example of Europeans, mingling familiarly with the natives in the course of their profession, and practically demonstrating, by daily recurring evidence, the nature and the value of the principles we desire to inculcate, and of the plans we seek to have adopted. It seems to be almost equally plain, that, independently of their influencing the native community in this way, various and important national advantages will result from there being a considerable body of

our countrymen, and their descendants, settled in the country. To question it, is to deny the superiority which has gained us the dominion of India: it is to doubt whether national character has any effect on national wealth, strength, and good government: it is to shut our eyes to all the perils and difficulties of our situation: it is to hold as nothing community of language, sentiment and interest, between the government and the governed: it is to disregard the evidence afforded by every corner of the globe in which the British flag is hoisted: it is to tell our merchants and our manufacturers, that the habits of a people go for nothing in creating a market; and that enterprise, skill, and capital, and the credit which creates capital, are of no avail in the production of commodities."

The existing regulations as to the residence of Englishmen in India are embodied in the act 3 & 4 Will. 4. c. 85., and are as follows: —

Authority for his Majesty's Subjects to reside in certain Parts of India. — It shall be lawful for any natural-born subjects of his Majesty to proceed by sea to any port or place having a Custom-house establishment within the same, and to reside thereat, or to proceed to, reside in, or pass through, any part of such of the said territories as were under the government of the said Company on the 1st day of January, 1800, and in any part of the countries ceded by the nabob of the Carnatic, of the province of Cuttack, and of the settlements of Singapore and Malacca, without any licence whatever; provided that all subjects of his Majesty not natives of the said territories shall, on their arrival in any part of the same from any port or place not within the said territories, make known in writing their names, places of destination, and objects of pursuit in India, to the chief officer of the customs or other officer authorised for that purpose at such place as aforesaid. — § 81.

Subjects of his Majesty not to reside in certain Parts of India without Licence. — It shall not be lawful for any subject of his Majesty, except the servants of the said Company and others now lawfully authorised to reside in the said territories, to enter the same by land, or to proceed to or reside in such parts of the said territories as are not herein-before in that behalf mentioned, without licence first obtained from the commissioners of the board of control, or the court of directors, or the governor-general, or a governor of any of the said presidencies: provided, that no licence given to any natural-born subject of his Majesty to reside in parts of the territories not open to all such subjects shall be determined or revoked unless in accordance with the terms of some express clause of revocation or determination in such licence contained. — § 82.

The Governor-General, with previous Consent of Directors, may declare other Places open. — It shall be lawful for the governor-general in council, with the previous consent and approbation of the said court of directors, to declare any place or places whatever within the said territories open to all his Majesty's natural-born subjects, and it shall be thenceforth lawful for any of his Majesty's natural-born subjects to proceed to or reside in or pass through any place or places declared open, without any licence whatever. — § 83.

Laws against illicit Residence to be made. — The governor-general shall and is required to make laws or regulations providing for the prevention or punishment of the illicit entrance into or residence in the said territories of persons not authorised to enter or reside therein. — § 84.

Laws and Regulations to be made for Protection of Natives. — And whereas the removal of restrictions on the intercourse of Europeans with the said territories will render it necessary to provide against any mischiefs or dangers that may arise therefrom, it is enacted, that the governor-general shall and is required, by laws or regulations, to provide with all convenient speed for the protection of the natives of the said territories from insult and outrage in their persons, religions, or opinions. — § 85.

Lands within the Indian Territories may be purchased. — It shall be lawful for any natural-born subject of his Majesty authorised to reside in the said territories to acquire and hold lands, or any right, interest, or profit in or out of lands, for any term of years, in such part or parts of the said territories as he shall be so authorised to reside in: provided always, that nothing herein contained shall be taken to prevent the governor-general in council from enabling, by any laws or regulations, or otherwise, any subjects of his Majesty to acquire or hold any lands, or rights, interests, or profits in or out of lands, in any part of the said territories, and for any estates or terms whatever. — § 86.

No Disabilities in respect of Religion, Colour, or Place of Birth. — No native of the said territories, nor any natural-born subject of his Majesty resident therein, shall, by reason only of his religion, place of birth, descent, colour, or any of them, be disabled from holding any place, office, or employment under the said company. — § 87.

IV. EAST INDIES, EXTENT, POPULATION, MILITARY FORCE, REVENUE, ETC. (OF BRITISH).

1. *Extent, Population, &c. of British Dominions in Hindostan, and of the Tributary and Independent States.* — The following Table has been framed, though with some very considerable modifications, on the basis of that given in the second edition of Mr. Hamilton's *Gazeteer*. It can, however, be regarded as an approximation only, inasmuch as no means exist of coming at correct conclusions; but we incline to think that it is nearly as accurate as it can be made with the present imperfect means of information.

Table of the Area and Population of the Modern States of Hindostan.

	British Square Miles.	Population.
Presidency of Bengal, including Agra	306,000	69,710,000
Madras Presidency	131,000	15,000,000
Bombay Presidency, including territories in the Deccan, Sattarah, &c. acquired since 1815	76,000	8,500,000
Territory acquired from the Ameers of Scinde in 1842	50,000	1,000,000
Total under the British government	563,000	94,210,000
British Allies and Tributaries.		
The Nizam	96,000	10,000,000
The Nagpoor Raja	64,000	3,000,000
The King of Oude	20,000	3,000,000
The Guicowar	18,000	2,000,000
Kotah, 6,500; Boondee, 2,500; Bopaul, 5,000	14,000	1,500,000
The Mysore Raja	27,000	3,000,000

Table of the Area and Population, &c. — *continued.*

	British Square Miles.	Population.
Travancore, 5,000; Cochin, 2,000	7,000	1,400,000
Under the Rajas of Joudpoor, Jeypoor, Odeypoor, Bicancere, Jesselmere, and other Rajpoot chiefs, Holcar, Ameer Khan, the Row of Cutch, Bhurtpoor, Macherry, and numerous other petty chiefs, Seiks, Gonds, Bheels, Coolies, and Catties, all under British protection	280,000	15,000,000
Total under the British government and its allies	1,089,000	133,110,000
Independent States.		
The Nepaul Raja	53,000	2,000,000
The Lahore Raja	60,000	4,000,000
The dominions of Sindia	40,000	4,000,000
Grand total of Hindostan	1,242,000	143,110,000

India beyond the Ganges.— British Acquisitions in 1824 and 1825.

	British Square Miles.	Population.
Countries south of Rangoon, consisting of half the province of Martaban, and the provinces of Tavoy, Ye, Tenasserim, and the Mergui Isles	12,000	51,000
The province of Arracan	16,250	250,000
Countries from which the Burmese have been expelled, consisting of Assam and the adjacent petty states, occupying a space of about	34,000	500,000
Total	62,250	801,000

In 1805, according to the official returns, the total number of British-born subjects in Hindostan was 31,000. Of these, 22,000 were in the army as officers and privates; the civil officers of government of all descriptions were about 2,000; the free merchants and mariners who resided in India under covenant, about 5,000; the officers and practitioners in the courts of justice, 300; the remaining 1,700 consisting of adventurers who had smuggled themselves out in various capacities. Since the date above mentioned, no detailed reports have been published: but there is reason to believe that even now the total number of British subjects in Hindostan does not exceed 45,000, if so many; the removal of the restrictions on their settlement having, as already seen, added very few to the previous number.

The army required for the protection of these extensive provinces, and for the retaining them under due subordination, is, with the exception of that of Russia, probably the largest standing army in the world. In 1796, it amounted to 55,000. In 1837, it consisted of the following effective force, in British, native, and contingent native troops: —

British.			Native.			Contingent Native.	
Staff		205	Staff (British)		312	Scindia	15,000
Horse artillery		1,927	Co's. officers of British birth		3,116	Oude	10,000
Foot do.		4,354	Officers of Hindoo birth		3,416	Nizam — cavalry, 10,000; infantry, 12,000	22,000
Engineers		77	Engineer corps		3,498		
Cavalry		2,585	Horse artillery		1,022	Baroda — cavalry, 3,000; infantry, 4,000	7,000
Infantry		13,879	Foot do.		5,822		
Officers		755	Artillery train		1,392	Nagpore	1,000
			Cavalry		14,529	Holkar	3,000
			Infantry		124,281	Travancore, 3 battalions	3,000
		26,582			157,758	Cochin, 1 do.	1,000
						Mysore	4,000
						Cutch and Joudpoor	6,000
						Rajpoot States — cavalry, 7,500; infantry, 27,000	34,500
						Sattarah	5,000
Total — British		26,582					111,500
Total — Native		157,758					
Total — Native subsidiary		111,500					
		295,840					

The expense of the Anglo-Indian army, according to reports laid before parliament in 1830, was as follows: —

	£		£
Engineer corps	83,874	Medical staff	132,490
Artillery	606,463	Pioneers	74,511
Cavalry	1,070,834	Commissariat	614,327
Infantry	4,124,079	Sundries	2,178,887
Staff	481,490	Total	9,373,955

It may be observed by the way, that this sum of 9,374,000*l.* is more than double the sum annually expended on the Prussian army! It is necessary, however, to observe, that very large additions have been made within the last half dozen years to the military force in India.

Each presidency has its separate army, commander-in-chief, staff, &c.; but the commander-in-chief of the supreme government has a general authority over the armies of all the presidencies. Among the native troops, called *Sepoys* (esquires), there is a complete intermixture of tribes, casts, and creeds; but the infantry consists chiefly of

Hindoos, and the cavalry of Mohammedans. The Hindoo soldiers of the Bengal army are mostly of high caste, more than 20,000 being Brahmins. The soldiers of the Madras army are principally Rajpoots, and are reckoned the most persevering hardy warriors; but they observe their religious customs so strictly, that the least deviation from them might have a dangerous effect on their discipline. The Bombay soldiers are the most easily disciplined, being generally of the lower castes. The troops are not raised by any forced levy or conscription; military service in India is quite voluntary, and is so popular that each regiment has a number of supernumeraries ready to take the place of such soldiers as die or leave. The men are well paid, clothed, and fed. The corporal punishment of Hindoos is not allowed; imprisonment being, in the Indian as in the French army, the principal engine by which discipline is kept up. In the former, however, the disgrace attending dismissal from the service, which is acutely felt by the native soldiers, tends powerfully to preserve discipline and obedience. Each company has an English captain, lieutenant, and ensign, as well as a native captain, lieutenant, and ensign. The latter, however, are under the command of the British officers; so that, with the title and uniform of officers, they are, properly speaking, only subalterns or non-commissioned officers. The Indian army, when not in the field, is in camp the whole year through, — a system which has contributed, in no small degree, to bring it to its present state of efficiency.

A good deal of conflicting evidence was given before the parliamentary committees, in 1832 and 1833, as to the real state of the Indian army, and the degree of dependence to be placed on it. On the whole, it would seem to be superior, in respect of discipline and organisation, to any native army ever previously embodied in India; and so long as its discipline and efficiency are maintained unimpaired, it is no doubt fully adequate to provide for the tranquillity of India, and its defence against Asiatic invaders. But the Sepoys are decidedly inferior both in physical strength and mental energy to Europeans: and such being the case, we cannot help, how reluctantly soever, agreeing in opinion with those who think that the Indian army could not make any effectual opposition to any thing like a corresponding force of French, Russian, or other European troops.

In direct and authoritative control, the dominion of the British government extends much further than that possessed by any prior dynasty, whether Patan or Mogul; yet the latter, so long as they abstained from persecution, had nothing to apprehend from the religion of the Hindoos; and history proves that the commotions which agitated the Mohammedan monarchies chiefly arose from their internal dissensions and national disputes. Neither does it appear that any prior conquerors ever employed disciplined corps of their own countrymen in defence of their own sovereignty, although they had to contend with one very numerous tribe — the Hindoo; while the British, more advantageously situated, have two to put in motion against each other, and in process of time may raise up a third. Each foreign invader certainly favoured his own countrymen: but it was by bestowing on them places and high appointments, which excited envy, without essentially strengthening his domination. Besides, therefore, total abstinence from persecution, the British government, in a powerful corps entirely European, and totally distinguished from the natives by colour, language, and manners, possesses a solidity and consistence much beyond any of the prior Mohammedan dynasties. — (*Hamilton's East India Gazetteer*, 2d ed. vol. i. pp. 656—659.)

We incline to think that the greatest danger to our Indian dominions is likely to arise from the disposition, which seems but too prevalent, to extend our conquests into Affghanistan and the central regions of Asia. Such conquests never can be productive of any advantage of any kind whatever; and it is to be hoped that the experience afforded by the disastrous termination of our late expedition to Cabul may suffice to hinder our re-engaging in such attempts. It is impossible, indeed, to vindicate either the justice or the policy of that expedition. The Affghans had done us no harm. Probably it is true that Russian agents were intriguing amongst them: but what had we to fear from them? Supposing these agents had succeeded in the all but impossible task of reconciling the conflicting views and objects of the proud and jealous chieftains of the country, what injury could this have done to us? No one is so absurd as to suppose that the Affghans would have attempted to attack our territories; and it would have been all but impossible for Russia, had she been so disposed, to have sent any considerable force to Cabul. The difficulty and expense of such a march would have been enormous; and even had these been surmounted, we might have occupied the passes leading from Affghanistan to India, and crushed, without difficulty, any army that might have attempted to force them. The truth is, that if Russia entertained the designs attributed to her, we did precisely what she would have most desired. We advanced 1,200 miles from our own frontier, and from our resources, on the road to Russia; and had we remained there, we should have saved the Russians, in the event of their attacking us, the trouble of a lengthened and difficult march; and met them in a lukewarm or unfriendly country, with a severe climate, under circumstances most

favourable to them, and most unfavourable to ourselves. It is not, in fact, easy to say whether our folly or contempt for the rights of others was most conspicuous on this occasion. And the destruction of our army, though principally owing to the gross incapacity of those by whom it was commanded, by making us abandon so perilous and untenable a position, was, on the whole, perhaps, advantageous rather than otherwise. We believe that true policy would have led to our never advancing beyond the desert to the south of the Indus. But it is, at all events, abundantly certain that it would be a good deal worse than foolish to attempt to push our conquests beyond the boundary formed by that river.

2. *Revenue and expenditure of the East India Company.* — The far greater part of the revenue of India is at present, and has always been, derived from the soil. The land has been held by its immediate cultivators generally in small portions, with a perpetual and transferable title; but they have been under the obligation of making an annual payment to government of a certain portion of the produce of their farms, which might be increased or diminished at the pleasure of the sovereign; and which has, in almost all cases, been so large, as seldom to leave the cultivators more than a bare subsistence. Under the Mohammedan government, the *gross* produce of the soil was divided into equal or nearly equal shares, between the ryots, or cultivators, and the government. We regret we are not able to say that the British government has made any material deductions from this enormous assessment. Its oppressiveness, more than any thing else, has prevented our ascendancy in India; and the comparative tranquillity and good order we have introduced, from having the beneficial effects that might have been anticipated. The cultivators throughout Hindostan are proverbially poor; and till the amount of the assessment they are at present subject to be effectually reduced, they cannot be otherwise than wretched. They are commonly obliged to borrow money, to buy their seed and carry on their operations, at a high interest, on a species of mortgage over the ensuing crop. Their only object is to get subsistence — to be able to exist in the same obscure poverty as their forefathers. If they succeed in this, they are satisfied. Mr. Colebrooke, whose authority on all that relates to India is so deservedly high, mentions that the quantity of land occupied by each ryot, or cultivator, in Bengal, is commonly about 6 acres, and rarely amounts to 24; and it is obvious that the abstraction of half the produce raised on such patches can leave their occupiers nothing more than the barest subsistence for themselves and their families. Indeed, Mr. Colebrooke tells us that the condition of ryots subject to this tax is generally inferior to that of a hired labourer, who receives the miserable pittance of 2 annas, or about 3 pence, a day of wages.

Besides the land revenue*, a considerable revenue is derived in India from the monopolies of salt and opium, the sale of spirituous liquors, land and sea customs, post-office, &c. Of these monopolies, the first is, in all respects, decidedly the most objectionable. Few things, indeed, would do more to promote the improvement of India, than the total abolition of this monopoly. An open trade in salt, with moderate duties, would, there can be no doubt, be productive of the greatest advantage to the public, and of a large increase of revenue to government. The opium monopoly, though less objectionable than the last, is, notwithstanding, very oppressive. It interferes with the industry of the inhabitants; those who are engaged in the cultivation of opium being obliged to sell their produce at prices abitrarily fixed by the Company's agents. It would be worse than useless to waste the reader's time, by pointing out in detail the mischievous effects of such a system; they are too obvious not to arrest the attention of every one.

Abstract View of the Revenues (exclusive of commercial Assets realised in England†) and Charges of India, for the Years 1838-39, 1839-40, 1840-41, 1841-42, including the Charges disbursed in Great Britain. — (*Parl. Paper* No. 367. Sess. 1843.)

Revenues.	1838-39.	1839-40.	1840-41.	1841-42., partly estimated.
	Co.'s Rupees.	*Co.'s Rupees.*	*Co.'s Rupees.*	*Co.'s Rupees.*
Bengal	7,00,09,469	6,32,60,118	6,63,41,586	7,05,33,295
Agra	4,06,61,737	3,87,28,692	3,75,64,979	4,17,38,079
Madras	3,76,93,899	3,77,16,000	3,80,08,989	3,83,97,258
				Actual.
Bombay	1,51,30,278	1,54,16,185	1,94,97,831	1,86,76,100
Total ordinary revenues	16,34,95,383	15,51,21,225	16,14,13,384	16,93,44,703
At 2*s.* per sicca rupee £	15,327,592	14,512,615	15,132,505	15,876,066
Extraordinary Receipts.				
Bengal	1,73,372	68,750	15,162	39,918
			Excess Charges.	
Madras	485	2,159	1,117	600
	1,73,857	70,909	14,045	39,318
At 2*s.* per sicca rupee £	16,299	6,647	1,317	3,686
Total ordinary and extraordinary revenues and receipts £	15,343,991	14,549,262	15,133,822	15,879,752
Deficiency	-	2,107,680	1,753,347	2,191,875
£	15,788,911	16,682,922	16,887,330	18,073,685

* For an account of the land revenue system of British India, see art. INDIA (BRITISH), in *Geog. Dict.*

† 444,920*l.* in 1838-39, and 25,980*l.* in 1839-40.

Abstract View of the Revenue and Charges of India, &c. — *continued.*

Charges.	1838-39.	1839-40.	1840-41.	1841-42, partly estimated.
	Co.'s Rupees.	*Co.'s Rupees.*	*Co.'s Rupees.*	*Co.'s Rupees.*
Bengal	7,74,57,289	8,21,63,925	8,73,40,152	9,64,08,457
Agra	86,29,471	78,38,592	80,52,904	82,39,900
Madras	3,28,81,619	3,82,01,650	3,57,55,468	3,66,19,125
				Actual.
Bombay	2,07,01,110	2,22,21,032	2,09,74,716	2,12,80,775
Total ordinary charges of India	13,96,69,489	15,04,25,199	15,21,23,240	16,25,48,257
At 2*s.* per sicca rupee £	13,094,014	14,102,362	14,261,554	15,238,899
Extraordinary Charges.				
Bengal	4,412	17,000	—	—
	4,412	17,000	—	—
At 2*s.* per sicca rupee £	413	1,594	—	—
Total ordinary and extraord. charges £	13,094,427	14,103,956	14,261,554	15,238,899
Charges disbursed in England £	2,615,465	2,578,966	2,625,776	2,834,786
Total charges of India £	15,709,892	16,682,922	16,887,330	18,073,685
£	15,788,892	16,682,922	16,887,330	18,073,685

Note. — The results here exhibited of the revenues and charges, for the years 1838-39 and 1839-40, differ from those inserted in the accounts laid before parliament last year, in consequence of the expenses of the mission, and measures for the support of Schah Soojah being now included as charge.

We subjoin, in illustration of the sources whence the Indian revenue is derived, and the amount of each, with the expenses of collection, &c., the following

Account of the Gross and Nett Revenue of the Bengal Presidency, in the Years 1838-39, 1839-40, 1840-41, and 1841-42.

Revenues.	1838-39.	1839-40.	1840-41.	Estimate, 1841-42.
	Co's. Rs.	*Co's. Rs.*	*Co's. Rs.*	*Co's. Rs.*
Mint duties	5,91,699	5,16,325	5,07,250	5,69,841
Post-office collections	5,99,629	5,48,736	5,53,154	6,28,781
Stamp duties	19,21,889	21,02,837	21,86,005	22,55,000
House tax in Calcutta	2,15,873	2,07,773	2,05,267	
Excise duties in ditto	1,89,158	2,24,974	1,69,953	3,40,300
Judicial fees and fines	6,65,017	6,94,266	7,02,155	6,98,420
Miscellaneous civil receipts, including nett gain by exchange operations between India and England	29,25,126	20,30,000	18,39,339	12,23,461
Land revenue	3,46,20,170	3,37,66,020	3,46,48,654	3,73,23,211
Saya and Abkarry, ditto	22,16,432	21,70,738	20,60,327	22,68,439
Miscellaneous receipts in the revenue department	2,78,328	2,42,979	1,13,819	91,500
Receipts from the territory ceded by the Burmese	15,15,860	15,92,974	16,28,298	15,27,384
Customs	29,44,604	39,91,530	48,51,319	50,11,332
Sale of salt	2,15,90,373	1,88,62,180	1,92,36,567	1,92,51,127
Sale of opium	1,36,80,178	76,45,856	1,19,78,596	1,37,71,581
Marine and pilotage receipts	7,01,642	5,97,450	8,21,513	7,71,744
Revenues of Prince of Wales' Island, Singapore, and Malacca.				
	Co's. Rs.	*Co's. Rs.*	*Co's. Rs.*	*Co's. Rs.*
Prince of Wales' Island	1,73,007	1,49,271	1,71,058	2,01,775
Singapore	2,67,620	2,60,091	3,27,120	4,69,869
Malacca	51,470	57,919	58,151	59,931
	4,92,097	4,67,281	5,56,329	7,34,575
Subsidy received from the Nagpore government	6,45,351	9,54,649	8,00,000	8,00,000
Tributes from the Nizam, Rajpoot, and other states	10,64,816	13,15,959	10,62,448	11,09,103
Interest on arrears of revenue, &c.	6,90,441	5,10,418	4,23,613	4,52,890
Total gross revenues	8,75,54,593	7,83,82,945	8,43,44,586	8,88,28,492
Deduct allowances and assignments payable out of the revenues in accordance with treaties or other engagements	21,26,810	17,64,978	30,58,743	19,45,176
	8,54,27,783	7,66,17,967	8,12,85,843	8,68,83,316
Charges of collecting the Revenues.				
	Co's. Rs.	*Co's. Rs.*	*Co's. Rs.*	*Co's. Rs.*
Charges of collecting the stamp duties	1,12,305	1,13,333	1,27,124	1,39,200
Ditto land, Saya and Abkarry revenues	42,56,965	44,06,813	44,17,681	45,40,446
Ditto customs	4,13,786	4,43,154	4,77,389	4,77,034
Costs and charges of salt, including payments made to the French and Danish governments under convention	39,43,070	40,09,454	44,39,792	52,96,369
Costs and charges of opium	66,92,188	43,85,095	51,82,272	58,96,972
	1,54,18,314	1,33,57,849	1,49,44,258	1,63,50,021
Total nett revenues of Bengal presidency, after payment of allowances and assignments, and charges of collection	7,00,09,469	6,32,60,118	6,63,41,585	7,05,33,295

It is seen from these statements that the territorial revenues at the disposal of the East India Company equal those of the most powerful monarchies. At present they are greater than those of either Russia or Austria, being inferior only to those of Great Britain and France. Still, however, the Company's financial situation is not very prosperous. Vast as their revenue has been, their expenditure appears, in most instances, to have been still larger; and at this moment their debts in India, exclusive of their bond debts at home, amount to about 32,000,000*l.*

The following account shows the balance between the revenue and expenditure of our Indian dominions, from 1814-15 to 1839-40.

Account exhibiting the Total Revenues and Charges of the British Possessions in India, in each Year from 1814-15 to 1839-40, both included, exclusive of the Expense of the Expedition into Affghanistan. —(Compiled from the *Parl. Paper* No. 574. Sess. 1842.)

Years.	Total Gross Revenue of India.	Cost of Collection and Payments thereout.	Total Nett Revenue of India.	Total Charges in India, St. Helena, &c.	Payments in England on account of India.	Total Charges exclusive of Expense of Collection, &c.	Nett Surplus of Revenue over Expenditure.	Nett Surplus of Expenditure over Revenue.
	£	£	£	£	£	£	£	£
1814-15	14,664,213	2,742,866	11,921,347	10,773,582	1,393,618	12,167,200	—	245,853
1815-16	14,617,709	2,725,717	11,891,992	11,657,265	1,412,126	13,079,391	—	1,187,429
1816-17	15,334,081	2,821,548	12,509,533	11,686,590	1,456,007	13,142,597	—	633,064
1817-18	15,577,537	2,749,562	12,827,975	12,410,339	1,381,273	13,791,612	—	963,637
1818-19	16,501,955	3,008,941	13,493,014	13,504,033	1,397,446	14,901,479	—	1,408,465
1819-20	16,305,763	3,064,233	13,241,530	13,275,710	1,392,292	14,668,002	—	1,426,472
1820-21	18,111,321	3,518,555	14,592,766	13,166,924	1,289,944	14,456,868	135,898	—
1821-22	18,480,761	4,070,196	14,410,565	12,648,172	1,349,517	13,997,689	412,876	—
1822-23	19,644,502	4,880,081	14,764,421	12,106,459	2,806,199	14,912,658	—	148,237
1823-24	18,034,597	5,260,640	12,773,957	12,361,898	1,295,018	13,659,916	—	885,959
1824-25	17,608,761	4,438,908	13,169,853	14,365,693	1,635,842	16,001,535	—	2,831,682
1825-26	17,909,789	4,120,198	13,789,591	16,364,724	1,823,285	18,188,009	—	4,398,418
1826-27	19,834,017	4,220,545	15,613,472	15,539,349	2,438,157	17,977,506	—	2,364,034
1827-28	19,413,348	4,740,789	14,672,559	15,639,974	2,051,210	17,691,184	—	3,018,625
1828-29	19,485,922	4,495,356	14,990,566	14,016,021	1,965,555	16,011,576	—	1,021,010
1829-30	18,517,122	3,989,249	14,527,873	13,539,562	1,715,084	15,254,646	—	726,773
1830-31	18,887,142	4,356,982	14,530,160	12,974,380	1,446,581	14,420,961	110,199	—
1831-32	18,317,237	4,289,440	14,027,797	12,758,723	1,476,655	14,235,378	—	207,581
1832-33	18,413,175	4,572,862	13,840,313	12,877,109	1,227,536	14,101,645	—	264,332
1833-34	18,016,917	4,411,233	13,605,684	12,262,549	1,293,637	13,556,186	49,398	—
1834-35	18,628,555	4,458,528	14,169,827	12,201,436	2,162,868	14,364,304	—	194,477
1835-36	19,543,071	4,116,464	15,426,607	11,875,280	2,109,814	13,985,094	1,441,513	—
1836-37	19,665,621	4,463,281	15,202,340	11,743,269	2,210,847	13,954,116	1,248,224	—
1837-38	19,530,679	4,464,378	15,066,301	11,981,538	2,304,445	14,285,983	780,318	—
1838-39	19,811,559	4,483,866	15,327,693	13,030,455	2,615,465	15,645,920	—	318,227
1839-40	18,858,719	4,316,104	14,542,615	13,809,718	2,578,966	16,388,684	—	1,846,069

N.B.—The charges defrayed in England on account of India, include dividends on Company's stock, about 630,000*l.* a year; interest on home bond debt; invoice value of stores consigned to India; half pay, and other retired allowances, &c.

However much this account of the financial concerns of our Eastern empire may be at variance with the exaggerated ideas entertained respecting it, as well by a large proportion of the people of England as by foreigners, it will excite no surprise in the mind of any one who has ever reflected on the subject. It is due, indeed, to the directors, to state, that though they have occasionally acted on erroneous principles, they have always exerted themselves to enforce economy in every branch of their expenditure, and to impose and collect their revenues in the best and cheapest manner. But though they have succeeded in repressing many abuses, it would be idle to suppose that they should ever entirely succeed in rooting them out. How can it be imagined, that strangers sent to India, conscious that they are armed with all the strength of government, placed under no real responsibility, exempted from the salutary influence of public opinion, fearing no effectual exposure through the medium of the press, and anxious only to accumulate a fortune, should not occasionally abuse their authority? or that they should manage the complicated and difficult affairs of a vast empire, inhabited by a race of people of whose language, manners, and habits they are almost wholly ignorant, with that prudence, economy, and vigilance, without which it were idle to expect that any great surplus revenue should ever be realised?

An Account of the Public Debts, bearing Interest, outstanding at the several Presidencies in the East Indies, on the 30th April, 1841; specifying the Rates and Annual Interest thereon.—(*Parl. Paper* No. 367. Sess. 1843.)

	Debts.	Rates of Interest.	Annual Amount of Interest.		Debts.	Rates of Interest.	Annual Amount of Interest.
BENGAL.				MADRAS.			
Registered Debt.	*Co.'s Rupees.*		*Co.'s Rupees.*		*Co.'s Rupees.*		*Co.'s Rupees.*
Loans	1,04,03,793	6 ₹ cent.	6,24,227	Loans	2,62,131	6 & 8 ₹ cent.	18,808
Ditto	15,79,95,278	5 ₹ cent.	78,99,764	Civil, military, and medical funds	80,04,758	5 & 6 ₹ cent.	4,42,765
Ditto	12,53,26,484	4 ₹ cent.	50,13,059	Miscellaneous deposits	4,18,833	4, 5, & 6 ₹ ct.	19,689
Company's rupees	29,37,25,555	- -	1,35,37,050	Company's rupees	86,85,722	- -	4,81,262
Loan transferred from Fort Maribro'	17,047	10 ₹ cent.	1,705	BOMBAY.			
Treasury notes	1,10,77,336	aver. 4⅔ ₹ ct.	5,17,778	Civil annuity and other funds	38,89,017	6₹ cent.	2,33,341
Civil and medical funds	1,48,26,789	6 ₹ cent.	8,89,608	Provident and military funds	44,69,670	5 ₹ cent.	2,[illegible]83
Miscellaneous deposits	6,45,474	4 & 5 ₹ cent.	27,655	Miscellaneous deposits	6,22,828	4 ₹ cent.	24,913
Company's rupees	32,02,92,201	- -	1,49,73,796	Treasury notes	5,69,700	4 ₹ cent.	22,788
N. WESTERN PROVINCES (late Agra Presidency).				Company's rupees	95,51,215	- -	5,04,525
Temporary Loans	31,35,131	5 ₹ cent.	1,56,756	Total ditto	34,18,78,269	- -	1,61,24,899
Ditto	14,000	4 ₹ cent.	560				
Miscellaneous deposits	2,00,000	4 ₹ cent.	8,000	At 2*s.* ₹ sicca rupee	£32,051,088	- -	£1,511,709
Company's rupees	33,49,131	- -	1,65,316				

EBONY (Ger. *Ebenholz*; Du. *Ebbenout*; Fr. *Ebène*; It. *Ebano*; Rus. *Ebenowoederewo*; Lat. *Ebenus*), a species of wood brought principally from the East. It is exceedingly hard and heavy, of great durability, susceptible of a very fine polish, and on that account used in mosaic and other inlaid work. There are many species of ebony. The best is that which is jet black, free from veins and rind, very compact, astringent,

and of an acrid pungent taste. This species (denominated by botanists *Diospyrus Ebenus*) is found principally in Madagascar, the Mauritius, and Ceylon. The centre only of the tree is said to be valuable. In 1837, 2,160 cwt. of ebony, of the estimated value of 1,275*l.* were exported from the Mauritius. Besides the black, there are red, green, and yellow ebonies; but the latter are not so much esteemed as the former. Cabinet makers are in the habit of substituting pear-tree and other woods dyed black, in the place of genuine ebony; these, however, want its polish and lustre, though they hold glue better. The price of ebony varies, in the London market, from 5*l.* to 20*l.* a ton. The quantities imported are but inconsiderable.

EEL (*Anguilla muræna* of Linnæus), a fish, the appearance of which is too well known to require any description. It is a native of almost all the waters of Europe, frequenting not only rivers but stagnant pools. Eels are, in many places, extremely abundant, particularly in Holland and Jutland. Several ponds are appropriated in England to the raising of eels; and considerable numbers are taken in the Thames and other rivers. But a large portion of the eels used in England are furnished by Holland. Indeed, very few except Dutch eels are ever seen in London; and even Hampton and Richmond are principally supplied by them. The trade is carried on by two Dutch companies, who employ in it several small vessels, by means of which the market is regularly and amply provided for. A cargo of eels is supposed to average from 15,000 to 20,000 lbs. weight, and is charged with a duty on importation of 13*l.* In 1840, this duty produced 920*l.*, showing that 72 cargoes had been imported that year. — (*Report on Channel Fisheries*, p. 93, &c.)

EGGS (Fr. *Œufs*; Lat. *Ova*) are too well known to require to be described. They differ in size, colour, taste, &c. according to the different species of birds that lay them. The eggs of hens are those most commonly used as food; and form an article of very considerable importance in a commercial point of view. Vast quantities are brought from the country to London and other great towns. Since the peace they have also been very largely imported from the Continent. At this moment, indeed, the trade in eggs forms a considerable branch of our commerce with France, and affords constant employment for a number of small vessels. We subjoin

An Account of the Quantity of foreign Eggs entered for Consumption during each of the Three Years ending with 1842, and of the Produce of the Duties on the same.

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	
Number.	*Number.*	*Number.*	£ s. d.	£ s. d.	
96,410,108	91,944,327	89,317,823	34,450 8 0	33,524 8 9	32,577 9 7

The duty is at the rate of 1*d.* per dozen, or 10*d.* per 120.

France supplies, at an average, about 80,000,000 of this immense importation, the rest being principally brought from Belgium. Now, supposing the eggs supplied by the former to cost at an average 4*d.* per dozen, it follows that the people of the metropolis and Brighton (for it is into them that they are almost all imported) pay the French about 111,111*l.* a year for eggs: and supposing that the freight, importers' and retailers' profit, duty, &c. raise their price to the consumer to 10*d.* a dozen, their total cost will be 277,777*l.*

EJOO. See Gomuti.

ELEMI, a resin obtained from the *Amyris elemifera*, a tree growing in different parts of America, Turkey, &c. It is obtained by wounding the bark in dry weather, the juice being left to thicken in the sun. It is of a pale yellow colour, semi-transparent; at first softish, but it hardens by keeping. Its taste is slightly bitter and warm. Its smell, which is, at first, strong and fragrant, gradually diminishes. It used to be imported in long roundish cakes, wrapped in flag leaves, but it is now usually imported in mats and chests. — (*Thomson's Chemistry.*)

ELEPHANTS' TEETH. See Ivory.

ELM (*Ulmus*), a forest tree common in Great Britain, of which there are several varieties. It attains to a great size, and lives to a great age: its trunk is often rugged and crooked, and it is of slow growth. The colour of the heart-wood of elm is generally darker than that of oak, and of a redder brown. The sap-wood is of a yellowish or brownish white, with pores inclined to red. It is in general porous, and cross-grained, sometimes coarse-grained, and has no larger septa. It has a peculiar odour. It twists and warps much in drying, and shrinks very much both in length and breadth. It is difficult to work, but is not liable to split, and bears the driving of bolts and nails better than any other timber. In Scotland, chairs and other articles of household furniture are frequently made of elm wood; but in England, where the wood is inferior, it is chiefly used in the manufacture of coffins, casks, pumps, pipes, &c. It is appropriated to these purposes because of its great durability in water, which also occasions its ex-

tenacity use as piles and planking for wet foundations. The naves of wheels are frequently made of elm; those of the heavy wagons and drays of London are made of oak, which supports a heavier weight, but does not hold the spokes so firmly. Elm is said to bear transplanting better than any other large tree. — (*Tredgold's Principles of Carpentry*, pp. 201—203, &c.)

ELSINEUR, OR HELSINGOR, a town of Zealand, on the Sound, about 22 miles north of Copenhagen, lat. 56° 2′ 17″ N., lon. 12° 38′ 2″ E. Population, in 1834, 7,122. Adjacent to Elsineur is the castle of Cronborg, which commands the entrance to the Baltic by the Sound. All merchant ships passing to and from the Baltic are obliged, under the reservations mentioned below, to salute Cronborg Castle by hoisting their colours when abreast of the same; and no merchant ship is allowed to pass the Sound without clearing out at Elsineur, and paying toll, according to the provisions in the treaties to that effect negotiated with Denmark by the different European powers. The first treaty with England having reference to this subject is dated in 1450. The Sound duties had their origin in an agreement between the King of Denmark on the one part, and the Hanse Towns on the other, by which the former undertook to construct light-houses, landmarks, &c. along the Cattegat, and the latter to pay duty for the same. The duties have since been varied at different periods. Ships of war are exempted from the payment of duties. Most maritime nations have consuls resident at Elsineur. The following plan of the Sound is taken from the Admiralty Chart, compiled from Danish authorities. — (See opposite page.)

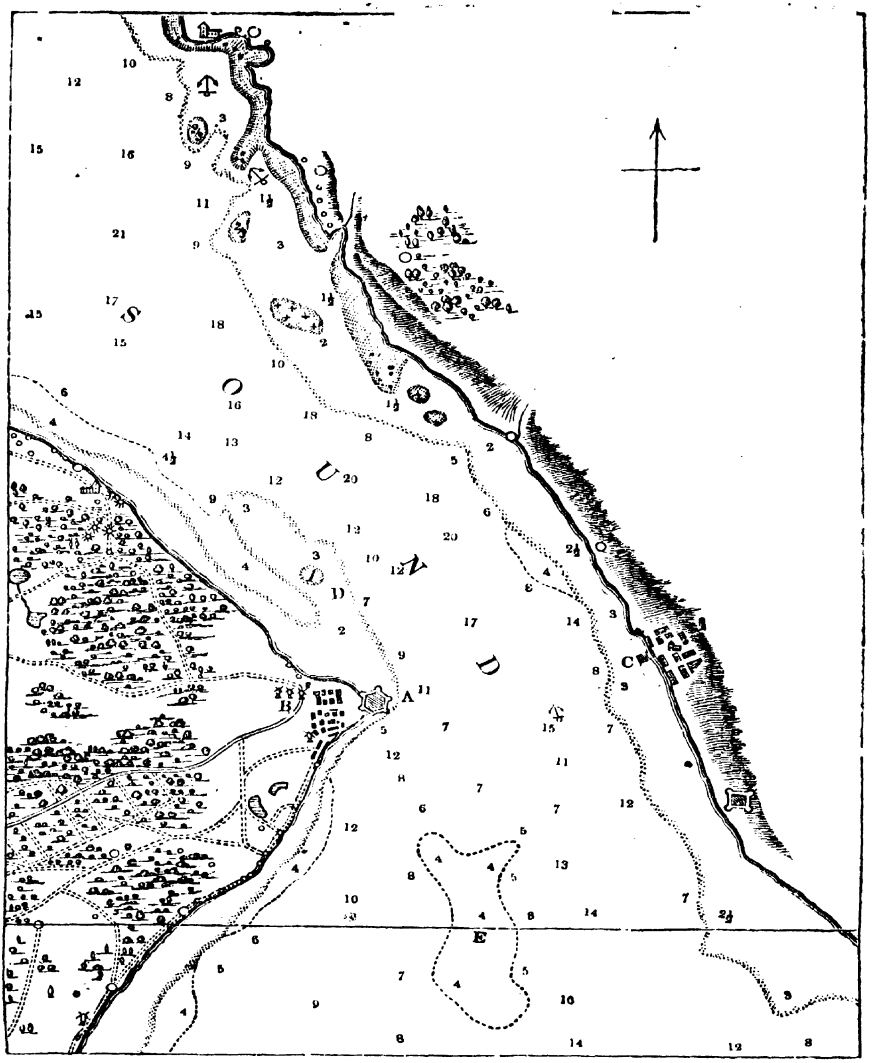
Navigation of the Baltic. — This is exhibited in the following Account of the Number of Ships that have passed (going and returning) the Sound at different Periods, from the Year 1777 to the present Time, specifying the Countries to which they belonged.

Countries.	1777.	1780.	1785.	1790.	1814.	1816.	1820.	1825.	1830.	1835.	1840.	Ships, 1842.	Tonnage in 1842.
British islands	2,552	1,701	2,537	3,771	2,319	1,848	3,597	5,186	4,274	2,472	4,071	3,519	613,809
Holland	2,567	2,058	1,571	2,009	551	876	853	630	1,227	654	947	912	90,288
Sweden	1,773	1,880	2,136	430	2,759	2,042	1,519	1,319	1,188	991	1,364	1,220	147,620
Denmark	1,110	1,341	1,787	1,586	476	787	792	803	744	752	974	1,068	106,800
Prussia	472	671	1,358	599	1,033	1,014	1,551	2,391	2,253	1,938	2,996	2,311	462,220
Russia	47	43	114	6	495	399	242	335	405	625	814	761	190,250
United States	-	-	20	44	-	168	169	230	152	126	143	113	33,900
France	21	-	20	123	12	16	63	72	199	146	239	240	29,280
Spain	10	-	15	32	22	9	-	-	8	7	18	4	600
Hanover	-	-	-	-	55	263	458	413	645	386	768	766	78,898
Imperial (Austria)	5	30	66	6									
Dantzic	231	174	161	248									
Mecklenburg	-	-	-	-	-	386	547	602	664	583	962	821	105,088
Oldenburg	-	-	-	24	18	9	47	54	56	46	85	140	12,600
Lubeck	78	82	79	89	28	45	64	121	80	71	96	79	9,480
Bremen	82	116	176	177	218	111	59	34	79	43	59	60	7,200
Hamburg	22	31	61	104	36	36	15	31	25	21	23	16	1,600
Rostock	79	104	101	339									
Papenburg	-	-	-	99									
Portugal	12	21	28	28	42	48	2	9	-	-	5	2	300
Courland	2	7	25	22									
Venice	-	2	4	(It.) 6	9		-	-	6				
Norway	-	-	-	-	83	794	946	951	1,202	1,357	2,025	1,860	217,620
Belgium	-	-	-	-	-	-	-	-	-	16	21	6	985
Italian states	-	-	-	-	-	-	-	-	-	21	52	59	8,850
Totals	9,053	8,291	10,268	9,742	8,186	8,871	10,926	13,160	13,212	10,255	15,662	13,957	2,117,388

The statements in this Table for the years 1777 and 1780 are taken from the valuable work entitled *Voyage de Deux François au Nord de l'Europe* (1. 360.); the other years are taken from the returns sent by the British consul at Elsineur, printed in various parliamentary papers. We have seen no two returns of the shipping that pass the Sound that quite agree, though the differences are not very material. The British consul first began to send returns of the tonnage in 1831.

A General Summary of the British Shipping employed in the Baltic Trade through the Sound during the Year 1842, stating the Number of Vessels and the Amount of their Tonnage, and distinguishing British and Foreign Ports.

Trade to the Baltic.				Trade from the Baltic.			
From what Ports proceeding.	Number of Vessels.	Tonnage.	Number of Crews.	To what Ports destined.	Number of Vessels.	Tonnage.	Number of Crews.
From ports of the U. Kingdom (In ballast, 504 ships; with coals and cinders, 722 ships; with salt, 117 ships; with iron, iron rails, and iron ore, 73 ships; with herrings, 78 ships; with general cargoes, 137 ships; with yarn, 19 ships; with cotton, 20 ships; with sugar, 7 ships; with logwood, 3 ships; with stores, ashes, bricks, tiles, tar, clay, oil, tin plates, and horses, 16 ships.)	1,696	296,555	14,416	To ports of the U. Kingdom (In ballast, 30 ships; with wheat, 364 ships; with linseed and rapeseed, 174 ships; with barley, oats, peas, tares, beans, seeds, grain, pulse, flour and provisions, 89 ships; with flax, 309 ships; with hemp, 145 ships; with timber, balks, and staves, 158 ships; with deals, 140 ships; with rape, linseed, oil-cakes, and bones, 50 ships; with cordage and iron, 21 ships; with general cargoes, 51 ships).	1,695	295,435	14,408
From foreign ports - -	103	17,657	876	To foreign ports - -	25	4,162	212
Totals - -	1,799	314,212	15,290	Totals - -	1,720	299,597	14,620



References to Plan. — A, Castle and light of Cronborg; B, Elsineur; C, Helsingborg in Sweden; D, the bank called the Lappen; E, the bank called the Disken. The soundings are in fathoms.

A general Statement of the Export Trade in British Ships, from Great Britain to the several Ports of the Baltic through the Sound in 1842, as compared with the Average Extent of the Ten Years from 1831 to 1840, and the Year 1841.

Years.	Cargoes of British and Colonial Products and Manufactures.		Cargoes of Coals.		Cargoes of Salt.		Cargoes of Herrings.		Total of Cargoes.		Ships in Ballast.		Total of Ships to the Baltic with Cargoes, and in Ballast.	
	Ships.	*Tonn.*	*Ships.*	*Tonn.*	*Ships.*	*Tonn.*	*Ships.*	*Tonn.*	*Ships.*	*Tonn.*	*Ships.*	*Tonn.*	*Ships.*	*Tonn.*
10 years, from 1831 to 1840	201	13,197	382	75,429	78	12,817	35	3,729	696	135,172	1,002	181,808	1,698	316,980
1841	275	53,292	689	126,534	108	17,817	56	5,711	1,128	203,354	672	115,475	1,800	318,829
1842	275	57,494	722	130,527	117	21,080	78	7,250	1,192	216,555	504	80,204	1,696	296,555

Pilotage, &c. — When ships come into Elsineur roads, or lie wind-bound near the Lappen, watermen come on board to inquire if the master will be carried ashore to clear; and in rough weather it is always best to make use of their services, their boats being generally very safe. The Danish authorities have published a Table of rates, being the highest charge that can be made by the boatmen upon such occasions;

but captains may bargain with them for as much less as they please. Most ships passing the Sound take on board pilots, the signal for one being a flag at the fore-topmast-head. Those bound for the Baltic take a pilot at Elsineur, who either carries the ship to Copenhagen, or Dragoe, a small town on the south-east extremity of the island of Amack, where she is clear of the grounds. Those leaving the Baltic take a pilot from Dragoe, who carries the ship to Elsineur. Sometimes, when the wind is fresh from the E. and S.E., it is impossible for a ship bound for Copenhagen or the Baltic to double the point of Cronborg; and in that case an Elsineur pilot is sometimes employed to n oor the ship in the channel towards Kull Point on the Swedish shore, in lat. 56° 18′ 3″ N., lon. 12° 26′ E. But this does not often happen, as the Danish government employ steam tugs for the special purpose of bringing ships, in adverse weather, round Cronborg Point. The pilots are regularly licensed, so that, by employing them, the captain's responsibility is at an end. Their charges are fixed by authority, and depend on the ship's draught of water. We subjoin a copy of the tariff applicable to pilots taken on board at Elsineur to carry ships to Dragoe, Copenhagen, or Kull Point, with the sums both in silver and in Rigsbank paper dollars.

Pilotage from the 1st of April to the 30th of September.

Ships drawing Water.	Dragoe.				Copenhagen.				Kull Point.			
	Silver.		Paper.		Silver.		Paper.		Silver.		Paper.	
Feet.	R. b. dr.	Sch.	R. b. dr.	Sch.	R. b. dr.	Sch.	R. b. dr.	Sch.	R. b. dr.	Sch.	R. b. dr.	Sch.
Under - - 8	11	78	12	18	9	10	9	38	5	72	5	89
Between - - 8 and 9	13	16	13	56	10	6	10	36	6	63	6	83
9 — 10	14	50	14	94	11	2	11	35	7	53	7	76
10 — 11	15	84	16	36	11	94	12	34	8	44	8	69
11 — 12	17	22	17	74	12	91	13	33	9	35	9	63
12 — 13	18	56	19	16	13	87	14	32	10	25	10	56
13 — 14	19	90	20	54	14	83	15	31	11	16	11	50
14 — 15	21	28	21	92	15	78	16	30	12	7	12	43
15 — 16	22	62	23	34	16	75	17	29	12	93	13	36
16 — 17	24	65	25	43	18	56	19	16	13	84	14	30
17 — 18	26	68	27	52	20	37	21	2	15	44	15	90
18 — 19	28	71	29	61	22	19	22	86	17	3	17	54
19 — 20	30	74	31	72	23	0	24	72	18	59	19	19
20 — 21	32	77	33	80	25	77	26	58	20	19	20	80
21 — 22	34	80	35	89	27	59	28	46	21	74	22	43
22 — 23	36	83	38	1	29	40	30	32	23	34	24	28

Pilotage from the 1st of October to the 30th of March.

Ships drawing Water.	Dragoe.				ıagen.				Kull Point.			
	Silver.		Paper.				Paper.		Silver.		Paper.	
Feet.			R. b. dr.	Sch.	t. b. dr.	Sch	R. b. dr.	Sch.	R. b. dr.	Sch.	R. b. dr.	Sch.
- 8					11	35	11	70	7	53	7	70
- 8 and 9			17		12	61	13	2	8	73	9	3
9 — 10			19		13	88	14	64	9	92	10	26
10 — 11			21		15	19	15	64	11	16	11	50
11 — 12					16	47	17	-	12	36	12	73
12 — 13					17	73	18	30	13	55	14	-
13 — 14					19	4	19	62	14	75	15	24
14 — 15			28		20	29	20	90	15	95	16	48
15 — 16			30		21	57	22	26	17	17	17	68
16 — 17	32		33				24	72	18	37	18	92
17 — 18	34						27	22	20	48	21	14
18 — 19	37						29	70	22	57	23	28
19 — 20							32	19	24	68	25	46
20 — 21							34	65	26	79	27	64
21 — 22					36		37	16	28	88	29	78
22 — 23					38		39	62	31	3	32	0

N.B. —When a pilot is taken on board at Dragoe to carry a ship to Elsineur, the charge is the same as that given under the first head of the above column. — (*Archives du Commerce*, tome iii. p. 145.)

The *Monies*, *Weights*, and *Measures* of Elsineur are the same as those of Copenhagen (which see), except that the rixdollar is divided into 4 *orts* instead of 6 marcs: thus, 24 skillings make 1 ort; and 4 orts 1 rixdollar.

The Sound duties are, however, levied and paid in specie rixdollars of 48 stivers, 9½ such specie rixdollars constituting 1 marc fine silver, Cologne weight. Taking silver at 5*s.* 2*d.* an ounce, the value of the specie rixdollar is 4*s.* 6½*d.*, and taking it at 5*s.* an ounce, it is worth 52·7*d.*, or 4*s.* 4½*d.* nearly. In either case the value of the stiver may be taken at 1·1*d.*

The following tariff of the Sound duties, subscribed on the 28th December, 1841, was drawn up by Danish, British, and Swedish-Norwegian commissioners, in strict accordance with the tariff of Christianople of the 13th of August, 1645, and with the conventions and schedules concluded and agreed upon in London, on the 13th of May, and at Elsineur on the 13th and 23d of August, 1841.

Introductory Remarks to the Tariff of Sound Duties.

I. — *Of the Sound Toll in general.*

The impost levied at Elsinore, known for ages by the appellation of the Sound-toll, involves two distinct branches; namely, the duty payable upon the ship, and that upon the cargo.

The duty payable upon the ship is confined to the light and beacon money, stipulated by a separate act in 1647; but in order to defray the expense of several new lights necessary for the better navigation of the Sound and the Cattegat, and which are in progress of erection, the above rate has been augmented 12½ per cent. by § 31. of the Convention on the Sound-toll with Great Britain of the 13th August, 1841, to the effect that merchant vessels of 20 lasts, or 40 tons and upwards, when in ballast, are henceforth to contribute two and a quarter specie dollars, and when with cargo four and a half specie dollars, each time they are passing, either through the Sound or the two Belts. Vessels of a smaller burden, however, pay on a reduced scale, viz.: —

Tons.	Sp. d.	sti.		Sp. d.	sti.
from 10 to 20: —With cargo	1	0	In ballast	0	24
20 to 30 —	1	24	—	1	0
30 to 40 —	2	0	—	1	24

Vessels under 10 tons are entirely exempt from light dues.

Remark. — Vessels laden with bricks, tiles, or a quantity of goods under six lasts or twelve tons, are considered in ballast, and charged light money accordingly. As to liquids, one last is held equal to eight hogsheads. Of dry goods by the weight, one last (of 2 tons) is reckoned at twelve shippounds, and by barrel measure at so many barrels as constitute a last of each of the respective articles, according to the Tariff. A ship laden with 8 horses or black cattle, however, is considered as carrying a full cargo.

Besides the light and beacon money, several other expenses fall to the charge of the ship, such as customs fees and poor-money, of which an account will be rendered hereafter.

The duty payable upon goods, or the Sound duty, properly speaking, is levied according to the Tariff of the Oresound Custom-house of the 23d December, 1841, (an official translation of which will be found annexed,) and which has been made to include —

1. The articles enumerated and rated in the Tariff of Christianople of the 13th August, 1645.

2. Articles the rates of which were agreed upon in London, on the 13th May, 1841.

3. Articles the rates of which were sanctioned by § 3. and 4. of the Convention of the 13th August, 1841.

All goods and wares not specified in the above-mentioned Tariff pay duty ad valorem, in conformity with the stipulation in § 3. of the treaty between Denmark and the United Netherlands of the 15th June, 1701. — (*Conf.* § 23. *and* 24. *of the present regulations.*)

A toll, upon the same principles as at the Sound, and denominated "stream toll," is levied upon all vessels and goods which pass through the larger and little Belt. In the former case it is collected at Nyborg, in the island of Funen, and in the latter, at Frederica, in Jutland.

The following objects, viz. bullion and coin of gold and silver; chalk and gypsum in lumps; clay of various kinds, with the exception of pipe-clay; coals and cinders; cordage and other ships' materials proceeding from a wreck; fresh fish, with the exception of oysters and lobsters; small grindstones, used household furniture and wearing apparel; paving stones; quicklime and limestone; small stones for fishing-nets; and wood for fuel, are exempt from duty at the Sound and Belts by ancient usage. The vessels laden with such objects, however, are liable to the light dues, stipulated for vessels with a cargo.—(*Conv.* 13th Aug. 1841, § 11.)

The duty, light, and beacon money, fees, and other dues at the Sound and Belts, are levied and paid in specie rixdollars of 48 stivers, of which 9½ rixdollars specie constitute one mark fine silver, Cologne weight. The notes issued by the Danish National Bank, however, are received in payment at the current exchange.—(*Conv.* 13th Aug. 1841, § 32.)

N.B. — Taking silver at *5s. 2d.* an oz., the value of the specie doll. is *4s. 6½d.*; and taking it at *5s.* an oz., it is worth *52·7d.*, or *4s. 4¾d.* nearly: in either case the value of the stiver may be taken at *1·1d.*

II. *Of the Oresound Custom House, and its Rules and Regulations, chiefly founded upon Treaties with foreign Nations; and of the Privileges enjoyed by such Nations at the Sound and the two Belts.*

The following are the rules and regulations, chiefly founded upon the existing treaties, and acted upon by the Customs, as respects the shipping and trade at the Sound and the two Belts.

In order to secure prompt despatch to the vessels clearing the dues, the officers are instructed to be in daily attendance at the Custom-house at the following periods, viz.: —

a. For the reception of papers,

from the 1st April to the 31st Oct.	- from 4 o'clock, A.M. to 10 o'clock, P.M.
in the month of March -	- from 6 o'clock, A.M. to 9 o'clock, P.M.
and during the rest of the year	- from 6 o'clock, A.M. to 8 o'clock, P.M.

b. For the delivery of Sound-passes,

from the 1st April to the 31st Oct.	- from 6 o'clock, A.M. to 9 o'clock, P.M.
in the month of March -	- from 7 o'clock, A.M. to 9 o'clock, P.M.
and during the rest of the year	- from 8 o'clock, A.M. to 6 o'clock, P.M.

(*Conv.* 13th Aug. 1841, § 26.)

The fees to be levied by the customs officers, in conformity with the conventions of the 13-25th August, 1841, between Denmark on the one part, and Great Britain, Sweden, and Norway on the other, have been determined and fixed as follows: —

a. Fees payable upon each Clearance.

To the director, commissioners, and officers of the Customs, to be charged in one sum under the head of "Customs Fees," 3 specie dollars (sp. d.).

Vessels proving to be under 20 lasts or 40 tons, are charged according to the following reduced scale, viz.: —

From 10 to 20 tons burden,	Sp. d.	0	12	stivers
20 to 30	—	1	24	—
30 to 40	—	2	0	—

Those under 10 tons are exempt from customs fees.

Remark. — Where the credit alluded to in section 2. of § 29. is made use of, 12 stivers are charged in addition for the stamped paper on which the bond is written.

b. Fees payable in special Cases.

1. To the inspector or searcher, where the vessel does not bring a Custom-house clearance or other official document, proving her national character and stating the nature of her cargo, sp. d. 1 6 st.

Vessels under 20 tons are not liable to the inspector's charge.

Remarks. — Where the clearances from foreign ports, and namely, the English "Victualling bills" of privileged ships in ballast, are defective, owing to their not stating either the ship's national character or the circumstance of her sailing in ballast, such defect may be amended by the master's declaration before the consul of his nation, in which case no inspector's fee is charged.—(*Conv.* 13th Aug. 1841, § 21.)

As unprivileged vessels are liable to be searched, they are charged the inspector's fee each time they clear.

2. To the interpreter, for reporting the cargoes for entry at the Custom-house, and for rendering a detailed statement of the duty, showing the proportion to be contributed and paid by each of the shippers or consignees in particular; namely, for any number of bills of lading, not exceeding four - - - - - - 32 stivers.
And in addition for each bill of lading above four 4 —
For reporting a ship in ballast, or laden with coals 12 —

Remark. — Where no bills of lading are on board, the interpreter is entitled for any number not exceeding six cockets - - - - - - 32 stivers.
And for each cocket over and above that number 4 —

Vessels proceeding from the countries under-mentioned, are exempt from the interpreter's charge, and pay only eight stivers for their pass, where the master requires to have the same returned; viz. from Denmark, Norway, Sweden, Prussia, Finland (with the exception of Wyburg and Frederickshamn); from the Baltic provinces of Russia (with the exception of St. Petersburg and Narva); and from Mecklenburg (with the exception of Rostock). — (*Conv.* 13th Aug. 1841, § 22.)

Remark. — Vessels from these countries proving to measure under 20 tons are not even subject to the charge for the copy of their pass.

Besides the fees above enumerated, another expense is entailed upon the shipping, which is the *extra poor-money*, stipulated for the benefit of the poor by § 5. of the Convention of the 15th June, 1701, and amounting to one specie dollar, payable where the clearance of a vessel is demanded and granted on Sundays, and on the holidays lawfully appointed, as well as out of the office hours, mentioned in § 9.—(*Conv.* 13th Aug. 1841, § 26.)

Remark. — Vessels proving to measure under 30 tons pay only 32 stivers poor-money.

British vessels of small size are, moreover, charged the British poor-money of one specie dollar, or *5s.* sterling, being a voluntary contribution on the part of the ship-owners in consideration of certain advantages and relief, granted by the clearing-houses at Elsinore, in the event of shipwreck, to the masters and crews of such vessels as have contributed to the same.

Regular acquittances for the duty, light, and beacon-money, as well as for the customs fees and other dues at the Sound and Belts, are given by the Customs on the respective passes.

Remark. — The above acquittance on the pass for the amount of duty should, strictly speaking, not be given in the gross, but in detail, and for each description of goods in particular; however, in order not to delay the despatch of vessels longer than is absolutely necessary, a detailed statement is only delivered to shipmasters upon their express demand, when previously made to that effect. — (*Conv.* 15th June, 1701, § 6.; and 13th Aug. 1841, § 25.)

Each merchant vessel calling at Elsinore is to hoist her colours; that is to say, when coming from the northward: previously to passing Cronborg Castle; and when coming from the southward, previously to passing the Danish guardship stationed in the roads.—(*Conv.* 13th Aug. 1841, § 13.)

Every merchant vessel is liable to the payment of duty, when on her voyage she passes the Custom-house line; by which is understood, in the Sound, an imaginary line drawn across the Sound between the flag-battery of Cronborg Castle and the northern point of Helsingborg; in the large Belt, the line between Halskow, in Zealand, and Knudshoved, in Funen; and in the little Belt, the line between Strib, in Funen, and the old Ferry-bridge at Frederica, in Jutland. — (*Conv.* 13th [illegible] 1841, § 14.)

[illegible] general rule established by the preceding article is subject to the following modifications: —

a. Vessels which, by stress of weather, seek the roads for shelter, or come in to wait for convoy, but return again, are entirely exempt from all clearance and charges.

b. Vessels, which call for orders and return again, without either loading or unloading, are not subject to the payment of any duty, except light-money and customs fees inwards.

c. Vessels carrying a pendant, and reporting to have goods on board, although liable to duty upon the rated articles of their cargo as heretofore, are exempt from light-money and all customs fees.—(*Conv.* 13th Aug. 1841, § 15.)

For the preservation of public order, shipmasters or other persons who come on shore at Elsinore for the purpose of clearing the Sound dues, are to proceed im[illegible] landing-place to the Custom-house, the [illegible] papers and to make the declarations required of them, in order that no delay may occur in the prompt despatch of their vessels.—(*Conv.* 13th Aug. 1841, § 16.)

Goods and wares on which the Sound and stream duty has once been paid, and which are necessarily returned either through the Sound or the Belts in consequence of shipwreck, or by some other reason, are not liable to duty a second time; the parties, however, will have to afford the necessary explanation on the subject, to the satisfaction of the Customs.

The same is observed with regard to vessels which, after having cleared the dues from tempestuous weather or contrary winds, are obliged to return to the roads. — (*Conv.* 15th June, 1701, § 8.)

The duty on goods is invariably computed according to the weights and measures of the country or place where the cargo has been shipped; to the effect that, inasmuch as a ton in England is 20 cwt., or 2240 lbs., the duty in like manner is calculated upon 2240 lbs.; and a kilogramme in France, and a Netherlands pound in Holland, being equal to 2 French and 2 Dutch pounds respectively, they are likewise taken at 2 pounds at the Sound and Belts; and so in similar cases.—(*Conv.* 15th June, 1701, § 2.; and 13th Aug. 1841, § 12.)

Where the ship's papers, therefore, state goods and measures other than those customary at the place where the goods have been laden, a reduction of the same to the weights and measures of the place of shipment is made previously to the duty being charged.

The nations trading through the Sound and Belts are considered by the Customs in the light either of privileged or of unprivileged nations. The former class includes all those whose governments are connected with Denmark by means of commercial treaties, containing stipulations about the Sound toll.

In consequence thereof, the ships (including the goods laden therein) of the following states are treated upon the footing of the most favoured nations, among which are Great Britain and most other powers.

Privileged nations pay duty according to the customs tariff of the 23d of December 1841; but on all articles not rated therein, they are charged 1 per cent. ad valorem according to the value of such articles at their respective places of shipment.

Unprivileged nations, although equally paying the rated duty according to the tariff, are charged 1½ per cent. upon all articles subject to the ad valorem duty.

Remark. — Unprivileged ships, when bound to the port of Rostock, laden with 6 tons of goods and upwards, are liable, besides, to a movable duty upon the scale of 4½ specie dollars, from which the most favoured nations have been exempted by § 10. of the Convention of 13th August, 1841. With regard to the discriminating duties which are levied upon certain wines, as well as upon various descriptions of corn from certain ports of the Baltic, when laden in unprivileged ships, see § 29. sections 4, 5, 6., and to Table III. at the end of the tariff.

The duty ad valorem, above alluded to, is charged upon the value or according to the prices, stated in the ship's papers; but where they do not afford the information required, or where the statements made prove to be incorrect, the customs officers are instructed to make, the valuation according to prices current, which quote the actual prices at the places of shipment; where these, however, are not obtainable, it is left to the officers to act according to the best of their judgment and upon principles of equity. Where the value of the goods actually shipped is not stated in the endorsement of the paper called "cocket," and no regular invoice accompanies the same, the value stated in front of such cocket is adopted by the Customs in the first instance for calculating the duty payable.—(*Conv.* 13th Aug. 1841, § 17, 18.)

Where, from a deficient state of the ship's papers or some other cause, the duty on any parcel of merchandise has been overcharged by the Sound Customs, the difference will be refunded to the claimants on their affording sufficient proofs to that effect within the term of one year, to commence from the time that such dues were paid.—(*Conv.* 13th Aug. 1841, § 19.)

In the event of any disagreement arising between the parties about the amount of Sound duty actually charged and paid upon any parcel of merchandise, the Sound Customs will deliver, gratuitously, to the persons applying for the same, a detailed statement, under their hand and seal, of the duty so charged and paid.—(*Conv.* 13th Aug. 1841, § 20.)

As soon as a shipmaster has delivered at the Custom-house the papers referring to his cargo, and has made the declarations required of him, he shall, at his request, and on giving good and sufficient security to the Customs for the payment of the dues, be furnished with a blank pass, in order that he may be enabled to proceed forthwith on his voyage, if the wind be favourable, without being obliged to wait for a regular Custom-house clearance.—(*Conv.* 13th Aug. 1841, § 27.)

Besides the privilege mentioned in § 23. of paying 1 per cent. only on articles not rated in the tariff, the following other privileges are enjoyed by the most favoured nations, viz.:—

1. Their ships and goods are free from being searched by the Customs, and full credence is given to their certificates and papers when in due order; with the understanding, however, that in case of any fraud upon the revenue at the Sound and the Belts, the government concerned, when called upon, adopt prompt and efficacious measures to procure redress.—(*Conv.* 15th June, 1701, § 11.)

2. Although goods, not rated in the tariff and belonging to them, be laden in unprivileged vessels, still such goods are not charged with a higher duty than 1 per cent. ad valorem, on being accompanied by the necessary certificates of property from the port of shipment.

3. They have a pre-eminent claim to their ships being despatched at the Custom house, without experiencing delay.—(*Treaty with England of* 1670, § 14.; *with Holland of* 1701, § 11.)

4. Spanish and Portuguese wines, when laden in their vessels, pay sp. d. 1½ per pipe only, while in unprivileged ships such wines are subject to a duty of sp. d. 2 per pipe.

5. In like manner wine in bottles laden in their vessels is charged 24 stivers per 100 bottles only, while in unprivileged ships the same wine is liable to 30 stivers duty per 100 bottles.

6. When their ships carry certain descriptions of corn from various enumerated ports in the Baltic, the duty payable thereon is not raised, as when laden in ships belonging to unprivileged nations.

7. They are exempt from the Rosenoble duty, mentioned in the remark to § 24.

8. On good and full security being given to the Customs, the ships of Great Britain, France, and Spain, when upwards bound, enjoy the privilege of paying the dues at their return from the Baltic; or if they do not return, then within three months, if they have not paid the same on their first passage. (*Treaty with England of* 1670, § 12.; *with France of* 1742, § 10.)

The pleasure yachts belonging to the members of the royal yacht squadrons in England are entirely exempt from light-money and customs at the Sound and the two Belts, on the necessary proofs being afforded by them to the satisfaction of the Customs.—(*Conv.* 13 Aug. 1841, § 30.)

Towards indemnifying shipmasters for the expenses necessarily attendant upon their coming on shore to clear the Sound dues, an allowance of 4 per cent. on the amount of duty payable upon their cargoes is granted by the Customs to every shipmaster who shall have made a true report and manifest of his cargo.—(*Conv.* 13 Aug. 1841, § 31.)

Masters and seamen of merchant vessels, who, having suffered shipwreck, arrive at Elsinore in distress, and apply to the Sound Custom-house, either in person or through the consul of their nation, receive the customary donation out of the extra poor-money mentioned in § 13.—(*Conv.* 13 Aug. 1841, § 34.)

The infraction of, or deviation from, the established rules and regulations of the Customs, is visited with the following penalties, viz.:—

1. For making a false entry of the quantity or quality of the cargo, and for running the ship past the Custom-house (except in case of distress), with a manifest intention of defrauding the revenue, a penalty is imposed adequate to the degree of culpability of the offending party; that is to say, over and above the lawful duty on the goods, in the worst case, a sum not exceeding double the amount of which the revenue was intended to be so defrauded.

2. Where shipmasters are bound to Copenhagen, and sail thither without having previously cleared the Sound duty, although they send their papers down to Elsinore for clearance, they are liable to a penalty of two specie dollars and a half.

3. Fines of one specie dollar are inflicted—

a. Where the ships' papers are forwarded to Elsinore for despatch previously to the ship's arrival from the southward.

b. Where the ships' papers are brought on shore by any other person than the master, mate or supercargo.

In conclusion, it must be remarked, that in order to secure prompt despatch to the vessels clearing at the Sound and the Belts, and to protect the owners of the goods therein laden, as much as possible, against involuntary overcharges in the dues, it is of the most vital importance that the papers relating to ship and cargo (which the shipmasters are held to deliver at the Custom-house each time they present themselves for clearance) should always be made out in such order, so as to enable the officers to calculate the duty without difficulty. The parties, therefore, will have to impute it to themselves, in so far as any delay in the clearance, or any overcharge in the dues, is occasioned by the deficient state of the papers produced. For these reasons it is strongly recommended to the shipmasters, as well as to the shippers of goods, to be careful that the papers which relate to the cargo, independently of a clear and exact report of the contents of the several packages, moreover distinctly mention—

1. As regards goods that are specified and rated in the tariff, either the weight or measure at the port of shipment, as the case may require.

2. As regards goods which pay duty ad valorem, the value of such goods at the port of shipment.

It is only under the guidance of an accurate and full statement of these details that the customs officers, on charging the duty, are enabled to do full justice to the commercial public in the sense of the existing treaties, and it is only by these means that a frequent recurrence of claims for overcharges (attended with great inconvenience to all parties) can be most effectually checked for the future.

Tariff of Duties levied at the Sound and Belts.

	Stivers.
Almonds, the 100 lbs.	9
Alum, the ship lb.	12
Amber, wrought, the 5 lbs.	6
raw, in fragments, or filings, the ship lb.	9
Anchor stocks, the shock of 60	48
Angora goat's hair is charged as camel's hair.	
Aniseed, the 100 lbs.	9
Annatto or roucou, the 100 lbs.	9
Antimony, the ship lb.	12
Apparel of a ship stranded, duty free.	
wearing, used, duty free.	
new, is charged duty ad valorem.	
Apples, the last (12 barrels to the last)	6
Argol or tartar, the 100 lb.	2
Armagnac. See *Brandy*.	
Arrack. See *Brandy*.	
Arsenic, the 300 lbs.	8
red. See *Orpiment*.	
Ashes, viz.:—	
pot and straw ash, the last or the 12 ship lb.	48
The weight not being stated, the barrel is reckoned at 1 ship lb. nett.	
kelp, the ship lb.	4
The weight not being stated, the barrel is reckoned at ½ ship lb. nett.	
soda. See *Barilla*.	
weed ash, the last (12 barrels to the last)	12
The barrel is reckoned at 1 ship lb. nett.	
A cask of weed ash from Riga is considered as a barrel.	
Atlas, the two pieces (25 ells being reckoned to the piece)	9
Bacon, the ship lb.	6
Weight unknown, the barrel is reckoned at 1 ship lb. nett.	
Bagging. See *Linen*.	
Baize, the piece, reckoned at 25 ells	3
Balk planks, of oak, the shock of 60	48
of fir and pine, the shock of 60	36
Balks of oak, ash, and beech, each	3
of fir, pine, and lime, the pair or two	3
round, are charged according to dimensions as round timber.	
denominated "balks hewed square or with eight edges," are charged as yards from 7 to under 15 palms.	
Barattes of silk, the two pieces (25 ells being reckoned to the piece)	9
Barley, the last (20 barrels to the last)	24
meal and groats. See *Flour* and *Groats*.	
Barilla, the 100 lbs.	1
Bars of gold and silver, duty free.	
Bay berries, the 200 lbs.	9
Beans, the last (12 barrels to the last)	12
The number of barrels unknown, 200 lbs. nett weight is reckoned to the barrel.	
Beaver skins. See *Skins*.	
Beaver wool or hair, the 25 lbs.	24
Bed ticking, fine, the 4 pieces (25 ells being reckoned to the piece)	15
coarse, the 5 pieces (50 ells being reckoned to the piece) without indication of quality, is charged as fine bed ticking.	3
Beef, salted and smoked, and all other kinds of meat salted and smoked, the last (12 barrels to the last)	36
The number of barrels unknown, 200 lbs. nett weight is reckoned to the barrel.	
Beer, Lubeck, Rostock, Stralsund, and Wismar, the last of 6 casks (12 barrels to the last)	18
mum, black or spruce beer, and all other kinds of beer not otherwise enumerated and described, the last of 6 casks (12 barrels to the last)	36
in hogsheads from England, Holland, and other places, the 2 hogsheads	9
8 hogsheads or 12 barrels are reckoned to the last in bottles, is charged duty ad valorem.	
Blankets, horse, the 2 dozen	15
for beds, the 2 dozen	15
Where the quantity is not otherwise reported than by the ell, 4 ells are reckoned to each blanket.	
Boat-hook shafts are charged as common spars.	
Bombazeen, the 4 pieces (25 ells being reckoned to the piece)	5
Bombazett, the 4 pieces (25 ells being reckoned to the piece)	5
Boxes, the last	18
Brandy, French, including Armagnac, Charente, and Cognac, the hogshead of 30 veltes	24
Spanish, the hogshead of 30 veltes	24
arrack, rum, and taffia, the hogshead of 30 veltes	24
Rhenish, the hogshead of 30 veltes	36
From Sweden, 60 kannor are reckoned to the hogshead.	
corn and potato, the barrel of 12 to the last	4
From Sweden 60 kannor are reckoned to the barrel in bottles } Dutch gin } are charged duty ad valorem.	
Brass, the ship lb.	24
guns, the ship lb.	24
wire. See *Wire*.	
Brazier's work, the crate weighing 1 ship lb.	24
Bread and biscuits of wheat, the last (12 barrels to the last)	18
of rye, the last (12 barrels to the last)	12
The number of barrels not being reported, 100 lbs. nett weight is reckoned to the barrel.	
Brimstone, the last or 12 ship lbs.	48
Broadswords, the 25	12
Brocade of gold and silver, the piece (25 ells to the piece)	18

	Stivers.
Brussen are balks.	
Buckram of all sorts, the 4 pieces (50 ells being reckoned to the piece) - - - - -	3
Buckskins. See *Skins*.	
Buckwheat, the last (12 barrels to the last) - -	12
Buff leather. See *Leather*.	
Buldan canvass is charged as boldavet. See *Linen*.	
Bullion, gold and silver, duty free.	
Bullocks, each - - - - - -	18
Buntine, the 4 pieces (25 ells being reckoned to the piece)	5
Butter, the last (12 barrels to the last) - -	60
The number of barrels being unknown, 200 lbs. nett weight is reckoned to the barrel.	
Calfa (figured plush), the 2 pieces (25 ells being reckoned to the piece) - - - - -	9
Calamine, the ship lb. - - - - -	6
Calamus, the 100 lb. - - - - -	6
Calemink or drillings from Russia, the 100 arshines -	6
Calf skins, raw, salted, and dried, the 10 dickers or 100 skins - - - - -	12
of the weight of 9 lbs. nett and upwards, each, pay as kips. See *Hides*.	
Calico, printed or dyed, is charged ad valorem.	
Calves, each - - - - - -	8
Camblets, the 2 pieces (25 ells being reckoned to the piece)	5
Cambrics of cotton, are charged ad valorem.	
of linen, the 4 pieces (25 ells reckoned to the piece) -	15
Camel's hair, the 25 lbs. - - - - -	6
Canary seed, the last of 6 casks (12 barrels to the last) -	36
Candles of tallow and wax. See *Tallow* and *Wax*.	
of spermaceti are charged ad valorem.	
Canella alba, the 100 lbs. - - - - -	6
Capers in pipes and hog-heads, the pipe or 2 hogsheads -	18
in smaller casks, or in boxes and cases or similar packages, are charged ad valorem.	
Cardamoms, the 100 lbs. - - - - -	18
Cassia fistula, the 100 lbs. - - - - -	12
Cassia lignea, the 100 lbs. - - - - -	9
Cattle bones, the ship lb. - - - - -	1
Cement, the last (12 barrels to the last) - - -	12
By weight the last is reckoned at 12 ship lb. nett.	
Chalk, white, raw, and in lumps, duty free. (12 barrels to the last.)	
ground or crushed } are charged ad valorem.	
red and black }	
Cheese, the ship lb. - - - - - -	4
Chesnuts, the boisseau - - - - -	1
The number of boisseaux not being mentioned, 100 lbs. nett weight is reckoned to the boisseau.	
Cider and similar fruit wines, including must, the hogshead of 30 veltes - - - -	12
Cinders, duty free.	
Cinnabar, the 100 lbs. - - - - -	24
Cinnamon, the 100 lbs. - - - - -	36
Clapwood. See *Wood*.	
Clay of all sorts, duty free, except pipe-clay, which pays ad valorem.	
Cloth, woollen, English, Dutch, and fine, the 8 pieces -	36
coarse, Scotch, Amsterdam, Flemish, and French, the 16 pieces - - - - - -	30
Cloth, woollen, virlot or coarse Dutch, if not particularly described, and all other coarse cloth, the 16 pieces -	36
25 ells of all sorts of woollen cloth are reckoned to the piece.	
Clothes, old and new. See *Apparel*, *Wearing*.	
Cloves, the 100 lbs. - - - - -	36
Club sticks, the long hundred of 48 shocks - -	48
Coals of all sorts, including cokes and cinders, duty free.	
Coal pitch, the last (12 barrels to the last) - -	18
Coal tar, the last (12 barrels to the last) - -	18
Cobalt or cobalt ore, the 100 lbs. - - -	3
Cochineal, the 100 lbs. - - - - -	36
Cocoa, the 100 lbs. - - - - -	6
Cod fish. See *Fish*.	
Codilla of flax and hemp, the 10 ship lbs. - -	36
Coffee, the 100 lbs. - - - - -	6
Coin of gold and silver, duty free.	
Coney wool, the 5 lbs. - - - -	3
Copper, wrought and unwrought, the ship lb. - -	24
wire. See *Wire*.	
Copperas (vitriol), the ship lb. - - -	6
blue, the ship lb. - - - - -	6
Cordage, namely—cables, cable yarn, rigging and hawser laid ropes, the ship lb. - - - -	6
old, used, the 5 ship lbs. - - - -	18
proceeding from a wreck, duty free.	
Cordovan. See *Leather*.	
Coriander seed, the 200 lbs. - - - -	3
Corkwood in bundles, the 5 bundles - - -	6
In other packages, pay ad valorem.	
Corks, cut, pay ad valorem.	
Cotton wool, the 100 lbs. - - - -	18
Cotton cloth, white, common, the 8 pieces - -	15
25 ells being reckoned to the piece.	
manufactures of, in so far as they are not particularly enumerated, or included in the descriptions mentioned in the present tariff, pay ad valorem.	
Coulters are charged according to dimensions, as Swedish and Norway spars.	
Cows, each - - - - - -	18
Crape, the 2 lbs. - - - - -	5
Cubebs, the 100 lbs. - - - - -	8
Cultrases, the 5 - - - - -	8
Cummin seed, the 100 lbs. - - - -	9
Currants, the 200 lbs. - - - -	9
Cypress boxes, the package or 12 pieces - -	9
Damask of silk, the 2 pieces - - -	9
of linen, the 2 pieces - - - -	5
of wool, the 4 pieces - - - -	5
25 ells of damask are reckoned to the piece.	
Dates, the 100 lbs. - - - - -	9
Deals and deal ends of ash, beech, lime, maple, and oak. See *Planks*.	
of fir and pine, viz.: —	
Prussian, the shock of 60 - - - -	36
from other places, of the length of 21 feet and upwards, the shock of 60 - - - - -	36
Deals, from 18 to under 21 feet, the shock of 60 - -	24
under 18 feet in length, the 1,000 - -	36
Diaper. See *Drillings*.	
towels, the 5 dozen - - -	18
Dodder, the last (24 barrels to the last) - -	18
Down, the ship lb. - - - - -	36
Dozens, the 4 pieces - - - - -	9
25 ells being reckoned to the piece.	
Drillings from Russia, the 100 arshines - -	6
from other places, the 2 pieces - - -	3
25 ells being reckoned to the piece.	
Drugget (a woollen stuff), pays as single says.	
Dyewoods. See the different species under *Wood*.	
Elephants' teeth, the 100 lbs. - - - -	9
Feathers, the ship lb. - - - -	6
Felt, pays as single says.	
Hats, when in casks - - - -	12
In other packages, and per dozen, or by the piece, they pay ad valorem.	
Figs, the 400 lbs. - - - - -	9
in baskets or frails, the weight being unknown, the frail or basket - - - - -	1
Firewood, duty free (2 fathoms to the last).	
Fish, salted, viz.: —	
eel, the last of 6 casks (12 barrels to the last) - -	30
mackerel, salmon, and sturgeon, the last of 6 casks (12 barrels to the last) - - - -	60
The number of barrels being unknown, 200 lbs. nett weight is reckoned to the barrel.	
herrings the last (12 barrels to the last) - -	24
Aberdeen fish, cod or torsk, and all other sorts of salted fish not particularly enumerated, the last (12 barrels to the last) - - - - -	12
The number of barrels being unknown, 200 lbs. nett weight is reckoned to the barrel.	
Do. dry or hard, viz.: —	
flounders and whitings, the last of 20,000 - -	12
cod, lub-fish, ling, skate, split stockfish, sponders or spuren, torsk, and all other sorts of dried fish not particularly enumerated, the last - - -	30
or by the piece, without weight or measure, the 1,000 pieces - - - - - -	30
12 ship lbs. 120 wogs 100 wahl are reckoned to the last.	
raw and reckling (cut out of the back of the holibut), the last of 8 hogsheads or 12 barrels - -	36
Do. smoked: — herrings, red, the last of 12 barrels, or 20 straw - - - - - -	3
salmon is charged ad valorem.	
pickled: — river lampreys, the barrel (12 barrels to the last) - - - - -	5
fresh, duty free, with the exception of oysters and lobsters, which are charged ad valorem.	
Flagstaffs under 7 palms, the 5 - - - -	6
of other dimensions, are charged as masts.	
Flannel, the 4 pieces (25 ells being reckoned to the piece)	5
Flax, rough, viz.: —	
Class 1., denominated — clean flax; Druana; Esthonian, if not further described; fine; Flanders; Helligh; Hollands; Knocken; Livonian, where the sort is not stated; Marienburg; matted; Narva, where the sort is not stated; Notabene, with the exception of Prussian Notabene flax; Paternoster; Podolian; Polish; Rakitzer; St. Petersburg, where the sort is not stated; 2 head, 1 and 1st and 2d sort; the ship lb. -	12
Class 2., denominated — Badstuben; common; Courland; cut, of all sorts; Farken; Notabene flax from Prussia; Oberlands; ordinary; Pernau; Prussian, if not particularly described; Rapen; Riston; Rositschey although reported 2d sort in the pass; 2, 3, and 4 band; 6 head, and 3d sort; the ship lb. - - -	8
dressed, the ship lb. - - -	
Flour and meal of all sorts, viz.: — of wheat, rye, barley, oats, &c., the last (12 barrels to the last) - -	24
Whenever the weight is reported, 200 lbs. nett weight is reckoned to the barrel.	
Frankincense, the 100 lbs. - - - -	9
Frescoyes, used for bedding, is charged, ad valorem.	
Fringes of silk, the 2 lbs. - - - -	5
of wool or flock fringes, the 8 lbs. - - -	15
Gallipot, the 100 lbs. - - - -	2
Galls, the 200 lbs. - - - - -	9
Gauze is charged as crape.	
Ginger, dry, the 100 lbs. - - - -	12
preserved, the 100 lbs. - - - -	24
Glassware, viz.: —	
bottles, empty, the shock of 60 - - -	1
the vat or 2 pipes - - - -	12
The preceding are common green bottles of the capacity of 2 quarts and under; the larger and superior sorts are charged ad valorem.	
window glass, the 4 boxes or crates - - -	15
drinking glasses from Venice, in boxes, the box -	9
Drinking glasses from other places than Venice, or reported by the dozen, are charged ad valorem.	
Gloves, Russian, the 1,000 pair - -	36
All other descriptions of gloves are charged ad valorem.	
Glue, the 100 lbs. - - - - -	6
Goats' hair, common, the ship lb. - - - -	5
Angora, Levant, and Persian is charged as camels' hair.	
Goldpele (a kind of stuff no longer in use), the two pieces	3
Goods, not enumerated in the present tariff. See *Merchandize*.	
Grease, kitchen-stuff, the last (12 barrels to the last) -	36
The number of barrels being unknown, 200 lbs. nett weight is reckoned to the barrel.	
Grindstones, small, duty free.	
Groats, viz.: —	
buckwheat, the last (12 barrels to the last) - -	18
barley groats, peeled, shelled, and hulled barley, the last (12 barrels to the last) - - - -	30
oat, the last (12 barrels to the last) - - -	12
The number of barrels being unknown, 200 lbs. nett weight is reckoned to the barrel.	
Eyergritz (superior buckwheat groats), the 100 lbs. -	2

Groats — *continued.* Stivers.
millet. See *Millet seed.*
manna, the 100 lbs. - - - - 2
pearl barley, the 400 lbs. - - - - 5
Groats, not particularly enumerated and described, the 400 lbs. - - - - - 5
Grogram, double, the 2 pieces - - - 5
single, the 4 pieces - - - - 5
25 ells of both kinds of grogram are reckoned to the piece.
Gum, viz. : —
Arabic, Barbary, Jedda, and Senegal, the 200 lbs. - 9
Benzoe or Benjamin and olibanum, the 100 lbs. - 9
All other descriptions of resinous gums are charged ad valorem.
Gunpowder, the 100 lbs. - - - - 6
Guns. See *Iron, Brass,* and *Metal.*
Gutters of wood, the dozen - - - - 8
Gypsum in lumps, duty free.
crushed or ground, is charged ad valorem.
Haircloth, the 4 pieces - - - - 3
Hairpowder is charged as starch.
Halberds, the 100 - - - - - 24
Hams are charged as bacon.
Handspikes, the 1,000 - - - - 16
Harnesses (coats of armour), the 100 - - - 48
Hazel nuts, the last (12 barrels to the last) - - 12
Heifers, each - - - - - 18
Helmposts, the shock of 60 - - - - 72
Hemp, the ship lb. - - - - - 8
Hempseed, the last (24 barrels to the last) - - 18
Hides, viz. : —
horse, cow, ox, and kip, raw, salted as well as dried, the 10 dickers or 100 hides - - - - 36
kips, weighing under 9 lbs. nett each, are charged the 10 dickers - - - - - 12
(See more under *Skins* and *Leather.*)
Honey, the last of 8 aums (12 barrels to the last) - - 60
(The weight being reported, the duty is charged accordingly, in which case the barrel is reckoned at 400 lbs. nett.)
Hoops, iron. See *Iron.*
Hoop-stakes and hoops-wood, the 1,000 - - 4
Hop-poles, the 1,000 - - - - - 4
Hops, the ship lb. - - - - - 6
Horses, each - - - - - 36
Hosiery, not being further described, is charged ad valorem.
Household furniture, used, duty free.
new, is charged ad valorem.
Indigo, the 100 lbs. - - - - - 36
Ingots of gold and silver ; duty free.
Iron, raw, viz. : —
osmund, the last or 12 ship lbs. - - - 24
ballast, or kentledge, cast, or pig iron, old broken or scrap iron, the ship lb. - - - - - 3
hoop, bolt, and rail iron, iron in bundles, manufacture iron, shear bar, rod, forge, and oreground iron in bars, the ship lb. - - - - - 4
Iron, wrought, viz. : —
anchors, balls, kintons, dolphins, furnaces, and stoves, ship guns, rails, and all other iron-work used for the construction of railroads, the ship lb. - - 4
anvils, axletrees, boilers, grates, pans, plates and sheet-iron, ploughshares, pots, shovels, spades, and all other iron-work without steel, not particularly enumerated or described, the ship lb. - - - - 6
Remark. — All kinds of machinery with appurtenances as well as all iron wares not specified in the present tariff, and which are partly composed of steel, are charged duty ad valorem as steel or hardware.
cast iron-ware, not otherwise, enumerated or described, the ship lb. - - - - - 6
wire. See *Wire.*
Isinglass, the 100 lbs. - - - - 6
Jackets, woollen, pay as woollen shirts.
Jib-booms are charged according to dimensions, as masts.
Jugs and tankards, the crate - - - - 36
(In other packages or by the piece, they pay ad valorem.)
Juniper-berries, the 800 lbs. - - - - 6
(Weight unknown, 100 lbs. nett are reckoned to the barrel.)
Juniper-poles, the 1,000 - - - - 16
Junk, old, the 5 ship lbs. - - - - 18
Kelp. See *Ashes.*
Kersey, Osnaburg, the 4 pieces - - - 5
(25 ells being reckoned to the piece.)
all other is charged as fine woollen cloth.
Ladder poles, rough as well as hewed, are charged according to their length and thickness, as spars.
Laths, viz. : —
of oak, the 10 - - - - - 4
of fir and pine, double, or toplaths of 6 fathoms and upwards in length, the 10 - - - - 4
of fir and pine, under 6 fathoms in length, the 10 - 3
single or straw-laths, the 1,000 - - - 8
from Sweden and Norway, the 1,000 - - - 8
N. B. A fathom of laths from Sweden and Norway is computed at 150 pieces, where the actual number is not reported.
square (Mauer-latten), the shock of 60 - - 48
Lathwood. See *Wood.*
Lead, the 6 ship lbs. or 1 fudder - - - 24
(A ton from England is a fudder.)
black, the ship lb. - - - - - 6
(Graphite-earth from Prussia is charged ad valorem.)
red, or minium, the 100 lbs. - - - - 2
white, the ship lb. - - - - - 6
Lead shot, the 100 lbs. - - - - 2
Leather, viz. : —
alum and white, the 1,000 - - - - 3
Basan or Basil, the 5 dickers or 50 pieces - - 9
coloured black leather, Rothless and Shamoy or buff, the 5 dickers - - - - - 18
Cordovan, Morocco, and Spanish tawed, and neats', wax, the dicker of 10 pieces - - - 6
Scotch, the dicker - - - - - 9

Leather — *continued.* Stivers.
juft or Russia hides, exceeding 5 lbs. per piece, the dicker - - - - - 9
of and under 5 lbs. the 5 dickers - - - 9
pump and sole, the 100 lbs. - - - - 9
cuttings and parings and furrier's waste, the 200 lbs. - 9
curried, not particularly enumerated and described, the dicker - - - - - 6
Lee-boards, the 5 - - - - - 6
Leidsegreen, is charged as single grogram.
Lemons, fresh, of all sorts, the box, without regard to the number of lemons contained therein - - - 1
(20 boxes are reckoned to the last.)
pickled, the pipe or 2 hogsheads - - - 18
Lentiles, the last (12 barrels to the last) - - - 30
Licorice, or Italian juice, the 100 lbs. - - - 9
Licorice-root, the 100 lbs. - - - - 9
Lignum vitæ, the 100 lbs. - - - - 9
Limestone, duty free. (12 barrels per last.)
Linen, viz. :
boldavet or canvass, double-broad, the four pieces or rolls 15
single melvings, the two pieces - - - ,,3
French and Dantzig, is charged as double boldavet.
of tow from Pillau. See *Tow linen.*
Buldan is charged as Boldavet.
Melvings Boldavet as single Boldavet.
(50 ells of all sorts of canvass are reckoned to the piece.)
Bremen, Bretagnes, British, and Irish, the 2 pieces - 5
flemish from Holland ; Flanders and Dutch, the 2 pieces 5
Silesia and Westphalia, the 2 pieces - - - 5
flaxen, in general ; Helsing flaxen ; Konigsberg, Pillau and Helsing, without describing the stuff of which it is made ; Pomeranian and all similar kinds of linen, the 2 pieces - - - - - 3
Steen, the piece - - - - - 1
(25 ells of these linens are reckoned to the piece.)
hempen ; Helsing hempen ; sangnlets used for lining ; pack-cloth ; Cracou ; Podolish and Polish ; sack-cloth or bagging and tow-linen in general, the 4 pieces - 3
black tow, the 8 pieces - - - - 3
(50 ells of these linens are reckoned to the piece.)
coarse Osnaburgs and buckram, the 100 ells - - 3
platillas royales are charged as double broad Boldavets.
Russia, viz. : —
hempen, flems, sack-cloth or crash-linen, ravenducks, and all other Russia linen from St. Petersburg and the whole of Russia, with the exception of sail-cloth and tarpawling-cloth, the 200 arshines - - 3
(50 arshines are equal to a piece.)
Linseed, the last (24 barrels to the last) - - - 36
Linsey woolsey, the 4 pieces - - - - 5
(25 ells being reckoned to the piece.)
Liquor cases, the 10 - - - - - 9
Lists of cloth, the 12 - - - - - 1
Litharge, the ship lb. - - - - - 6
Lunts or matches, the ship lb. - - - - 9
Mace, the 100 lbs. - - - - - 36
Madder, the 200 lbs. - - - - - 9
Makeys, Turkey, double, the 2 pieces } (25 ells to the single, the 4 pieces - } piece) 5
Malt, the last (20 barrels to the last) - - - 18
Manna is charged duty ad valorem.
groats. See *Groats.*
Maniguet (a kind of cardamoms), the 100 lbs. - - 9
Manufactures. See *Cottons, Woollens,* and *Silks.*
Marbles or knickers, the cask - - - - 18
Martin-skins. See *Skins.*
Masts and other round timber of fir and pine, viz. : —
large, of 15 palms and upwards, each - - 24
less, or yards, from 7 to under 15 palms, each - - 8
small, or boat and top-masts, flagstaffs, or small yards under 7 palms, the 5 - - - - 6
Matches. See *Lunts.*
Mead, the last (12 barrels to the last) - - - 72
Merchandise or wares not enumerated in the present tariff (including the articles therein quoted, as paying by the value) are charged 1 per cent. ad valorem, when laden in privileged ships.
Metal, wrought and unwrought, is charged as brass.
guns are charged as brass guns.
Millet-seed, the last (12 barrels to the last) - - 30
(Number of barrels unknown, 200 lbs. nett weight is reckoned to the barrel.)
Millrods, from 7 to under 15 palms, each - - 8
of other dimensions, pay as masts.
Millstones pay ad valorem.
Muskets, soldiers', the box of 100 muskets - - 24
(Fowling-pieces pay ad valorem.)
Mustard-seed, the last (12 barrels to the last) - - 30
(Measure unknown, 200 lbs. nett weight is reckoned to the barrel.)
Nails of iron from Russia and Sweden, the ship lb. - 12
from other places, the 100 lbs. - - - 4
of copper, brass, and metal, the ship lb. - - 24
of wood, or trunnels, the 10,000 - - - 9
Nellou. See *Paddy,* under Rice.
Nutmegs, the 100 lbs. - - - - 36
Oars, large, the shock of 60 - - - - 12
small, the shock of 60 - - - - 8
not further described, are charged as large oars.
Oats, the last (24 barrels to the last) - - - 12
Oatmeal and oat-groats. See *Flour* and *Groats.*
Ochre, the 200 lbs. - - - - - 1
Oil, viz. : —
Lisbon and other olive-oil, the vat or pipe - - 36
N. B. The pipe of Lisbon and other olive-oil is reckoned as 900 lbs. nett, and the weight is adopted on computing the duty, where the measure is not reported.
hempseed, linseed, rapeseed, and seed-oil in general, the 2 aums - - - - - - 9
pitch, the 2 aums - - - - - 9
(The aum is reckoned at 1 ship lb. nett weight.)
odoriferous, palm, turpentine, and oil in bottles or flasks, are charged duty ad valorem.
Olives in pipes and hogsheads, the pipe or 2 hogsheads - 18
in small casks, boxes, or similar packages, are charged ad valorem.
Ombro. See *Madder.*

	Stivers.
Onions, the last (12 barrels to the last)	18
Oranges, fresh, of all sorts, the box, without regard to the number of pieces contained therein (20 boxes to the last)	1
pickled, are charged as pickled lemons.	
Ordnance. See *Iron*, *Brass*, and *Metal*.	
Organzine silk. See *Silk*.	
Orpiment, the 100 lbs.	6
Oxen, each	18
Paper, the 8 reams	3
N. B. The number of bales being reported without the number of reams, 10 reams are reckoned to each bale.	
hangings and pasteboard are charged ad valorem.	
Paradise grains, the 100 lbs.	3
Passement ware, such as lace, fringes, cords, spun buttons, &c., when of gold or silver, the lb.	5
when of silk, the 2 lbs.	5
wool, the 8 lbs.	15
Passel. See *Woad*.	
Pearl barley. See *Groats*.	
Pears, the last (12 barrels to the last)	6
Peasc, the last (12 barrels to the last)	12
Pepper, the 100 lbs.	12
Pernambuco wood. See *Dyewoods*, under Wood.	
Perpetuana is charged as serge.	
Perry. See *Cider*.	
Pigment, red, from Sweden, the last (12 barrels to the last)	48
Dantzig, or Dantzig red, the ship lb.	9
other places. See *Madder*.	
Pimento, the 200 lbs.	9
Pipe staves. See *Staves*.	
Pitch, great band, the last (12 barrels to the last)	18
small band, the last (12 barrels to the last)	9
oil. See *Oil*.	
Planks and boards, viz.: —	
of maple and lime, of 21 feet and upwards in length, the shock or 60	36
ditto ditto, from 18 feet to under 21 feet, the shock or 60	24
ditto ditto, under 18 feet, the 1,000	36
Plank ends and deal ends of maple and lime are charged in the same proportion as the preceding.	
of oak, beech, and ash, the shock or 60	48
plank ends and deal ends of oak, beech, and ash; of and under 8 feet in length, the shock or 60	12
of greater length. See *Planks* and *Boards of Oak*, &c., as above.	
of fir and pine. See *Deals of Fir* and *Pine*.	
Remark. — Planks of fir and pine, square, of 9 inches and upwards in thickness (denominated tall planks or thick stuff) employed in ship-building, are charged as balks of fir. But under 9 inches in thickness, they pay as fir deals of 21 feet and upwards, namely, 36 stivers per shock of 60.	
Plaster stones, duty free.	
(40 cubic feet to the last.)	
Plates, iron or black, the ship lb.	6
copper, brass, and metal, are charged as copper, brass, and metal.	
white iron or tin plates, pay ad valorem.	
Poles of fir and pine pay according to their length and thickness as spars.	
of birch and alder, pay as common spars.	
Poppy-seed is charged as canary-seed.	
Porter in hogsheads, the 2 hogsheads	9
(1 hhd. from England = 54 gallons; from Sweden, 90 cans.)	
in bottles, is charged ad valorem.	
Potash. See *Ashes*.	
Potatoes, the 100 barrels (12 barrels to the last)	16
Prunes, Hungary and German, or common, the 800 lbs.	18
in pipes, the pipe of 800 lbs.	18
in other casks, the quality of the prunes not being stated, the 800 lbs.	18
in boxes, cases, or similar packages, the quality of the prunes not being stated, are charged as French prunes.	
French or St. Catherine's, the 200 lbs.	9
Quarry-stones or sandstones are charged ad valorem.	
Quicklime, duty free. (12 barrels to the last.)	
Quicksilver, the lb.	18
Rafters (a kind of spars), from 5 to 6 inches in thickness, the 10	4
of other dimensions, are charged as Swedish and Norway spars.	
Raisins in baskets or frails, the 400 lbs.	9
(weight unknown), each basket or frail	1
black or currant raisins, the 200 lbs.	9
of other sorts, the 100 lbs.	9
Rapeseed, the last (24 barrels to the last)	36
Rash is charged as bombazeen.	
Rateen is charged as fine woollen cloth.	
Reindeer hides. See *Skins*.	
Rhapontic root, the 25 lbs.	9
Rhubarb, the 25 lbs.	9
Ribbons of silk and floret, the 2 lbs.	5
with gold and silver, each lb.	5
linen or tape, and other ribbons not particularly enumerated and described, the 5 lbs.	3
cotton, are charged ad valorem.	
Ribs (a kind of spars), from Prussia and Russia, the shock or 60	48
from Sweden and Norway, to 6 inches in thickness, the 10 pieces	4
of other dimensions, are charged as Swedish and Norway spars.	
Rice, not being rough and in the husk, the 200 lbs.	9
rough and in the husk, denominated paddy or nellou, the 400 lbs.	6
(A bushel of paddy is reckoned equal to 45 lbs. nett.)	
Rickers. See *Spars of Fir* and *Pine*.	
Rifle barrels, short, the 12	6
Rockmoss, Swedish, the ship lb.	3
Orchilla and all other rockmoss is charged ad valorem.	
Rosette, blue mixed, of 25 ells to the piece, each piece	3
Rosin, the ship lb.	6
Rye, the last (20 barrels to the last)	24
Flour. See *Flour*.	

	Stivers.
Sackcloth. See *Linen*.	
Saffron, the 2 lbs.	9
Sailcloth, the 4 pieces or rolls (50 ells being reckoned to the piece)	15
old, used in paper-mills, is charged ad valorem.	
Salt, Luneburg, the last of 12 barrels	36
all other, the last (18 barrels to the last)	24
Saltpetre, the 100 lbs.	6
Sandstones. See *Quarry-stones*.	
Sarcenet, the 2 pieces (25 ells being reckoned to the piece)	9
Sarsaparilla, the 100 lbs.	18
Satins of cotton are charged ad valorum.	
of silk, the 2 pieces (25 ells being reckoned to the piece)	9
of wool, the 4 pieces (25 ells being reckoned to the piece)	5
Saw-wort (Serratula), the ship lb.	9
Saye or Sayette-yarn. See *Yarn*.	
Says or soys, double, the 2 pieces (25 ells being reckoned to the piece)	9
single, the 4 pieces (25 ells being reckoned to the piece)	5
Seeds. See the several species.	
Sempiterne is charged as Serge.	
Serge, the 4 pieces (25 ells being reckoned to the piece)	5
Shalloon is charged as single says.	
Ships' materials proceeding from a wreck, duty free.	
Shirts, woollen, the 10 pieces	3
Shovel-shafts are charged as common spars.	
Shrines, painted, the basket	18
Shumac, the 400 lbs.	9
Sienna-earth. See *Ochre*.	
Silk, raw and undyed, of all sorts, the 100 lbs.	3
floss, floret or ferret, and organzine, the 10 lbs.	3
wrought: passement ware and ribbons of silk and floret with gold and silver, the lb.	5
ribbons and fringes of silk and floret, silk cords, embroidering and sewing-silk, passement ware of silk, and similar articles wrought of silk, the 2 lbs.	5
stuffs not otherwise enumerated and described, the 2 pieces (25 ells of silk stuffs are reckoned to the piece)	9
stockings. See *Stockings*.	
manufactures of, in so far as they are not particularly specified, or included among the sorts enumerated in the present tariff, pay duty ad valorem.	
Silver in bars, duty free.	
Skins, viz.: —	
beaver, the 100	48
buck, the 10 dickers, or 100 skins	18
calabar, or squirrel, the 1,000	36
cat, wild and tame, the 1,000	36
elk, the dicker of 10	9
ermine, the 5 timmer, of 40 skins each	9
ferret and eitchet, the 1,000	36
fox, the 100	36
gennet, the 1,000	36
goat, the 1,000	36
kid, the 1,000	9
lamb, the 1,000	18
martin, the timmer of 40	30
otter, the 100	72
rabbit, black, the 1,000	18
grey, the 1,000	9
the colour not being specified, the 1,000	18
Roman, the 4 dozen	9
sable, of the value of 100 specie dollars	36
sheep, the 1,000	36
stag and reindeer, the dicker of 10	9
wolf, the 100	36
Furs of all kinds pay ad valorem. See *Furs*.	
Skinners' wool. See *Wool*.	
Soap, green, the last (12 barrels to the last)	36
The number of barrels unknown, 200 lbs. nett weight is reckoned to the barrel.	
white and Spanish, the 100 lbs.	9
scented, is charged ad valorem.	
Soda. See *Barilla*.	
Spars, viz.: —	
of oak, each	3
fir and pine; large, exceeding 36 ft., the pair or 2	3
of 36 ft., the 5	2
under 36 ft. or common, the 1,000	16
Swedish and Norway; of 9 in. and upwards in thickness, the pair	3
from 7 to under 9 in., the 5	6
from 5 to under 7 in., the 5	2
under 5 in., or common, the 1,000	16
Spear-irons, the 100	6
Spear-shafts, the 100	6
Spelter. See *Zinc*.	
Spermaceti oil is train oil.	
Spirit, the hogshead of 30 veltes	24
Starch, the 300 lbs.	8
Staves, viz.:—	
Swedish, the 8 shocks of 60 staves each	1
all other sorts, the 48 shocks	36
The headings belonging to the same are reduced to staves, and pay duty accordingly.	
Steel from Russia and Sweden, the ship lb.	12
from other places, the 100 lbs.	4
wire. See *Wire*.	
Stockings, viz.: —	
cotton, the 50 pair	6
children's and half, the 100 pair	6
worsted and woollen, fine woven kersey and sayette, the 10 pair	3
do. do. children's or half, the 20 pair	3
coarse woollen, of all sorts, the 2 dozen pair	1
of cloth, common, the dozen pair	1
of silk, the dozen pair	30
knit, the 50 pair	30
Stones, small, or pebbles for fishing-nets, duty free.	
used for building, are charged ad valorem.	
oland, the 100 feet	3
flag, the 100 feet	3
Foot-measure unknown, each stone is reckoned at 2 ft.	
Storm caps, the 100	12
Stromling (small herrings) are charged as herrings.	

	Stivers.
Succades, the 100 lbs.	24
in hogsheads, the hogshead of 150 lbs.	36
Suet, or butchers' tallow (Ister), the 2 ship lbs.	9
Sugar, raw, the 100 lbs.	5
candy and confectionery, the 100 lbs.	18
refined, powder and all other, the 100 lbs.	9
Sugar-bakers' clay, duty free.	
Sword blades, the 100	24
hilts, the 100	8
Syrup, the vat or pipe	36
The pipe is reckoned at 1200 lbs. nett, and the weight is adopted on computing the duty, where the measure is not reported.	
Tallow, the ship lb.	6
candles, the ship lb.	6
Tankards or jugs, the crate	36
Tar, great band, the last (12 barrels to the last)	18
small band, the last (12 barrels to the last)	9
Tares, the last (12 barrels to the last)	12
Tarpawling is charged as sail-cloth.	
Tartarilla is charged as buckwheat.	
Thick stuff. See *Planks of Fir* and *Pine*.	
Thread of gold or silver, the lb.	5
silk and floret, or sewing silk, the 2 lbs.	5
linen, the 50 lbs.	30
cotton, or sewing cotton, the 50 lbs.	15
Ticks. See *Bed ticking*.	
Tillers, the shock of 60	48
Timber. See *Wood*, and the different sorts.	
Tin, the ship lb.	24
Tobacco, Ukraine or Russian, the ship lb.	8
all other kinds of leaf and manufactured tobacco, the 100 lbs.	9
Cigars, snuff and tobacco stems are charged ad valorem.	
Train oil, the 2 hhds. (8 hogsheads to the last)	9
Trees of fir and pine, round, according to dimensions, as masts.	
Trip, woollen, the 4 pieces (25 ells to the piece)	5
Turmeric, the 100 lbs.	4
Turnip-seed is charged as rape-seed.	
Turpentine, the ship lb.	6
oil of, is charged ad valorem.	
Velvet, fine, the piece (25 ells being reckoned to the piece)	9
half, the 2 pieces (25 ells being reckoned to the piece)	9
thread, is charged as half-velvet.	
Velvets, silks, and woollens, one cask mercery	30
one package or cask, value 100 rixdollars	30
Verdigris, the 100 lbs.	9
Vermillion. See *Cinnabar*.	
Vinegar of wine, the pipe of 2 hhds.	24
of cider do.	9
of beer do. (the hogshead is reckoned at 30 veltes.)	9
Vitriol, the ship lb.	6
oil of, is charged ad valorem.	
Wadmel, a coarse woollen cloth, the 4 pieces (25 ells being reckoned to the piece)	5
Wainscot boards, Courland, the 100	18
Prussian, the 100	48
from other places, the 100	40
Walnuts, the last (18 barrels or 36 boisseaux to the last)	12
Wax, the ship lb.	36
Wax candles, the ship lb.	36
Wearing apparel. See *Apparel*.	
Wedges. See *Timber*, under *Wood*.	
Weed ash. See *Ashes*.	
Weld, the ship lb.	9
Whale oil. See *Train oil*.	
Wheat, the last (20 barrels to the last)	48
flour. See *Flour*.	
Wheelstones, duty free, with the exception of hones or oil-stones, which pay ad valorem.	
White lead. See *Lead*.	
Wind beams, the 1,000 pieces	16
Windlasses, ships', of iron, the ship lb.	6
of wood, are charged according to dimensions as round timber. See *Masts*.	
Window glass. See *Glass-ware*.	
Wines, viz.: —	
Italian: — Cagliari, Calabria, Leghorn, Marsala, Messina, Italian Muscatel, Naples, Palermo; Syracuse and all other Italian wines, the butt or pipe	96
the hogshead	48
the anker	8
The following are treated and charged duty as Italian wines: — Cape, Constantia, Corsican, Cyprus, Fayal-Madeira, Funchal, Madeira, Malmsey, not the produce of the Canary Islands, Pico-Madeira and Zante wines.	
Spanish and Portuguese, viz.: — Barcelona, Benicarlo, Cadiz, Canary-sack, Fayal, with the exception of Fayal-Madeira, Figueira, Iviça, liquor wines, the sort not being stated, Lisbon, Malaga, Malaga sack, Mountain, Palm-sack, Pedro-Ximenes, Pico, with the exception of Pico-Madeira, Port, Salou, Sherry or Xeres, Tarragona, Teneriffe, Tinto, Vidonia and all other wines the produce of the Canary Islands, including all Spanish and Portuguese wines, not specified in the present list, when laden in privileged ships, the butt or pipe	72
the hogshead	36
the anker	6
French, viz.: — Challevette, Charente, Croisac, La Flotte, Marennes, St. Martin, Nantes, Pouliguen, La Rochelle and Seudres, the hogshead of 30 veltes	18
Bordeaux and Libourne, the 5 hogsheads of 30 veltes each	104
Bayonne, Burgundy, Cahors, Casals, Cette, Champaign, Dieppe, Havre, Hermitage, Hieres, Marseilles, French Muscatel, Picardan, Provence, Rouen, Toulon and all other French wines not specially enumerated and described, including all French wines,	

Wines — *continued.*	Stivers.
which, proceeding from places not in France, pass the Sound and the Belts, the hogshead of 30 veltes	24
denominated Moselle, Neckar, and all kinds of Rhenish wines, or Hock, the 5 aums	192
Hungary or Tokay and all other Hungary wines, the 5 aums	192
In bottles, when laden in privileged ships, the 100 bottles	24
Wire of copper and brass, the ship lb.	24
of steel and iron, the 100 lbs.	4
of steel when in casks or crates, the cask or crate	24
Woad, the ship lb.	6
Wood, viz.: —	
for dyeing, Pernambuco and Brazil wood of all sorts, the 1,000 lbs.	30
do. Barwood, Caliatour, Campeachy, Camwood, Ficet, Fustick of all sorts, Galicia, Honduras, Japan or Sapan, Logwood, Province and Sandal-wood, the 1,000 lbs.	8
do. Nicaragua or blood-wood, Rio de la Hacha, St. Martin's or Sta. Marta, and Stockfish wood, the 1,000 lbs.	12
or timber for house and shipbuilding, boat stems and wood for boatbuilding, the 25 pieces	6
do. bohl wood of oak and fir. See *Balks*.	
cross beams (Riegelholt). See *Balks*.	
do. cross wood, the shock of 60	24
do. lath-wood, the 100 pieces	2
N B. Where lathwood is reported in fathoms with the number of pieces, the duty is charged on the number of pieces; but where the latter is not stated, the fathom is reckoned at 150 pieces.	
do. logs of birch and ash, the 10	9
do. do. oak, the 25	36
do. quarters of 9 inches and upwards pay as Balks.	
do. quarters under 9 in. in thickness, the 60	24
do. quoins and wedges pay the same duty as quarters.	
do. paling boards, square, pay as balks of oak and fir.	
do. paling boards, round, pay as round timber.	
do. round, pays according to dimensions as masts.	
do. stems perforated for pumps and gutters, the 25	36
do. denominated building and ship's timber, crooked timber, half wood, keel wood, knees and long-wood, the 25 pieces	36
do. from Riga, called "Rundhölzer," pays according to dimensions as masts.	
do. denominated "Quadrat-hölzer" of oak and fir, pays as balks of oak and fir.	
do. denominated "Hölzer," pays as do.	
do. wales of ships (Barkholter), the shock of 60	84
used for staves, denominated clap-wood, Dutch, and French wood, heading-boards, pipe and vat wood, the long hundred of 48 shocks	48
used for staves, called cooper's wood and stave wood, the 4 shocks	3
See more under the particular heads.	
for fuel, duty free, 2 fathoms to the last.	
wares, viz. troughs, trays, milk-basons, porringers, and bowls, the 5 shocks, or 500	9
trenchers and platters, the 5 shocks	2
shovels and scoops, the 10 shocks	9
nails or trunnels. See *Nails*.	
Wool, viz.: —	
flock-wool and shearings, the 2 ship lbs.	9
noile and refuse, common wool, skinners' and carrion wool, Turkey wool, and all other sorts of coarse wool, the ship lb.	5
Spanish, and all other sorts of fine wool, English, Scotch, Prussian, and all other lamb and sheep wool, the quality of which is not particularly described, the ship lb.	9
Wool-cards (hand-cards), the cask of 30 dozen pair (The number of pairs not being stated, 12 lbs. nett is reckoned to the dozen pair.)	18
Cards used in cloth manufactories (*cardes fabriques*), and fullers' thistles or teazels (*chardons à carder*), are charged ad valorem.	
Wool, manufactures of, in so far as they are not particularly enumerated, or included in the various descriptions rated in the present tariff, are charged duty ad valorem.	
Woollen and worsted yarn. See *Yarn*.	
Yards, sail, from 7 to under 15 palms, each	8
Yarn, viz.: —	
cable-yarn, spun twine, tarred twine, and rope-yarn, the ship lb.	6
tow-yarn, the ship lb.	9
sail-twine, the ship lb.	36
hemp-yarn, fine, the ship lb.	36
flax and linen yarn, and Ebersfelda yarn, the ship lb.	36
Koningsberg, Pillau, and Dantzic yarn, when not further described, is charged as flax yarn.	
N. B. — Yarn from the ports of Prussia, being reported "in shocks," the shock is reckoned at 20 lbs. nett, or 15 shocks to the ship lb. nett.	
cotton or twist, the 100 lbs.	16
cotton embroidering yarn, knitting and sewing yarn, the 50 lbs.	15
Turkey red yarn, the 50 lbs.	15
mohair, the 50 lbs.	18
woollen and worsted, or sayette, the 5 lbs.	3
linen-thread and sewing-silk. See *Thread*.	
Zinc or spelter, the 100 lbs.	2
Finally, all goods and wares not enumerated in the preceding tariff (including those articles liable to the ad valorem duty, which have merely been quoted by way of illustration to distinguish them from rated goods of the same or a similar denomination), when laden in vessels belonging to a privileged nation, are charged one per cent. ad valorem upon the value of such goods at the port of shipment, without regard to the places whence they may arrive, or whither they may be destined.	

The following statements are subjoined to the Tariff of Tolls: —

1. Where the Sound tariff, on rating any specific article, distinguishes between fine and ordinary quality, and the ship's papers do not report to which of the two the article belongs, the duty is always charged according to the rate imposed upon

the superior article, unless it may be inferred from the value stated in the ship's papers that the goods are really of an inferior kind.

Is
and S
lbs.; and from all other places, of 300 lbs.

3. With regard to timber, the duty on round timber is computed according to its dimensions, and on planks, deals, and boards (in so far as the duty is imposed upon a certain length), according to foot measure, without considering the denominations by which the several descriptions of timber may be reported in the ship's papers, in such manner that the foot and inch measure of the country where the cargo has been shipped is invariably made the basis for calculating the duty, and where the ship's papers report a foreign measure other than that actually in use at the place of shipment, it is reduced by the stoms to the latter measure, previously to the duty being charged.

4. Where the number of pieces is not specified in the ship's papers for such manufactured goods as ---ted in the tariff by the piece, stuffs so reported are presum
of 50 or 25 ells per piece, according to qual
the tariff under the head of each particular article. Where, however, both the number of pieces and of ells are stated, duty is preferably charged upon the former, it being only charged upon the latter where the number of pieces is unknown. In accordance with these principles,

100 Danish ells are reckoned respectively at 2 and 4 pieces.

— Swedish ells	do.	do.	2	— 4 —
— Norway ells	do.	do.	2	— 4 —
— Russian arshins	do.	do.	2	— 4 —
— Prussian ells	do.	do.	2	— 4 —
— Netherland ells	do.	do.	3	— 6 —
— English yards	do.	do.	3	— 6 —
— French aunes	do.	do.	4	— 8 —

5. The duty upon liquids is always charged upon the quantitive contents of the casks without regard to the denominations by which these latter may have been reported: to the effect that the measure in velts, gallons, litres, or as the case may be, is adopted for computing the duty.

6. The duty is charged upon the nett weight of the articles liable to the same. Where, therefore, the ship's papers only state the gross weight, the following tares are allowed: viz., 5 per cent. upon goods in bags, packages, bundles, serons, bales, &c., and 10 per cent. upon goods in boxes, cases, crates, casks, &c.; with the exception, however, of hemp, rape, and linseed oil in casks, — which 15 per cent. is allowed.

7. As stipulated by § 12. of the Conventions of the 13th and 23d August 1841, the duty is chargeable upon the weights and measures of the places where the cargoes or goods liable to the same, have been shipped.

EMBARGO, an order issued by the government of a country to prevent the sailing of ships.

EMERALD (Fr. *Emêraude*; Ger. *Smaragd*; It. *Smeraldo*; Lat. *Smaragdus*; Sp. *Esmeralda*), a precious stone in high estimation. It is distinguished from all other gems by its peculiar *emerald green* lustre, varying in intensity from the palest possible tinge to a full and deep colour, than which, as Pliny has truly stated, nothing can be more beautiful and pleasing; *nullius coloris aspectus jucundior est.* It emulates, he continues, if it do not surpass, the verdure of the spring; and the eye, satiated by the dazzling glare of the more brilliant gems, or wearied by intense application, is refreshed and strengthened by the quiet enlivening green of the emerald. In Pliny's time, the best came from Scythia. Those met with in modern times do not often exceed the size of a walnut. Some of a much larger size, and perfect, have been found, but they are extremely rare. Nero used one as an eye-glass in surveying the combats of the gladiators. Hitherto it has always been found crystallised. Specific gravity from 2·6 to 2·77. — (*Plin. Hist. Nat.* lib. xxxvii. cap. 5.; *Thomson's Chemistry.*)

"For the last two centuries and more, the only country known to yield emeralds is Peru, where they occur in Santa Fé, and in the valley of Tunca. Several large stones have appeared in Europe: about 2 years ago I cut one, exceeding 2 ounces in weight, for the Emperor of Morocco, but it was full of imperfections. The largest specimen known is an hexagonal crystal, nearly 6 inches long, and above 2 in diameter. This gem, however small, is so rarely seen perfect, that 'an emerald without a flaw' has passed into a proverb. A fine stone of 4 carats may be valued at 40*l.* or 50*l.*, or even more if very pure. Inferior stones of 1 or 2 carats are sold at from 40*s.* to 70*s.* per carat; and if smaller and defective, at 10*s.* or 15*s.* per carat. Fine emeralds are rare, and in such demand, that a particular suit has been known to have passed into the possession of a series of purchasers, and to have made the tour of Europe in the course of half a century."—*Mawe on Diamonds*, 2d ed. p. 104.)

EMERY (Fr. *Emeril, Emeri*; Ger. *Smirgel*; It. *Smerglio, Smeregio*; Sp. *Esmeril*; Rus. *Nashdak*; Lat. *Smiris*), a mineral brought to Britain from the Isle of Naxos, where it exists in large quantities. It occurs also in Germany, Italy, and Spain. It is always in shapeless masses, and mixed with other minerals. Colour intermediate between greyish black and bluish grey. Specific gravity about 4. Lustre glistening and adamantine. Emery is extensively used in the polishing of hard bodies. Its fine powder is obtained by trituration. — (*Thomson's Chemistry.*)

ENGROSSING, is "the buying up of corn and other dead victuals, with intent to sell them again."— (*Blackstone*, book iv. cap. 42.) We have shown, in another article, how absurd it is to suppose that this practice should have any injurious influence — (*antè*, p. 399.). But, for a long time, most scarcities that occurred were either entirely ascribed to the influence of engrossers and forestallers — (see FORESTALLING) — or, at least, were supposed to be materially aggravated by their proceedings. In consequence, however, of the prevalence of more just and enlarged views upon such subjects, the statutes that had been made for the suppression and punishment of engrossing, forestalling, &c. were repealed in 1772. But notwithstanding this repeal, engrossing continues to be an indictable offence, punishable at common law by fine and imprisonment; though it is not at all likely, were an attempt made, that any jury would now be found ignorant or prejudiced enough to convict any one on such a charge.

ENTRY, BILL OF. See IMPORTATION.

ERMINE (Ger. *Hermelin*, Fr. *Hermine, Ermine*; Rus. *Gornostai*), a species of weasel (*Mustela candida* Lin.), abundant in all cold countries, particularly Russia, Norway, Lapland, &c., and producing a most valuable species of fur. In summer, the ermine is of a brown colour, and is called the *stoat*. It is in winter only that the fur has that beautiful snowy whiteness and consistence so much admired. — (See FURS.)

ESPARTO, a species of rush, the *Stipa tenacissima* of botanists. It is found in the southern provinces of Spain; and is particularly abundant on all the sterile, uncultivated, and mountainous districts of Valencia. — Beckmann (*Hist. of Invent.* vol. ii. p. 288.

Eng. ed.) supposes, apparently with good reason, that the *stipa tenacissima* is the plant described by Pliny under the name of *Sparta*, who ascribes its application to useful purposes to the Carthaginians. — (*Hist. Nat.* lib. xix. c. 2.) It is still used for the same purposes as in antiquity, being manufactured into cordage, shoes, matting, baskets, nets, mattresses, sacks, &c. Cables made of esparto are said to be excellent; being light, they float on the surface of the water, and are not, therefore, so liable as hempen cables to be cut or injured by a foul bottom. They are exclusively made use of in the Spanish navy. Esparto is largely consumed in the manufacture of *alpergates*. These are light shoes worn by the Valencian peasantry, having platted soles made either of esparto or hemp, but principally of the former. They are extremely cheap and commodious in hot climates; and besides being in extensive demand at home, used to be exported in immense quantities to both Indies: but since the emancipation of Spanish America, this trade has greatly fallen off. The Spanish peasantry have attained to wonderful dexterity in the manufacture of esparto. "After having soaked the rush in water, the women and children, without either wheel or spindle, contrive to twist two threads at the same time. This they do by rubbing them between the palms of their hands, in the same manner as a shoemaker forms a thread upon his knees, with this difference, that one motion gives the twist to each thread, and, at the same time, unites them. To keep the threads asunder, the thumb of the right hand is interposed between them; and when that is wanted for other purposes, the left thumb supplies its place. Two threads being thus twisted into one of the bigness of a large crow-quill, 46 yards are sold for little more than ½*d.*, the materials being worth about ¼th part of the price." — (*Townsend's Travels in Spain*, vol. iii. p. 177., see also p. 129.; *Fischer's Picture of Valencia*, Eng. ed. p. 92. and p. 57, &c.)

ESTRICH or ESTRIDGE (Fr. *Duvet d'autruche*; It. *Penna matta di strozzo*; Sp. *Plumazo de avestrux*; Lat. *Struthionum plumæ molliores*), is the fine soft down which lies immediately under the feathers of the ostrich. The finest is used as a substitute for beaver in the manufacture of hats, and the coarser or stronger sort is employed in the fabrication of a stuff which resembles fine woollen cloth. Estridge is brought from the Levant, Italy, and other parts of the Mediterranean.

EUPHORBIUM (Ger. *Euphorbiengummi*; Lat. *Euphorbium*; Fr. *Euphorbe*; Arab. *Akal-nafzah*), the produce of a perennial plant, a native of Africa, and of many parts of India, &c. It is a concrete gum resin; is inodorous; when first chewed has little taste, but it soon gives a very acrid burning impression to the tongue, palate, and throat, which is very permanent, and almost insupportable. It is imported in serons, containing from 100 to 150 lbs. It is in small, hollow, forked pieces, often mixed with seeds and other impurities. — (*Thomson's Dispensatory.*)

EXCHANGE. In commerce, this term is generally used to designate that species of mercantile transactions, by which the debts of individuals residing at a distance from their creditors are cancelled without the transmission of money.

Among cities or countries having any considerable intercourse together, the debts mutually due by each other approach, for the most part, near to an equality. There are at all times, for example, a considerable number of persons in London indebted to Hamburg; but, speaking generally, there are about an equal number of persons in London to whom Hamburg is indebted. And hence, when A. of London has a payment to make to B. of Hamburg, he does not remit an equivalent sum of money to the latter; but he goes into the market and buys a *bill* upon Hamburg, that is, he buys an order from C. of London addressed to his debtor D. of Hamburg, requesting him to pay the amount to A. or his order. A., having indorsed this bill or order, sends it to B., who receives payment from his neighbour D. The convenience of all parties is consulted by a transaction of this sort. The debts due by A. to B., and by D. to C., are extinguished without the intervention of any money. A. of London pays C. of ditto, and D. of Hamburg pays B. of ditto. The debtor in one place is substituted for the debtor in another; and a postage or two, and the stamp for the bill, form the whole expenses. All risk of loss is obviated.

A bill of exchange may, therefore, be defined to be an order addressed to some person residing at a distance, directing him to pay a certain specified sum to the person in whose favour the bill is drawn, or his order. In mercantile phraseology, the person who draws a bill is termed the *drawer*; the person in whose favour it is drawn, the *remitter*; the person on whom it is drawn, the *drawee*; and after he has accepted, the *acceptor*. Those persons into whose hands the bill may have passed previously to its being paid, are, from their writing their names on the back, termed *indorsers*; and the person in whose possession the bill is at any given period, is termed the *holder* or *possessor*.

The negotiation of *inland* bills of exchange, or of those drawn in one part of Great Britain and Ireland on another, is entirely in the hands of bankers, and is conducted in the manner already explained. — (See *antè*, p. 66.) Bills drawn by the merchants

of one country upon another are termed *foreign* bills of exchange, and it is to their negotiation that the following remarks principally apply.

I. *Par of Exchange.* — The *par* of the currency of any two countries means, among merchants, the equivalency of a certain amount of the currency of the one in the currency of the other, *supposing the currencies of both to be of the precise weight and purity fixed by their respective mints.* Thus, according to the mint regulations of Great Britain and France, 1*l.* sterling is equal to 25 fr. 20 cent., which is said to be the par between London and Paris. And the exchange between the two countries is said to be at par when bills are negotiated on this footing; that is, for example, when a bill for 100*l.* drawn in London is worth 2,520 fr. in Paris, and conversely. When 1*l.* in London buys a bill on Paris for more than 25 fr. 20 cent., the exchange is said to be in favour of London and against Paris; and when, on the other hand, 1*l.* in London will not buy a bill on Paris for 25 fr. 20 cent., the exchange is against London and in favour of Paris.*

II. *Circumstances which determine the Course of Exchange.* — The exchange is affected, or made to diverge from par, by two classes of circumstances: *first*, by any discrepancy between the actual weight or fineness of the coins, or of the bullion for which the substitutes used in their place will exchange, and their weight or fineness as fixed by the mint regulations; and, *secondly*, by any sudden increase or diminution of the bills drawn in one country upon another.

1. It is but seldom that the coins of any country correspond exactly with their mint standard; and when they diverge from it, an allowance corresponding to the difference between the actual value of the coins and their mint value must be made in determining the *real* par. Thus, if, while the coins of Great Britain corresponded with the mint standard in weight and purity, those of France were either 10 per cent. worse or debased below the standard of her mint, the exchange, it is obvious, would be at *real* par when it was *nominally* 10 per cent. against Paris, or when a bill payable in London for 100*l.* was worth in Paris 2,772 fr. instead of 2,520 fr. In estimating the real course of exchange between any 2 or more places, it is always necessary to attend carefully to this circumstance; that is, to examine whether their currencies be all of the standard weight and purity, and if not, how much they differ from it. When the coins circulating in a country are either so worn or rubbed as to have sunk considerably below their mint standard, or when paper money is depreciated from excess or want of credit, the exchange is at real par only when it is against such country to the extent to which its coins are worn or its paper depreciated. When this circumstance is taken into account, it will be found that the exchange during the latter years of the war, though apparently very much against this country, was really in our favour. The depression was nominal only; being occasioned by the great depreciation of the paper currency in which bills were paid.

2. Variations in the actual course of exchange, or in the price of bills, arising from circumstances affecting the currency of either of two countries trading together, are *nominal* only: such as are *real* grow out of circumstances affecting their trade.

When two countries trade together, and each buys of the other commodities of precisely the same value, their debts and credits will be equal, and, of course, the *real* exchange will be at par. The *bills* drawn by the one will be exactly equivalent to those drawn by the other, and their respective claims will be adjusted without requiring the transfer of bullion or any other valuable produce. But it very rarely happens that the debts reciprocally due by any two countries are equal. There is almost always a balance owing on the one side or the other; and this balance must affect the exchange. If the debts due by London to Paris exceeded those due by Paris to London, the competition in the London market for bills on Paris would, because of the comparatively great amount of payments our merchants had to make in Paris, be greater than the compe-

* The statements in the text explain what is usually meant by the *par* of exchange; but its exact determination, or the ascertaining of the precise equivalency of a certain amount of the currency of one country in the currency of another, is exceedingly difficult. If the standard of one be gold and that of another silver, the par must necessarily vary with every variation in the relative values of these metals. This, however, is not all: even where two countries use the same metal for a standard, its value may be greater in one than in the other, and in estimating the par of exchange between them this difference must be taken into account. In illustration of this we may take the case of France and Mexico: they both use silver for a standard; but silver being largely produced in Mexico, is always cheaper there than in France, and is extensively imported into the latter; and taking the cost of this importation at 2 or 3 per cent., it is plain that the exchange would be really at par when it appeared to be 2 or 3 per cent. against Mexico. But the value of the precious metals, even in contiguous countries, is always exposed to fluctuations from the over issue or withdrawal of paper, from circumstances affecting the balance of payments, &c., as shown in the text. It is obvious, therefore, that it is all but impossible to say, by merely looking at the mint regulations of any two or more countries, and the prices of bullion in each, what is the par of exchange between them. And, luckily, this is not necessary. The importation and exportation of bullion is the real test of the exchange. If bullion be stationary, neither flowing into nor out of a country, its exchanges may be truly said to be at par; and, on the other hand, if there be an efflux of bullion from a country, it is a proof that the exchange is against it, and conversely if there be an influx of bullion into a country.

tition in Paris for bills on London; and, consequently, the real exchange would be in favour of Paris and against London.

The cost of conveying bullion from one country to another forms the limit within which the rise and fall of the *real* exchange between them must be confined. If 1 per cent. sufficed to cover the expense and risk attending the transmission of money from London to Paris, it would be indifferent to a London merchant whether he paid 1 per cent. premium for a bill of exchange on Paris, or remitted money direct to that city. If the premium were less than 1 per cent., it would clearly be his interest to make his payments by bills in preference to remittances: and that it could not exceed 1 per cent. is obvious; for every one would prefer remitting money, to buying a bill at a greater premium than sufficed to cover the expense of a money remittance. If, owing to the breaking out of hostilities between the two countries, or to any other cause, the cost of remitting money from London to Paris were increased, the fluctuations of the *real* exchange between them *might* also be increased. For the limits within which such fluctuations *may* range, correspond in all cases with the cost of making remittances in cash.

Fluctuations in the *nominal* exchange, that is, in the value of the currencies of countries trading together, have no effect on foreign trade. When the currency is depreciated, the premium which the exporter of commodities derives from the sale of the bill drawn on his correspondent abroad, is only equivalent to the increase in the price of the goods exported, occasioned by this depreciation. But when the premium on a foreign bill is a consequence, not of a fall in the value of money, but of a deficiency in the supply of bills, there is no rise of prices; and in these circumstances the unfavourable exchange operates as a stimulus to exportation. As soon as the *real* exchange diverges from *par*, the mere inspection of a price current is no longer sufficient to regulate the operations of the merchant. If it be unfavourable, the premium which the exporter will receive on the sale of his bill must be included in the estimate of the profit he is likely to derive from the transaction. The greater that premium, the less will be the difference of prices necessary to induce him to export. And hence an unfavourable *real* exchange has an effect exactly the same with what would be produced by granting a bounty on exportation equal to the premium on foreign bills.

But for the same reason that an unfavourable *real* exchange increases exportation, it proportionally diminishes importation. When the exchange is really unfavourable, the price of commodities imported from abroad must be so much lower than their price at home, as not merely to afford, exclusive of expenses, the ordinary profit of stock on their sale, but also to compensate for the premium which the importer must pay for a foreign bill, if he remit one to his correspondent, or for the discount, added to the invoice price, if his correspondent draw upon him. A less quantity of foreign goods will, therefore, suit our market when the *real* exchange is unfavourable; and fewer payments having to be made abroad, the competition for foreign bills will be diminished, and the *real* exchange rendered proportionally favourable. In the same way, it is easy to see that a favourable *real* exchange must operate as a *duty* on exportation, and as a *bounty* on importation.

It is thus that fluctuations in the *real* exchange have a necessary tendency to correct themselves. They can never, for any considerable period, *exceed* the expense of transmitting bullion from the debtor to the creditor country. But the exchange cannot continue either permanently favourable or unfavourable to this extent. When favourable, it corrects itself by restricting exportation and facilitating importation; and when unfavourable, it produces the same effect by giving an unusual stimulus to exportation, and by throwing obstacles in the way of importation. The true PAR forms the centre of these oscillations; and although the thousand circumstances which are daily and hourly affecting the state of debt and credit, prevent the ordinary course of exchange from being almost ever precisely at *par*, its fluctuations, whether on the one side or the other, are confined within certain limits, and have a constant tendency to disappear.

This natural tendency which the exchange has to correct itself, is powerfully assisted by the operations of the bill-merchants.

England, for example, might owe a large excess of debt to Amsterdam; yet, as the aggregate amount of the debts *due* by a commercial country is generally balanced by the amount of those which it has to receive, the deficiency of bills on Amsterdam in London would most probably be compensated by a proportional redundancy of those on some other place. Now, it is the business of the merchants who deal in bills, in the same way as of those who deal in bullion or any other commodity, to buy them where they are cheapest, and to sell them where they are dearest. They would, therefore, buy up the bills drawn by other countries on Amsterdam, and dispose of them in London; and by so doing, would prevent any great fall in the price of bills on Amsterdam in those countries in which the supply exceeded the demand, and any great rise in Great Britain and those countries in which the supply happened to be deficient. In the trade between Italy and this country, the bills drawn on Great Britain amount almost inva-

riably to a greater sum than those drawn on Italy. The bill-merchants, however, by buying up the excess of the Italian bills on London, and selling them in Holland, and other countries indebted to England, prevent the *real* exchange from ever becoming very much depressed.

III. *Negotiation of Bills of Exchange.* — Bills of exchange are either made payable at *sight*, at a certain specified time *after sight* or *after date*, or at *usance*, which is the usual term allowed by the custom or law of the place where the bill is payable. Generally, however, a few days are allowed for payment beyond the term when the bill becomes due, which are denominated *days of grace*, and which vary in different countries. In Great Britain and Ireland, *three* days' grace are allowed for all bills except those payable at sight, which must be paid as soon as presented. The following is a statement of the usance and days of grace for bills drawn upon some of the principal commercial cities: —

[*m|d. m|s. d|d. d|s. d|a.* respectively denote *months after date, months after sight, days after date, days after sight, days after acceptance.*]

London on	Usance.	Days of Grace.		Usance.	Days of Grace.	London on	Usance.	Days of Grace.
Amsterdam	1 m|d.	6	Geneva	30 d|d.	5	Vienna†	14 d|a.	3
Rotterdam	1 m|d.	6	Madrid	2 m|s.	14	Malta	30 d|d.	13
Antwerp	1 m|d.	6	Cadiz	60 d|d.	6	Naples	3 m|d.	3
Hamburg	1 m|d.	12	Bilboa	2 m|d.	14	Palermo	3 m|d.	0
Altona	1 m|d.	12	Gibraltar	2 m|s.	14	Lisbon	30 d|s.	6
Dantzic	14 d|a.	10	Leghorn	3 m|d.	0	Oporto	30 d|s.	6
Paris*	30 d|d.	10	Leipsic	14 d|a.	0	Rio Janeiro	30 d|d.	6
Bordeaux	30 d|d.	10	Genoa	3 m|d.	30	Dublin	21 d|s.	3
Bremen	1 m|d.	8	Venice	3 m|d.	6	Cork	21 d|s.	3
Barcelona	60 d|d.	14						

In the dating of bills, the new style is used in every country in Europe, with the exception of Russia.

In London, bills of exchange are bought and sold by brokers, who go round to the principal merchants and discover whether they are buyers or sellers of bills. A few of the brokers of most influence, after ascertaining the state of the relative supply and demand for bills, suggest a price at which the greater part of the transactions of the day are settled, with such deviations as particular bills, from their being in very high or low credit, may be subject to. The price fixed by the brokers is that which is published in Wettenhall's List; but the first houses generally negotiate their bills on $\frac{1}{2}$, 1, $1\frac{1}{2}$, and 2 *per cent.* better terms than those quoted. In London and other great commercial cities, a class of middlemen speculate largely on the rise and fall of the exchange; buying bills when they expect a rise, and selling them when a fall is anticipated.

It is usual, in drawing foreign bills of exchange, to draw them in sets, or duplicates, lest the first should be lost or miscarry. When bills are drawn in sets, each must contain a condition that it shall be payable only while the others remain unpaid: thus, the first is payable only, "second and third unpaid;" the second, "first and third being unpaid;" and the third, "first and second unpaid."

All bills of exchange must be drawn upon stamps as under: —

Inland Bills and Notes. — Not exceeding Two Months after Date, or Sixty Days after Sight.

	£	s.		£	s.	d.	Exceeding Two Months, &c. £	s.	d.
If	2	0	and not above	5	5	0	1	0	6
Above	5	5	—	20	0	1	2	0	
—	20	0	—	30	0	2	2	6	
—	30	0	—	50	0	2	3	6	
—	50	0	—	100	0	3	4	6	
—	100	0	—	200	0	4	5	0	
—	200	0	—	300	0	5	6	0	
—	300	0	—	500	0	6	8	6	
—	500	0	—	1,000	0	8	12	6	
—	1,000	0	—	2,000	0	12	15	0	
—	2,000	0	—	3,000	0	15	1	5	0
—	3,000	0	-	-	-	1	5	0	1 10 0

Promissory notes from 2*l.* to 100*l.* inclusive are not to be drawn payable to bearer on demand (excepting bankers' *re-issuable* notes, which require a different stamp). — But notes for any sum exceeding 100*l.* may be drawn either payable to bearer on demand, or otherwise.

Foreign Bills of Exchange. — Foreign bill, drawn in but payable out of Great Britain, if drawn singly, *the same duty as an inland bill.*

Foreign bills of exchange, drawn in sets, for every bill of each set, if the sum does	£	s.	d.
not exceed 100*l.* - - - -	-	1	6
Exceeding 100*l.* and not exceeding 200*l.*	-	3	0
— 200*l.* — 500*l.*	-	4	0

	£	s.	d.
Exceeding 500*l.* and not exceeding 1,000*l.*	-	5	0
— 1,000*l.* — 2,000*l.*	-	7	6
— 2,000*l.* — 3,000*l.*	-	10	0
— 3,000*l.* — -	-	15	0

* In France, no days of grace are allowed on bills payable *à vue.*

† In Austria, bills payable at sight, or on demand, or at less than 7 days after sight or date, are not allowed any days of grace.

No one acquainted with the fundamental rules of arithmetic can have any difficulty whatever in estimating how much a sum of money in one country is worth in another, according to the state of the exchange at the time. The common arithmetical books abound in examples of such computations. But in conducting the business of exchange, a direct remittance is not always preferred. When a merchant in London, for example, means to discharge a debt due by him in Paris, it is his business to ascertain not only the state of the direct exchange between London and Paris, and, consequently, the sum which he must pay in London for a bill on Paris equivalent to his debt, but also the state of the exchange between London and Hamburg, Hamburg and Paris, &c.; for it frequently happens that it may be more advantageous for him to buy a bill on Hamburg, Amsterdam, or Lisbon, and to direct his agent to invest the proceeds in a bill on Paris, rather than remit directly to the latter. This is termed the ARBITRATION of exchange. An example or two will suffice to show the principle on which it is conducted.

Thus, if the exchange between London and Amsterdam be 35*s.* Flemish (old coinage) per pound sterling, and between Paris and Amsterdam 1*s.* 6*d.* Flemish per franc, then, in order to ascertain whether a direct or indirect remittance to Paris would be most advantageous, we must calculate what would be the value of the franc in English money if the remittance were made through Holland; for if it be less than that resulting from the direct exchange, it will obviously be the preferable mode of remitting. This is determined by stating, as 35*s.* Flem. (the Amsterdam currency in a pound sterling) : 1*s.* 6*d.* Flem (Amsterdam currency in a franc) : : 1*l.* : 10*d.* the proportional or *arbitrated* value of the franc. — Hence, if the English money, or bill of exchange, to pay a debt in Paris, were remitted by Amsterdam, it would require 10*d.* to discharge a debt of a franc, or 1*l.* to discharge a debt of 24 francs: and therefore, if the exchange between London and Paris were at 24, it would be indifferent to the English merchant whether he remitted directly to Paris, or indirectly *viâ* Amsterdam; but if the exchange between London and Paris were *above* 24, then a direct remittance would be preferable; while, if, on the other hand, the direct exchange were less than 24, the indirect remittance ought as plainly to be preferred.

"Suppose," to borrow an example from Kelly (*Universal Cambist*, vol. ii. p. 137.) "the exchange of London and Lisbon to be at 68*d.* per milree, and that of Lisbon on Madrid 500 rees per dollar, the arbitrated price between London and Madrid is 34*d.* sterling per dollar; for, as 1,000 rees : 68*d.* : : 500 rees : 34*d.* But if the direct exchange of London on Madrid be 35*d.* sterling per dollar, then London, by remitting directly to Madrid, must pay 35*d.* for every dollar; whereas, by remitting through Lisbon, he will pay only 34*d.*: it is therefore the interest of London to remit indirectly to Madrid through Lisbon. On the other hand, if London draws directly on Madrid, he will receive 35*d.* sterling per dollar; whereas, by drawing indirectly through Lisbon, he would receive only 34*d.*; it is therefore the interest of London to draw directly on Madrid. Hence the following rules: —

"1. Where the certain price is given, draw through the place which produces the lowest arbitrated price, and remit through that which produces the highest.

"2. Where the uncertain price is given, draw through that place which produces the highest arbitrated price, and remit through that which produces the lowest."

In compound arbitration, or when more than 3 places are concerned, then, in order to find how much a remittance passing through them all will amount to in the last place, or, which is the same thing, to find the arbitrated price between the first and the last, we have only to repeat the different statements in the same manner as in the foregoing examples.

Thus, if the exchange between London and Amsterdam be 35*s.* Flem. for 1*l.* sterling; between Amsterdam and Lisbon 42*d.* Flem. for 1 old crusade; and between Lisbon and Paris 480 rees for 3 francs: what is the arbitrated price between London and Paris?

In the first place, as 35*s.* Flem. : 1*l.* : : 42*d.* Flem. : 2*s.* sterling = 1 old crusade.

Second, as 1 old crusade, or 400 rees : 2*s.* sterling : : 480 rees : 2*s.* 4·8*d.* sterling = 3 francs.

Third, as 2*s.* 4·8*d.* sterling : 3 francs : : 1*l.* sterling : 25 francs, the arbitrated price of the pound sterling between London and Paris.

This operation may be abridged as follows: —

		1*l.* sterling.
1*l.* sterling	=	35*s.* Flemish.
3½ shillings Flem.	=	1 old crusade.
1 old crusade	=	400 rees.
480 rees	=	3 francs.

Hence $\frac{35 \times 400 \times 3}{480 \times 3\frac{1}{2}} = \frac{4,200}{168} = 25$ francs.

This abridged operation evidently consists in arranging the terms so that those which would form the divisors in continued statements in the Rule of Three are multiplied together for a common divisor, and the other terms for a common dividend. The ordinary arithmetical books abound with examples of such operations.

The following account of the manner in which a very large transaction was actually conducted by indirect remittances, will sufficiently illustrate the principles we have been endeavouring to explain.

In 1804, Spain was bound to pay to France a large subsidy; and, in order to do this, three distinct methods presented themselves: —

1. To send dollars to Paris by land.
2. To remit bills of exchange directly to Paris.
3. To authorise Paris to draw directly on Spain.

The first of these methods was tried, but it was found too slow and expensive; and the second and third plans were considered likely to turn the exchange against Spain. The following method by the indirect, or circular exchange, was, therefore, adopted.

A merchant, or *banquier*, at Paris, was appointed to manage the operation, which he thus conducted: — He chose London, Amsterdam, Hamburg, Cadiz, Madrid, and Paris, as the principal hinges on which the operation was to turn; and he engaged correspondents in each of these cities to support the circulation. Madrid and Cadiz were the places in Spain from whence remittances were to be made; and dollars were, of course, to be sent to where they bore the highest price, for which bills were to be procured on Paris, or on any other places that might be deemed more advantageous.

The principle being thus established, it only remained to regulate the extent of the operation, so as not to issue too much paper on Spain, and to give the circulation as much support as possible from real business. With this view, London was chosen as a place to which the operation might be chiefly directed, as the price of dollars was then high in England; a circumstance which rendered the proportional exchange advantageous to Spain.

The business was commenced at Paris, where the negotiation of drafts issued on Hamburg and Amsterdam served to answer the immediate demands of the state; and orders were transmitted to these places to draw for the reimbursements on London, Madrid, or Cadiz, according as the course of exchange was most favourable. The proceedings were all conducted with judgment, and attended with complete

success. At the commencement of the operation, the course of exchange of Cadiz on London was 36*d.*; but by the plan adopted, Spain got 39¼*d.*, or above 8 *per cent.* by the remittance of dollars to London, and considerable advantages were also gained by the circulation of bills through the several places on the Continent. — (*Kelly's Cambist*, vol. ii. p. 168.; *Dubost's Elements of Commerce*, 2d ed. p. 228.)

Table specifying the Value of the Monies of Account of the principal Places with which this Country has Exchange Transactions, taking Silver at 5*s.* an oz., and specifying also the *Par* of Exchange with such Places on this Hypothesis. — (Abstracted from *Tate's Modern Cambist*, to which the reader is referred for farther explanations).

					Par of Exchange.	
Petersburg	100 copecks	= 1 rouble	= 3*s.* 1½*d.* giving		6 roub. 40 cop.	= 1*l.*
Berlin	30 sil. groschen	= 1 Pruss. doll.	= 2*s.* 10⅔*d.* —		6 doll. 27 *s. g.*	= 1*l.*
Copenhagen	96 skillings	= 1 Rig. doll.	= 2*s.* 2¼*d.* —		9 doll. 10 *sk.*	= 1*l.*
Hamburg	16 schillings	= 1 mark	= 1*s.* 5½*d.* —		13 mks. 10½ *sch.*	= 1*l.*
Amsterdam	100 centimes	= 1 florin	= 1*s.* 8*d.* —		11 fl. 97 cents	= 1*l.*
Antwerp	100 centimes	= 1 florin	= 1*s.* 8*d.* —		11 fl. 97 cents	= 1*l.*
Paris	100 centimes	= 1 franc	= 9½*d.* —		25 fr. 57 cents	= 1*l.*
Frankfort	24½ guld. or flor.	= 1 mark	= 1*s.* 7⅝*d.* —		12 3/40 guldens	= 1*l.*
Vienna	60 kreusers	= 1 florin	= 2*s.* 0 4/10*d.* —		9 fl. 50 kr.	= 1*l.*
Venice	100 centisimi	= 1 lira Austriaca	= 8·13*d.* —		29 li. 52 cent.	= 1*l.*
Genoa	100 centisimi	= 1 lira Nuova	= 9½*d.* —		25 li. 57 cent.	= 1*l.*
Leghorn	100 centisimi	= 1 lira Toscana	= 7·82*d.* —		30 li. 69 cent.	= 1*l.*
Madrid	8 reals	= 1 dollar of Plate	= 3*s.* 1⅝*d.* —		6 doll. 2⅝ reals	= 1*l.*
Lisbon	1000 reis	= 1 milreis	= 4*s.* 8*d.* —		4 mil. 285 reis	= 1*l.*
New York	100 cents	= 1 dollar	= 4*s.* 2*d.* —		4 doll. 80 cents	= 1*l.*
Rio Janeiro	1000 reis	= 1 milreis	= 2*s.* 7*d.* —		7 mil. 777 reis	= 1*l.*
Havannah	100 cents	= 1 dollar	= 4*s.* 6 13/222*d* —		4 doll. 44 cents	= 1*l.*

It is easy from this table to calculate the value of any of the above coins, taking silver at 5*s.* 2*d.*, 5*s.* 6*d.* an oz., or any other price, and thence to deduce the par of exchange at such rates. The values of the coins in the Table of Coins (*anté*, p. 310.) are estimated on the hypothesis that silver is worth 5*s.* 2*d.* an oz.

Law of Bills of Exchange.

The chief legal privileges appertaining to bills are, first, that though only a simple contract, yet they are always presumed to have been originally given for a good and valuable consideration; and, secondly, they are assignable to a third person not named in the bill or party to the contract, so as to vest in the assignee a right of action, in his own name; which right of action, no release by the drawer to the acceptor, nor set-off or cross demand due from the former to the latter, can affect.

All persons, whether merchants or not, being legally qualified to contract, may be parties to a bill. But no action can be supported against a person incapable of binding himself, on a bill drawn, indorsed, or accepted by such incapacitated person; at the same time the bill is good against all other competent parties thereto.

Bills may be drawn, accepted, or indorsed by the party's agent or attorney verbally authorised for the purpose. When a person has such authority, he must either write the name of his principal, or state in writing that he draws, &c. as agent, thus: "per procuration, for A. B."

Where one of several partners accepts a bill drawn on the firm, for himself and partners, or in his own name only, such acceptance binds the partnership if it concern the trade. But the acceptance of one of several partners on behalf of himself and partners, will not bind the others, if it concern the acceptor only in a separate and distinct interest; and the holder of the bill, at the time he becomes so, was aware of that circumstance. If, however, he be a *bonâ fide* holder for a sufficient consideration, and had no such knowlege at the time he first became possessed of the bill, no subsequently acquired knowledge of the misconduct of the partner in giving such security will prevent him from recovering on such bills against all the partners.

Although no precise form of words is required to constitute a bill of exchange or promissory note, yet it is necessary that it should be *payable at all events*, and not depend on any contingency: and that it be made for the payment of money only, and not for payment of money and performance of some other act, as the delivery of a horse, or the like.

If, however, the event on which the payment is to depend must inevitably happen, it is of no importance how long the payment may be in suspense; so a bill is negotiable and valid if drawn payable 6 weeks after the death of the drawer's father, or payable to an infant when he shall become of age.

Any material alteration of a bill after it has been drawn, accepted, or indorsed, such as the date, sum, or time of payment, will invalidate it: but the mere correction of a mistake, as by inserting the words "or order," will have no such effect.

The negotiability of a bill depends on the insertion of sufficient operative words of transfer; such as by making it payable to A. or order, or to A. or bearer, or to bearer generally.

Although a bill is presumed to have been originally drawn upon a good and valuable consideration, yet in certain cases a want of sufficient consideration may be insisted on in defence to an action on a bill. Certain considerations have been made illegal by statute; as for signing a bankrupt's certificate, for money won at gaming, or for money lent on a usurious contract. But with respect to gaming, it is held, that a bill founded on a gambling transaction is good in the hands of a *bonâ fide* holder; and by 58 Geo. 3. c. 93. a bill or note in the hands of an innocent holder, although originally founded on a usurious contract, is not invalid.

In general, if a bill is fair and legal in its origin, a subsequent illegal contract or consideration on the indorsement thereof will not invalidate it in the hands of a *bonâ fide* holder.

A bill cannot be given in evidence in a court of justice, unless it be duly stamped, not only with a stamp of the proper value, but also of the proper denomination.

Acceptance of a Bill. — An acceptance is an engagement to pay a bill according to the tenor of the acceptance, which may be either *absolute* or *qualified*. An *absolute* acceptance is an engagement to pay a bill according to its request, which is done by the drawee writing "Accepted" on the bill, and subscribing his name, or writing "Accepted" only; or merely subscribing his name at the bottom or across the bill. A *qualified* acceptance is when a bill is accepted conditionally; as when goods conveyed to the drawee are sold, or when a navy bill is paid, or other future event which does not bind the acceptor till the contingency has happened.

An acceptance may be also partial; as to pay 100*l.* instead of 150*l.*, or to pay at a different time or place from that required by the bill. But in all cases of a conditional or partial acceptance, the holder should, if he mean to resort to the other parties to the bill in default of payment, give notice to them of such partial or conditional acceptance.

In all cases of presenting a bill for acceptance, it is necessary to present the bill at the house where the drawee lives, or where it is made payable. By 1 & 2 Geo. 4. c. 78., all bills accepted payable at a banker's or other place are to be deemed a general acceptance; but if they are accepted payable at a banker's "only, and not otherwise or elsewhere," it is a qualified acceptance, and the acceptor is not liable to pay the bill,

except in default of payment when such payment shall have been first demanded at the banker's. The drawee is entitled to keep the bill 24 hours when presented for acceptance. The acceptance of an inland bill must be *in writing on the face of the bill*, or, if there be more parts than one, on one of such parts; nothing short of this constitutes a valid acceptance.

If a bill is made payable a certain time *after sight*, it must, in order to fix the time when it is to be paid, be presented for acceptance, and the date of the acceptance should appear thus: "Accepted, October 23rd, 1843.

Due diligence is the only thing to be considered in presenting any description of bill for acceptance; and such diligence is a question depending on the situation of the parties, the distance at which they live, and the facility of communication between them.

When the drawee refuses to accept, any third party, after protesting, may accept for the honour of the bill generally, or for the drawee, or for the indorser; in which case the acceptance is called an acceptance *supra protest*.

The drawers and indorsers are discharged from liability, unless due notice of non-acceptance when presented for acceptance, or non-payment at the time the bill becomes due, is given. These notices must be given with all due diligence to all the parties to whom the holder means to resort for payment. Generally, in both foreign and inland bills, notice is given next day to the immediate indorser, and such indorser is allowed a day, when he should give fresh notice to the parties who are liable to him.

Notice may be sent by the post, however near the residence of the parties may be to each other; and though the letter containing such notice should miscarry, yet it will be sufficient; but the letter, containing the notice, should be delivered at the General Post-Office, or at a receiving-house appointed by that office, not to the bellman in the street. In all cases of notice, notice to one of several parties is held to be notice to all; and if one of several drawers be also the acceptor, it is not necessary to give notice to the other drawers.

Upon the non-acceptance or non-payment of a bill, the holder, or a public notary for him, should protest it; that is, draw up a notice of the refusal to accept or pay the bill, and the declaration of the holder against sustaining loss thereby. Inland bills need not be protested; in practice they are usually only noted for non-acceptance; but this, without the protest, is wholly futile, and adds nothing whatever to the evidence of the holder, while it entails a useless expense on those liable to pay.

Indorsement of Bills.—An indorsement is the act by which the holder of a negotiable instrument transfers his right to another person, termed the indorsee. It is usually made on the back of a bill, and must be in writing; but the law has not prescribed any set form of words as necessary to the ceremony, and in general the mere signature of the indorser is sufficient.

All bills payable to order or to bearer for 1*l.* and upwards are negotiable by indorsement; and the transfer of them for a good consideration, before they are payable, gives a right of action against all the precedent parties on the bill, if the bills in themselves are valid; but a transfer after they are due will only place the holder in the situation of the person from whom he takes them.

Bills may be transferred either by delivery only, or by indorsement and delivery: bills payable to order are transferred by the latter mode only; but bills payable to bearer may be transferred by either mode. On a transfer by delivery, the person making it ceases to be a party to the bill; but on a transfer by indorsement, he is to all intents and purposes chargeable as a new drawer.

A bill originally transferable may be restrained by restrictive words; for the payee or indorsee, having the absolute property in the bill, may, by express words, restrict its currency, by indorsing it "Payable to A. B. only," or "to A. B. for his use," or any other words clearly demonstrating his intention to make a restrictive and limited indorsement. Such special indorsement precludes the person in whose favour it is made from making a transfer, so as to give a right of action against the special indorser, or any of the precedent parties to the bill.

In taking bills to account or discount, it is important well to examine all special indorsements. Lord Tenterden decided that a person who discounts a bill indorsed "Pay to A. B. or order *for my use*," discounts it subject to the risk of having to pay the money to the special indorser, who so limited the application *for my use*; thus a party may be liable to pay the amount of the bill twice over, unless he previously ascertains that the payment has been made conformably to the import of the indorsement.

After the payment of part, a bill may be indorsed over for the residue.

Presentment for Payment.—The holder of a bill must be careful to present it for payment at the time when due, or the drawer and indorsers will be exonerated from their liability; even the bankruptcy, insolvency, or death of the acceptor, will not excuse a neglect to make presentment to the assignees or executor; nor will the insufficiency of a bill in any respect constitute an excuse for non-presentment: the presentment should be made at a reasonable time of the day when the bill is due; and if by the known custom of any trade or place bills are payable only within particular hours, a presentment must be within those hours. If a bill has a qualified acceptance, the presentment should be at the place mentioned in such qualified acceptance, or all the parties will be discharged from their obligations.

If a bill fall due on Sunday, Good Friday, Christmas Day, or any public fast or thanksgiving day, the presentment must be on the day preceding these holidays. By 7 & 8 Geo. 4. c. 15., if a bill or note be payable on the day preceding these holidays, notice of the dishonour may be given the day following the holiday; and if Christmas Day fall on Monday, notice may be given on Tuesday.

Bills, however, payable at usance, or at a certain time after date or sight, or after demand, ought not to be presented for payment precisely at the expiration of the time mentioned in the bills, but at the expiration of what are termed *days of grace*. The days of grace allowed vary in different countries, and ought always to be computed according to the usage of the place where the bill is due.—(See *ante*, p. 557.) At Hamburg, and in France, the day on which the bill falls due makes one of the days of grace; but no where else.

On bills payable on demand, or when no time of payment is expressed, no days of grace are allowed; but they are payable instantly on presentment. On bank post bills no days of grace are claimed; but on a bill payable at sight the usual days of grace are allowed from the sight or demand.

Payment of a bill should be made only to the holder; and it may be refused unless the bill be produced and delivered up. On payment, a receipt should be written on the back; and when a part is paid, the same should be acknowledged upon the bill, or the party paying may be liable to pay the amount a second time to a *bonâ fide* indorser.

Promissory Notes and Checks.—The chief distinction between promissory notes and bills of exchange is, that the former are a direct engagement by the drawer to pay them according to their tenor, without the intervention of a third party as a drawee or acceptor. Promissory notes may be drawn payable on demand to a person named therein, or to order, or to bearer generally. They are assignable and indorsable; and in all respects so nearly assimilated to bills by 3 & 4 Ann. c. 9., that the laws which have been stated as bearing upon the latter, may be generally understood as applicable to the former. In *Edis* v. *Bury*, it has been decided, in case an instrument is drawn so equivocally as to render it uncertain whether it be a bill of exchange or promissory note, the holder may treat it as either against the drawer.

Promissory notes, bills, drafts, or undertakings in writing, being made negotiable or transferable, for a less sum than 20*s*., are void, and persons uttering such are subject to a penalty not exceeding 20*l*., recoverable before a justice of peace.

The issue of any promissory note payable to bearer on demand for a less sum than 5*l*. by the Bank of England, or any licensed English banker, is prohibited; and by 9 Geo. 4. c. 65. it is provided, that no corporation or person shall utter or negotiate, in England, any such note which has been made or issued

in Scotland, Ireland, or elsewhere, under a penalty not exceeding 20*l.* nor less than 5*l.* But this does not extend to any draft or order on bankers for the use of the drawer.

Promissory notes for any sum exceeding 100*l.* may be drawn payable to bearer on demand or otherwise; but notes from 2*l.* to 100*l.* inclusive are not to be drawn payable to bearer on demand, except bankers' issuable notes, which require a different stamp.

A *check* or *draft* is as negotiable as a bill of exchange, and vests in the assignee the same right of action against the assignor. As to the presentation of checks, &c., see CHECK.

Any person making, accepting, or paying any bill, draft, order, or promissory note, not duly stamped, is liable to a penalty of 50*l.*; for post-dating them, 100*l.*; and for not truly specifying the place where unstamped drafts are issued, 100*l.*: and any person knowingly receiving such unstamped draft, 20*l.*; and the banker knowingly paying it, 100*l.*; besides not being allowed such sum in account.

Before concluding this article on mercantile paper, it may not be improper to introduce one or two cautions with regard to acceptances, and accommodation paper, and proceedings in case of the loss of bills.

First, A man should not put his name as acceptor to a bill of exchange without well considering whether he has the means of paying the same when due, as otherwise he may be liable not only to the costs of the action against himself, but also to the costs of the action, against the other parties to the bill: the shrewd tradesman is generally anxious to get the acceptance of his debtor at a short date, well knowing that it not only fixes the amount of the debt, but it is more speedily recoverable by legal procedure than a book debt.

Secondly, Traders who wish to support their respectability, and desire to succeed in business, should be cautious in resorting to the destructive system of cross-accommodation acceptances: it seldom ends well, and usually excites suspicion as to the integrity of the parties; it being an expedient often adopted by swindlers to defraud the public. Independent of the expense in stamps and discounts, and frequently in noting, interest, and law expenses, the danger attending such accommodation is sufficient to deter from the practice. Suppose, for instance, A. and B. mutually accommodate each other to the amount of 1,000*l.*, the acceptances being in the hands of third persons: both A. and B. are liable to such third persons to the extent of 2,000*l.* each; and should A. by any unforeseen occurrence be suddenly rendered unable to meet his acceptances, the holders of the whole, as well the acceptances of A. as the acceptances of B., will resort to B. for payment; and it may so happen, that although B. could have provided for his own share of the accommodation paper, he may be unable to provide for the whole, and may thus become insolvent.

Thirdly, In case of the loss of a bill, the 9 & 10 Will. 3. c. 17. provides, that if any inland bill be lost or missing within the time limited for its payment, the drawer shall, on sufficient security given to indemnify him if such bill be found again, give another bill of the same tenor with the first.

Lastly, it is of great importance to bankers and others taking bills and notes, that they should have some knowledge of the parties from whom they receive them; otherwise, if the instrument turn out to have been lost or fraudulently obtained, they may, without equivalent, be deprived of their security, on an action by the owner to recover possession. Lord Tenterden decided, "if a person take a bill, note, or any other kind of security, under circumstances which ought to excite suspicion in the mind of any reasonable man acquainted with the ordinary affairs of life, and which ought to put him on his guard to make the necessary inquiries, and he do not, then he loses the right of maintaining possession of the instrument against the rightful owner."—(*Guildhall*, Oct. 25. 1826.)

EXCHEQUER BILLS. See FUNDS.

EXPECTATION, of life. See INSURANCE.

EXPORTATION, in commerce, the act of sending or carrying commodities from one country to another. —(See IMPORTATION and EXPORTATION.)

EXCISE, the name given to the duties or taxes laid on certain articles produced and consumed at home; but, exclusive of these, the duties on licences, auctions, and post-horses, are also placed under the management of the excise, and are consequently included in the excise duties.

Excise duties were introduced into England by the Long Parliament in 1643; being then laid on the makers and venders of ale, beer, cider, and perry. The royalists soon after followed the example of the republicans; both sides declaring that the excise should be continued no longer than the termination of the war. But it was found too productive a source of revenue to be again relinquished; and when the nation had been accustomed to it for a few years, the parliament declared, in 1649, that the "impost of excise was the most easy and indifferent levy that could be laid upon the people." It was placed on a new footing at the Restoration: and, notwithstanding Mr. Justice Blackstone says that "from its first original to the present time its very name has been odious to the people of England"—(*Com.* book i. c. 3.),—it has continued progressively to gain ground; and is at this moment imposed on various important articles, and furnishes a large share of the public revenue of the kingdom.

The prejudice to which Blackstone alludes did not, perhaps, originate so much in any dislike to the duties themselves, as in circumstances connected with their imposition. Down to a comparatively recent period, the acts by which they were imposed were, for the most part, singularly obscure and contradictory, so that it was hardly possible for any trader, how desirous soever to comply with their provisions, to avoid getting into scrapes. The duties being frequently, also, carried to an oppressive extent, smuggling was practised; and when a party was prosecuted, either for any intentional or unintentional infraction of the law, or for attempting to defraud the revenue, the case was tried by 2 commissioners of excise or 2 justices of the peace, without the intervention of a jury. No wonder, therefore, that the excise should have been unpopular. But of late years the laws and regulations connected with the assessment of the duties have been much simplified. It is indeed true, that very material improvements might still be made, and should be made, in this respect. The rules laid down by the commissioners for the assessing of the duties should be as brief and clear as possible, and should interfere as little as possible with the details and processes of

spect the same, &c. And upon an officer making oath that he has cause to suspect that goods forfeited under the excise acts are deposited in any private house or place, 2 commissioners of excise, or 1 justice of the peace, may grant a warrant to the officer to enter such house or place (if in the night, in the presence of a constable) to search for and seize such forfeited goods.

Specimen Books may be left by the officers on the premises of persons subject to the excise laws; and any one who shall remove or deface such books shall be liable to a penalty of 200*l*.

Removing Goods to avoid Duty.—Goods fraudulently removed or secreted, in order to avoid the duty, to be forfeited; and every person assisting in such removal shall forfeit and lose treble the value of such goods, or 100*l*., at the discretion of the commissioners.

Obstructing Officers. — All persons who shall oppose, molest, &c. any officer of excise in the execution of his duty, shall respectively, for every such offence, forfeit 200*l*.

Officers violently resisted in making any seizure may oppose force to force; and in the event of their wounding, maiming, or killing any person, when so opposed, they shall be admitted to bail, and may plead the general issue.

Justices, mayors, bailiffs, constables, &c. are required to assist excise officers; and any constable or peace officer who, on notice and request, declines going with an excise officer, is to forfeit 20*l*. for every such offence.

Claimants of Goods seized. — No claim shall be entered for goods seized, except in the real names of the proprietors of such goods. Claimants are bound with 2 sureties in a penalty of 100*l*. to pay the expenses of claim; and in default thereof, the goods are to be condemned.

Proceedings in Courts of Law. — All penalties under the excise laws may be sued for and recovered in the Courts of Exchequer at Westminster, Edinburgh, or Dublin respectively, according as the offence may have taken place in England, Scotland, or Ireland; provided that the proceedings in the courts commence within 3 years after the commission of the offe

Informations for the recovery of penalties against the excise laws in London may be heard and adjudged by any 3 or more of the commissioners of excise; and in other places such informations may be exhibited before 1 or more justices of the peace, and may be heard and adjudged by any 2 or more such justices.

Mitigation of Penalties. — Justices are authorised, if they [illegible]ere is a special provision to the [illegible]alty incurred for any offence

but it is lawful for the commissioners of excise, when they s[illegible] cause, further to mitigate, or entirely remit, such penalty.

Distribution of Penalties. — All penalties and forfeitures incurred under the excise acts are to be distributed, half to his majesty, and half to the officer or person who shall discover, inform, or sue for the penalty. On proof being made of any officer acting collusively in making a seizure, the commissioners may direct his share to be forfeited.

Oaths and Affirmations. — Persons wilfully taking or making any false oath or affirmation as to any matter connected with the excise laws, shall, upon being convicted of such offence, suffer the pains and penalties incident to wilful and corrupt perjury; and those procuring or suborning such persons to swear or affirm falsely shall, upon conviction, be liable to the pains and penalties incident to subornation of perjury.

Actions against Excise Officers. — No writ, summons, or process shall be sued out or served upon, nor shall any action be brought, raised, or prosecuted against, any officer of excise, for any thing done under any of the excise laws, until after the expiration of 1 calendar month next after notice in writing has been delivered to such officer, specifying the cause of such action, and the name and place of abode of the person in whose name it is to be brought. No action shall lie against any excise officer for any thing done under the excise laws, unless it be brought within 3 months after the cause of action shall have arisen. If judgment be given against the plaintiff, and in favour of the defendant, the latter shall, in every such action, have treble costs awarded to him.

Forging Certificates, &c. — By the 41 Geo. 3. c. 91. it is enacted, that if any one shall forge, counterfeit, or knowingly give any forged certificate required to be granted by any officer of excise, he shall be guilty of felony, and being convicted, shall be transported for 7 years.

All individuals carrying on any business subjected to the control of the excise, must take out licences renewable annually on the 5th of July. — (See *Licences.*)

All such individuals are also obliged to make entries of every building, place, vessel, or utensil, as the case may be, in the name of the real owner, with the officer of excise in whose survey such building, place, &c. shall be situated. Individuals found employed in unentered excise manufactories are [illegible]ally liable in a penalty of 30*l*. for the first offence; and in the event of any such offender refusing or neglecting to pay such [illegible] to the [illegible]lendar months, to be kept to hard labour, and not to be liberated until the fine of 50*l*. has been paid, or the term of 3 months has expired; and if found guilty of a second offence, the fine is to be 60*l*.; and in the event of its not being paid, the imprisonment is to be for 6 months. — (7 & 8 Geo. 4. c. 53. s. 35.)

Permits are usually necessary for the removal of exciseable commodities. — (See *Permits.*)

EXPORTS, the articles exported, or sent beyond seas. — (See IMPORTS AND EXPORTS.)

F.

FACTOR, an agent employed by some one individual or individuals, to transact business on his or their account. He is not generally resident in the same place as his principal, but, usually, in a foreign country. He is authorised, either by letter of attorney or otherwise, to receive, buy, and sell goods and merchandise; and, generally, to transact all sorts of business on account of his employers, under such limitations and conditions as the latter may choose to impose. A very large proportion of the foreign trade of this and most other countries is now carried on by means of factors or agents.

Factors and brokers are, in some respects, nearly identical, but in others they are radically different. "A factor," said Mr. Justice Holroyd, "differs materially from a broker. The former is a person to whom goods are sent or consigned; and he has not only the possession, but, in consequence of its being usual to advance money upon them, has also a special property in them, and a general lien upon them. When, therefore, he sells in his own name, it is within the scope of his authority; and it may be right, therefore, that the principal should be bound by the consequences of such sale. But the case of a broker is different: he has not the possession of the goods, and so the vendor cannot be deceived by the circumstance; and, besides, the employing a person to sell goods as a broker does not authorise him to sell in his own name. If, therefore, he sells in his own name, he acts beyond the scope of his authority; and his principal is not bound."

A factor is usually paid by a per-centage or commission on the goods he sells or buys. If he act under what is called a *del credere* commission, that is, *if he guarantee the price of the goods sold on account of his principal*, he receives an additional per-centage to indemnify him for this additional responsibility. In cases of this sort the factor stands in the vendee's place, and must answer to the principal for the value of the goods sold. But where the factor undertakes no responsibility, and intimates that he acts only on account of another, it is clearly established that he is not liable in the event of the vendee's failing.

The sound maxim, that the principal is responsible for the acts of his agent, prev[illegible] universally in courts of law and equity. In order to bind the principal, it is necessary only that third parties should deal *bonâ fide* with the agent, and that the conduct of the latter should *be conformable to the common usage and mode of dealing.* Thus, a factor may sell goods upon credit, that being in the ordinary course of conducting mercantile

affairs: but a stock broker, though acting *boná fide*, and with a view to the benefit of his principal, cannot sell stock upon credit, *unless he have special instructions to that effect;* that being contrary to the usual course of business.

A sale by a factor creates a contract between the owner and buyer; and this rule holds even in cases where the factor acts upon a *del credere* commission. Hence, if a factor sell goods, and the owner *give notice to the buyer to pay the price to him*, and not to the factor, the buyer will not be justified in afterwards paying the factor, and the owner may bring his action against the buyer for the price, unless the factor has a lien thereon. But if no such notice be given, a payment to the individual selling is quite sufficient.

If a factor buy goods on account of his principal, where he is accustomed so to do, the contract of the factor binds the principal to a performance of the bargain; and the principal is the person to be sued for non-performance. But it is ruled, that if a factor enter into a charterparty of affreightment with the master of a ship, the contract obliges *him* only, unless he lade the vessel with his principal's goods, in which case the principal and lading become liable, and not the factor. Where a factor, who is authorised to sell goods in his own name, makes the buyer debtor to himself; then, though he be not answerable to the principal for the debt, if the money be not paid, yet he has a right to receive it, if it be paid, and his receipt is a sufficient discharge; the factor may, in such a case, enforce the payment by action, and the buyer cannot defend himself by alleging that the principal was indebted to him in more than the amount.

"Where a factor," said Lord Mansfield, "dealing for a principal, but concealing that principal, delivers goods in his own name, the person contracting with him has a right to consider him, to all intents and purposes, as the principal; and though the real principal may appear, and bring an action on that contract against the purchaser of the goods, yet that purchaser may set off any claim he may have against the factor, in answer to the demand of the principal."

Merchants employing the same factor run the joint risk of his actions, although they are strangers to each other: thus, if different merchants remit to a factor different bales of goods, and the factor sell them as a single lot to an individual who is to pay one moiety of the price down and the other at 6 months' end; if the buyer fail before the second payment, each merchant must bear a proportional share of the loss, and be content to accept his dividend of the money advanced. — (*Beawes, Lex Merc.*)

A factor employed, without his knowledge, in negotiating an illegal or fraudulent transaction, has an action against his principal. On this ground it was decided, that a merchant who had consigned counterfeit jewels to his factor, representing them to be genuine, should make full compensation to the factor for the injury done to him by being concerned in such a transaction, as well as to the persons to whom the jewels had been sold.

The office of a factor or agent being one of very great trust and responsibility, those who undertake it are bound, both legally and morally, to conduct themselves with the utmost fidelity and circumspection. A factor should take the greatest care of his principal's goods in his hands: he should be punctual in advising him as to his transactions on his behalf, in sales, purchases, freights, and, more particularly, bills of exchange: he should deviate as seldom as possible from the terms, and never from the *spirit and tenor*, of the orders he receives as to the sale of commodities: in the execution of a commission for purchasing goods, he should endeavour to conform as closely as practicable to his instructions as to the quality or kind of goods: if he give more for them than he is authorised, they may be thrown on his hands; but he is bound to buy them for as much less as he possibly can. After the goods are bought, he must dispose of them according to order. If he send them to a different place from that to which he was directed, they will be at his risk, unless the principal, on getting advice of the transaction, consent to acknowledge it.*

* "Whoever," says Dr. Paley, "undertakes another man's business, makes it his own; that is, promises to employ upon it the same care, attention, and diligence, that he would do if it were actually his own; for he knows that the business was committed to him with that expectation. And he promises nothing more than this. Therefore, an agent is not obliged to wait, inquire, solicit, ride about the country, toil, or study, whilst there remains a possibility of benefiting his employer. If he exert as much activity, and use such caution, as the value of the business in his judgment deserves; that is, as he would have thought sufficient if the same interest of his own had been at stake; he has discharged his duty, although it should afterwards turn out, that by more activity and longer perseverance, he might have concluded the business with greater advantage."—(*Moral and Pol. Phil.* c. 12.)

There seems to be a good deal of laxity in this statement. It is necessary to distinguish between those who, in executing a commission, render their services for the particular occasion only, without hire, and those who undertake it *in the course of business*, making a regular charge for their trouble. If the former bestow on it that ordinary degree of care and attention which the *generality of mankind* bestow on similar affairs of their own, it is all, perhaps, that can be expected: but the latter will be justly censurable, if they do not execute their engagements on account of others with that care and diligence which a "*provident and attentive father of a family*" uses in his own private concerns. It is their duty to exert themselves proportionally to the exigency of the affair in hand; and neither to *do* any thing, how minute soever, by which their employers may sustain damage, nor omit any thing, however inconsiderable, which the nature of the act requires. Perhaps the best general rule on the subject is, to suppose a factor

A factor who sells a commodity under the price he is ordered, may be obliged to make good the difference, unless the *commodity be of a perishable nature and not in a condition longer to be kept.* And if he purchase goods for another at a fixed rate, and, their price having afterwards risen, he fraudulently takes them to himself, and sends them somewhere else, in order to secure an advantage, he will be found, by the custom of merchants, liable in damages to his principal.

If a factor, in conformity with a merchant's orders, buy with his money, or on his credit, a commodity he is directed to purchase, and, without giving advice of the transaction, sells it again at a profit, appropriating that profit to himself, the merchant may recover it from him, and have him amerced for fraud.

If a factor buy, conformably to his instructions, goods of which he is *robbed*, or which suffer some unavoidable injury, he is discharged, and the loss falls on the principal. But if the goods be *stolen* from the factor, he will not be so easily discharged; for the fact of their having been abstracted by *stealth*, and not by *violence*, raises a strong presumption that he had not taken that reasonable care of them which was incumbent upon him. If, however, he can prove that the goods were lodged in a place of security, and that he had not been guilty of positive negligence, nor exercised less care towards them than towards his own property, he will not be held responsible even for a theft committed by his servants. — (*Jones on Bailments*, 2d ed. p. 76.; *Chitty on Commercial Law*, vol. iii. p. 368.)

If a factor, having money in his hands belonging to his principal, neglect to insure a ship and goods, according to order, he must, in the event of the ship miscarrying, make good the damage; and if he make any composition with the insurers after insurance, without orders to that effect, he is answerable for the whole insurance. A principal at the end of a very long letter, directed his agent thus: "Observe, the premium on this value is also to be insured." But the agent, not noticing this sentence, neglected to insure the premium; and being sued, was held liable for the omission.

If goods are remitted to a factor, and he make a false entry of them at the Custom-house, or land them without entry, and they are, in consequence, seized or forfeited, he is bound to make good the damage to his principal; but if the factor make his entry according to invoice or letters of advice, and these proving erroneous, the goods are seized, he is discharged.

It is now a settled point, that a factor has a lien on goods consigned to him, not only for incidental charges, but as an item of mutual account for the balance due to him so long as he remains in possession. If he be surety in a bond for his principal, he has a lien on the goods sold by him on account of such principal, to the amount of the sum he is bound for.

It being the general rule of law "that property does not change while *in transitu*," or in the hands of a carrier, a consignment made *before* the bankruptcy of a consignor, but not arriving till *after*, remains the property of the consignor, except, indeed, where the *delivery* is made *by the order* and upon the account of the consignee, and is a complete *alienation from* the consignor. In the case, therefore, of a consignment to a factor, the property remains the consignor's, and passes into the hands of *his* assignees. When a factor has a lien on goods, he has a right to the price, though received after the bankruptcy.

Where general or unlimited orders are given to a factor, he is left to buy and sell on the best conditions he can. And if detriment arise to a principal from the proceedings of a factor acting under such authority, he has no redress, unless he can show that he acted fraudulently or with *gross negligence.*

A factor or broker acting against the interest of his principal cannot even receive his commission. If he pay money on account of his principal, without being authorised, he cannot recover it back.

An agent cannot delegate his rights to another so as to bind the principal, unless expressly authorised to nominate a sub-agent.

(For further information as to the general powers and liabilities of factors and agents, see *Beawes, Lex Mercatoria*, art. *Factors, Supercargoes, &c.*; *Chitty's Commercial Law*, vol. iii. c. 3.; *Woolrych on Commercial Law*, pp. 317—329, &c. See also the article BROKERS.)

Under the law with respect to the transactions of factors or agents on third parties that prevailed down to the act 6 Geo. 4. c. 94., it was held, that a factor, as such, had no authority to *pledge*, but only to *sell* the goods of his principal; and it was repeatedly decided that a principal might recover back goods on which a *bonâ fide* advance of

or agent bound to exert that degree of care and vigilance that may *be reasonably expected of him by others.* At all events, it is clear he is not to be regulated by his own notions of the "value of the business." A man may neglect business of his own, or not think it worth attending to; but he is not, therefore, to be excused for neglecting any similar business he has undertaken to transact for others.—(There are some very good observations on this subject in *Sir William Jones's Essay on Bailments*, 2d ed. p. 53. and *passim*.)

money had been made by a third party, without his being bound to repay such advance; and notwithstanding this third party was wholly ignorant that the individual pledging the goods held them as a mere factor or agent. It used also to be held, that *bonâ fide* purchasers of goods from factors or agents not vested with the power of sale, might be made liable to pay the price of the goods a second time to the real owner.

The extreme hardship and injurious influence of such regulations is obvious. It is the business of a principal to satisfy himself as to the conduct and character of the factor or agent he employs; and if he make a false estimate of them, it is more equitable, surely, that he should be the sufferer, than those who have no means of knowing any thing of the matter. The injustice of the law in question, and the injury it did to the commerce of the country, had frequently excited attention; and was very ably set forth by the late Lord Liverpool, in his speech in the House of Lords, on moving the second reading of the bill referred to.

"Those of their Lordships who were acquainted with commercial transactions, would know that money was frequently advanced on goods, without its being possible for the person advancing the money to have any further acquaintance with the transactions, than that the factor was in actual possession of the goods. It then became a question, putting fraud out of view, if the factor became a bankrupt, or in any other way failed to execute his engagements, whether the loss should fall on the principal who had consigned these goods, or on the *pledgee* who had advanced money on them. It had been of late ruled, that if the factor were intrusted only to dispose of the property, the loss must fall on the pledgee. He meant to contend, that this was contrary to equity, and contrary to analogy; that it was disapproved of by high authority, and was contrary to the law in every country of the world, except this, and the United States of America, which had drawn their law from this country. It was contrary to equity, he thought, that the pledgee, who had advanced his money without any fraud, but on the *bonâ fide* possession of the goods, should suffer. He had placed no confidence, but the principal who had appointed the factor had placed confidence. He could limit him in his operations as he pleased — he could give him any kind of instructions — he might qualify his power — he was bound to take precautions before placing confidence; and he was in all respects more liable to suffer from his faults than the pledgee. The latter knew nothing of the power of the factor, he saw only the goods, and advanced his money on what was a sufficient security for repayment. On every principle of natural equity, therefore, the loss ought to fall, not on the *pledgee*, but on the principal. He knew that this view was connected with one very important question — that of possession and title; but it was not possible for transactions to go on, unless the possession was admitted as the title to the goods. If this were an indifferent question, or a question involving only a few cases, he would not have called on their Lordships to legislate on this subject; but all the commercial interests of the country were connected with it. And he might say he believed that two thirds of the whole commerce of the country was carried on by consigning goods to a factor, and leaving it to his discretion to dispose of them to the greatest advantage, sending them to market when he pleased, and raising money on them when he could not send them to market. Bills of exchange, Exchequer bills, and money bills of every description, were subject to this rule. If a person consigned Exchequer bills to a second person, and he parted with them, the third party who obtained them was held to have a right to them. Commercial proceedings were of as much importance as money proceedings, and he could not see why they should not receive the same security. It might be asked, perhaps, when this was felt to be so great an evil, why it was not altered before; but it seemed to be one of those things which had grown up gradually, and which did much mischief before they became extensively known. The first decision, he believed, which established the law as it now stood, was delivered in 1742; and he knew that Lord Chief Justice Gibbs had said, he could not explain the origin of that decision. He supposed it might have been dictated by some fraud. That decision, the Lord Chief Justice maintained, was at variance with the best interests of commerce, and had grown out of circumstances he could not explain. From the time of the first decision, the decisions had not been numerous, till of late years. He did not doubt but the judges had decided according to the law as it was established by these precedents; but in doing that, they had expressed their regret that these precedents had been established. [Here his Lordship read an extract from opinions delivered by the late Lord Chief Justice Ellenborough, and a late judge, Mr. Le Blanc, expressing their regret, in deciding cases according to these precedents, that they had been established.] He inferred from these opinions, that these judges, though they had felt themselves obliged to decide in this way, supposed that the law was contrary to the general analogy of our laws, and to the principles of justice. He then came to the last consideration, the law of this country being in this respect different from the law of all other countries, except the law of the United States of America. In all other countries, the law was recognised to be what he wished to establish it by the bill before their Lordships. When there was no evidence of fraud, it was held, that the man advancing money on goods held by a factor should not suffer for his faults, but that the person who confided in the factor must be the sufferer. This was also the law in Scotland. He had understood, too, that the evils of the law were felt in America, and that means had been taken for bringing it before the congress, with a view to assimilate the law of America to the law of other countries. If the question were examined by the principles of equity, by analogy with other cases, by the authority of those who decided in our courts, or by the practice of other countries, it would be found that the reasons were strong in favour of the bill. It was of great importance in commercial transactions, that our law should be like the laws of other countries. It was not the same with the laws relative to real property — to our local law, if he might so call it; but when the bill was founded on equity and analogy, he thought it was an additional reason in its favour, that it assimilated our commercial law to the commercial law of other countries. He did not know if he had made himself understood, or if he had sufficiently explained the object of the bill; but the measure was founded in justice, and he hoped to have their Lordships' consent to it." The noble Earl concluded by moving the second reading of the bill.

Nothing can be clearer or more satisfactory than the principle laid down by Lord Liverpool, in the above extract from his speech. But the act 6 Geo. 4. c. 94., which his Lordship introduced, did not fully carry out his views; for while it confirms *bonâ fide* sales, made in the ordinary course of business, in cases in which the purchaser had notice that the seller was merely an agent, it does not confirm *bonâ fide* advances made on goods, or on documents of title to goods, under the same circumstances. To obviate this discrepancy, to get rid of the litigation to which certain ambiguities in the 6 Geo. 4. c. 94. had given rise, and to facilitate commerce, the following statute, 5 & 6 Victoria, c. 39., was passed in 1842.

Bonâ fide Advances to Persons intrusted with the Possession of Goods or Documents of Title, though known to be Agents, protected. — From and after the passing of this act, any agent intrusted with the

possession of goods, or of the documents of title to goods, shall be deemed and taken to be owner of such goods and documents, so far as to give validity to any contract or agreement by way of pledge, lien, or security *bonâ fide* made by any person with such agent, as well for any original loan, advance, or payment made upon the security of such goods or documents, as also for any further or continuing advance in respect thereof; and such contract or agreement shall be binding upon and good against the owner of such goods, and all other persons interested therein, notwithstanding the person claiming such pledge or lien may have had notice that the person with whom such contract or agreement is made is only an agent. — § 1.

Bonâ fide Deposits in exchange protected. — Where any such contract or agreement for pledge, lien, or security shall be made in consideration of the delivery or transfer to such agent of any other goods or merchandise, or document of title, or negotiable security, upon which the person so delivering up the same had at the time a valid and available lien and security for or in respect of a previous advance by virtue of some contract or agreement made with such agent, such contract and agreement, if *bonâ fide* on the part of the person with whom the same may be made, shall be deemed to be a contract made in consideration of an advance within the true intent and meaning of this act, and shall be as valid and effectual, to all intents and purposes, and to the same extent, as if the consideration for the same had been a *bonâ fide* present advance of money: provided always, that the lien acquired under such last-mentioned contract or agreement upon the goods or documents deposited in exchange shall not exceed the value at the time of the goods and merchandise which, or the documents of title to which, or the negotiable security which shall be delivered up and exchanged. — § 2.

But the Statute to be construed to protect only Transactions bonâ fide. — This act, and every matter and thing herein contained, shall be deemed and construed to give validity to such contracts and agreements only, and to protect only such loans, advances, and exchanges, as shall be made *bonâ fide*, and without notice that the agent making such contracts or agreements as aforesaid has not authority to make the same, or is acting *malâ fide* in respect thereof against the owner of such goods and merchandise; and nothing herein contained shall be construed to extend to or protect any lien or pledge for or in respect of any antecedent debt, owing from any agent to any person with or to whom such lien or pledge shall be given, nor to authorise any agent intrusted as aforesaid in deviating from any express orders or authority received from the owner; but that, for the purpose and to the intent of protecting all such *bonâ fide* loans, advances, and exchanges as aforesaid (though made with notice of such agent not being the owner, but without any notice of the agent's acting without authority), and to no further or other intent or purpose, such contract or agreement as aforesaid shall be binding on the owner and all other persons interested in such goods. — § 3.

Meaning of the Term "Document of Title," &c. — Any bill of lading, India warrant, dock warrant, warehouse keeper's certificate, warrant, or order for the delivery of goods, or any other document used in the ordinary course of business as proof of the possession or control of goods, or authorising or purporting to authorise, either by indorsement or by delivery, the possessor of such document to transfer or receive goods thereby represented, shall be deemed and taken to be a document of title within the meaning of this act; and any agent intrusted as aforesaid, and possessed of any such document of title, whether derived immediately from the owner of such goods, or obtained by reason of such agent's having been intrusted with the possession of the goods, or of any other document of title thereto, shall be deemed and taken to have been intrusted with the possession of the goods represented by such document of title as aforesaid, and all contracts pledging or giving a lien upon such document of title as aforesaid shall be deemed and taken to be respectively pledges of and liens upon the goods to which the same relates; and such agent shall be deemed to be possessed of such goods or documents, whether the same shall be in his actual custody, or shall be held by any other person subject to his control or on his behalf; and where any loan or advance shall be *bonâ fide* made to any agent intrusted with and in possession of any such goods or documents of title as aforesaid, on the faith of any contract or agreement in writing to consign, deposit, transfer, or deliver such goods or documents of title as aforesaid, and such goods or documents of title shall actually be received by the person making such loan or advance, without notice that such agent was not authorised to make such pledge or security, every such loan or advance shall be deemed and taken to be a loan or advance on the security of such goods or documents of title within the meaning of this act, though such goods or documents of title shall not actually be received by the person making such loan or advance till the period subsequent thereto; and any contract or agreement, whether made direct with such agent as aforesaid, or with any clerk or other person on his behalf, shall be deemed a contract or agreement with such agent; and any payment made, whether by money or bills of exchange, or other negotiable security, shall be deemed and taken to be an advance within the meaning of this act; and an agent in possession as aforesaid of such goods or documents shall be taken, for the purposes of this act, to have been intrusted therewith by the owner thereof, unless the contrary can be shown in evidence. — § 4.

Agent's civil Responsibility not to be diminished. — Nothing herein contained shall lessen, vary, alter, or affect the civil responsibility of an agent for any breach of duty or contract, or non-fulfilment of his orders or authority in respect of any such contract, agreement, lien, or pledge as aforesaid. — § 5.

Agent making Consignments contrary to Instruction of Principal, guilty of Misdemeanor. — If any agent intrusted as aforesaid shall, contrary to or without the authority of his principal in that behalf and for his own benefit and in violation of good faith, make any consignment, deposit, transfer, or delivery of any goods or documents of title so intrusted to him as aforesaid, as and by way of a pledge, lien, or security; or shall, contrary to or without such authority, for his own benefit and in violation of good faith, accept any advance on the faith of any contract or agreement to consign, deposit, transfer, or deliver such goods or documents of title as aforesaid; every such agent shall be deemed guilty of a misdemeanor, and being convicted thereof, shall be sentenced to transportation for any term not exceeding 14 years nor less than 7 years, or to suffer such other punishment by fine or imprisonment, or by both, as the court shall award; and every clerk or other person who shall knowingly and wilfully act and assist in making any such consignment, deposit, transfer, or delivery, or in accepting or procuring such advance as aforesaid, shall be deemed guilty of a misdemeanor, and being convicted thereof, shall be liable, at the discretion of the court, to any of the punishments which the court shall award, as hereinbefore last mentioned: provided nevertheless, that no such agent shall be liable to any prosecution for consigning, depositing, transferring, or delivering any such goods or documents of title, in case the same shall not be made a security for or subject to the payment of any greater sum of money than the amount which at the time of such consignment, deposit, transfer, or delivery was justly due and owing to such agent from his principal, together with the amount of any bills of exchange drawn by or on account of such principal, and accepted by such agent: provided also, that the conviction of any such agent shall not be received in evidence in any action at law or suit in equity against him, and no agent intrusted as aforesaid shall be liable to be convicted by any evidence in respect of any act done by him, if he shall, at any time previously to his being indicted for such offence, have disclosed such act, on oath, in consequence of any compulsory process of any court of law or equity in any action, suit, or proceeding which shall have been *bonâ fide* instituted by any party aggrieved, or if he shall have disclosed the same in any examination or deposition before any commissioner of bankrupt. — § 6.

Right of Owner to redeem, &c. — Nothing herein contained shall prevent such owner as aforesaid from having the right to redeem such goods or documents of title pledged as aforesaid, at any time before such goods shall have been sold, upon repayment of the amount of the lien thereon, or restoration of the securities in respect of which such lien may exist, and upon payment or satisfaction to such agent, if by him required, of any sum of money for or in respect of which such agent would by law be entitled to

retain the same goods or documents, or any of them, by way of lien as against such owner, or to prevent the said owner from recovering of and from such person with whom any such goods or documents may have been pledged, or who shall have any such lien thereon as aforesaid, any balance or sum of money remaining in his hands as the produce of the sale of such goods, after deducting the amount of the lien of such person under such contract or agreement: provided always, that in case of the bankruptcy of any such agent, the owner of the goods which shall have been so redeemed by such owner shall, in respect of the sum paid by him on account of such agent for such redemption, be held to have paid such sum for the use of such agent before his bankruptcy, or in case the goods shall not be so redeemed, the owner shall be deemed a creditor of such agent for the value of the goods so pledged at the time of the pledge, and shall, if he shall think fit, be entitled in either of such cases to prove for or set off the sum so paid, or the value of such goods, as the case may be. — § 7.

Clause 8. refers to the interpretation of the act.

FACTORAGE, OR COMMISSION, the allowance given to factors by the merchants and manufacturers, &c. who employ them: it is a percentage on the goods they purchase or sell on account of their principals; and varies in different countries, and as it refers to different articles. It is customary for factors, as observed in the previous article, to insure the debts due to those for whom they sell for an additional, or *del credere*, commission, generally averaging from 1½ to 2 per cent. Factorage or commission is also frequently charged at a certain rate per cask, or other package, measure, or weight, especially when the factor is only employed to receive or deliver: this commission is usually fixed by special agreement between the merchant and factor.

Factorage, Brokerage, and Commission Table.

Amt.	At ⅛ per Ct.	At ¼ per Ct.	At ⅜ per Ct.	At ½ per Ct.	At ⅝ per Ct.	At ¾ per Ct.	At ⅞ per Ct.	At 1 per Ct.
£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1	0 0 0½	0 0 0½	0 0 0½	0 0 1	0 0 1½	0 0 1½	0 0 2	0 0 2½
2	0 0 0½	0 0 1	0 0 1½	0 0 2½	0 0 3	0 0 3½	0 0 4	0 0 4½
3	0 0 0½	0 0 1½	0 0 2½	0 0 3½	0 0 4½	0 0 5½	0 0 6½	0 0 7
4	0 0 1	0 0 2	0 0 3½	0 0 4½	0 0 6	0 0 7	0 0 8½	0 0 9½
5	0 0 1½	0 0 3	0 0 4½	0 0 6	0 0 7½	0 0 9	0 0 10½	0 1 0
6	0 0 1½	0 0 3½	0 0 5½	0 0 7	0 0 9	0 0 10½	0 1 0½	0 1 2
7	0 0 2	0 0 4	0 0 6½	0 0 8½	0 0 10½	0 1 0½	0 1 2½	0 1 4½
8	0 0 2½	0 0 4½	0 0 7	0 0 9½	0 1 0	0 1 2½	0 1 4½	0 1 7
9	0 0 2½	0 0 5½	0 0 8	0 0 10½	0 1 1½	0 1 4	0 1 6½	0 1 9½
10	0 0 3	0 0 6	0 0 9	0 1 0	0 1 3	0 1 6	0 1 9	0 2 0
20	0 0 6	0 1 0	0 1 6	0 2 0	0 2 6	0 3 0	0 3 6	0 4 0
30	0 0 9	0 1 6	0 2 3	0 3 0	0 3 9	0 4 6	0 5 3	0 6 0
40	0 1 0	0 2 0	0 3 0	0 4 0	0 5 0	0 6 0	0 7 0	0 8 0
50	0 1 3	0 2 6	0 3 9	0 5 0	0 6 3	0 7 6	0 8 9	0 10 0
60	0 1 6	0 3 0	0 4 6	0 6 0	0 7 6	0 9 0	0 10 6	0 12 0
70	0 1 9	0 3 6	0 5 3	0 7 0	0 8 9	0 10 6	0 12 3	0 14 0
80	0 2 0	0 4 0	0 6 0	0 8 0	0 10 0	0 12 0	0 14 0	0 16 0
90	0 2 3	0 4 6	0 6 9	0 9 0	0 11 3	0 13 6	0 15 9	0 18 0
100	0 2 6	0 5 0	0 7 6	0 10 0	0 12 6	0 15 0	0 17 6	1 0 0
200	0 5 0	0 10 0	0 15 0	1 0 0	1 5 0	1 10 0	1 15 0	2 0 0
300	0 7 6	0 15 0	1 2 6	1 10 0	1 17 6	2 5 0	2 12 6	3 0 0
400	0 10 0	1 0 0	1 10 0	2 0 0	2 10 0	3 0 0	3 10 0	4 0 0
500	0 12 6	1 5 0	1 17 6	2 10 0	3 2 6	3 15 0	4 7 6	5 0 0
600	0 15 0	1 10 0	2 5 0	3 0 0	3 15 0	4 10 0	5 5 0	6 0 0
700	0 17 6	1 15 0	2 12 6	3 10 0	4 7 6	5 5 0	6 2 6	7 0 0
800	1 0 0	2 0 0	3 0 0	4 0 0	5 0 0	6 0 0	7 0 0	8 0 0
900	1 2 6	2 5 0	3 7 6	4 10 0	5 12 6	6 15 0	7 17 6	9 0 0
1,000	1 5 0	2 10 0	3 15 0	5 0 0	6 5 0	7 10 0	8 15 0	10 0 0
2,000	2 10 0	5 0 0	7 10 0	10 0 0	12 10 0	15 0 0	17 10 0	20 0 0
3,000	3 15 0	7 10 0	11 5 0	15 0 0	18 15 0	22 10 0	26 5 0	30 0 0
4,000	5 0 0	10 0 0	15 0 0	20 0 0	25 0 0	30 0 0	35 0 0	40 0 0
5,000	6 5 0	12 10 0	18 15 0	25 0 0	31 5 0	37 10 0	43 15 0	50 0 0
10,000	12 10 0	25 0 0	37 10 0	50 0 0	62 10 0	75 0 0	87 10 0	100 0 0

Amt.	At 1¼ per Ct.	At 2 per Ct.	At 2½ per Ct.	At 3 per Ct.	At 4 per Ct.	At 4½ per Ct.	At 5 per Ct.
£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1	0 0 3½	0 0 4½	0 0 6	0 0 7	0 0 9½	0 0 10½	0 1 0
2	0 0 7	0 0 9½	0 1 0	0 1 2½	0 1 7	0 1 9½	0 2 0
3	0 0 10½	0 1 2½	0 1 6	0 1 9½	0 2 3½	0 2 8½	0 3 0
4	0 1 2½	0 1 7	0 2 0	0 2 6	0 3 2½	0 3 7	0 4 0
5	0 1 6	0 2 0	0 2 6	0 3 0	0 4 0	0 4 6	0 5 0
6	0 1 9½	0 2 4½	0 3 0	0 3 7	0 4 9½	0 5 4½	0 6 0
7	0 2 1	0 2 9½	0 3 6	0 4 2½	0 5 7	0 6 3½	0 7 0
8	0 2 4½	0 3 2½	0 4 0	0 4 9½	0 6 4½	0 7 2½	0 8 0
9	0 2 8½	0 3 7	0 4 6	0 5 3	0 7 2½	0 8 1	0 9 0
10	0 3 0	0 4 0	0 5 0	0 6 0	0 8 0	0 9 0	0 10 0
20	0 6 0	0 8 0	0 10 0	0 12 0	0 16 0	0 18 0	1 0 0
30	0 9 0	0 10 0	0 15 0	0 18 0	1 4 0	1 7 0	1 10 0
40	0 12 0	0 16 0	1 0 0	1 4 0	1 12 0	1 16 0	2 0 0
50	0 15 0	1 0 0	1 5 0	1 10 0	2 0 0	2 5 0	2 10 0
60	0 18 0	1 4 0	1 10 0	1 16 0	2 8 0	2 14 0	3 0 0
70	1 1 0	1 8 0	1 15 0	2 2 0	2 16 0	3 3 0	3 10 0
80	1 4 0	1 12 0	2 0 0	2 8 0	3 4 0	3 12 0	4 0 0
90	1 7 0	1 16 0	2 5 0	2 14 0	3 12 0	4 1 0	4 10 0
100	1 10 0	2 0 0	2 10 0	3 0 0	4 0 0	4 10 0	5 0 0
200	3 0 0	4 0 0	5 0 0	6 0 0	8 0 0	9 0 0	10 0 0
300	4 10 0	6 0 0	7 10 0	9 0 0	12 0 0	13 10 0	15 0 0
400	6 0 0	8 0 0	10 0 0	12 0 0	16 0 0	18 0 0	20 0 0
500	7 10 0	10 0 0	12 10 0	15 0 0	20 0 0	22 10 0	25 0 0
600	9 0 0	12 0 0	15 0 0	18 0 0	24 0 0	27 0 0	30 0 0
700	10 10 0	14 0 0	17 10 0	21 0 0	28 0 0	31 10 0	35 0 0
800	12 0 0	16 0 0	20 0 0	24 0 0	32 0 0	36 0 0	40 0 0
900	13 10 0	18 0 0	22 10 0	27 0 0	36 0 0	40 10 0	45 0 0
1,000	15 0 0	20 0 0	25 0 0	30 0 0	40 0 0	45 0 0	50 0 0
2,000	30 0 0	40 0 0	50 0 0	60 0 0	80 0 0	90 0 0	100 0 0
3,000	45 0 0	60 0 0	75 0 0	90 0 0	120 0 0	135 0 0	150 0 0
4,000	60 0 0	80 0 0	100 0 0	120 0 0	160 0 0	180 0 0	200 0 0
5,000	75 0 0	100 0 0	125 0 0	150 0 0	200 0 0	225 0 0	250 0 0
10,000	150 0 0	200 0 0	250 0 0	300 0 0	400 0 0	450 0 0	500 0 0

FACTORY, in commerce, a place where merchants and factors reside, to negotiate business for themselves and their correspondents on commission. We have factories in China, Turkey, Russia, &c.

FAIRS AND MARKETS. These institutions are very closely allied. A fair, as the term is now generally understood, is only a greater species of market recurring at more distant intervals. Both are appropriated to the sale of one or more species of goods, the hiring of servants, or labourers, &c. : but fairs are, in most cases, attended by a greater concourse of people, for whose amusement various exhibitions are got up.

1. *Origin of Fairs.* — Institutions of this sort are peculiarly serviceable in the earlier stages of society, and in rude and inland countries. The number of shops, and the commodities in them, are then either comparatively limited, or they are but little frequented by dealers ; so that it is for the advantage of all, that fairs should be established, and merchants induced to attend them. For this purpose various privileges have been annexed to fairs, and numerous facilities afforded to the disposal of property in them. To give them a greater degree of solemnity, they were originally, both in the ancient and modern world, associated with religious festivals. In most places, indeed, they are still held on the same day with the wake or feast of the saint to whom the church is dedicated ; and till the practice was prohibited, it was customary, in England, to hold them in churchyards ! — (*Jacob's Law Dict.* art. *Fair.*) But since the growth of towns, and the opportunities afforded for the disposal and purchase of all sorts of produce at the weekly or monthly markets held in them, the utility of fairs, in this country at least, has very much diminished ; they have, also, lost much of their ancient splendour ; and, though some of them are still well attended, and of real use, a good number might be advantageously suppressed.

But it is far otherwise in inland countries, where the facilities for carrying on commercial transactions are comparatively circumscribed. There it is of the utmost importance, that certain convenient places and specified periods should be appointed for the bringing together of commodities and dealers. This is not only the readiest and best means of promoting commerce, but also of softening national antipathies, and diffusing a knowledge of the products, arts, and customs of other countries.

2. *Establishment of English Fairs.* — No fair can be holden without grant from the Crown, or a prescription which supposes such grant. And before a patent is granted, it is usual to have a writ of *ad quod damnum* executed and returned, that it may not be issued to the prejudice of a similar establishment already existing. The grant usually contains a clause that it shall not be to the hurt of another fair or market ; but this clause, if omitted, will be implied in law : for if the franchise occasion damage either to the king or a subject, in this or any other respect, it will be revoked ; and a person, whose ancient title is prejudiced, is entitled to have a *scire facias* in the king's name to repeal the letters patent. If his Majesty grant power to hold a fair or market in a particular place, the lieges can resort to no other, even though it be inconvenient. But if no place be appointed, the grantees may keep the fair or market where they please, or rather where they can most conveniently.

3. *Times of holding Fairs and Markets.* — These are either determined by the letters patent appointing the fair or market, or by usage. The statute 2 Edw. 3. c. 15. enacts, that the duration of the fair shall be declared at its commencement, and that it shall not be continued beyond the specified time. By statute 5 Edw. 3. c. 5. any merchant selling goods after the stipulated time is to forfeit double the value of the goods sold.

4. *Effects of Sales in Fairs and Markets.* — A *bonâ fide* sale made in a fair or open market, in general, transfers the complete property of the thing sold to the vendee ; so that, however vicious or illegal the title of the vendor may be, the vendee's is good against every one except the king. But the sale, in order to come within this rule, must take place *on the market day, and at the place assigned for the market.* The city of London is said to be a market overt every day of the week except Sunday ; every shop being a market overt for such things as the shopkeeper professes to deal in. The property of goods may, however, be changed, and effectually transferred to the buyer, by a *bonâ fide* sale in a shop out of London, whether the shopkeeper be the vendor or vendee, if the goods are of the kind in which he trades. A wharf in London is not within the custom, and is not a market overt for articles brought there. But a sale in a market will not be binding, if it be such as carries with it a presumption of fraud : as, for example, if it take place in a back room, or secret place ; if the sale be covinous, and intended to defraud the real owner ; or if the buyer know that the vendor is not the real owner of the goods, &c. It is very difficult to transfer the property of horses, even when they are sold in an open market, without the consent of the real owner. — (See HORSES.)

5. *Court of Pié Poudre.* — To every fair or market there is incident, even without any express words in the grant, a court of *pié poudre*, in allusion to the dusty feet of the suitors. The steward or mayor may preside. It has cognizance of all questions as to contracts made in the market, respecting goods *bought and delivered there*, &c. Formerly *pié poudre* courts were held at every considerable fair ; but they are now entirely laid aside.

6. *Clerk of the Market.* — Owners and governors of fairs are to take care that every thing be sold according to just weights and measures. And for that and other purposes they may appoint a clerk of the fair or market, who is to mark and allow all such weights, &c.; charging 1*d.* for sealing and marking a bushel, ½*d.* for marking a half bushel or peck, and ¼*d.* for marking a gallon, pottle, quart, pint, &c., under penalty of 5*l.* — (22 *Cha.* 2. c. 8.)

7. *Tolls.* — Being a matter of private benefit to the owners of fairs or markets, and not incident to them, tolls are not exigible unless specially granted in the patent: but the king may by a new grant authorise a reasonable toll to be taken. If the toll granted be excessive, the patent will be void. It is a general rule, unless changed by a contrary custom obtaining time out of mind, that no toll be paid for any thing brought to a fair or market, before the same is sold, and that it shall then be *paid by the buyer.*

The owner of a house next to a fair or market is not allowed to open his shop during such fair or market without paying *stallage* (toll for having a stall); on the ground that if he take the benefit of the market, he ought to pay the duties thereon. This regulation has been a good deal complained of.

The owners of fairs and markets are required by statute (2 & 3 Ph. and M. c. 7.) to appoint a person in a special open place to take the toll. The most important part of this person's duty has reference to his entering the horses sold with three distinguishing marks, and the names, &c. of those who buy and sell them. — (See Horses.)

An action lies against any one who refuses to pay the customary toll.

(For further information as to British fairs and markets, see *Chitty on Commercial Law*, vol. ii. c. 9.)

The 3 Geo. 4. c. 55. enacts, that at all fairs held within 10 miles of Temple Bar, business and amusements of all kinds shall cease at 11 o'clock in the evening, and not re-commence before 6 o'clock in the morning, under a penalty of 40*s.* to be paid by any master, mistress, or other person, having the care or management of any house, shop, room, booth, standing, tent, caravan or wagon, where any breach of this enactment shall have been committed. Power is also given by the same act to any 2 justices of the peace, within their respective jurisdictions, to put a stop to any fair which is held without charter, prescription, or lawful authority.

8. *Principal British Fairs.* — Among these may be specified Stourbridge, in Worcestershire. Bristol has two considerable fairs, one in March and one in September. Exeter December fair, for cattle, horses, and most sorts of commodities. Weyhill fair, in Hampshire (October 10.), has, probably, the greatest display of sheep of any fair in the kingdom. Bartholomew fair, in London, used to be of considerable importance, but latterly it was appropriated only to shows of wild beasts, and such like exhibitions, and has, within these few years, been very properly suppressed. St. Faith's near Norwich (October 17.), is the principal English fair for Scotch cattle. They are sold to the graziers and feeders of Norfolk, Suffolk, Essex, &c., by whom they are fattened for the London markets, where they are met with in great abundance. But besides those sold at St. Faith's, large numbers of Scotch cattle are disposed of at Market Harborough, Carlisle, Ormskirk, and other places. Ipswich has two considerable fairs: one in August, for lambs; and one in September, for butter and cheese: it is reckoned that above 100,000 lambs are annually sold at the former. Woodborough-hill, in Dorset, for west country manufactures, as kerseys, druggets, &c. Woodstock October fair, for cheese. Northampton and Nottingham have each several large fairs, for horses, cattle, cheese, &c. The August fair of Horncastle, in Lincolnshire, is the largest horse fair in the kingdom, many thousand horses being exhibited for sale during its continuance: it is resorted to by crowds of dealers from all parts of Great Britain, by several from the Continent, and sometimes even from North America. Howden, in Yorkshire, has, also, a very large horse fair, particularly for Yorkshire hunters. Devizes, in Wiltshire, has several large fairs for sheep and cattle. There is usually a large display of cheese at the Gloucester April fair. A guild, or jubilee, commencing the last week of August, is held every twentieth year at Preston, in Lancashire; the last was held in 1842, and was well attended. The October fair of Market Harborough, Leicestershire, lasts 9 days, and a great deal of business is usually done in cattle, cheese, &c. Woodbridge Lady-day fair is celebrated for the show of Suffolk horses. Falkirk fair, or tryst, is one of the most important in Scotland, for the sale of cattle and sheep. The October fair of Ballinasloe, in the county Galway, is famous for the display of cattle and sheep; by far the largest proportion of these animals raised for sale in Connaught being disposed of at it. The sheep are generally from 3 to 4, the heifers from 3 to 4, and the bullocks from 4 to 5 years of age. They are mostly lean; and are kept for a year in Leinster before they are fit for the Dublin or Liverpool markets.

We subjoin an

Account of the Number of Sheep and Cattle exhibited at the October Fairs of Ballinasloe, from 1790 to 1842, both inclusive.

Years.	Sheep, total sold and unsold.	Horned Cattle, total sold and unsold.	Years.	Sheep, total sold and unsold.	Horned Cattle, total sold and unsold.	Years.	Sheep, total sold and unsold.	Horned Cattle, total sold and unsold.
1790	61,931	8,632	1808	82,799	9,327	1826	94,405	8,240
1791	67,227	8,162	1809	76,948	8,457	1827	91,375	8,349
1792	68,031	7,529	1810	91,001	7,958	1828	97,384	11,513
1793	68,384	7,816	1811	86,489	7,462	1829	86,119	9,343
1794	67,475	7,337	1812	85,529	9,988	1830	81,556	7,476
1795	68,247	7,996	1813	77,088	9,268	1831	69,176	7,869
1796	70,551	6,289	1814	80,280	9,611	1832	65,054	8,128
1797	71,248	6,200	1815	94,764	8,149	1833	56,412	8,761
1798	74,151	7,631	1816	78,553	8,183	1834	66,714	9,637
1799	77,937	9,957	1817	70,399	6,802	1835	62,431	8,584
1800	70,386	7,749	1818	70,877	9,610	1836	63,638	9,483
1801	79,252	9,713	1819	78,222	9,758	1837	69,336	9,137
1802	81,498	9,744	1820	80,776	8,505	1838	92,269	14,143
1803	87,682	6,664	1821	83,400	7,284	1839	96,231	11,750
1804	87,464	8,801	1822	90,177	9,017	1840	91,282	12,208
1805	84,354	10,104	1823	95,999	10,909	1841	77,189	14,164
1806	87,393	12,190	1824	84,234	10,505	1842	76,815	14,364
1807	80,962	8,568	1825	90,265	10,266			

9. *Principal French Fairs.* — Among these may be specified the fairs of St. Germain's, Lyons, Rheims, Chartres, Rouen, Bordeaux, Troyes, and Bayonne; but they are much fallen off.

The most important of the modern French fairs is that of Beaucaire, on the right bank of the Rhone opposite to Tarrascon, 14 miles E. Nismes. It is very favourably situated for an entrepôt, being, exclusive of the command of internal navigation afforded by the Rhone, connected by canals with the sea and the *Canal du Midi*. The fair, which commences on the 22d and finishes on the 28th of July, was formerly the greatest in Europe, and, though a good deal fallen off, it is still attended by a vast concourse of people, not from France only, but also from Switzerland, Germany, Italy, Spain, and the Levant. Almost every sort of article, whether of convenience or luxury, may then be met with in the town. It is said that the number of visitors still amounts to from 70,000 to 80,000, and the amount of business done to 150,000,000 fr.; but we incline to think that these estimates, especially the first, is very greatly exaggerated, and that it would be nearer the mark were it reduced a half. All bills due at this fair are presented on the 27th, and protested on the 28th. A tribunal instituted for the purpose takes cognizance of and immediately settles all disputes growing out of transactions that take place at the fair. A military force attends to preserve order, and the prefect of the department, who is always present, entertains the principal merchants and strangers. — (See *Geographical Dictionary*, art. *Beaucaire*, and the authorities there referred to.)

10. *German Fairs.*— The principal German, or rather European, fairs, are those of Frankfort on the Maine, Frankfort on the Oder, and Leipsic. The concourse of merchants, and the business done at these fairs, are generally very great. They are copiously supplied with the cotton stuffs, twist, cloths, and hardware of England; the silks and jewellery of France; the printed cottons of Switzerland and Austria; the raw, manufactured, and literary products of Germany; the furs of the North; Turkey carpets; Cachemere shawls, &c.; and there, also, are to be found merchants of all countries, those of Ispahan negotiating with those of Montreal for the purchase of furs; and Georgians and Servians supplying themselves with the cottons of Manchester and the jewellery of Paris. There, in fact, are met the representatives, as it were, of every people in the world, labouring, though without intending it, to promote each other's interest, and to extend and strengthen those ties that bind together the great family of the human race.

The fairs at Frankfort on the Maine should begin, the first on Easter Tuesday, and the second on the Monday nearest to the 8th of September. Their duration is limited to 3 weeks; but they usually begin from 8 to 15 days before their legal commencement. Accounts are kept in rixdollars: 1 rixdollar of account = 1½ florin, or 4½ copsticks, or 22½ batzen. The rixdollar = 3*s.* 1·8*d.*; so that the par of exchange is 141 batzen per 1*l.* sterling. 100 lbs. common Frankfort weight = 103 lbs. avoirdupois. The foot = 11·27 English inches.

The fairs at Frankfort on the Oder are 3 in number: viz. *Reminiscere*, in February or March; *St. Margaret*, in July; and *St. Martin*, in November. They ought, strictly speaking, to terminate in 8 days, but they usually extend to 15. The Prussian government gives every facility to those who attend these fairs. Accounts are kept in Prussian money, that is, in rixdollars of 2*s.* 11¼*d.* 100 lbs. Prussian = 103 lbs. avoirdupois. The foot = 12·356 English inches.

The fairs of Leipsic are still more celebrated than those of either Frankfort. They are held thrice a year, — on the 1st of January, at Easter, and at Michaelmas. The first is the least important. The Easter and Michaelmas fairs are famous, particularly the former, for the vast number of new publications usually offered for sale. They are

attended by all the principal booksellers of Germany, and by many from the adjoining countries, who adjust their accounts, learn the state of the trade in all parts of the world, and endeavour to form new connections. Most German publishers have agents in Leipsic; which is to the literature of Germany, what London is to that of Great Britain. As many as 4,500 new publications have been in a single Leipsic catalogue! They are also great markets for Saxon woollens and other goods, British calicos, French silks, and, in fact, for most descriptions of produce. The fairs ought to close in 8 days, but they usually continue for about 3 weeks. No days of grace are allowed. The holder of a bill must demand payment on the day it becomes due; and, if not paid, he must have it protested on that very day, and returned by the first opportunity. If he neglect any of these regulations, he loses all right of recourse upon the drawer and indorsers. Money of account at Leipsic same as at Frankfort on the Maine. 100 lbs. Leipsic = 103 lbs. avoirdupois. The foot = 11·11 English inches. — (*Kelly's Cambist; Manuel de Nelkenbrecher; Bowring's Report on the Prussian Commercial Union*, pp. 255—269, &c.

Dr. Bright gives, in his *Travels in Hungary* (pp. 201—223.), an interesting account of the fairs held at Debretzin and Pesth. The latter has become the grand centre of Hungarian commerce; most part of which is conducted at its fairs.

11. *Italian Fairs.* — Of these, the most celebrated is that of Sinigaglia, a small but handsome town of the Papal dominions, on the Misa, near its confluence with the Adriatic. The fair commences on the 20th of July, and should terminate on the last day of that month, but it usually continues 8 or 10 days longer. The duties on goods brought to the fair are extremely moderate, and every thing is done to promote the convenience of those frequenting it. All sorts of cotton, woollen, and silk goods, colonial produce, iron and steel, hardware, jewellery, brandy and liqueurs, timber, drugs, spices, &c. are brought here by the English, French, Austrians, Swiss, &c. These are exchanged for the various raw and manufactured products of Italy and the Levant; consisting, among others, of raw, thrown, and wrought silks; oil, fruits, cheese, alum, soda, sumach, sulphur, &c. The value of the imports for the fair of 1841 was estimated at about 1,700,000*l.* Accounts are kept in scudi of 20 soldi; the scudo = 4*s.* 4*d.* very nearly. 100 lbs. Sinigaglia = 73¾ avoirdupois. The ell or braccio measures 25·33 English inches. — (*Manuel de Nelkenbrecher; Macgregor's Tariffs, Italy*, p. 121.)

12. *Russian Fairs.*—These are numerous, and many of them are well attended. The most important is held at Nijnii-Novgorod, at the confluence of the Oka with the Wolga, lat. 56° 19′ 40″ N. lon. 44° 28′ 30″ E. Previously to 1817 this fair was held in a less convenient situation, at Makarieff, lower down the Wolga. But the buildings for the accommodation of the merchants at the latter having been accidentally burnt down in 1816, government took advantage of the circumstance to remove the fair to Nijnii. It is principally carried on within the new bazaars constructed for that purpose on the left bank of the Oka. These, which are divided into parallel rows or streets, are constructed of stone walls roofed with iron, having covered galleries in front supported by iron pillars. They are built on piles, and, to guard against inundations, the ground on which they stand has been raised about 20 feet. Being enclosed on 3 sides by canals, and on the 4th by a navigable inlet of the Oka, there is every facility for the delivery and shipment of goods. The establishment is of great extent, comprising 2,524 booths, and is admitted on all hands to be at once the largest and most perfect of its kind that is anywhere to be met with. But, in addition to the above, no fewer than 2,506 shops and booths, belonging to private parties, and constructed of wood, were occupied during the fair of 1841. The fair begins on the 1st of July and continues for a month or 6 weeks

The value of the different Russian products offered for sale and sold in 1841 is stated to have been as follows:—

	Offered for Sale.	
	Silver roubles.	*Silver roubles.*
Cottons	7,536,665	5,947,865
Woollen stuffs	3,448,295	2,620,175
Linens	3,126,736	2,375,736
Silks	3,220,489	2,239,989
Skins	1,996,273	1,498,[illegible]
Hides, raw and tanned	1,045,583	876,083
Metals and works in metal	7,560,330	6,450,330
Porcelain, earthenware, &c.	398,860	336,860
Dried fish, caviar, fish oil, &c.	513,778	473,278
Corn and flour	2,850,750	1,645,750
Wine, mead, &c.	866,786	781,386
Refined sugar, wax, paper, bristles, &c.	4,730,148	4,516,748
	37,132,693	29,762,473 *

The value of the merchandise offered for sale and sold at this fair in the undermentioned years, is stated, in the official returns, to have been as follows: —

* One silver rouble is equal to 3½ paper roubles, and is worth about 3*s.* 2*d.*

Years.	Merchandise offered for Sale.	Merchandise sold.
	Paper roubles.	*Paper roubles.*
1837	146,638,181	125,567,881
1838	156,199,500	129,231,500
1839	161,645,674	137,700,774
1840	165,427,384	135,901,454
1841	176,773,141	145,964,826

Tea, brought from Kiachta, is an important article at the Novgorod fairs. Previously to 1840 the quantity of tea sold at any single fair did not exceed 38,000 chests; but in 1840 and 1841 the quantities, exclusive of about 5,500 chests of coarse or Tartar tea, exceeded 50,000 chests each year, its value in 1841 having been estimated at 7,107,500 silver roubles. The total value of the various articles of Asiatic (including Chinese) produce exposed for sale at Novgorod in 1841 amounted to 9,146,719 silver roubles, being more than double the value of the products of Western Europe exposed in the same year. Of the latter, indigo, wine, and cottons were the principal articles.—(*Journal des Manufactures, Petersburg*, 1842.) The stationary population of the town, which may amount to about 25,000, is, during the fair, said to amount to from 130,000 to 160,000, including Chinese, Persians, Armenians, Tartars, Bokharians, &c. Theatrical exhibitions, shows of wild beasts, and other Bartholomew fair exhibitions, add to the attractions of the scene.

Another celebrated Russian fair is held, in the month of December, at Kiachta, in Mongolia, on the Chinese frontier, lat. 50° 21′ 5″ N., lon. 106° 28′ 15″ E. The town is small, the population not exceeding 4,000 or 5,000; but by far the largest part of the commerce between the Russian and Chinese empires is transacted at its fair, and it is also the centre of the political intercourse between them. The commodities brought by the Russians consist principally of Russian and German broad cloths, furs, sheep and lamb skins, leather, coarse linens, worsted stuffs, cattle, &c., with, for the most part, bullion. These they exchange with the Chinese for tea, raw and manufactured silk, nankeens, porcelain, sugar candy, rhubarb, tobacco, musk, &c., the value of the articles other than tea being, however, quite inconsiderable. The quantity of tea purchased at the Kiachta fairs by the Russians, which has latterly increased very considerably, amounted, in 1841, according to the official returns, to 242,608 poods, or 8,733,888 lbs., valued at 7,313,325 silver roubles. It consists principally of the fine and costly species of tea called pekoe; and in the above year, its estimated cost price, taking the rouble at 3*s.* 2*d.*, must have been as high as 2*s.* 7¾*d.* per lb. But, exclusive of this, the Russians buy large quantities of a coarser species of tea, called break or Tartar tea, which, though not thought worth the trouble of putting into packages, is largely consumed by the nomadic Tartars and Siberians. According to the same accounts, the total value of the exports to China, which pass almost wholly through Kiachta, in 1841, amounted to 7,671,118 silver roubles, and that of the imports to 7,687,576 do. The Russian trade is in the hands of a comparatively small number of merchants, some of whom are very rich; that of the Chinese is much more diffused. Commodities may be conveyed from Kiachta to European Russia either by land or by water. In the former case, the journey takes a year; in the latter, it takes 3 years, or rather 3 very short summers; the rivers being for the most part of the year frozen over. —(*Schnitzler, Statistique Générale de l'Empire de la Russie*, p. 143.; *Official Statement of the Trade of the Russian Empire in* 1841, *&c.*)

13. *Eastern Fairs.*—The most important fair in the Eastern world is that held at Mecca, during the resort of pilgrims in the month of Dhalhajja. It used to be frequented by many thousands of individuals of all ranks and orders, brought together from the remotest corners of the Mohammedan world; and though the numbers attending it have declined of late years, the concourse is still very great. — (See CARAVAN.)

Hurdwar, in Hindostan, in lat. 29° 57′ N., lon. 78° 2′ E., 117 miles N. E. from Delhi, is famous from its being one of the principal places of Hindoo pilgrimage, and the greatest fair in India. The town, which is but inconsiderable, is situated on the Ganges, at the point where that sacred stream issues from the mountains. The pilgrimage and fair are held together at the vernal equinox; and Europeans, nowise addicted to exaggeration, who have been repeatedly present on these occasions, estimate that from 200,000 to 300,000 strangers are then assembled in the town and its vicinity. But every twelfth year is reckoned peculiarly holy; and then it is supposed that from 1,000,000 to 1,500,000, and even 2,000,000 pilgrims and dealers are congregated together from all parts of India and the countries to the north. In 1819, which happened to be a twelfth year, when the auspicious moment for bathing in the Ganges was announced to the impatient devotees, the rush was so tremendous that no fewer than 430 persons were either trampled to death under foot, or drowned in the river! The foreigners resorting to Hurdwar fair for commercial purposes only, consist principally of natives of Nepaul, the Punjab, and Peshwaur, with Afghans, Usbeck Tartars, &c. They import vast numbers of horses, cattle, and camels; Persian dried fruits, shawls, drugs, &c.: the returns are made in cotton piece goods, indigo, sugar, spices, and other tropical productions.

The merchants never mention the price of their goods, but conduct the bargain by touching the different joints of their fingers, to hinder the bystanders gaining any information. During the Mahratta sway, a kind of poll-tax and duties on cattle were levied; but all is now free, without impost or molestation of any sort. Owing, also, to the precautions adopted by the British government, the most perfect order is preserved; much to the surprise and satisfaction of the natives; for, antecedent to our occupation of the country, the fairs usually ended in disorder and bloodshed.—(*Private information*, and the excellent account of *Hurdwar* in *Hamilton's Gazetteer*.

The fairs of Portobello, Vera Cruz, and Acapulco, once so famous, are now totally deserted; that of the Havannah is also much fallen off.

FATHOM, a measure of length, 6 feet, chiefly used for measuring the length of cordage, and the depth of water and mines.

FEATHERS, BED-FEATHERS (Fr. *Plumes, Plumes à lit*; Ger. *Federn, Bettfedern*; Du. *Bedveern, Pluimen*; It. *Piume*; Sp. *Plumas*), make a considerable article of commerce; particularly those of the ostrich, heron, swan, peacock, goose, and other poultry; for plumes, ornaments of the head, filling of beds, quilts, &c. The coarsest part of the ostrich plumage is generally denominated *hair*, to which it bears a resemblance, and is used in the manufacture of hats. Many parts of Great Britain supply feathers for beds, and an inferior sort is brought from Ireland. Eider down is imported from the north of Europe; the ducks that supply it being inhabitants of Greenland, Iceland, and Norway. The eider duck breeds in the islands on the west of Scotland, but not in sufficient numbers to form a profitable branch of trade to the inhabitants. Hudson's Bay furnishes very fine feathers. The down of the swan is brought from Dantzic, as well as large quantities of superior feathers.

The bed-feathers imported in 1842 produced 776*l.* of duty; the duty on ostrich feathers during the same year being 83*l.* 9*s.* 9*d.*

FIDDLES, or VIOLINS (Ger. *Violinen, Geigen*; Du. *Vioolen*; Fr. *Violons*; It. *Violini*; Sp. *Violines*; Rus. *Skripizii*), musical instruments, too well known to need any particular description. The finest-toned violins are those made in Italy; they are usually called Cremonas, from the name of the town where they were formerly manufactured in the highest perfection: 50 or 60 guineas have not unfrequently been given for a Cremona violin.

FIGS (Ger. *Feigen*; Du. *Vygen*; Fr. *Figues*; It. *Fichi*; Sp. *Higos*; Lat. *Fici, Caricæ*; Arab. *Teen*), the fruit of the fig tree (*Ficus carica*), a native of Asia, but early introduced into Europe. It flourishes in Turkey, Greece, France, Spain, Italy, and Northern Africa, and even sometimes ripens its fruit in the open air in this country. Figs, when ripe, are, for the most part, dried in ovens to preserve them; and then packed very closely in the small chests and baskets in which we import them. The best come from Turkey; those of Kalamata, in the Morea, are said to be the most luscious.—(*Thomson's Dispensatory.*)

Dried figs form a very considerable article of commerce in Provence, Italy, and Spain; besides affording, as in the East, a principal article of sustenance for the population. In Spain, figs are chiefly exported from Andalusia and Valencia; but they are more or less abundant in every province. In the northern parts of France there are many fig gardens, particularly at Argenteuil.

Account of the Quantities of Figs entered for Consumption, and of the Produce of the Duties thereon, in 1840, 1841, and 1842

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	1842.
Cwt. Qrs. Lbs.	*Cwt. Qrs. Lbs.*	*Cwt. Qrs. Lbs.*	£ *s. d.*	£ *s. d.*	£ *s. d.*
29,951 0 15	29,077 3 14	22,938 0 3	20,798 6 2	22,918 2 3	18,064 2 4

Of 30,063 cwts. of figs, imported in 1840, 17,863 cwts. were brought from Turkey, 4,351 do. from Portugal, 3,885 do. from Spain, 2,200 do. from Italy, and 1,035 from the Morea. The duty on figs was reduced in 1842 from 21*s.* 6*d.* to 15*s.* a cwt.—(*Decennial Returns by Board of Trade*; *Parl. Paper* No. 45. Sess. 1843.)

No abatement of duty is made on account of any damage received by figs.

FILE, FILES (Da. *File*; Du. *Vylen*; Fr. *Limes*; Ger. *Feilen*; It. *Lime*), an instrument of iron or forged steel, cut in little furrows, used to polish or smooth metals, timber, and other hard bodies.

FIR. See PINE.

FIRE-ARMS. Under this designation is comprised all sorts of guns, fowling-pieces, blunderbusses, pistols, &c. The manufacture of these weapons is of considerable importance; employing at all times, but especially during war, a large number of persons.

In consequence of the frequent occurrence of accidents from the bursting of insufficient barrels, the legislature has most properly interfered, not to regulate their manufacture, but to prevent all persons from using or selling barrels that have not been regularly *proved* in a public proof-house. The first act for this purpose was passed in 1813; but it was soon after superseded by a fuller and more complete one, the 55 Geo. 3. c. 59. This statute imposes a fine of 20*l.* on any person *using*, in any of the progressive stages

of its manufacture, any barrel not duly proved; on any person *delivering* the same, except through a proof-house; and on any person *receiving*, for the purpose of making guns, &c., any barrels which have not passed through a proof-house. These penalties to be levied on conviction before 2 justices: with like penalties, to be similarly levied, on persons counterfeiting the *proof-marks*.

FIRE-WORKS. By 9 & 10 Will. 3., all sorts of fire-works are declared to be a common nuisance: and the *making, causing to be made, giving, selling*, or *offering* for sale, any squibs, rockets, serpents, or *other fireworks*, or any cases or implements for making the same, is made subject to a penalty of *5l.*, to be recovered on conviction before a justice of the peace. Casting or firing any such fire-works, or permitting the same to be cast or fired, *from* any house or place, and casting or firing the same *into* any house, shop, street, highway, or river, is subjected to a penalty of 20*s.*, to be recovered in like manner; and if not immediately paid, the party to be imprisoned and kept to hard labour for any time not exceeding a month. But the statute provides, that it shall be lawful for the master, lieutenant, or commissioners of his Majesty's ordnance, or those authorised by them, to give orders for making any fire-works, to be used according to such orders.

FIRKIN, a measure of capacity, equal to 9 ale gallons, or 7½ Imperial gallons, or 2,538 cubic inches. —(See WEIGHTS AND MEASURES.)

FIRLOT, a dry measure used in Scotland. The Linlithgow wheat firlot is to the Imperial bushel as ·998 to 1; and the Linlithgow barley firlot is to the Imperial bushel as 1·456 is to 1. —(See WEIGHTS AND MEASURES.)

FISH (Ger. *Fische*; Du. *Visschen*; Da. and Sw. *Fisk*; Fr. *Poissons*; It. *Pesci*; Sp. *Pescados*; Port. *Peixes*; Rus. *Rüb*; Pol. *Rybi*; Lat. *Pisces*), a term used in natural history to denote every variety of animal inhabiting seas, rivers, lakes, ponds, &c. that cannot exist for any considerable time out of the water. But in a commercial point of view, those fishes only are referred to, that are caught by man, and used either as food or for some other useful purpose. Of these, herring, salmon, cod, pilchard, mackarel, turbot, lobster, oyster, whale, &c. are among the most important. —(See the different articles under these titles.)

The supply of fish in the seas round Britain is most abunaant, or rather quite inexhaustible. "The coasts of Great Britain," says Sir John Boroughs, "doe yield such a continued sea harvest of gain and benefit to all those that with diligence doe labour in the same, that no time or season of the yeare passeth away without some apparent meanes of profitable employment, especially to such as apply themselves to fishing; which, from the beginning of the year unto the latter end, continueth upon some part or other upon our coastes; and these in such infinite shoales and multitudes of fishes are offered to the takers, as may justly move admiration, not only to strangers, but to those that daily are employed amongst them."—"That this harvest," says Mr. Barrow, "ripe for gathering at all seasons of the year — without the labour of tillage, without expense of seed or manure, without the payment of rent or taxes — is inexhaustible, the extraordinary fecundity of the most valuable kinds of fish would alone afford abundant proof. To enumerate the thousands, and even millions of eggs, which are impregnated in the herring, the cod, the ling, and indeed in almost the whole of the esculent fish, would give but an inadequate idea of the prodigious multitudes in which they flock to our shores; the shoals themselves must be seen, in order to convey to the mind any just notion of their aggregate mass."—(For an account of the shoals of herrings, see HERRING.)

But, notwithstanding these statements, there has been, for these some years past, a growing complaint of a scarcity of such fish as breed in the channel; and it is affirmed, in the report of the Commons' committee of 1833, on the Channel fisheries, that the fact of such scarcity existing has been completely established. The committee ascribe it to various causes, but principally to the destruction of the spawn or brood of fish, by fishing with trawl or drag nets with small meshes, near the shore, during the breeding season; a practice prohibited by several statutes, which seem, however, to have fallen into disuse. The committee represent the fishermen as being generally in a very depressed state, and that the business is, for the most part, very unprofitable. We believe that this is the fact; but we do not know any period when the same might not have been said with quite as much truth as at present. Smith has remarked, that from the age of Theocritus downwards, fishermen have been proverbially poor—(*Wealth of Nations*, p. 45.); and a library might be filled with the acts, reports, plans, tracts, &c. that have been printed in this country during the last 2 centuries, containing regulations, schemes, suggestions, &c. for the improvement of fisheries and fishermen. But it is not too much to say, that not one of these well-meant endeavours, notwithstanding the enormous expense incurred in carrying some of them into effect, has been productive of any material advantage! and we see no reason to think that the suggestions of the late committee, supposing they were to be acted upon, would have any better success.

The injury done to the breeding grounds might, perhaps, be obviated; but besides this, the committee laid much stress on the encroachments of the French and other

foreign fishermen, and on the licence given to import foreign-caught turbot, &c. duty free! We confess, it appears to us quite visionary to suppose that these circumstances could have much influence. Our fishermen, living upon the very shores of the bays to which the French are said to resort, have advantages on their side sufficient, surely, to insure them a superiority, without the forcible expulsion, supposing that could be accomplished, of their foreign competitors. A man who does not succeed in a business carried on at his own door so well as one who resides 100 miles off, must look for the cause in his want of skill or industry; and should seek rather to improve himself than to discard his rival. The proposition for excluding turbot, &c. of foreign catch, is one that ought not to be listened to for a single moment. Such exclusion could not be of the slightest advantage to the British fishermen, unless it occasioned a rise in the price of the fish; and we need not say, that if the legislature interfere at all in the matter, it should have for its object the lowering, not the raising of prices. We are glad, however, to have to state that a convention for fixing the limits of the oyster and other fisheries on the coasts of the U. Kingdom and of France, was signed at Paris on the 2d of August, 1839.

All that it is possible to do for the fishery, by relieving it from tithes and other burdens, and facilitating the disposal of the fish in the markets of this and other countries, should be done; but, except in so far as its interests may be promoted in this way, and, perhaps, by some new regulations for preserving the brood, we do not see what more is to be done by legislative interference. It will be seen, in our articles on the herring and whale fisheries, that the bounty system was attended with vast expense, without leading to any useful result.

Except in London and a few sea-port towns, the consumption of fish in England is not great. The price in the metropolis, though it has been a good deal reduced of late years, is still very high. This has been pretty generally believed to be in no small degree owing to the salesmen of Billingsgate market being able, in a great measure, to regulate both the supply of the article and its price. The committee of 1833, however, declare, that though they minutely examined the subject, it did not appear that any improper monopoly or injurious regulations subsisted either in the mode of supplying the market, or in the sale of the fish. Had any such existed, the establishment of Hungerford market would have tended materially to counteract their influence.

Sir John Barrow, in a valuable article on the fisheries, in the *Encyclopedia Britannica*, has estimated the value of the entire annual produce of the foreign and domestic fisheries of Great Britain at 8,300,000*l*. But it is admitted by every one who knows any thing of the subject, that this estimate is very greatly exaggerated. We doubt much, whether the entire value of the fisheries can be reckoned so high as 4,500,000*l*.

Regulations as to Importation. — Fish of foreign taking, except anchovies, eels, turbots, and lobsters, may not be imported into the U. Kingdom in fishing vessels, or in any other vessels not regularly cleared out from some foreign port. — (5 & 6 *Vict.* c. 47. § 4.)

FLAX (Ger. *Flachs*; Du. *Vlasch*; Fr. *Lin*; It. and Sp. *Lino*; Rus. *Len*, *Lon*; Pol. *Len*; Lat. *Linum*), an important plant (*Linum usitatissimum*) that has been cultivated from the earliest ages in Great Britain and many other countries; its fibres being manufactured into thread, and its seed crushed for oil. Generally, however, we have been in the habit of importing a large proportion of our supplies. The premiums given by the legislature to force the cultivation of flax have had very little effect; the fact being, as Mr. Loudon has stated, that its culture is found to be, on the whole, less profitable than that of corn. When allowed to ripen its seed, it is one of the most severe crops.

Russia supplies by far the largest portion of the flax imported into this country, the principal sorts being Petersburg, Narva, Riga, Revel, Pernau, Liebau, Memel, and Oberland. Petersburg and Narva flax are nearly of the same quality, the latter being but little inferior to the former. Both sorts come to us in bundles of 12, 9, and 6 heads. The Riga flax seems to deserve the preference of any imported from the Baltic. It is the growth of the provinces of Marienburg, Druania, Thiesenhausen, and Lithuania.

The best Marienburg is called simply Marienburg (M), or Marienburg clean; the second quality, cut (GM); and the third, *visten dreyband* (RD): of the three other provinces, the first quality bears the name of *rakitzer*; — as *Druania rakitzer* (DR), *Thiesenhausen rakitzer* (TR), and *Lithuania rakitzer* (LR). The cut flax of these three provinces is the second quality: and to the third quality belong the *badstub* and *badstub cut* (B and BG); the *paternoster* (PN); and *hafs three band* (HB). *Badstub* and *paternoster* are the refuse of the *rakitzer* flax, and the *three band* again the refuse of the former sorts, and consequently very ordinary. The Revel and Pernau consists of Marienburg, *cut*, *visten*, *hafs three band*, and *three band*. The Liebau and Memel growths are distinguished by the denomination of *four* and *three band*. These two sorts, as well as the Oberland flax, come from Königsberg, Elbing, &c., and are little esteemed in the British markets.

Flanders or Dutch flax is well dressed, and of the finest quality.

Flax is extensively cultivated in Egypt. Of late years, some of the Italian ports, which used to be supplied from Russia, have been fully supplied on low terms from Alexandria.

The *Phormium tenax*, or New Zealand flax, has been said to exceed every other species in strength of fibre and whiteness; qualities which (if it really possess them in the degree stated) must make it peculiarly well fitted for being made into canvas and cordage. In point of fact, however, there is a great diversity of opinion as to its real merits, and it fetches at present but a low price. In 1831 and 1832 the imports of New Zealand flax amounted respectively to 15,325 and 15,867 cwts.; but they fell off in 1835 to 7,812 cwts., and since then none has been imported. It is alleged that this is a consequence of the imperfect preparation of the flax, which has hitherto been entirely intrusted to the native women. But without presuming to say whether the defects with which it is charged be inherent in the flax itself, or depend on its preparation, it is abundantly certain that, unless it be furnished of a superior quality, it will not suit our markets.

When flax is brought to the principal Russian ports whence it is shipped, it is classified according to its qualities, and made up in bundles by sworn inspectors (*brackers*) appointed by government for the assortment of that and all other merchandise. These functionaries are said to perform their task with laudable impartiality and exactness. A ticket is attached to every bundle of assorted flax, containing the names of the inspector and owner, the sort of flax, and the period when it was selected or inspected. — (See HEMP.) Good flax should be of a fine bright colour, well separated from the tow, codilla, or coarser portion of the plant; and of a long, fine, and strong fibre. In purchasing flax, it is usual to employ agents wholly devoted to this peculiar business.

Account of the Quantities of Flax and Tow imported into the United Kingdom during the 7 Years from 1835 to 1841 inclusive, distinguishing the Countries whence they were imported, and the Quantities brought from each.

	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
Russia	438,483	1,037,021	682,025	1,089,559	705,708	870,401	969,455
Prussia	84,587	180,291	20,709	131,745	89,454	135,590	110,665
Holland	104,434	155,016	134,916	191,602	160,487	113,108	120,085
Belgium	72,731	119,259	118,298	153,423	180,531	80,748	97,216
France	16,192	26,119	39,557	53,493	78,607	43,295	29,559
All other countries	24,388	11,410	5,360	6,454	8,913	10,098	19,863
Totals	740,815	1,529,116	1,000,865	1,626,276	1,223,700	1,253,240	1,346,843

Account of the Quantities of Flax entered for Consumption, and of the Produce of the Duties thereon, in 1840, 1841 and 1842.

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	1842.
Cwts.	*Cwts.*	*Cwts.*	£ s. d.	£ s. d.	£ s. d.
1,260,459	1,353,631	1,148,616½	5,521 13 2	5,972 19 8	5,064 5 5

The duty on flax is only 1*d.* a cwt.

Flax, the produce or manufacture of Europe, not to be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or of the country from which it is imported, on pain of forfeiture of the goods and 100*l.* by the master of the ship.—(3 & 4 *Will.* 4. c. 54.)

We subjoin an account of the charges on the importation of the different sorts of flax from Petersburg and Riga.

Charges at Petersburg on 12 Head Flax, per ton.

Circa, 16 bobbins = 63 poods = 1 ton.

	Pap. rou. cop.
Duty, 540 cop. per bercovitz	34 2
Quarantine duty, 1 per cent.	0 34
Additional duty, 10 per cent.	3 40
	R. 37 76
Custom-house charges, 4 per cent.	1 51
Receiving and weighing, 40 cop. per bobbin	6 40
Bracking, 1 roub. per bercovitz	6 30
Binding, 75 cop. per ditto	4 72
Lighterage and attendance to Cronstadt, 8 roub. per 60 poods	8 40
Mats	8 0
Brokerage, 60 cop. per ton	0 60
Fixed charges	*R.* 73 69

Brokerage, ½ per cent.
Commission and extra charges, 3 per cent.
Stamps, ½ per cent.
Brokerage on bills, ½ per cent. } ½ per cent.
are charges varying according to the price paid.

Riga flax is bought at so much the shippound. 6 shippound = 1 ton.

The charges of importation are the same, or nearly so, as on Petersburg flax.

Charges here, per ton, taking the price at 45*l.*

	£ s. d.
Insurance, 12*s.* 6*d.* per cent. and policy, during the summer, for best risks	0 6 9
Sound dues	0 5 6
Freight, say 5*l.* 6*d.* per ton in full	2 12 6
Customs	0 1 8
Landing charges	1 11 0
Discount, 3½ per cent. (being sold at 9 months' credit)	1 13 9
Brokerage, ½ per cent.	0 4 6
	£5 15 8
Loss by tare, 2 per cent.	0 18 0
	£6 13 8

9 Head Flax.

26 bobbins = 63 poods = 1 ton. *Rou. cop.*

Fixed charges at Petersburg amount to — 80 36

The other charges same as on 12 head; the charges of import may be called the same as on 12 head also, the difference being only on the value; which makes the insurance, discount, and brokerage, of less amount. The increase of fixed charges at Petersburg is owing to the larger number of bobbins to the ton.

6 Head Flax.

47 bobbins = 63 poods = 1 ton. *Rou. cop.*

Fixed charges, per ton — 91 52

Other charges, *vide suprà.*

FLAX-SEED, or LINSEED (Fr. *Lin, Graine de Lin*; Ger. *Leinsaat*; Du. *Lynzaad*; It. *Linseme*; Sp. *Linaza*; Port. *Linhaca*; Pol. *Siemie, Iniane*; Rus. *Semja lenjanoe*; Lat. *Lini semen*), the seed of flax. It contains a great deal of oil, which it yields by expression; and is cultivated either that it may be used in sowing, or sent to the crushing mills to be converted into oil.

As the quality of the crop depends much on the seed employed, a good deal of care is requisite in selecting the best. Generally speaking, it should be chosen of a bright, brownish colour, oily to the feel, heavy, and quite fresh. Dutch seed is in the highest estimation for sowing; it not only ripens sooner than any other that is imported, but produces larger crops, and of the quality that best suits our principal manufactures. American seed produces fine flax, but the produce is not so large as from Dutch seed. British flax seed is sometimes used instead of Dutch; but the risk of the crop misgiving is so much greater, "that those only who are ignorant of the consequences, or who are compelled from necessity, are chargeable with this act of ill-judged parsimony."—(*Loudon's Ency. of Agriculture.*) Crushing seed is principally imported from Russia, but considerable quantities are also brought from India, Italy, and Egypt.

Account of the Quantities of Flaxseed or Linseed imported into the United Kingdom during the 7 Years from 1835 to 1841 inclusive, distinguishing the Countries whence they were imported, and the Quantities brought from each.

	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Russia	1,534,075	2,109,530	2,432,654	2,586,523	3,367,456	2,567,316	2,225,543
Sweden	42,897	58,819	23,183	37,084	32,703	23,605	22,806
Denmark	19,061	48,385	41,523	18,315	14,287	13,692	17,334
Prussia	133,327	495,781	297,459	165,716	236,532	338,070	301,119
Germany	30,588	67,100	55,715	14,843	10,767	30,349	6,398
Holland	87,172	103,487	42,342	45,630	55,126	66,747	42,344
Belgium	112	175	8	3,525	2,480	40,419	8
France	-	10	2	840	756	13,643	12
Italy, and the Italian Islands	35,182	12,027	171,937	209,174	146,759	161,406	49,851
Turkey	111	40,061	62,866	92,297	48,970	16,408	287
East India Company's territories, and Ceylon	127,416	275,168	126,532	78,572	163,958	207,869	199,322
United States of America	194,226	123,572	36,827	42,070	49,357	73,308	29,545
All other countries	2,583	5,169	30,041	10,280	21,896	2,256	13,156
Totals	2,206,748	3,339,215	3,321,089	3,304,869	4,151,047	3,558,070	2,907,685

Account of the Quantities of Flaxseed or Linseed entered for Consumption, and of the Produce of the Duties thereon, in 1840, 1841, and 1842.

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	1842.
Qrs. Bush	*Qrs. Bush.*	*Qrs. Bush.*	£ s. d.	£ s. d.	£ s. d.
411,862 0	339,9[illegible] 1	359,241 4	21,318 8 9	17,826 2 11	5,220 8 7

The duty is 1*d.* a quarter; and the price, in January, 1843, varied from 43*s.* to 50*s.* a quarter.

FLOTSAM, JETSAM, AND LAGAN. In order to constitute a legal wreck, the goods must come to land. If they continue at sea, the law distinguishes them by the foregoing uncouth and barbarous appellations: *flotsam* is when the goods continue swimming on the surface of the waves; *jetsam* is when they are sunk under the surface of the water; and *lagan* is when they are sunk, but tied to a cork or buoy to be found again.—(*Blackstone*, book i. c. 8.) Foreign liquors, brought or coming into Great Britain or Ireland, as derelict, flotsam, &c., are to pay the same duties and receive the same drawbacks as similar liquors regularly imported.

FLOUR (Ger. *Feines mehl, Semmelmehl;* Du. *Bloem;* Fr. *Fleur de Farine*; It. *Fiore;* Sp. *Flor*), the meal of wheat corn, finely ground and sifted. There are three qualities of flour, denominated *firsts, seconds,* and *thirds,* of which the first is the purest.—(See CORN LAWS AND CORN TRADE.)

FOOT, a measure of length, consisting of 12 inches.—(See WEIGHTS AND MEASURES.)

FORESTALLING, the buying or contracting for any cattle, provision, or merchandise, on its way to the market, or dissuading persons from buying their goods there, or persuading them to raise the price, or spreading any false rumour with intent to enhance the value of any article. In the remoter periods of our history several statutes were passed, prohibiting forestalling under severe penalties; but as more enlarged views upon such subjects began to prevail, their impolicy became obvious, and they were consequently repealed in 1772. But forestalling is still punishable at common law by fine and imprisonment; though it be doubtful whether any jury would now convict an individual accused of such practices.—(*Wealth of Nations*, p. 237.)

FRANKINCENSE. See ROSIN.

FREIGHT, the sum paid by the merchant or other person hiring a ship, or part of a ship, for the use of such ship or part, during a specified voyage or for a specified time.

The freight is most commonly fixed by the charterparty—(see CHARTERPARTY)—or bill of lading—(see BILL OF LADING); but in the absence of any formal stipulations on the subject, it would be due according to the custom or usage of trade.

In the case of a charterparty, if the stipulated payment be a gross sum for an entire ship, or an entire part of a ship, for the whole voyage, the gross sum will be payable

although the merchant has not fully laden the ship. And if a certain sum be stipulated for every ton, or other portion of the ship's capacity, for the whole voyage, the payment must be according to the number of tons, &c. which the ship is proved capable of containing, without regard to the quantity actually put on board by the merchant. On the other hand, if the merchant have stipulated to pay a certain sum per cask or bale of goods, the payment must be, in the first place, according to the number of casks and bales shipped and delivered; and if he have further covenanted to furnish a complete lading, or a specific number of casks or bales, and failed to do so, he must make good the loss which the owners have sustained by his failure.

If an entire ship be hired, and the burden thereof be expressed in the charterparty, and the merchant bind himself to pay a certain sum for every ton, &c. of goods which he shall lade on board, but does not bind himself to furnish a complete lading, the owners can only demand payment for the quantity of goods actually shipped. But if the merchant agree to load a full and complete cargo, though the ship be described as of less burden than she really is, the merchant must load a full cargo, according to the *real burden* of the ship, and he will be liable for freight according to what ought to be loaded.

The delivery of goods at the place of destination is in general necessary to entitle the owner to freight; but with respect to living animals, whether men or cattle, which may frequently die during the voyage, without any fault or neglect of the persons belonging to the ship, it is ruled, that if there be no express agreement whether the freight is to be paid for the lading, or for the transporting them, freight shall be paid as well for the dead as for the living: if the agreement be to pay freight for the *lading*, then death certainly cannot deprive the owners of the freight; but if the agreement be to pay freight for *transporting* them, then no freight is due for those that die on the voyage, because as to them the contract is not performed. These distinctions have been made in the civil law, and have been adopted into the modern systems of maritime law.

Freight is most frequently contracted to be paid either by the whole voyage, or by the month, or other time. In the former case the owners take upon themselves the chance of the voyage being long or short: but in the latter the risk of the duration falls upon the merchant; and if no time be fixed for the commencement of the computation, it will begin from the day on which the ship breaks ground and commences her voyage, and will continue during the whole course of the voyage, and during all unavoidable delays *not occasioned by the act or neglect of the owners or master*, or by such circumstances as occasion a suspension of the contract for a particular period. Thus, the freight will be payable for the time consumed in necessary repairs during a voyage, provided it do not appear that the ship was insufficient at the outset, or that there was any improper delay in repairing her.

In the absence of an express contract to the contrary, the entire freight is not earned until the whole cargo be ready for delivery, or has been delivered to the consignee according to the contract for its conveyance.

If a consignee receive goods in pursuance of the usual bill of lading, by which it is expressed that he is to pay the freight, he, by such receipt, makes himself debtor for the freight, and may be sued for it. But a person who is only an agent for the consignor, and who is known to the master to be acting in that character, does not make himself personally answerable for the freight by receiving the goods, although he also enters them in his own name at the Custom-house.

In some cases freight is to be paid, or rather an equivalent recompence made to the owners, although the goods have not been delivered at the place of destination, and though the contract for conveyance be not strictly performed. Thus, if part of the cargo be thrown overboard for the necessary preservation of the ship and the remainder of the goods, and the ship afterwards reach the place of destination, the value of this part is to be answered to the merchant by way of general average, and the value of the freight thereof allowed to the owner. So, if the master be compelled by necessity to sell a part of the cargo for victuals or repairs, the owners must pay to the merchant the price which the goods would have fetched *at the place of destination*; and, therefore, are allowed to charge the merchant with the money that would have been due if they had been conveyed thither.

When goods are deteriorated during a voyage, the merchant is entitled to a compensation, provided the deterioration has proceeded from the fault or neglect of the master or mariners; and of course he is not answerable for the freight, unless he accept the goods, except by way of deduction from the amount of the compensation. On the other hand, if the deterioration has proceeded from a principle of decay naturally inherent in the commodity itself, whether active in every situation, or in the confinement and closeness of a ship, or from the perils of the sea, or the act of God, the merchant must bear the loss and pay the freight; for the master and owners are in no fault, nor does their contract contain any insurance or warranty against such an event. In our West India

trade, the freight of sugar and molasses is usually regulated by the weight of the casks at the port of delivery here, which, in fact, is in every instance less than the weight at the time of the shipment; and, therefore, the loss of freight occasioned by the leakage necessarily falls upon the owners of the ship by the nature of the contract.

Different opinions have been entertained by Valin, Pothier, and other great authorities as to maritime law, with respect to the expediency of allowing the merchant to abandon his goods for freight in the event of their being damaged. This question has not been judicially decided in this country. "The only point," says Lord Tenterden, "intended to be proposed by me as doubtful, is the right to abandon for freight alone at the port of destination: and in point of practice, I have been informed that this right is never claimed in this country."—(*Law of Shipping*, part iii. c. 7.)

Freight being the return made for the conveyance of goods or passengers to a particular destination, no claim arises for its payment in the event of a total loss; and it is laid down by Lord Mansfield, that "in case of a total loss with salvage, the merchant may either take the part saved, or abandon."—(*Abbott*, part iii. c. 7.) But after the merchant has made his election, he must abide by it.

It often happens that a ship is hired by a charterparty to sail from one port to another, and thence back to the first—as, for example, from London to Leghorn, and from Leghorn back to London—at a certain sum to be paid for every month or other period of the duration of the employment. Upon such a contract, *if the whole be one entire voyage*, and the ship sail in safety to Leghorn, and there deliver the goods of the merchant and take others on board to be brought to London, but happen to be lost in her return thither, nothing is due for freight, although the merchant has had the benefit of the voyage to Leghorn; but, *if the outward and homeward voyages be distinct*, freight will be due for the proportion of the time employed in the outward voyage. "If," said Lord Mansfield, in a case of this sort, "there be *one entire voyage out and in*, and the ship be cast away on the homeward voyage, no freight is due; no wages are due, because the whole profit is lost; and by express agreement the parties may make the outward and homeward voyage one. Nothing is more common than two voyages: *wherever there are two voyages, and one is performed*, and the ship is lost on the homeward voyage, freight is due for the first."—(*K. B. Trin. Term*, 16 *Geo.* 3.)

It frequently happens that the master or owner fails to complete his contract, either by not delivering the whole goods to the consignee or owner, or by delivering them at a place short of their original destination; in these cases, if the owner or consignee of the goods *derive any benefit from their conveyance*, he is liable to the payment of freight according to the proportion of the voyage performed, or *pro ratâ itineris peracti*: and though contracts of this nature be frequently entire and indivisible, and the master or owner of the ship cannot, from their nature, sue thereon, and recover a rateable freight, or *pro ratâ itineris*; yet he may do so upon a fresh *implied* contract, for as much as he deserves to have, unless there be an express clause in the original charterparty or contract to the contrary. A fresh implied contract is inferred from the owner's or consignee's acceptance of the goods. Many difficulties have, indeed, arisen in deciding as to what shall amount to an acceptance: it is not, however, necessary actually to receive the goods; acceptance may be made by the express or implied directions, and with the consent, of the owner or consignee of the goods, but not otherwise.

It sometimes happens that the owner of the ship, who is originally entitled to the freight, sells or otherwise disposes of his interest in the ship, where a chartered ship is sold *before* the voyage, the vendee, and not the vendor or party to whom he afterwards assigns the charterparty, is entitled to the freight. But where a ship has been sold *during* the voyage, the owner, with whom a covenant to pay freight has been made, is entitled to the freight, and not the vendee. A mortgagee who does not take possession, is not entitled to the freight.

The time and manner of paying freight are frequently regulated by express stipulations in a charterparty, or other written contract; and when that is the case, they must be respected: but if there be no express stipulation contrary to or inconsistent with the right of *lien*, the goods remain as a security till the freight is paid; for the master is not bound to deliver them, or any part of them, without payment of the freight and other charges in respect thereof. But the master cannot detain the cargo on board the vessel till these payments be made, as the merchant would, in that case, have no opportunity of examining the condition of the goods. In England, the practice is, when the master is doubtful of payment, to send such goods as are not required to be landed at any particular wharf, to a public wharf, ordering the wharfinger not to part with them till the freight and other charges are paid. No right of lien for freight can exist, unless the freight be earned; if the freighter or a stranger prevent the freight from becoming due, the ship owner or master's remedy is by action of damages.

(For further information and details with respect to this subject, see the art. CHARTER-

PARTY, in this Dictionary; *Abbot* (Lord Tenterden) *on the Law of Shipping*, part. iii. c. 7.; *Chitty's Commercial Law*, vol. iii. c. 9.; *Molloy de Jure Maritimo*, book ii. c. 4., *&c.*)

FRUIT (Ger. *Obst, Früchte;* Du. *Ooft;* Fr. *Fruit;* It. *Frutta, Frutte;* Sp. *Fruta;* Rus. *Owoschtsch;* Lat. *Fructum*). This appellation is bestowed by commercial men upon those species of fruit, such as oranges, lemons, almonds, raisins, currants, apples, &c., which constitute articles of importation from foreign countries.

FULLERS' EARTH (Ger. *Walkererde;* Du. *Volüarde;* Fr. *Terre à foulon;* It. *Terra da purgatori;* Sp. *Tierra de batan;* Rus. *Schiffernaia;* Lat. *Terra fullonum*), a species of clay, of a greenish white, greenish grey, olive and oil green, and sometimes spotted colour. It is usually opaque, very soft, and feels greasy. It is used by fullers to take grease out of cloth before they apply the soap. The best is found in Buckinghamshire and Surrey. When good, it has a greenish white, or greenish grey colour, falls into powder in water, appears to melt on the tongue like butter, communicates a milky hue to water, and deposits very little sand when mixed with boiling water. The remarkable detersive property on woollen cloth depends on the alumina, which should be at least one fifth of the whole, but not much more than one fourth, lest it become too tenacious. — (*Thomson's Chemistry; Jameson's Mineralogy.*) Malcolm, in his *Survey of Surrey*, published in 1809, says that he took considerable pains in endeavouring to ascertain the consumption of fullers' earth, and that he found it to be about 6,300 tons a year for the entire kingdom, of which about 4,000 tons were furnished by Surrey.

FUNDS (PUBLIC), the name given to the public funded debt due by government.

The practice of borrowing money in order to defray a part of the war expenditure began, in this country, in the reign of William III. In the infancy of the practice, it was customary to borrow upon the security of some tax, or portion of a tax, set apart as a fund for discharging the principal and interest of the sum borrowed. This discharge was, however, very rarely effected. The public exigencies still continuing, the loans were, in most cases, either continued, or the taxes were again mortgaged for fresh ones. At length the practice of borrowing for a fixed period, or, as it is commonly termed, upon *terminable* annuities, was almost entirely abandoned, and most loans were made upon *interminable* annuities, or until such time as it might be convenient for government to pay off the principal.

In the beginning of the funding system, the term fund meant the taxes or funds appropriated to the discharge of the principal and interest of loans; those who held government securities, and sold them to others, selling, of course, a corresponding claim upon some fund. But after the debt began to grow large, and the practice of borrowing upon interminable annuities had been introduced, the meaning attached to the term fund was gradually changed; and instead of signifying the security upon which loans were advanced, it has, for a long time, signified the principal of the loans themselves.

Owing partly, perhaps, to the scarcity of disposable capital at the time, but far more to the supposed insecurity of the Revolutionary establishment, the rate of interest paid by government in the early part of the funding system was, comparatively, high. But as the country became richer, and the confidence of the public in the stability of government was increased, ministers were enabled to take measures for reducing the interest, first in 1716, and again in 1749.

During the reigns of William III. and Anne, the interest stipulated for loans was very various. But in the reign of George II. a different practice was adopted. Instead of varying the interest upon the loan according to the state of the money market at the time, the rate of interest was generally fixed at *three* or *three and a half* per cent.; the necessary variation being made in the principal funded. Thus, suppose government were anxious to borrow, that they preferred borrowing in a 3 per cent. stock, and that they could not negotiate a loan for less than 4½ per cent.; they effected their object by giving the lender, in return for every 100*l.* advanced, 150*l.* 3 per cent. stock; that is, they bound the country to pay him or his assignees 4*l.* 10*s.* a year in all time to come, or, otherwise, to extinguish the debt by a payment of 150*l.* In consequence of the prevalence of this practice, the principal of the debt now existing amounts to nearly *two fifths* more than the sum actually advanced by the lenders.

Some advantages are, however, derivable, or supposed to be derivable, from this system. It renders the management of the debt, and its transfer, more simple and commodious than it would have been, had it consisted of a great number of funds bearing different rates of interest: and it is contended, that the greater field for speculation afforded to the dealers in stocks bearing a low rate of interest, has enabled government to borrow, by funding additional capitals, for a considerably less payment on account of interest than would have been necessary had no such increase of capital been made.

Were this a proper place for entering upon such discussions, it would be easy to show that the advantages now referred to are really of very trifling importance; and that the method of funding by an increase of capital has been a most improvident one, and most injurious to the public interest. But it would be quite foreign from the objects of this

Account of the State of the Public Funded and Unfunded Debt of Great Britain and Ireland, and the Charge thereon, on the 5th of January, 1843. — (*Finance Accounts for* 1842, p. 107, &c.)

DEBT.	Capital of Unredeemed Debt. £ s. d.
Great Britain.	
Debt due to the South Sea Company, at 3 per cent.	3,662,784 8 6½
Old South Sea annuities - - — -	3,497,870 2 7
New South Sea annuities - - — -	2,460,830 2 10
South Sea annuities, 1751 - - — -	523,100 0 0
Debt due to the Bank of England - — -	11,015,100 0 0
Bank annuities created in 1726 - — -	825,990 1 9
Consolidated annuities - - — -	368,995,292 6 5½
Reduced annuities - - - — -	125,726,567 7 5
Total at 3 per cent. -	516,687,534 9 6½
Annuities at 3½ per cent. anno 1818 - -	9,653 179 10 0
Reduced 3½ per cent. annuities - - -	66,609,642 6 5
New 3½ per cent. annuities - - - -	144,632,521 2 0
New 5 per cent. annuities - - - -	£30,076 3 2
Total, Great Britain -	738,012,953 11 1½
Ireland.	
Irish consolidated annuities, at 3 per cent. -	3,916,214 15 7
Irish reduced annuities, ditto - - -	207,326 12 5
3½ per cent. debentures and stock - -	14,663,919 7 5
Reduced 3½ per cent. annuities - - -	835,758 14 3
New 3½ per cent. annuities - - - -	12,797,724 8 4
Debt due to the Bank of Ireland, at 3½ per cent. -	2,630,769 4 8
New 5 per cent. annuities - - - -	3,673 11 2
Total, Ireland -	35,055,386 13 10
Total, United Kingdom -	773,068,340 4 11½
Exchequer bills outstanding, 5th Jan. 1843 -	18,187,800 0 0
Total funded and unfunded debt, 5th Jan. 1843 -	791,256,140 4 11½

CHARGE.	In Great Britain. £ s. d.	In Ireland. £ s. d.	Total Annual Charge of Unredeemed Debt. £ s. d.
Due to the public creditor: Annual interest on unredeemed capital - -	23,253,466 16 10¾	1,206,375 18 5½	
Long annuities, expire 1860 - - -	1,293,713 2 0	709 8 10	
Annuities per 4 Geo. 4. c. 22. do. 1867 - -	585,740 0 0		
Annuities for a limited term of years, per 59 Geo. 3. c. 34., 10 Geo. 4. c. 24., and 3 Will. 4. c. 14., which expire at various periods, viz. — Granted up to 5 Jan. 1843 £1,610,377 2 0; Deduct, expired and unclaimed up to do., including £106,100. Waterloo annuities, 59 Geo. 3. c. 34. 387,052 14 9	1,223,324 7 3		
Payable at the National Debt Office. Life annuities, per 48 Geo. 3. c. 142., 10 Geo. 4. c. 24. and 3 Will. 4. c. 14. viz. — Granted up to 5 Jan. 1843 £1,775,316 4 6; Deduct, expired and unclaimed up to ditto 948,957 14 0	826,358 10 6		
Tontine and other Life annuities, per various acts - - English / Irish -	18,883 12 8 / 34,230 8 7	6,823 7 3	
Interest of funded debt - - - - -	27,235,716 17 10½	1,213,908 14 6½	
Management - - - - - - -	160,063 7 1½		
Annual charge on account of public funded debt -	- - -	- - -	28,609,708 19 7½
Interest on Exchequer bills (1842) - - -	- - -	- - -	409,276 10 3
Total annual charge of funded and unfunded debt, exclusive of 55,360*l.* 3*s.* 8½*d.*, the annual charge on capitals and long annuities, standing in the names of the commissioners, on account of stock unclaimed 10 years or upwards, and of unclaimed dividends; and also on account of donations and bequests	27,395,800 5 0½	1,213,908 14 6½	29,018,985 9 10½

The act 10 Geo. 4. (abolishing the sinking funds) enacts, that the sum thenceforth annually applicable to the reduction of the national debt shall consist of the actual surplus revenue beyond the expenditure. In 1835, this surplus amounted to 1,620,940*l.* 4*s.* 11½*d.*

work to enter into any examination of such questions: our readers will, however, find them fully investigated in an article in the 93d No. of the *Edinburgh Review*. Here we have merely to consider funded property, or government securities, as transferable or marketable commodities. The following is an account of the progress of the National Debt of Great Britain, from the Revolution to the present time: —

Account of the Principal and Annual Charge of the Public Debt since the Revolution.*

	Principal, Funded and Unfunded.	Interest and Management.
Debt at the Revolution, in 1689	£ 664,263	£ 39,855
Excess of debt contracted during the reign of William III. above debt paid off	15,730,439	1,271,087
Debt at the accession of Queen Anne, in 1702	16,394,702	1,310,942
Debt contracted during Queen Anne's reign	37,750,661	2,040,116
Debt at the accession of George I., in 1714	54,145,363	3,351,058
Debt paid off during the reign of George I., above debt contracted	2,053,125	1,133,207
Debt at the accession of George II., in 1727	52,092,238	2,217,851
Debt contracted from the accession of George II. till the peace of Paris in 1763, three years after the accession of George III.	86,773,192	2,634,500
Debt in 1763	138,865,430	4,852,051
Paid during peace, from 1763 to 1775	10,281,795	380,480
Debt at the commencement of the American war, in 1775	128,583,635	4,471,571
Debt contracted during the American war	121,267,995	4,980,.01
Debt at the conclusion of the American war, in 1784	249,851,628	9,451,772
Paid during peace, from 1784 to 1793	10,501,380	243,277
Debt at the commencement of the French war, in 1793	239,350,148	9,208,495
Debt contracted during the French war	601,500,343	23,929,096
Total funded and unfunded debt on the 1st of February, 1817, when the English and Irish exchequers were consolidated	840,850,491	32,038,191
Debt cancelled from the 1st of February, 1817, to 5th of January, 1843	49,594,351	3,019,206
Debt, and charge thereon, 5th of January, 1843	791,256,140	29,018,985

* This account has been made up partly from the table in Dr. Hamilton's work on the National Debt (3d ed. p. 100.); partly from the *Pari. Paper* No. 165. Sess. 1834; and partly from the *Annual Finance Book*, for the year ending 5th January, 1843, page 107, &c.

The above statement shows that a reduction of 49,594,351*l.* was effected in the principal of the national debt, and of 3,019,206*l.* in the annual charge on account thereof, between February, 1817, and January, 1843. The debt, at the last-mentioned period, includes the stock created by the funding of the loan of 15,000,000*l.* in 1835, for behoof of the slave proprietors. The diminution has been brought about partly by the application of surplus revenue to buy up stock, but more by the reduction of the interest on the 4 and 5 per cent. stocks existing in 1817, and by that paid on the unfunded debt. The total annual saving by the reduction of interest on the funded debt between 1822, when the first, and 1834, when the last reduction was made (that of the 4 per cent. annuities, mentioned in former impressions of this work), has been 2,355,846*l.*; and, considerable as this is, it would have been more than three times as great, but for the pernicious practice, previously pointed out, of funding large nominal capitals.

We subjoin a brief notice of the different funds or stocks constituting the public debt, as it stood on the 5th of January, 1843.

I. Funds bearing Interest at Three per Cent.

1. *South Sea Debt and Annuities.* — This portion of the debt, amounting, on the 5th of January 1843, to 10,144,584*l.*, is all that now remains of the capital of the once famous, or rather infamous, South Sea Company. The Company has, for a considerable time past, ceased to have any thing to do with trade: so that the functions of the directors are wholly restricted to the transfer of the Company's stock, and the payment of the dividends on it; both of which operations are performed at the South Sea House, and not at the Bank. The dividends on the old South Sea annuities are payable on the 5th of April and 10th of October; the dividends on the rest of the Company's stock are payable on the 5th of January and 5th of July.

2. *Debt due to the Bank of England.* — This consists of the sum of 11,015,100*l.* lent by the Bank to the public at 3 per cent.; dividends payable on the 5th of April and 10th of October. This must not be confounded with the Bank capital of 10,914,750*l.*, on which the stockholders divide. The dividend on the latter has been 7 per cent. since 1839. — (See *antè*, p. 78. and p. 87.)

3. *Bank Annuities created in 1726.* — The civil list settled upon George I was 700,000*l.* a year; but having fallen into arrear, this stock, consisting of 825,990*l.*, was created for the purpose of cancelling Exchequer bills that had been issued to defray the arrear. "The capital is irredeemable; and being small, in comparison with the other public funds, and a stock in which little is done on speculation, the price is generally at

least 1 per cent. lower than the 3 per cent. consols."—(*Cohen's* edit. of *Fairman on the Funds*, p. 40.)

4. *Three per Cent. Consols, or Consolidated Annuities.* — This stock forms by much the largest portion of the public debt. It had its origin in 1751, when an act was passed, consolidating (hence the name) several separate stocks bearing an interest of 3 per cent. into one general stock. At the period when the consolidation took place, the principal of the funds blended together amounted to 9,137,821*l.*; but, by the funding of additional loans, and parts of loans, in this stock, it amounted, on the 5th of January, 1843, to the immense sum of 368,975,292*l.*!

The consolidated annuities are distinguished from the 3 per cent. reduced annuities, by the circumstance of the interest upon them never having been varied, and by the dividends becoming due at different periods. This stock is, from its magnitude, and the proportionally great number of its holders, the soonest affected by all those circumstances which tend to elevate or depress the price of funded property; and, on this account, it is the stock which speculators and jobbers most commonly select for their operations. Dividends payable on the 5th of January and 5th of July.

5. *Three per Cent. Reduced Annuities.* — This fund was established in 1757. It consisted, as the name implies, of several funds which had previously been borrowed at a higher rate of interest; but, by an act passed in 1749, it was declared that such holders of the funds in question as did not choose to accept in future of a reduced interest of 3 per cent. should be paid off, — an alternative which comparatively few embraced. The debts that were thus reduced and consolidated, amounted, at the establishment of the fund, to 17,571,574*l.* By the addition of new loans, they now amount to 125,726,567*l.* Dividends payable on the 5th of April and 10th of October.

II. Funds bearing more than Three per Cent. Interest.

1. *Annuities at 3½ per Cent.*, 1818. — This stock was formed in 1818, partly by a subscription of 3 per cent. consolidated and 3 per cent. reduced annuities, and partly by a subscription of Exchequer bills. It was made redeemable at par any time after the 5th of April, 1829, upon 6 months' notice being given. Dividends payable on the 5th of April and 10th of October. The capital of this stock amounts to 9,653,179*l.*

2. *Reduced 3½ per Cent. Annuities.* — This stock was created in 1824, by the transfer of a stock bearing interest at 4 per cent. (Old 4 per cents.). It is redeemable at pleasure. Dividends payable 5th of April and 10th of October. Amount, on the 5th of January, 1843, 66,609,642*l.*

3. *New 3½ per Cent. Annuities.* — This stock was formed by the act 11 Geo. 3. c. 13., out of the stock known by the name of "New 4 per cents.," amounting on the 5th of January, 1830, to 144,331,212*l.* The holders of this 4 per cent. stock had their option either to subscribe it into the new 3½ per cent. annuities, or into a new 5 per cent. stock, at the rate of 100*l.* 4 per cents. for 70*l.* 5 per cents. Dissentients to be paid off. Only 467,713*l.* new 5 per cent. stock was created under this arrangement. The sum required to pay dissentients was 2,610,000*l.* The new 3½ per cent. stock thus created, amounted on the 5th of January, 1843, to 144,632,521*l.* Dividends payable 5th of January and 5th of July.

4. *New 5 per Cent.* — Amount, 5th of January, 1843, 430,076*l.* — (See previous Article.)

III. Annuities.

1. *Long Annuities.* — These annuities were created at different periods, but they all expire together in 1860. They were chiefly granted by way of premiums or douceurs to the subscribers to loans. — Payable on the 5th of April and 10th of October.

2. *Annuities per 4 Geo. 4. c. 22.* — This annuity is payable to the Bank of England, and is commonly known by the name of the "Dead Weight" annuity. (See *antè*, p. 86.) It expires in 1867. It is equivalent to a *perpetual* annuity of 470,319*l.* 10*s.*

3. *Annuities per 48 Geo. 3., 10 Geo. 4. c. 24., and 3 & 4 Will. 4. c. 14.* — These acts authorised the commissioners for the reduction of the national debt to grant annuities for terms of years, and life annuities; accepting in payment either money or stock, according to rates specified in Tables to be approved by the Lords of the Treasury. No annuities are granted on the life of any *nominee* under 15 years of age, nor in any case not approved by the commissioners. Annuities for terms of years not granted for any period less than *ten* years. These annuities are transferable, but not in parts or shares. Those for terms of years, payable 5th of January and 5th of July; and those for lives, 5th of April and 10th of October.

The terminable and life annuities granted under the above acts, amounted, on the 5th of January, 1836, to 4,188,809*l.*, being equal, according to the calculations of Mr. Finlaison, to a corresponding *perpetual* annuity of 1,970,019*l.*—(*Parl. Paper* No. 457. Sess. 1836.)

Irish Debt.—It seems unnecessary to enter into any details with respect to the public debt of Ireland. The various descriptions of stock of which it consists, and their amount, are specified above. The dividends on the Irish debt are paid at the Bank of Ireland; and, in order to accommodate the public, stock may be transferred, at the pleasure of the holders, from Ireland to Great Britain, and from the latter to the former.

Exchequer Bills are bills of credit issued by authority of parliament. They are for various sums, and bear interest (generally from 1½*d.* to 2½*d.* per diem, per 100*l.*) according to the usual rate at the time. The advances of the Bank to Government are made upon Exchequer bills; and the daily transactions between the Bank and Government are principally carried on through their intervention. Notice of the time at which outstanding Exchequer bills are to be paid off is given by public advertisement. Bankers prefer vesting in Exchequer bills to any other species of stock, even though the interest be for the most part comparatively low; because the capital may be received at the Treasury at the rate originally paid for it, the holders being exempted from any risk of fluctuation. Exchequer bills were first issued in 1696, and have been annually issued ever since. The amount outstanding, and *unprovided for*, on the 5th of January, 1843, was 18,187,800*l.*

India Stock and India Bonds are always quoted in the lists of the prices of the public funds. The stock on which the East India Company divide is 6,000,000*l.*; the dividend on which has been, since 1793, 10½ per cent.; and is to remain at that rate during the continuance of the charter. India bonds are generally for 100*l.* each, and bear at present 2½ per cent. interest, payable 31st of March and 30th of September. In selling them, the interest due down to the day of sale is, with the premium, added to the amount of the bills; the total being the sum to be paid by the purchaser. The premium, which is, consequently, the only variable part of the price, is influenced by the circumstances which influence the price of stocks generally,—the number of bonds in circulation, &c.

The price of stocks is influenced by a variety of circumstances. Whatever tends to shake or to increase the public confidence in the stability of government, tends, at the same time, to lower or increase the price of stocks. They are also affected by the state of the revenue; and, more than all, by the facility of obtaining supplies of disposable capital, and the interest which may be realised upon loans to responsible persons. From 1730 till the rebellion of 1745, the 3 per cents. were never under 89, and were once, in June, 1737, as high as 107. During the rebellion they sunk to 76; but in 1749 rose again to 100. In the interval between the peace of Paris, in 1763, and the breaking out of the American war, they averaged from 80 to 90; but towards the close of the war they sunk to 54. In 1792, they were, at one time, as high as 96. In 1797, the prospects of the country, owing to the successes of the French, the mutiny in the fleet, and other adverse circumstances, were by no means favourable; and, in consequence, the price of 3 per cents. sunk, on the 20th of September, on the intelligence transpiring of an attempt to negotiate with the French republic having failed, to 47⅜, being the lowest price to which they have ever fallen.

Average Prices of 3 per Cent. Consols, in each Year since 1820.

Years.	Prices of Consols. £	s.	d.	Years.	Prices of Consols. £	s.	d.	Years.	Prices of Consols. £	s.	d.
1820	68	11	3	1828	85	17	6	1835	91	0	0
1821	73	15	0	1829	90	12	6	1836	89	8	9
1822	79	3	9	1830	86	10	0	1837	91	1	3
1823	79	12	6	1831	79	17	6	1838	92	17	6
1824	91	11	3	1832	83	15	0	1839	91	11	3
1825	87	11	3	1833	88	8	9	1840	89	7	6
1826	79	5	0	1834	90	5	0	1841	88	17	6
1827	83	2	6								

The following is the account given in Wettenhall's List of the Prices of the different descriptions of British funds on the 18th October, 1843.

Bank Stock, div. 7 per cent.	-	-	180 a 79½ ex div.	India Stock, 10½ per cent.	-	-	——
3 per Cent. Reduced Annuities	-	-	94¾ a ⅞ a ¾ ex div.	Ditto Bonds, 3¼ per cent.	-	-	75*s.* a 6*s.* a 4*s.* pm.
3 per Cent. Consols	-	-	95⅛ a ⅜ a ½.	South Sea Stock, div. 3½ per cent.	-	-	——
3½ per Cent. Annuities, 1818	-	-	——	Ditto, Old Annuities, div. 3 per cent.	-	-	——
3 per Cent. Annuities, 1726	-	-	——	Ditto, New Annuities, div. 3 per cent.	-	-	——
3½ per Cent. Reduced Annuities		-	101½ a ⅝ ex div.	3 per Cent. Annuities	-	-	——
New 3½ per Cent. Annuities	-	-	102⅝ a ⅝	Bank Stock for Account, 28th Nov.	-	-	——
New 5 per Cent.	-	-	——	3 per Cent. Consols for Account, 19th Oct.	-	-	95⅛.
Long Annuities, expire 5th Jan. 1860	-	-	12½ a 7/16 a ½ ex div.	Ditto for Account 28th Nov.	-	-	——
Annuities for 30 Years, expire 10th Oct. 1850	-	-	——	India Stock for Account, 28th Nov.	-	-	——
Ditto, expire 5th Jan. 1860	-	-	——	Exchequer Bills, £1000 1½*d.*	-	-	{ 65*s.* a 3*s.* pm. 64*s.* a 2*s.* pm.
Ditto, 5th Jan. 1859	-	-	——				

Agreements for the sale of stock are generally made at the Stock Exchange, which is frequented by a set of middlemen called *jobbers*, whose business is to accommodate the buyers and sellers of stock with the exact sums they want. A jobber is generally possessed of considerable property in the funds; and he declares a price at which he will either sell or buy. Thus, he declares he is ready to buy 3 per cent. consols at 85⅛, or

to sell at 85⅛; so that, in this way, a person willing to buy or sell any sum, however small, has never any difficulty in finding an individual with whom to deal. The jobber's profit is generally ⅛ per cent., for which he transacts both a sale and a purchase. He frequently confines himself entirely to this sort of business, and engages in no other description of stock speculation.

We borrow the following details from Dr. Hamilton's valuable work on the National Debt: —

"A bargain for the sale of stock, being agreed on, is carried into execution at the Transfer Office, at the Bank, or the South Sea House. For this purpose the seller makes out a note in writing, which contains the name and designation of the seller and purchaser, and the sum and description of the stock to be transferred. He delivers this to the proper clerk*; and then fills up a receipt, a printed form of which, with blanks, is obtained at the office. The clerk in the mean time examines the seller's accounts, and if he find him possessed of the stock proposed to be sold, he makes out the transfer. This is signed in the books by the seller, who delivers the receipt to the clerk; and upon the purchaser's signing his acceptance in the book, the clerk signs the receipt as witness. It is then delivered to the purchaser upon payment of the money, and thus the business is completed.

"This business is generally transacted by brokers, who derive their authority from their employers by powers of attorney. Forms of these are obtained at the respective offices. Some authorise the broker to sell, others to accept a purchase, and others to receive the dividends. Some comprehend all these objects, and the two last are generally united. Powers of attorney authorising to sell must be deposited in the proper office for examination one day before selling; a stockholder acting personally, after granting a letter of attorney, revokes it by implication.

"The person in whose name the stock is invested when the books are shut, previous to the payment of the dividends, receives the dividend for the half year preceding; and, therefore, a purchaser during the currency of the half year has the benefit of the interest on stock he buys, from the last term of payment to the day of transfer. The price of stock, therefore, rises gradually, *cæteris paribus*, from term to term; and when the dividend is paid, it undergoes a fall equal thereto. Thus, the 3 per cent. consols should be higher than the 3 per cent. reduced by ¼ per cent. from the 6th of April to the 5th of July, and from the 10th of October to the 5th of January; and should be as much lower from the 5th of January to the 5th of March, and from the 5th of July to the 10th of October; and this is nearly the case. Accidental circumstances may occasion a slight deviation.

"The dividends on the different stocks being payable at different terms, it is in the power of the stockholders to invest their property in such a manner as to draw their income quarterly.

"The business of speculating in the stocks is founded on the variation of the price of stock, which it probably tends in some measure to support. It consists in buying or selling stock according to the views entertained, by those who engage in this business, of the probability of the value rising or falling.

"This business is partly conducted by persons who have property in the funds. But a practice also prevails among those who have no such property, of contracting for the sale of stock on a future day at a price agreed on. For example, A. may agree to sell B. 10,000*l.* of 3 per cent. stock, to be transferred in 20 days, for 6,000*l.* A. has, in fact, no such stock; but if the price on the day appointed for the transfer be only 58, he may purchase as much as will enable him to fulfil his bargain for 5,800*l.*, and thus gain 200*l.* by the transaction; on the other hand, if the price of that stock should rise to 62, he will lose 200*l.* The business is generally settled without any actual purchase of stock, or transfer; A. paying to B. or receiving from him the difference between the price of stock on the day of settlement, and the price agreed on.

"This practice, which amounts to nothing else than a wager concerning the price of stock, is not sanctioned by law; yet it is carried on to a great extent: and as neither party can be compelled by law to implement these bargains, their sense of honour, and the disgrace attending a breach of contract, are the principles by which the business is supported. In the language of the Stock Exchange, the buyer is called a *Bull*, and the seller a *Bear*, and the person who refuses to pay his loss is called a *Lame Duck*; and the names of these defaulters are exhibited in the Stock Exchange, where they dare not appear afterwards.

"These bargains are usually made for certain days fixed by a committee of the Stock Exchange, called *settling days*, of which there are about 8 in the year; viz. one in each of the months of January, February, April, May, July, August, October, November; and they are always on Tuesday, Wednesday, Thursday, or Friday, being the days on which the commissioners for the reduction of the national debt make purchases. The settling days in January and July are always the first days of the opening of the Bank books for public transfer; and these days are notified at the Bank when the consols are shut to prepare for the dividend. The price at which stock is sold to be transferred on the next settling day, is called the price *on account*. Sometimes, instead of closing the account on the settling day, the stock is carried on to a future day, on such terms as the party agree on. This is called a *continuation*.

"All the business, however, which is done in the stocks *for time*, is not of a gambling nature. In a place of so extensive commerce as London, opulent merchants, who possess property in the funds, and are unwilling to part with it, have frequently occasion to raise money for a short time. Their resource in this case is to sell for money, and buy for account; and although the money raised in this manner costs more than the legal interest, it affords an important accommodation, and it may be rendered strictly legal and recoverable."—(Third ed. pp. 314—317.)

It would be foreign to the object of this work to enter upon any explanation of the comparative advantages and disadvantages of the funding system. Perhaps, on the whole, the latter preponderate; though it is not to be denied that the former are very considerable. The purchase of funded property affords a ready method of investment; and as neither the Bank of England, nor any of the London private banks, allows interest upon deposits, it is plain that, had it not been for the facilities given by the funds, individuals unable to employ their savings in some branch of business, would, down to a late period, have derived no immediate advantage from them, unless they resorted to the hazardous expedient of lending upon private credit. But since the establishment of joint stock banks in the metropolis, which allow interest on deposits, the advantage of the funds as a means of commodious investment is not quite so obvious, though, probably, it is little less real; for, it may be doubted whether the banks in question, or even the Scotch banks, which have been long in the habit of allowing interest on deposits, could do so, or whether, in fact, they could be conducted at all, without the aid of the funds.

The subjoined account of the number of dividend warrants issued in the quarters

* The letters of the alphabet are placed round the room, and the seller must apply to the clerk who has his station under the initial of his name. In all the offices, there are supervising clerks who join in witnessing the transfer.

ending with the 10th of October and 5th of January, 1842, is a very important document. The large number (85,991) of holders of sums not producing above *5l.* of quarterly dividend, is principally to be ascribed to the circumstances already mentioned as peculiar to the banking system of the metropolis; and there can be little doubt that their number would be materially diminished, did the Bank of England and the private banks allow a reasonable rate of interest on deposits. It is evident from this account, that the number of persons having a direct interest in the funds is much greater than it represents. The dividends upon the funded property belonging to the Equitable and other insurance companies, the different banking companies, &c. are paid upon single warrants, as if they were due to so many private individuals; whereas they are, really, paid to these individuals only because they act as factors or trustees for a vast number more. It is consequently quite absurd to pretend, as is sometimes done, that any interference with funded property would affect only some 285,000 individuals out of a population of 26,000,000. Any attack upon the dividends would really be destructive, not merely of the interests of those to whom dividend warrants are issued, but of *all* who depend upon them: it would destroy our whole system of insurance and banking, and overspread the country with bankruptcy and ruin. Not only, therefore, is every proposal for an invasion of the property of the fundholders bottomed on injustice and robbery, but it would, were it acted upon, be little less ruinous to the community than to the peculiar class intended to be plundered.

Account of the Number of Persons who were entitled to Dividends on the Portions of the Public Debt held by them which became due at the Quarters ended the 10th of October 1841, and 5th January 1842, arranged in classes according to the Amount of Dividend paid to each.

		Not exceeding									Exceeding 2000*l.*	Total.
		5*l.*	10*l.*	50*l.*	100*l.*	200*l.*	300*l.*	500*l.*	1000*l.*	2000*l.*		
Number to whom dividends were payable												
On 3*l.* per cent. reduced annuities	*	11,605	5,213	12,294	3,695	2,231	720	396	217	61	32	36,464
On 3*l.* 10*s.* per cent.	*	9,580	5,518	11,211	3,034	1,568	427	254	97	30	12	31,471
On 3*l.* 10*s.* per cent. annuities, 1818	*	173	120	374	150	102	41	25	20	4	2	1,011
On long annuities	*	4,026	2,747	6,985	1,532	795	259	174	72	36	26	16,652
On annuities for terms of years	*	1,005	653	1,552	314	148	35	30	20	11	13	3,781
On 3*l.* per cent. consolidated annuities	†	32,237	15,275	35,748	10,553	6,666	2,808	1,468	699	188	78	105,120
On 3*l.* per cent. annuities, 1726	†	111	59	150	36	21	5	4	-	-	-	386
On new 3*l.* 10*s.* per cent. annuities	†	26,329	15,320	30,904	6,972	3,241	819	465	177	44	24	83,564
On new 3*l.* per cent. annuities	†	29	24	89	33	20	2	3	1	1	-	202
On annuities for terms of years	†	963	667	1,537	285	125	27	29	26	12	23	3,694
Totals		85,991	45,596	100,144	26,604	14,897	4,545	2,843	1,329	387	210	282,349

* Dividends payable 10th of October. † Dividends payable 5th of January.

The following Table has been calculated, in order to show in which of the public funds money may be invested, so as to yield the greatest interest. It gives the prices, differing by 1 per cent. from 50 to 93 for 3 per cents., &c., at which they all must be, to yield the *same* interest; *so* that, supposing the 3 per cents. to be at 80, a sum invested in them, or in the 3½ per cents., will yield the same interest, provided the latter be at 93¼: if the 3½ per cents. be *below* this sum, it will of course be more advantageous, in so far at least as interest is concerned, to invest in them than in the 3 per cents.; while, if they be *above* 93¼, it will be less advantageous.

To get the *true value* of the different funds at any particular period, in order to compare them accurately together, it is necessary to deduct from each the amount of interest accruing upon it from the payment of the last dividend.—(For further details, see *ante*, p. 82. and p. 188.)

Table showing the Prices the different Funds must be at to produce an equal Interest; and also the annual Interest produced by 100*l.* sterling invested at any of those Prices.

3 per Cent. Price.	3½ per Cent. Price.	4 per Cent. Price.	5 per Cent. Price.	Interest.	3 per Cent. Price.	3½ per Cent. Price.	4 per Cent. Price.	5 per Cent. Price.	Interest.
£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£	£ s. d.	£ s. d.	£ s. d.	£ s. d.
50	58 6 8	66 13 4	83 6 8	6 0 0	72	84 0 0	96 0 0	120 0 0	4 3 3
51	59 10 0	68 0 0	85 0 0	5 17 7	73	85 3 4	97 6 8	121 13 4	4 2 8
52	60 13 4	69 6 8	86 13 4	5 15 4	74	86 6 8	98 13 4	123 6 8	4 1 3
53	61 16 8	70 13 4	88 6 8	5 13 2	75	87 10 0	100 0 0	125 0 0	4 0 0
54	63 0 0	72 0 0	90 0 0	5 11 1	76	88 13 4	101 6 8	126 13 4	3 19 11
55	64 3 4	73 6 8	91 13 4	5 9 0	77	89 16 8	102 13 4	128 6 8	3 17 11
56	65 6 8	74 13 4	93 6 8	5 7 1	78	91 0 0	104 0 0	130 0 0	3 16 11
57	66 10 0	76 0 0	95 0 0	5 5 3	79	92 3 4	105 6 8	131 13 4	3 15 11
58	67 13 4	77 6 8	96 13 4	5 3 5	80	93 6 8	106 13 4	133 6 8	3 15 0
59	68 16 8	78 13 4	98 6 8	5 1 8	81	94 10 0	108 0 0	135 0 0	3 14 0
60	70 0 0	80 0 0	100 0 0	5 0 0	82	95 13 4	109 6 8	136 13 4	3 13 3
61	71 3 4	81 6 8	101 13 4	4 18 4	83	96 16 8	110 13 4	138 6 8	3 12 3
62	72 6 8	82 13 4	103 6 8	4 16 9	84	98 0 0	112 0 0	140 0 0	3 11 5
63	73 10 0	84 0 0	105 0 0	4 15 2	85	99 3 4	113 6 8	141 13 4	3 10 7
64	74 13 4	85 6 8	106 13 4	4 13 8	86	100 6 8	114 13 4	143 6 8	3 9 9
65	75 16 8	86 13 4	108 6 8	4 12 3	87	101 10 0	116 0 0	145 0 0	3 8 11
66	77 0 0	88 0 0	110 0 0	4 10 10	88	102 13 4	117 6 8	146 13 4	3 8 2
67	78 3 4	89 6 8	111 13 4	4 9 8	89	103 16 8	118 13 4	148 6 8	3 7 4
68	79 6 8	90 13 4	113 6 8	4 8 2	90	105 0 0	120 0 0	150 0 0	3 6 8
69	80 10 0	92 0 0	115 0 0	4 6 11	91	106 3 4	121 6 8	151 13 4	3 5 11
70	81 13 4	93 6 8	116 13 4	4 5 8	92	107 6 8	122 13 4	153 6 8	3 5 2
71	82 16 8	94 13 4	118 6 8	4 4 6	93	108 10 0	124 0 0	155 0 0	3 4 6

Foreign Funds. — Exclusive of the funded and unfunded debt due by the British government, more than 19-20ths of which is held by British subjects, our countrymen are also large creditors of foreign states. With the exception of Spain, the interest on the debts of most European states is paid with great regularity; and their funds form what may, on the whole, be reckoned, at least so long as peace is preserved, a pretty secure investment. Our countrymen are, also, large creditors of the new South American States, and of the U. States of North America. Owing, however, to the anarchy in which the former have been almost constantly involved, and the consequent want of power, and probably also of inclination, on the part of their rulers, to make any adequate provision for the payment of their debts, a large arrear of interest has, in most instances, been allowed to accumulate, with but little prospect of its being speedily reduced.

The public debt of the U. States, which amounted, at the close of the last war with this country, to 158,713,049 dollars, was entirely paid off in 1835. This proceeding, so honourable to the U. States, naturally tended to raise the character of American securities in the English market, and facilitated the contracting of loans by the different state governments. These have been contracted principally for the construction of canals, railways, and other local improvements, the erection of public buildings, the establishment of banks, insurance offices, and other institutions. Subjoined is a

Statement of the Debts of the several indebted States and Cities of the Union in 1842.

States, &c.	Debts in Dollars.	States, &c.	Debts in Dollars.	Cities.	Debts in Dollars.
Maine	1,678,367	Tennessee	1,789,166	New York	9,663,269
Massachusetts	5,149,137	Kentucky	4,665,000	Boston	1,698,232
New York	20,165,254	Ohio	14,809,476	Philadelphia	1,000,000
New Jersey	83,283	Indiana	13,667,433	Baltimore	4,680,870
Pennsylvania	34,723,261	Illinois	13,465,682	Albany	695,552
Maryland	15,109,026	Missouri	2,929,557	Troy	361,000
Virginia	6,857,161	Michigan	6,011,000	Cincinnati	860,000
S. Carolina	5,764,734	Arkansas	3,755,562	New Orleans	1,758,180
Georgia	500,000	Florida	3,900,000	Mobile	515,000
Alabama	10,459,556	District of Columbia	1,500,000	Charleston	1,142,558
Mississippi	12,500,000				
Louisiana	20,585,000				
		Total	198,367,455		22,372,441
	Debts of the States for the United States surplus money deposited with them		28,101,644		226,469,099
		Total of State and City debts			248,841,540

Some of the funds so borrowed have been profitably laid out; but a large proportion has, we believe, been expended on projects, some of which will, probably, be a total loss, while others will yield little or no revenue for years to come. But their injudicious outlay does not certainly afford so much as the shadow of an excuse for the conduct of Pennsylvania, Michigan, Mississippi, Louisiana, and other states, who have proceeded to repudiate their debts. Nothing, in fact, was ever heard of in the public conduct of nations more entirely profligate and audaciously villanous than this repudiation. Necessity may compel a state, as well as an individual, to become bankrupt; but the repudiating American states have no such excuse. Pennsylvania, indeed, is not only one of the wealthiest and most flourishing communities in America, but in the world; and, down to this disgraceful occurrence, the inhabitants were supposed to be eminently moral and high principled. The other repudiating states are universally, also, in the most prosperous circumstances; they are all but entirely free from the burden of taxes; and the smallest sacrifice on their part, such as the imposition of a small internal duty on spirits, tobacco, or some such article, consumed within their limits, would enable them to face all their engagements. The truth is, that their dishonesty is glaring and barefaced, admitting neither of palliation nor excuse. The pretences they have put forward in its extenuation serve only to set it in a still more striking point of view. What is it to the capitalists who made them loans, whether they expended them judiciously or employed honest agents? That was their own private affair; and to decline paying their just debts on such flimsy grounds is the climax of knavery. We regret to have to state, that our countrymen are large creditors of the states who have repudiated their debts, holding no less than 20,026,458 doll. (about 4,000,000*l.*) of Pennsylvanian stock. — (*Downe's American Almanac* for 1843, p. 272.) We would fain hope that the experience they have now had of American honour will make them more cautious how they trust to it on future occasions.

At the same time, it would be unjust not to state that New York and several of the leading states of the Union have treated the doctrine of repudiation with contempt, and have honourably distinguished themselves by their adherence to their engagements; and, seeing the disgrace that will be brought upon the Union by the proceedings of the repudiating states, the central government may, it is to be hoped, endeavour to bring them to a sense of their duty.

If any thing other than the consciousness, which they cannot but feel, of their dishonesty and bad faith, were necessary to make the repudiating states retrace their steps, it would be found in the disgust which their conduct has everywhere generated, the disgrace it has entailed on the American character, and the pain it has inflicted on the friends and well-wishers of American institutions. We have never, indeed, been of opinion that the latter had any very well-founded claim to the unqualified commendations that have been so frequently bestowed on them; though we did not certainly anticipate that under their influence any considerable portion of the population would have thus early become so lost to all sense of moral obligation, and such adepts in the art of swindling, as the repudiation of their debts and their banking schemes show them to be.

Our readers, we are sure, will be glad to have the opportunity of perusing the following petition to Congress in reference to this subject. The Americans cannot surely continue deaf to such an appeal. Its forcible statements derive additional weight from their coming from so distinguished a friend to liberal institutions.

The Humble Petition of the Rev. Sydney Smith to the House of Congress at Washington.

"I petition your honourable house to institute some measures for the restoration of American credit, and for the repayment of debts incurred and repudiated by several of the states. Your petitioner lent to the State of Pennsylvania a sum of money, for the purpose of some public improvement. The amount, though small, is to him important, and is a saving from a life income, made with difficulty and privation. If their refusal to pay (from which a very large number of English families are suffering) had been the result of war, produced by the unjust aggression of powerful enemies; if it had arisen from civil discord; if it had proceeded from an improvident application of means in the first years of self-government; if it were the act of a poor state struggling against the barrenness of nature, — every friend of America would have been contented to wait for better times; but the fraud is committed in profound peace, by Pennsylvania, the richest state in the Union, after the wise investment of the borrowed money in roads and canals, of which the repudiators are every day reaping the advantage. It is an act of bad faith which (all its circumstances considered) has no parallel, and no excuse.

"Nor is it only the loss of property which your petitioner laments: he laments still more that immense power which the bad faith of America has given to aristocratical opinions, and to the enemies of free institutions in the Old World. It is in vain any longer to appeal to history, and to point out the wrongs which the many have received from the few. The Americans, who boast to have improved the institutions of the Old World, have at least equalled its crimes. A great nation, after trampling under foot all earthly tyranny, has been guilty of a fraud as enormous as ever disgraced the worst king of the most degraded nation of Europe.

"It is most painful to your petitioner to see that American citizens excite, wherever they may go, the recollection that they belong to a dishonest people, who pride themselves on having tricked and pillaged Europe; and this mark is fixed, by their faithless legislators, on some of the best and most honourable men in the world, whom every Englishman has been eager to see, and proud to receive.

"It is a subject of serious concern to your petitioner that you are losing all that power which the friends of freedom rejoiced that you possessed, looking upon you as the ark of human happiness, and the most splendid picture of justice and of wisdom that the world had yet seen. Little did the friends of America expect it, and sad is the spectacle, to see you rejected by every state in Europe, as a nation with whom no contract can be made, because none will be kept; unstable in the very foundations of social life, deficient in the elements of good faith, men who prefer any load of infamy, however great, to any pressure of taxation, however light.

"Nor is it only this gigantic bankruptcy for so many degrees of longitude and latitude which your petitioner deplores, but he is alarmed also by that total want of shame with which these things have been done, the callous immorality with which Europe has been plundered, that deadness of the moral sense which seems to preclude all return to honesty, to perpetuate this new infamy, and to threaten its extension over every state of the Union.

"To any man of real philanthropy, who receives pleasure from the improvements of the world, the repudiation of the public debts of America, and the shameless manner in which it has been talked of and done, is the most melancholy event which has happened during the existence of the present generation. Your petitioner sincerely prays that the great and good men still existing among you may, by teaching to the U. States the deep disgrace they have incurred in the Old World, restore them to moral health, to that high position they have lost, and which, for the happiness of mankind, it is so important they should ever maintain; for the U. States are now working out the greatest of all political problems, and upon that confederacy the eyes of thinking men are intensely fixed, to see how far the mass of mankind can be trusted with the management of their own affairs, and the establishment of their own happiness."

FURS, in commerce, the skins of different animals, covered, for the most part, with thick fine hair, the inner side being converted by a peculiar process into a sort of leather. Furs, previously to their undergoing this process, are denominated *peltry*.

Beaver fur, from its extensive use in the hat manufacture, is a very important commercial article. That made use of in this country is almost entirely brought from North America. It is gradually becoming scarcer and dearer, being now obtainable only in considerable quantities from the most northerly and inaccessible districts. The fur of the middle-aged or young animal, called cub beaver, is most esteemed. It is the finest, most glossy, and takes the best dye. Fitch, or the fur of the fitchet or polecat, is principally imported from Germany; it is soft and warm, but the unpleasant smell which adheres to it depresses its value. Martin and mink (a diminutive species of otter) are principally imported from the U. States and Canada. The fur of the musquash or musk rat (a diminutive species of beaver) is imported in vast quantities from our possessions in North America; which also supply us with considerable quantities of otter skins. Nutria skins are principally brought from Buenos Ayres. The more valuable furs, as ermine, sable, &c., come principally from Russia.

FUR TRADE. We are indebted for the following details with respect to the fur trade to one of the most extensive and intelligent fur merchants of London.

"Though practically engaged in the fur trade, I fear I shall be able to say little with regard to it not already known to you; but were I to write on the subject, I should divide the trade into 2, or rather 3 classes.

"1. The 1st class would comprise articles of necessity; among which I should principally number an immense variety of lamb skins, varying so widely from each other in size, quality, colour, and value, that, to most persons, they would appear as the produce of so many different species of animals. These lamb skins are produced in all parts of the globe, and are every where consumed; but they form, in particular, an essential part of the dress of thousands among the lower classes in Russia, Poland, East Prussia, Hungary, Bohemia, and Saxony. In Russia and other cold climates, the skins of various other animals may be considered as articles of actual necessity.

"2. The 2d class would in a measure form part of the first, as it also comprises furs which through habit and fashion have now become articles of necessity. I should here enumerate all those different skins commonly called *hatting furs*. Few who are not acquainted with this branch of the fur trade can form an idea of its extent. It spreads, of course, over all parts of the globe where hats are worn, and requires very superior judgment and considerable capital to conduct it successfully. The furs now used for hat making are beaver, musquash, otter, nutria, hare, and rabbit; but each of these may be subdivided into 20 different sorts or classes.

"Neutria, or nutria, is comparatively a new article. It began first to be imported in large quantities about 1810, from the Spanish possessions in South America. — (See NUTRIA.) The skin is used for different purposes, being either dressed as a peltry, or cut (shorn) as a hatting fur; and if well manufactured and prepared, it bears some resemblance to beaver fur, and is used for similar purposes.

"3. Under the 3d and last class I should bring all those furs which, though continually sold, and used in immense quantities, must still be considered mere articles of fashion, as their value varies according to the whims and fancies of different nations. There are, however, exceptions among these; and many furs may be considered as standard articles, since they are always used, though their price is much influenced by changes of fashion.

"This class comprises an endless variety of furs, as under it may be brought the skins of most animals in existence; almost all of them appearing occasionally in the trade.

"Furs being entirely the produce of nature, which can neither be cultivated nor increased, their value is not influenced by fashion alone, but depends materially on the larger or smaller supplies received. The weather has great influence on the quality and quantity of furs imported from all quarters of the globe; and this circumstance renders the fur trade more difficult, perhaps, and precarious than any other. The quality, and consequently the price, of many furs will differ every year. It would be completely impossible to state the value of the different articles of furs, the trade being the most fluctuating imaginable. I have often seen the same article rise and fall 100, 200, and 300 per cent. in the course of a twelvemonth; nay, in several instances, in the space of 1 month only.

"Among the furs which always rank very high (though, like all the rest, they change in value) may be specified the Siberian sable, and the black and silver fox. These articles are at all times comparatively very scarce, and command high prices.

"The chief supplies of peltries are received from Russia (particularly the Asiatic part of that empire), and from North America. But many other countries produce very beautiful and useful furs; and though we are most indebted to Asia and America, Europe furnishes a very considerable quantity. Africa and Australia are of little importance to the fur trade, as, from their situation, they furnish but few articles, and consume still less. From the former we draw leopard and tiger skins (the most beautiful of that species), while the *only* production of the latter is the kangaroo; this, however, is never used as a fur being chiefly consumed by leather dressers and tanners for the sake of its pelt.

"Besides numerous private traders, there are several fur companies of very old standing, who in various countries do a great amount of business. Among these, the Hudson's Bay Company (in London) deserves to be mentioned first, not only from the extent of their business, but because it is one of the oldest chartered companies in England.

"The American Fur Company (in New York) stands next. They chiefly trade to London, whither they send the produce of the U. States and other parts of North America.

"The 3d company is the Russo-American (in Moscow). They trade to the Russian possessions on the western coast of North America, whence they draw their supplies, which are chiefly consumed in Russia, and sent to China.

"The 4th and last company of any consequence is the Danish Greenland Company (in Copenhagen). They do but a very limited business; exposing their goods for sale once a year in Copenhagen.

"The principal consumption of the furs which I should bring under the head of the 3d class, is in China, Turkey, and Russia, and among the more civilised countries of Europe, particularly in England. Germany consumes a considerable quantity. The consumption of America is comparatively little. In Africa, none but the Egyptians wear fur. In Australia, none is consumed.

"Hatting furs are used throughout Europe (with the exception of Turkey and Greece), and in America; but by far the principal trade in these articles is carried on in London and New York.

"Most of the companies sell their goods by public sale, and the principal fur fairs are held at Kiachta (on the borders of China); Nijni Novgorod, between Moscow and Casan, in Russia; and twice a year at Leipsic. — (See FAIRS.)

"It is a remarkable feature of the fur trade, that almost every country or town which produces and exports furs, imports and consumes the fur of some other place, frequently the most distant. It is but seldom that an article is consumed in the country where it is produced, though that country may consume furs to a very great extent."

The following details with respect to the North American fur trade may not be uninteresting: —

This trade was first practised by the French settlers at Quebec and Montreal; and consisted then, as now, in bartering fire-arms, ammunition, cloth, spirits, and other articles in demand among the Indians, for beaver and other skins. In 1670, Charles II. established the Hudson's Bay Company, to which he assigned the exclusive privilege of trading with the Indians in and about the vast inlet known by the name of Hudson's Bay. The company founded establishments at Forts Churchill and Albany, Nelson River, and other places on the west coast of the bay. But the trade they carried on, though said to be a profitable one, was of very limited extent; and their conduct on various occasions shows how thoroughly they were "possessed with that spirit of jealousy which prevails in some degree in all knots and societies of men endued with peculiar privileges." — (*European Settlements*, vol. ii. p. 268.) Mr. Burke has, in the same place, expressed his astonishment that the trade has not been thrown open. But as the company's charter was never confirmed by any act of parliament, all British subjects are lawfully entitled to trade with those regions; though, from the difficulties attached to the trade, the protection required in carrying it on, and the undisguised hostility which private traders have experienced from the agents of the company, the

latter have been allowed to monopolise it with but little opposition. In 1783–4, the principal traders engaged in the fur trade of Canada formed themselves into an association known by the name of the North-West Company, having their chief establishment at Montreal. This new company prosecuted the trade with great enterprise and very considerable success. The course of their proceedings in their adventurous undertakings has been minutely described by Mr. Mackenzie, one of the agents of the company, in his *Voyage from Montreal, through the Continent of America.* This gentleman informs us, that some of those engaged in this trade are employed at the astonishing distance of upwards of 4,000 miles north-west of Montreal! A very numerous caravan, if we may so call it, sets out every year for *Le Grande Portage*, on Lake Superior, where they meet those who have wintered in the remoter establishments, from whom they receive the furs collected in the course of the season, and whom they, at the same time, furnish with fresh supplies of the various articles required in the trade. Fort Chepeywan, on the Lake of the Hills, in lon. 110° 26′ W., used to be one of the most distant stations of the servants of the North-West Company; but many of the Indians who traded with the fort came from districts contiguous to, and sometimes even beyond, the Rocky Mountains.

The competition and success of the North-West Company seem to have roused the dormant energies of the Hudson's Bay Company. The conflicting interests and pretensions of the two associations were naturally productive of much jealousy and ill-will. Under the auspices of the late Earl of Selkirk, who was for a considerable period at the head of the Hudson's Bay Company, a colony was projected and founded on the Red River, which runs into Lake Winnipec. The North-West Company regarded this establishment as an encroachment upon their peculiar rights; and the animosities thence arising led to the most violent proceedings on the part of the servants of both companies. At length, however, the more moderate individuals of each party began to perceive that their interests were not materially different; and the rival companies, wearied and impoverished by their dissensions, ultimately united under the name of the *Hudson's Bay Fur Company*, which at present engrosses most of the fur trade of British America. The most important part of the trade is still carried on from Montreal in the way described by Mr. Mackenzie.

The *North American Fur Company*, the leading directors of which reside in the city of New York, have long enjoyed the principal part of the Indian trade of the great lakes and the Upper Mississippi. But, with the exception of the musk rat, most of the fur-clad animals are exterminated in the vicinity of the lakes. The skins of racoons are of little value; and the beaver is now scarce on this side the Rocky Mountains. The further north the furs are taken, the better is their quality.

Account of the Quantities of the Principal Furs imported in 1841, specifying the Countries whence they were brought and the Quantity furnished by each Country.

Countries.	Bear.	Beaver.	Fitch.	Marten.	Mink.	Musquash.	Nutria.	Otter.
	Number.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*
Russia	-	-	-	7,109				
Germany	-	3	85,080	76,816	1,833	160		
Holland	-	-	2,686	1,342				
Belgium	-	-	8,922	1,437				
France	-	-	5,100	21,681				
East India Company's territories and Ceylon	11	-	-	1	-	-	45	3,743
British North American colonies	5,389	52,240	-	67,375	22,233	147,835	-	8,644
United States of America	6,579	15,250	-	40,998	109,257	191,914	5,457	11,541
States of the Rio de la Plata	-	-	-	-	-	-	1,119,963	
All other countries	8	287	-	-	-	-	145	187
Total	11,987	67,780	101,788	217,259	133,323	339,939	1,125,212	24,115

The furs from our North American colonies are mostly all imported by the Hudson's Bay Company, by whom they are sold at public sales.

China is one of the best markets for furs. The Russo-American Fur Company are in the habit of carrying a considerable quantity of the furs taken by them in Kamtchatska and Russian America to Kiachta, where they are exchanged for tea and other Chinese product. We subjoin

An Official Account of the Furs disposed of by the Russian Fur Company at Kiachta, in 1839, 1840, and 1841. — (*Supplement du Journal de l'Interieur* for 1842, p. 157.)

Furs.	1839.	1840.	1841.
Sea otter	511	700	468
Ditto tails	1,053	1,083	891
Beaver, 1st class	7,361	5,294	6,779
Ditto 2d class	2,272	2,053	
Ditto 3d class	2,984	1,616	1,381
Sea bear	9,259	9,000	10,000
Common fox	3,869	3,481	3,817
White	44	58	153
Yellow	752	606	609
Lynx	445	149	755½
Glutton (*Mustela gulo*)	97	-	187
Wolf	21	-	82
Musk rat	1,643	-	905
Otter	1,681½	1,798	7,552

FUSTIAN (Ger. *Barchent*; Du. *Fustein*; Fr. *Futaine*; It. *Fustagno, Frustagno*; Sp. *Fustan*; Rus. *Bumasea*; Pol. *Barchan*), a kind of cotton stuff, wealed or ribbed on one side.

FUSTIC (Ger. *Gelbholz, Fustick*; Du. *Geelhout*; Fr. *Bois jaune de Brésil*; It. *Legno giallo de Brasilio*; Sp. *Palo del Brasilamarillo*), the wood of a species of mulberry (*Morus tinctoria*), growing in most parts of South America, in the United States, and the West India islands. It is a large and handsome tree; and the timber, though, like most other dye woods, brittle, or at least easily splintered, is hard and strong. It is very extensively used as an ingredient in the dyeing of yellow, and is largely imported for that purpose. Of 9,047 tons of fustic imported into Great Britain in 1840, 2,183 tons were brought from the British West Indies, 1,201 ditto from Cuba and the foreign West Indies, 397 ditto from the United States, 546 ditto from Mexico, 4,349 ditto from Colombia, and 192 ditto from Brazil. Fustic from Cuba fetches full 30 per cent. more in the London market than that of Jamaica or Colombia. At present, the price of the former varies from 7*l.* to 9*l.* a ton, while the latter varies from 6*l.* to 7*l.* a ton. The consumption amounted at an average of the 3 years ending with 1842, to 7,560 tons a year. The duty on fustic from a foreign country is 2*s.* a ton, and from a British plantation, 1*s.* per ditto.

Zante, or *young* fustic, is really a species of sumach (*Rhus cotinus* Lin.), and is quite distinct from the *morus tinctoria*, or *old* fustic; the latter being a large American tree, while the former is a small European shrub. It grows in Italy and the south of France, but is principally exported from the Ionian Islands and Patras in the Morea. It imparts a beautiful bright yellow dye to cottons, &c., which, when proper mordants are used, is very permanent. It is conveniently stowed amongst a cargo of dry goods, as it may be cut into pieces of any length without injury. Only a small quantity of this species of sumach is imported; the imports in 1840 being 82 tons. Its price fluctuates considerably.

G.

GALACZ OR GALATZ, a town of Moldavia, on the left bank of the Danube, between the confluence of the Sereth and Pruth with that river, lat. 45° 25′ N., long. 28° E. It is ill built and dirty: population supposed to amount to 12,000. The trade of the town is chiefly carried on by Greek merchants; but, within the last few years, various English and other foreigners have formed establishments in it. Though at a considerable distance inland, Galacz is in the best position for becoming the port of the Danube. At present, however, it is little more than the port of Moldavia, Ibraila, or Brahilow, about 12 miles farther inland, being the port of Wallachia. The commercial importance of these ports, and indeed of the Danube, dates only from the treaty of Adrianople in 1829. Previously to that epoch the trade of the principalities laboured under the most oppressive restrictions, and was principally carried on by land. But all articles of native produce may now be freely exported either by sea or land, on paying moderate duties; and the duties on imports are also, for the most part, comparatively moderate. The probability indeed seems to be that Galacz, "the Alexandria," as it has been called, "of the Scythian Nile," will at no very distant period become a first-rate emporium. The rescuing of Moldavia and Wallachia from Turkish misgovernment has, of itself, been of signal advantage; and the political jealousies that so long obstructed the navigation of the Danube have been, for the present at least, in a considerable degree mitigated. The establishment of a regular intercourse by means of steam packets between Vienna and Galacz, and thence, by the Black Sea, with Constantinople and Trebizond, has already done a great deal, and will every day do more, to introduce a spirit of improvement into the vast and fertile, but long neglected, countries traversed by the Danube in the lower part of its course. The capacities of this great river as a commercial highway are certainly unequalled by those of any other European stream; and their full development would be of immeasurable advantage, not merely to the countries on its banks, but to all commercial nations.

Exports and Imports. — Moldavia and Wallachia are very productive provinces, being fruitful both of corn and cattle. The exports of the former are very extensive, having amounted, in 1840, to 230,568 quarters of wheat from Galacz, and 151,200 ditto from Brahilow, exclusive of large quantities of Indian corn. The quality of the wheat, which is partly hard and partly soft, was, a few years ago, very inferior, being generally damp, and having an earthy smell from its being kept in pits dug in the ground. Latterly, however, it has been much improved; and the finer samples now fetch, in Marseilles, Genoa, and Leghorn, within from 4 to 5 per cent. of the price of Odessa wheat. But it would appear to be altogether unsuitable for our markets; so much so, that, notwithstanding the high prices in England in 1840 and 1841, the im-

ports of wheat from the Danube in these years were quite inconsiderable. Both provinces fatten large herds of cattle, particularly Moldavia, which annually sends great numbers to the Austrian states. Tallow may be had in large quantities, its annual produce in Wallachia only being estimated at about 3,000,000 okes, or 8,500,000 lbs. Until within these two or three years the tallow shipped at Galacz was burdened with a heavy export duty, which checked its sale, and consequently, also, its growth. Happily, however, that duty is now reduced to 3 per cent., and the exportation is rapidly increasing. The quality of the Danubian tallow is excellent. Among the other articles of export are wool, timber, hides, and skins, lard, butter, bristles, bones, jerked beef, linseed, barilla, yellow-berries, coarse cheese, &c. Timber of the finest quality may be had in any quantity; but as it can only be advantageously exported in large ships, which cannot when laden make their way over the bar, the trade in it has hitherto been confined within comparatively narrow limits. One, however, would be disposed to think that this difficulty might be obviated by sending down the timber in rafts and loading outside the bar.

Notwithstanding the recent period at which the navigation of the Danube has been opened, and the barbarous state of the countries in the lower parts of its course, the value of the exports from Galacz and Brahilow probably at this moment (1843) exceed 1,000,000*l.* a year, of which from 600,000*l.* to 650,000*l.* may be from the former. But, considerable as this is, it is nothing to what it certainly would be were civilisation to make any considerable progress in the countries traversed by the Danube after it leaves the Austrian dominions, and still more were the river to become, as it naturally is, the principal channel for the conveyance of products to and from Hungary and Transylvania.

The great articles of import are manufactured cotton goods and cotton twist, principally from England, the demand for which is rapidly increasing; with sugar, coffee, and other colonial products; olives and olive oil, iron and steel, hardware, &c.

Entrance to Galacz. — Of the three principal mouths of the river, the Soulineh (middle) mouth, in lat. 45° 10′ 30″ N., long. 29° 41′ 20″ E., is the only one accessible by vessels of considerable burden. The depth of water on the bar, at its entrance, ¼ mile from shore, varies from 10 to 13 and 14 feet, according to the season of the year, and the direction of the wind. From the bar to Galacz and Brahilow, there is nowhere less than 18 feet water, and in many places from 60 to 70 feet. Vessels of 300 tons lie close to the quays at Galacz. The shores at the mouth of the river being low, and bordered with reeds and shoals, vessels intending to enter the river generally make the small rocky islet of Phidonisi, or Serpent's Isle*, in lat. 45° 15′ 15″ N., long. 30° 10′ 30″ E., whence the Soulineh mouth bears W. by S., distant 23 miles. According to Mr. Cunningham, the first objects seen, on nearing the shore, are the masts of vessels in the river and the houses in the town of Soulineh, which, however, are very low. Hagemeister says that there is a wooden tower on the south shore at the entrance to the river; but, though the contrary has been often affirmed, and its position given in Arrowsmith's map, there is certainly no lighthouse. When a ship approaches the entrance, a boat from the Russian captain of the port goes off, and by waving a red flag indicates the course to be kept. Lighters are generally stationed without the bar, into which large ships discharge a part of their cargoes; and pilots may generally be obtained from them or other vessels. As the current is sometimes very strong, and difficult to stem, the establishment of steam tugs at the mouth of the river would obviate the principal difficulties incident to its navigation. An E. S. E. wind carries a vessel from Soulineh to Galacz through all the different reaches of the river; but otherwise the navigation is difficult, and tracking is in parts necessary.

Frost usually sets in on the Danube in the month of December, and continues till the month of March; in 1833, however, there was no frost. Freights in the ports of the Danube are always from 20 to 25 per cent. higher than in Odessa; premiums of insurance, on the contrary, are not higher than at the latter, except on such vessels as, on account of their size, are obliged to discharge outside the bar.

Money, Weights, and Measures.—These are mostly the same as at Constantinople, which see. Accounts are kept in piastres and paras. 1 piastre = 40 paras.

Galacz. — Ducat blanc = pia. 44. Silver ruble = 15 pia. Spanish dollar = 19 pia. 32 paras. Turkish yermelik, old coinage = 19 pia. 32 paras; Turkish yermelik, new coinage, = 17 pia. 15 paras. Austrian swanziker = 3 pia. 5 paras. It is to be observed that when exchanges are so high that it is requisite to remit in specie, any of these coins may go to a premium, according as it suits better than others for the remittance; and just now, owing to the want of bills to remit to Austria, the ducat blanc = 44 pia. 20 paras.

Ibraila has two rates of currency; the one for charges, which is the same as in Galacz, and the other for the purchase of merchandise, as follows: — Ducat blanc = 32 pia.; Spanish dollar = 18½ pia.; Turkish yermelik, old coinage, = 14½ pia.; Turkish yermelik, new coinage, = 12 pia. 28 paras; swanziker = 2 pia. 12 paras. *Note.*—The same as in Galacz, any of these coins may go to a premium.

Galacz and Ibraila. — All duties are paid in both places, in the course of the Treasury, as follows: — Ducat blanc = 31½ pia.; silver ruble = 10½ pia.; Spanish dollar = 14 pia.; Turkish yermelik, old, = 14 pia.; swanziker = 2½ pia.

The ducat blanc weighs 1 Turkish drachm.

		Pias.	Paras.	
Vienna		9	16	per florin.
Trieste		9	13	florin.
Marseilles	3 = plate	3	26	franc.
Genoa		3	26	franc.
Leghorn		3	4	lira.
London		90	20	£ sterl.
Odessa	10 d/st.	490 per 100 roubles.		
Constantinople		119	100 of Galacz.	

Weights.—Galacz and Ibraila. 400 drams = 1 oke. 44 okes = 1 cantar.

Measures.—Galacz and Ibraila. 20 banniza = 1 kilo. kilo of Galacz = 2 kilo of Ibraila.

Correspondence of Weights and Measures of Galacz with those of Foreign Places.

39½ okes	=	1 cwt. English.
78 —	=	100 kilogrammes.
44 —	=	100 fund of Vienna.
12½ —	=	1 pud of Russia.
100 kilo of Galacz	=	50 Imperial quarters.
100 —	=	43.9 hectolitres.
100 —	=	525 stajo of Venice.
100 —	=	600 sacks of Leghorn.
100 —	=	208 chetwerts of Odessa.
160 okes linseed	=	1 Imperial quarter
55 —	=	1 hectolitre.
115 —	=	1 chetwert.
1 kilo of Brahilow	=	2½ Imperial quarters.

Note.—These measures generally measure out somewhat less.

* This island was famous in antiquity for its temple in honour of Achilles, to whom it was sacred. It was called *Leuce*, or the White Island, from the myriads of sea-fowl by which it was usually covered. There seems to be no good foundation for the modern notion of its being infested with serpents. It is singular, however, seeing that it is now annually passed by numbers of European ships, that it should not have been visited by any traveller. It may be expected to contain some remains of antiquity. — (See *Clarke's Travels in Russia, Turkey, &c.* 8vo. edit. vol. ii. p. 394—401.)

Charges on Shipping, &c. in Galacz and Ibrailа.

Port Charges.— In Galacz anchorage is 30 pia., and a guardian for 5 days' observation 5 pia. per day. In Ibrailа anchorage is 17½ pia., and guardian for 5 days' observation 5 pia. per day.

Quarantine.— Vessels generally remain in quarantine during their stay, as little or no advantage is gained by taking pratique.

Vessels wishing to take pratique may obtain it in 14 to 21 days, according to the state of health in Turkey, by taking a Health Office guard on board; or the captain alone may take pratique, the same as any passenger, by going into the Lazaret. During the last year, as the health was good in Constantinople and along the Danube, the quarantine was only seven days.

Account of Exports by Sea from Galacz in the Year 1840, in English Weights and Measures, and Value in Sterling, free on board.

Merchandise.		Quantity.	Price.		Amount in Sterling.
			s.	*d.*	£
Wheat - -	Imp. qrs.	230,568	26	0	299,738
Indian corn -	—	189,037	12	0	60,682
Kidney beans -	—	333	30	0	500
Linseed - -	Imp. qrs.	1,156	37	0	2,139
Hempseed -	—	10	25	0	12
Flax - -	- cwt.	700	22	0	770
Wool, Zigai -	- lbs.	117,600	0	9	4,410
Zurcan -	- —	249,200	0	6	6,230
Tallow - -	- cwt.	232	36	0	398
Tobacco -	- —	750	20	0	750
Hare skins -	pieces	12,000	0	8	400
Butter - -	- cwt.	150	42	0	315
Cheese - -	- —	4,250	13	0	2,762
Ox hides -	pieces	3,780	10	0	1,890
Wine - -	- gal.	222,750	0	6	5,569
Walnuts -	- cwt.	811	5	0	203
Prunes - -	- —	1,088	5	0	272
Salt - -	- —	34,641	3	0	5,196
Planks -	pieces	65,155	0	4	1,086
Masts and spars	—	42,500	5	0	10,625
Staves - -	—	20,000	0	6	500
				£	504,447

Note.— The foregoing table, taken from the books of the Quarantine, and corrected by those of the Custom-house, is correct.

In 1842, 154,675 quarters of wheat, 93,531 quarters of Indian corn, 9,922 cwts. of wool, 850 tons bones, &c. were exported from Galacz.

Account of the Exports by Sea from Brahilow in 1841 and 1842, in English Weights and Measures, with their Value in Sterling, free on board.

Merchandise.	1841. Quantity.	Price.	Amount in Sterling.	1842. Quantity.	Price.	Amount in Sterling.
			£			£
Wheat - - Imp. qrs.	84,692	22*s.*	93,161	160,121	20*s.*	160,121
Indian corn - —	26,818	15*s.*	20,113	10,291	11*s.*	5,621
Barley - - —	20,954	9*s.*	9,429	73,892	6*s.* 3*d.*	26,991
Millet - - —	2,704	9*s.*	1,217	1,482	7*s.*	519
Kidney beans - —	2,607	18*s.*	2,346	2,470	18*s.*	2,223
Linseed - - —	537	36*s.*	967	1,818	36*s.*	3,272
Wool - - lbs.	122,900	8*d.*	4,097	93,865	8*d.*	3,129
Tallow - - cwt.	48,170	34*s.*	82,399	40,635	34*s.*	69,079
Hog's lard - —	654	30*s.*	981	491	30*s.*	736
Tobacco - —	179	20*s.*	179	165	20*s.*	165
Honey - - —	312	20*s.*	312	300	20*s.*	300
Butter and mantecca - —	471	42*s.*	989	730	42*s.*	1,533
Cheese - - —	2,543	13*s.*	1,653	4,617	13*s.*	3,001
Hides, ox - pieces	1,983	10*s.*	992	3,293	10*s.*	1,646
Buffalo - —	274	20*s.*	274	286	20*s.*	286
Skins, hare's - —	46,317	6*d.*	1,658			
Wine - - gallons	9,823	4*d.*	163	18,435	4*d.*	307
Spirits - - —	1,550	2*s.*	155	3,590	2*s.*	359
Prunes - - cwt.	1,594	5*s.*	399	110	5*s.*	27
Apples and pears - —	378	5*s.*	94	3,233	4*s.*	646
Yellow berries - —	560	30*s.*	840	369	30*s.*	554
Silk - - lbs.	222	7*s.*	77	1,189	7*s.*	416
Cantharides - —	5,700	1*s.* 3*d.*	356	2,301	1*s.* 3*d.*	144
Soda or barilla - cwt.	213	4*s.*	48	1,345	4*s.*	269
Pastremah (jerked beef) —	1,410	10*s.*	705	2,459	10*s.*	1,229
Tongues, ox - pairs	3,969	4*d.*	61	9,161	4*d.*	153
Bristles - cwt.	83	120*s.*	498			
Bones, cattle - tons	882	30*s.*	1,323	4,198	30*s.*	6,297
Walnuts - - cwt.	- -	- -	- -	104	5*s.*	26
Staves - - pieces	- -	- -	- -	29,500	4*d.*	492
Totals - -	- -	- -	225,484	- -	- -	288,641

Pro formâ Invoice of Wheat purchased in Galacz, and put free on board.

	Pias.	*Par.*
Kilo 1000 wheat at 150 pias. ₰ kilo - - - - - - - - -	150,000	0
Kilo 30 loss on sifting.		
Kilo 970 shipped.		
CHARGES.	*Pias.*	*Par.*
Duty on kilo 970, @ pias. 4.—D. 31¼ = 44 - - - - - -	5,419	69
Town duty, @ paras 10 ₰ kilo - - - - - - -	242	50
Measuring on purchasing, @ paras 6 ₰ kilo - - - - -	150	0
Porterage receiving, @ paras 20 ₰ kilo - - - - - -	500	0
Sifting, @ paras 20 ₰ kilo - - - - - - -	500	0
Cartage in warehouse according to distance, paras 30 ₰ kilo on kilos 970 - -	727	50
Measuring shipping on kilos 970 @ paras 12 - - - - -	291	0
Porterage on shipping kilos 970 @ paras 20 - - - - -	485	0
Cartage on shipping, paras 30 - - - - - - -	727	50
Warehouse, 1½ ⅁⁄₀ - - - - - - - -	750	0
Brokerage, 1½ ⅁⁄₀ - - - - - - - -	750	0
Scandaglio box for measure - - - - - - - -	30	0
Attendance of warehouseman - - - - - - - -	80	0
Postage and petty expenses - - - - - - - -	30	0
	10,974	19
	160,974	19
Commission, 3 ⅁⁄₀ - - - - - - - - -	4,829	22
Bill brokerage, 1 ⅁⁄₀ - - - - - - - - -	165	96
Pia.	165,969	37

When the grain is shipped direct from the warehouse of the seller, without being transported to the warehouse of the buyer, then the charges will be less by the cartage and porterage passed for that purpose.

When the season is advanced and the streets in bad order, the charges of embarking will be something more.

Duties.— An *ad valorem* duty of 3 per cent. is levied on all articles, except provisions, imported into, or exported from, the principalities of Moldavia and Wallachia. Government reserves to itself the power of prohibiting the exportation of any article, but it has to give a month's previous notice of any such prohibition.

Galacz is a free port; that is, a port at which all commodities may be landed, warehoused, re-exported, and consumed in the town, free of duty. Quarantine regulations are strictly enforced, unless performed previously to entering the river.

Ismail and Reni, ports of the Russian province of Bessarabia, are situated on the Danube, and are both, but especially Ismail, a good deal nearer its mouth than Galacz; but they are much less considerable in point of commercial importance. Having little importation, their trade is confined almost entirely to the exportation of corn, and even in this respect they are very inferior to Galacz and Brahilow. They are subject to the Russian duties and regulations.

We have gleaned these particulars from a variety of works, but principally from the valuable *Report* by Mr. Cunningham, now vice-consul at Brahilow, printed at Galacz in 1841; the work of Hagemeister, *On the Commerce of the Black Sea*, Eng. Trans. pp. 85—95, &c.; *Purday's Sailing Directions for the Black Sea*, p. 193, &c.

Account of Vessels departing loaded from Brahilow in 1842, with a Specification of their Cargoes.

Nation.	No.	Wheat.	Barley.	Indian Corn.	Tallow.	
		Qrs.	Qrs.	Qrs.	Cwt.	
Greek -	161	89,433	13,016	2,412	16,841	Kidney beans, 350 qrs.; wool, 16,800 lbs.; cheese, 1,160 cwt.; hides, 601; staves, 5,558; bones, 180 tons.
Russian -	48	13,275	6,183	2,155	4,777	Kidney beans, 330 qrs.; linseed, 295 qrs.; cheese, 165 cwt.; staves, 3,000; bones, 150 tons.
Turkish -	120	21,510	44,122	727	2,681	Millet, 1,510 qrs.; kidney beans, 280 qrs.; cheese, 320 cwt.; bones, 152 tons.
Sardinian -	33	14,166	7,859	2,081	1,755	Kidney beans, 290 qrs.; linseed, 55 qrs.; staves, 1,112.
Austrian -	16	6,721	2,712	1,948	3,676	Hides, 692; bones, 652 tons.
English -	8	2,999	- -	- -	6,606	Bones, 950.
Ionian -	3	1,430	- -	- -	1,004	
French -	1	- -	- -	- -	898	
Belgian -	4	2,660				
Hanoverian -	1	- -	- -	- -	- -	Wool, 122,000 lbs.; cheese, 790 cwt.
Wallachian -	11	5,892	- -	900	1,599	Staves, 11,900; bones, 105 tons.
Moldavian -	2	2,344	- -	- -	798	
Neapolitan -	1	- -	- -	- -	- -	Bones, 130 tons.
Samos -	1	288				
Serbian -	1					
Totals	411	160,121	73,892	10,221	40,635	

Account of Vessels departing loaded from Galacz, and Cargoes of same, in 1840.

Nation.	No.	Wheat.	Indian Corn.	Linseed.	Wool.	Kidney Beans.	Tallow.	Sundries.
		Qrs.	Qrs.	Qrs.	Lbs.	Qrs.	Cwt.	
Greek -	280	107,682	76,934	—	—	132	232	Ox hides, 3,780 pieces; cheese, 1,242 cwt.; salt, 15,187 cwt.; staves, 54,530 pieces; deals, 21,700.
Turkish -	91	20,574	30,800	—	290,640	201	—	Salt, 6,350 cwt.; deals, 36,5[illegible] rafts of masts, 2; cheese, 3,008 cwt.; tobacco, 344 cwt.
Sardinian -	88	43,174	23,250	—	—	—	—	
Russian -	64	25,655	10,619	—	—	—	—	Wine, 922,750 gallons; prunes, 1088 cwt.; walnuts, 811 cwt.; salt, 10,802 cwt.; deals, 6,600.
Austrian -	60	11,575	38,109	—	—	—	—	
Ionian -	29	10,959	5,100	—	—	—	—	
Samian -	14	2,660	2,058	—	—	—	—	
English -	5	3,014	—	—	—	—	—	
Neapolitan -	2	354	—	880	—	—	—	
Wallachian -	8	2,382	1,572	—	—	—	—	Salt, 2,001 cwt.; deals, 350.
Belgian -	2	1,441	—	7	—	—	—	Tobacco, 356 cwt.; Hempseed, 9 qrs.; flax, 28 cwt.; Hareskins, 1,500.
Mecklenburg -	1	1,098	—	269	76,160	—	—	
Roman -	1	—	615	—	—	—	—	
Totals -	645	230,568	189,037	1,156	366,800	333	232	

In 1842, only 309 vessels left Galacz with cargoes; of these, 6 were English, principally loaded with tallow and bones.

Mouths of the Danube. — There is a great discrepancy in the statements of ancient authors as to the number of channels by which the Danube poured its waters into the Euxine. — (*Cellarii Notitia Orbis Antiqui*, lib. ii. cap. 8.) A similar discrepancy exists at this moment; some authorities affirming that it has 4, others 5, and others 6 or 7 mouths. But, as stated above, there are only 3 of any considerable magnitude, viz. the Kilia mouth on the north, and successively the Soulineh mouth, and the Edrillis mouth. But, besides these, there are other channels of inferior importance, of which two, at least, are still more to the south than the Edrillis mouth. In antiquity, the most southerly channel was the deepest, and best suited for the purposes of navigation, and was thence called *Sacrum*. — (See *Cellarius ut suprà.*) It is not, however, to be wondered at, that, in the course of so many ages, very great changes should have taken place in the channels of the river. It seems probable that the *Ostium Sacrum*, or southern channel of the ancients, may have run between *Carsum*, now Hirchova, and the lake *Halmyris*, now Rassein, which communicates with the Euxine at Kara Kerman, formerly *Istropolis*, and at a point still more to the south. At any rate, there certainly was a channel in the route now pointed out — (*D'Anville Abrégé de la Géographie Ancienne*, tom. i. p. 307.); and as it is a good deal more to the south than the Edrillis mouth, with which the *Ostium Sacrum* has been commonly identified, it would seem to have the best claim to the distinction of being synonymous with the latter. This channel is, in fact, still partially open, and it is stated that the Austrian government has seriously entertained a project for making it navigable. There can be no doubt, that if this could be effected, it would be of much importance to the trade with Hungary and the countries on the upper part of the river, by materially shortening the river navigation, and facilitating the transit of ships and goods to and from the Black Sea; but the marshy nature of the ground is said to oppose formidable obstacles to the construction of a canal.

Navigation of the Danube. — Steam navigation was first established on the Danube in 1830, since which the undertaking has gone on prospering, so much so, that the communication between Vienna and Constantinople is now maintained by a line of 7 steam vessels. The Austrian steam company, which was the first in the field, have extended their scheme by starting vessels between Vienna and Linz, and a Bavarian company commenced in 1838 running a vessel between Ratisbon and Linz. It is probable that in a year or two steamers may ply from Ulm downwards.

At present steam boats ply on the Danube as long as the river remains free from ice (usually from February or March to November), from Ratisbon to Linz, once a week; Linz to Vienna, 10 hours, once a week; Vienna to Presburg and Pesth, twice; Pesth to Drencova, once a week; Gladova to Galacz. once a week; Galacz to Constantinople, once a fortnight.

The voyage from Vienna to Constantinople, including stoppages, is seldom performed in less than 14 days, and sometimes occupies 17; in returning against the stream it takes at least a month, including 10 days quarantine at Orsova. The fare, first place, is 134 fl., about 13*l.*; second place, 94 fl.

The navigation of the Danube by steamers is unfortunately interrupted for about 50 miles, between Drencova and Gladova, by rocks and rapids, the lowest and most considerable of which is a sort of cataract, called the "Irongate," about 3 miles below the Hungarian frontier. It is worthy of remark that the most illustrious of the Roman emperors, Trajan, alive to all the advantages to be derived from the easy navigation of the Danube, had with equal industry and sagacity formed a road, or towing path, along the river's edge, for facilitating the operation of towing, of which the remains are still extant, with an inscription commemorative of the completion of the works. It has been proposed to overcome the difficulties in the way of the navigation by renovating the old Roman road, and deepening the channel contiguous to it. But it rarely happens that attempts to improve the navigation in the bed of a river, under any thing like similar circumstances, are even tolerably successful. The better way undoubtedly would be, were it practicable, to construct a lateral canal, or rather a canal from the mouth of the Bereska to Palanka, which would not only avoid the rapids, but also shorten the navigation by getting rid of the bend of the river by Orsova. But the difficulties in the way of such an undertaking, from the nature of the ground, are said to be insuperable; and it is, therefore, probable that the distance of 50 miles along the rapids will continue, if not always, at least for some considerable time, *a portage*. The inconvenience, however, of this break in the navigation has been diminished, as far as possible, by the construction of an admirable carriage road (recently finished), at great expense, by the Hungarian diet, from Moldova to Orsova. In the extent of excavations in the rock, and terraces of masonry, upon which it is carried, it is not inferior as a specimen of engineering to the finest roads over the Alps. Several steamers have been transported down these rapids at the season of floods, small barges pass them at all times, and little boats, laden with wax and wool, are towed up by men and oxen. The passengers and goods conveyed by the steamers are transferred from Moldova in row-boats, to Gladova, below the Irongate, where they embark on another steamer. — (*Geog. Dict.* art. *Danube.*)

A *railroad* is nearly completed from Brunn, the capital of Moravia, to Vienna; another railroad diverges, from the Danube at Linz, north to Budweis in Bohemia, where it reaches the banks of the Muldau, and through it communicates with the Elbe.

Junction of the Danube and the Rhine. — The long projected canal to unite the Danube and Rhine, the favourite scheme of Charlemagne, is being carried into execution by the King of Bavaria, and is now (1843) nearly finished. It extends from Bamberg, by Erlangen and Nuremberg, to Neumark, joining the Danube at Kellheim, a few miles above Ratisbon. The distance between the Maine near Bamberg, and the Danube, is about 112 miles; but the actual extent of canal is less, the communication being in part effected by the Regnitz, a tributary of the Maine, and the Altmuhl, a tributary of the Danube. When this is accomplished, an internal communication by water will be established throughout all the vast country, stretching from the shores of the Netherlands to the Black Sea; so that produce shipped at Rotterdam or at Galacz may be conveyed from the one to the other in the same vessel.

GALANGAL (Ger. *Galgant*; Du. and Fr. *Galanga*; Rus. *Kalgan*; Lat. *Galanga*; Arab. *Kusttulk*; Chin. *Laundon*), the root of the *galanga*, brought from China and the East Indies in pieces about an inch long, and hardly ¼ an inch thick. A larger root of the same kind (*Greater Galangal*), an inch or more in thickness, is to be rejected. It has an aromatic smell, not very grateful; and an unpleasant, bitterish, extremely hot, biting taste. It should be chosen full and plump, of a bright colour, very firm and sound: 12 cwt. are allowed to a ton.—(*Lewis's Mat. Med.*; *Milburn's Orient. Com.*)

GALBANUM (Fr. *Galbanum*; Ger. *Mutterharz*; It. *Galbano*; Lat. *Galbanum*; Arab. *Barzud*), a species of gum resin obtained from a perennial plant (*Galbanum officinale*) growing in Africa, near the Cape of Good Hope, and in Syria and Persia. It is brought to this country from the Levant in cases or chests containing from 100 to 300 lbs. each. The best is in ductile masses, composed of distinct whitish tears agglutinated together by a pale brown or yellowish substance. It is generally much mixed with stalks, seeds, and other impurities. The separate tears are considered as the best. When the colour is dark brown or blackish, it is to be rejected. It has a strong peculiar odour, and a bitterish, warm, acrid taste. — (*Thomson's Dispensatory.*)

GALLON, a measure of capacity, both for dry and liquid articles, containing 4 quarts. By 5 Geo. 4. c. 74., "the Imperial gallon shall be the standard measure of capacity, and shall contain 10 lbs. avoirdupois weight of distilled water, weighed in air at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches, or 277·274 cubic inches; and all other measures of capacity to be used, as well for wine, beer, ale, spirits, and all sorts of liquids, as for dry goods, not measured by heaped measure, shall be derived, computed, and ascertained from such gallon; and all measures shall be taken in parts, or multiples, or certain proportions, of the said Imperial standard gallon." The old English gallon, wine measure, contained 231 cubic inches; and the old English gallon, ale measure, contained 282 cubic inches. Hence the Imperial gallon is about $\frac{1}{5}$ larger than the old wine gallon, and about $\frac{1}{60}$ less than the old ale gallon. By the 6 Geo. 4. c. 58. § 6. it is enacted, that from and after the 6th of January, 1826, whenever any gallon measure is mentioned in any act of parliament relative to the excise, it shall be taken and deemed to be a gallon Imperial standard measure. — (See WEIGHTS AND MEASURES.)

GALLS, OR GALL-NUTS (Fr. *Galles, Noix de Galle*; Ger. *Gallapfel, Gallus*; It. *Galle, Galluze*; Lat. *Galæ*; Arab. *Afis*; Hind. *Mujoophal*; Pers. *Mazu*), are excrescences produced by the attacks of a small insect, which deposits its eggs in the tender shoots of a species of oak (*Quercus infectoria* Lin.), abundant in Asia Minor, Syria, Persia, &c. Galls are inodorous, and have a nauseously bitter and astringent taste. They are nearly spherical, and vary in magnitude from the size of a pea to that of a hazel nut. When good, they are of a black or deep olive colour; their surface is tubercular, and almost prickly; they are heavy, brittle, and break with a flinty fracture. They are known in commerce by the names of *white*, *green*, and *blue*. The white galls are those which have not been gathered till after the insect has eaten its way out of the nidus and made its escape. They are not so heavy as the others, are of a lighter colour, and do not fetch so high a price. The green and blue galls are gathered before the insect has escaped; they are heavier and darker than the former, and are said to afford about one third more of colouring matter.

Galls are of great importance in the arts, being very extensively used in dyeing, and in the manufacture of ink, of which they form one of the principal ingredients. They are the most powerful of all the vegetable astringents; and are frequently used with great effect in medicine.

The ancients reckoned the gall-nuts of Syria superior to every other, and they still retain their pre-eminence. They are principally exported from Aleppo, Tripoli, Smyrna, and Said; those brought from the first come chiefly from Mosul, on the western bank of the Tigris, about ten days' journey from Aleppo. The real Mosul galls are unquestionably the best of any; but all that are gathered in the surrounding country are sold under this name. Those from Caramania are of a very inferior quality. The galls met with in India are carried thither from Persia by Arabian merchants.

It is not unusual to dye the whitish gall-nuts blue, in order to increase their value. The fraud is, however, detected by the deeper blue tinge that is thus imparted to them; and by their being perforated and lighter than the genuine blue galls.

The price of galls in bond varies in the London market from 50*s.* to 64*s.* a cwt. The duty is 1*s.* a cwt. — (*Rees's Cyclopædia*; *Bancroft on Colours*; *Ainslie's Mat. Indica*, &c.)

GALVESTON, the principal sea-port of the newly formed republic of Texas, at the N. E. end of the long, low, narrow island of the same name, on the north shore of the Gulph of Mexico, and on the channel forming the entrance to the bay of Galveston, an extensive inlet of the sea between the N. side of the island and the mainland, lat. 29° 16′ 37″ N., long. 94° 49′ 41″ W. Having only recently attained to any distinction, Galveston is yet of no great magnitude, its population not perhaps exceeding 6,000 or 7,000; but it is daily increasing; and if population and cultivation should increase in the interior, it will most probably become one of the principal *entrepôts* in this part of the world.

The bar outside Galveston harbour and bay, between the N.E. end of the island and Point Bolivar on the mainland, has not more than 13½ feet water at the highest springs, and but 10 feet at ebb: hence the smaller class of vessels, or those under 200 or 250 tons, are most suitable for the trade of the port, as well as for that of almost all the other ports on the N. and E. sides of the gulph, the deficiency of water being all but universal. Though the land be low, the houses of Galveston may be seen from the masthead at a distance of several miles. Vessels drawing 8 feet water and upwards should, however, not approach the bar nearer than 6 fathoms, without heaving to and making the signal for a pilot, which is promptly attended to. Vessels drawing less than 8 feet water may approach the bar till the water shoals to 4 fathoms before heaving to. Vessels making the port in the night should invariably anchor in 5 or 6 fathoms; and the holding ground being excellent, those who are well found in anchors and cables have nothing to fear. Pilot boats are now constantly on the look-out; and ships should on no account attempt crossing the bar till they have got a pilot on board. In the harbour there is from 18 to 30 feet water. The bay, which stretches about 35 miles from N. to S., and from 12 to 18 miles from E. to W., has not generally more than 9 feet water, and is intersected by a bar, on which there is only from 5 to 6 feet water. — (*Kennedy's Texas*, i. 29.) Several very considerable rivers have their embouchure in the bay, so that the town has a considerable command of internal navigation.

It is no part of our business to give any account of the circumstances which led to the independence of Texas; but we may shortly state that it had its origin in the attempts of the Mexican government to impose taxes on the settlers. In fact, no direct taxes at present exist in the country; so that all, or mostly all, the public revenue is derived from customs duties, of which the port of Galveston pays above two-thirds.

The great articles of export from Galveston, and, indeed, from Texas, are cotton, provisions, cattle and other stock, hides and skins, furs, bullion from Mexico, &c. The articles of importation consist principally of cotton and other manufactured goods hardware, agricultural implements and machinery,

powder and shot, salt, coal, &c. The following details give a view of the trade and of the regulations under which it is conducted.

Monies, Weights, and Measures, same as those of the U. States; for which see NEW YORK.

Gross Return of Foreign Trade of the Port of Galveston, in 1842.

Nation.	Arrived. Vessels.	Tonnage.	Invoice Value of Cargoes.	Departed. Vessels.	Tonnage.	Invoice Value of Cargoes.
			Ex. 108			Ex. 10
			£ s. d.			£ s. d.
British	6	1258	8002 14 5	6	1,258	18,992 14 6
Texas	6	171	738 4 8	2	45	16 12 4
French	3	680	3,424 14 9	3	680	6,192 4 10
Spanish	2	272	1,574 7 6	2	272	3,053 3 6
American	77	20,151	90,850 8 4	77	20,151	35,141 4 6
Bremen	3	475	3,424 14 9	3	475	5,594 9 7
	96	23,007	108,015 4 5	93	22,881	8,990 9 3

Return of British Trade in the Port of Galveston, in 1842.

Name of Vessel.	Entry.	Arrived. Tonnage.	Where from.	Nature of Cargo.	Invoice Value of Cargoes.	Departed. Date of Clearance.	Tonnage.	Where bound.	Nature of Cargo	Invoice Value of Cargo
					£ s. d.					£ s. d.
Severn	Feb. 5.	233	Turk's Is.	Salt&coals	116 13 4	Apr. 5.	233	Liverpool.	Cotton.	4,441 13 4
Jane	Feb. 23.	192	London.	Assorted.	1,037 13 0	May 5.	192	- -	-	2,916 13 4
Funchall	June 14.	189	- -	- -	541 19 7	Sep. 8. 1843.	189	- -	-	1,419 8 5
Mary Barry	Oct. 27.	156	- -	- -	3,175 3 0	Jan. 14.	156	London.	-	2,120 4 2
Iron Queen	Nov. 28.	314	Liverpool.	Salt &c.	548 8 8	Jan. 21.	314	Liverpool.	-	5,904 5 10
Alpha	Dec. 11.	174	London.	Assorted.	2,582 16 10	Mar. 4.	174	- -	-	2,160 9 5
		1,258			8,002 14 5		1,258			18,992 14 6

Charges on Shipping in the Ports of Texas.

Tonnage Duty. — All sailing vessels entering any port of the republic from any foreign port or place, are chargeable with a tonnage duty of 60 cents per ton, and steam-boats with 30 cents, according to registered tonnage.

Entrance. — Any ship or vessel of less than 100 tons burden pays 1½ dollars; of 100 and upwards, 2½ dollars.

Clearance. For every clearance of vessels of the above-mentioned burden, the same fees respectively: —

	$ cts.
Port entry	2 0
Permit to land goods	0 30
Bond taken officially	0 40
Permit to load goods for exportation, that may be entitled to debenture or official certificate	0 40
Bill of health	0 20
For every document (registers excepted) required by any merchant, owner, or master of any ship or vessel not before enumerated	0 20

Rates of Pilotage at Galveston. — On all vessels drawing less than 8 feet water, 2 dollars 50 cents per foot. On all vessels drawing 8 feet and over, 3 dollars per foot.

Any pilot that may be detained waiting on any vessel bound for sea, or any vessel that may be prevented from entering the port by contrary winds or otherwise, shall be entitled to receive 3 dollars per day for each day he may be detained after the first 24 hours.

Any pilot taking charge of a vessel in distress from loss of anchors, spars, or rudder, shall receive such extra compensation as in the opinion of the collector of customs the circumstances of the case may require; the same to be awarded by the collectors after hearing the parties.

Any pilot speaking a vessel outside the bar, inward bound, or any vessel inside the bar, outward bound, and offering his services, shall be entitled to full pilotage whether those services be accepted or not.

Any pilot speaking a vessel, inward bound, inside the bar, shall, if his services be accepted, be entitled to half pilotage; but, if his services be not accepted, he shall not be entitled to any pilotage.

Any vessel, after waiting outside the bar for four hours with a signal for a pilot flying, may enter port free of all pilotage charges.

Any pilot boarding a vessel 15 miles from shore, shall be entitled to 25 per cent. more than the regular rates for off-shore pilotage.

*** Consignees are, in all cases, liable for the pilotage of vessels consigned to them, and no vessel is permitted to go to sea, until all pilotage has been paid.

Pilotage Regulations at Galveston. — The collector of customs at Galveston is authorised to appoint as many pilots as may be necessary for the shipping, with power of suspension and dismissal, requiring bond with good security, in the sum of 10,000 dollars, for the faithful performance of duties; without which appointment it is not lawful for any person to exercise the calling of pilot.

Each branch pilot may appoint two deputies, for whose acts he is responsible; these appointments are subject to the approval of the collector.

Any pilot or deputy taking charge of a vessel, while in a state of inebriety, forfeits his appointment. Any pilot wilfully or negligently losing any vessel, is to be dismissed, and is, with his sureties, liable to the party injured for all damages sustained by reason of his misconduct.

Any branch or deputy pilot, who fails to board with promptitude a vessel in need of his services, is, for the first offence, subject to the penalty of suspension for three months, and for the second, to forfeiture of his appointment; and any pilot, who for any cause whatever forfeits his branch, or appointment, is ever afterwards held incapable of filling any office of the kind.

Flag of Texas. — The national flag consists of a blue perpendicular stripe, of the width of one third of the whole length of the flag, with a white star of five points in the centre, and two horizontal stripes of equal width, of two-thirds the length of the flag; the upper, white; the lower, red.

Regulations for the Coasting Trade, and for the Protection of Texan Shipping. — No merchant vessel is permitted to assume the Texan flag, unless owned by a citizen or citizens of the republic; nor can such vessel be commanded after assuming it, save by a citizen of the republic; and every vessel or boat above 8 tons burden, before sailing under the national flag, must be enrolled at the Custom-house of some port of the country, and must take out a register, or coasting licence, according to the rules and regulations, and under the responsibilities and restrictions observed and demanded in the U. States of America, so far as they may be compatible with the statutes of Texas.

The enrolment and the register or licence of every merchant vessel, sailing under the Texan flag, is to specify her name, class, description, admeasurement, and burden, and to declare whether she be of domestic or foreign construction; and if the former, when and in what part of the republic she was built.

All vessels of domestic build, and sailing under the national flag, are free from every kind of tonnage duty, and are subject to no other exaction than is specified in the tariff of fees established by law.

Vessels built in a foreign country, on becoming the property of a citizen or citizens of the republic, may be enrolled under the Texan flag, and employed either in the foreign or coasting trade; but if engaged in the latter, under a coasting licence, she shall pay, on the expiration of the term of her licence, an annual tonnage duty of 37½ cents for each ton of her burden, for which the vessel and her securities are bound in the bond of her licence; and in case that her licence be returned within the year of its term, the said tonnage duty is to be exacted in proportion only to the time which has intervened between the date of the licence and its relinquishment. If the licence be returned in consequence of wreck, the duty is to be paid in proportion to the time that has elapsed between the loss of the vessel and the date of the licence. Any foreign vessel so adopting the flag of the republic is required to pay for enrolment and register, or licence, and for all coasting entrances and clearances, while under coasting licence, fees double in amount of those paid by vessels of domestic build.

Foreign vessels, without changing owner, master, or flag, by giving a bond conditioned and secured according to the mode of licensing coasting vessels in the U. States, and depositing the register with the collector of a port of the republic, may obtain from said collector a licence to carry on the coasting trade, and no other, for the term of six months; which licence may be relinquished for the aforesaid register within or at the end of the specified term; or may be renewed. On granting or renewing such licence, the collector exacts a half-yearly tonnage-duty of 62½ cents for each ton of the vessel's burden, no part of which duty is to be refunded, even should the licence be relinquished within the term. All such vessels, while under licence, pay for licence and for all coasting entrances and clearances, fees double in amount of those levied on licensed coasters of domestic construction.

Any foreign vessel, without changing her owner, master, flag, or register, may receive at any port of the republic, a cargo either of domestic or foreign produce, and land the same at another port of the republic; each foreign vessel making sail voyage coastwise, has to pay at the port of her entrance coastwise, a

tonnage duty of 15 cents for each ton of her burden; and while engaged in such voyage, with cargo so received, she is subject to the payment of fees, for entrance and clearance, double in amount to those paid for entrance and clearance from and to a foreign port.

No vessel bearing the flag of the republic, and sailing under a register, whether she be of domestic or foreign build, is subject to the payment of tonnage duty, nor to higher fees for entrance from and clearance to a foreign port, than those specified in the tariff of fees established by law. Any Texan vessel of domestic construction, making a coasting voyage under register, pays for entrance and clearance coastwise, the same fees as if sailing to or arriving from a foreign port. Vessels of foreign build, sailing under the flag of the republic, and making a coasting voyage, under register, pay double that amount of fees for such entrance and clearance.

Every vessel or boat of more than 4 tons burden, in sailing from one port of the republic to another, without cargo, and with or without a coasting licence, is to report, and clear verbally; if laden with cargo of domestic produce for home consumption, the nature of such cargo is to be briefly stated in writing; if laden with foreign merchandise, or with cotton, or other articles of domestic produce for exportation out of the republic, the contents of the cargo are to be specified in a manifest, a duplicate of which is to be left at the custom-house where she clears.

Warehousing. — A law passed 5th February, 1840, enjoins the secretary of the Treasury to provide good and sufficient warehouses in the ports of the republic, for the stowage of goods, wares, and merchandise, without payment upon the first entry thereof, or for exportation, in conformity with the revenue laws. Merchants are allowed to warehouse in their own stores under Custom-house lock and key.

All warehoused goods are to be duly cleared either for exportation, or for home consumption, within one year from the date of entry, unless the secretary of the Treasury, for good and sufficient reasons, should extend the time, which he is empowered to do, for a further term of three months. If any such goods be not so cleared, it is lawful for the secretary of the Treasury to order the collector of customs, where such failure may take place, to advertise and sell, at public auction, all such goods, by giving fifteen days' public notice, the produce of sale being applied to the payment of the duties, warehouse rent, and other charges, and the residue, if any, to the owners or proprietors of the goods, if discoverable, and if not, to be paid to his credit into the treasury.

The secretary of the Treasury is empowered to remit or return the duties payable or paid on goods entered to be warehoused, and lost or destroyed, either on shipboard or in the landing or shipping of the same, or in the receiving into or delivery from the warehouse.

Officers of the customs guilty of causing any embezzlement, waste, spoil, or destruction, in goods legally warehoused, are subject upon conviction to any punishment the proper tribunal may inflict, one year being the shortest term of imprisonment for any goods so embezzled, wasted, spoiled, or destroyed; the importer is not liable to duty, and in cases where importers prosecute officers of customs to conviction, the damage sustained by them is to be made good by the secretary of the Treasury.

When it is intended that warehoused goods shall be reshipped for exportation beyond seas, bond is required, with security quadruple the amount of the duties, that such goods shall be duly shipped and exported, and that they shall be landed at the place for which they are entered outwards, or otherwise accounted for to the satisfaction of the collector of customs. Warehoused goods are not to be exported in any craft of less than 45 tons burden.

Collectors of customs are empowered to appoint appraisers to appraise and estimate damage sustained by warehoused goods, and on estimates being forwarded to the secretary of the Treasury, he is authorised to refund to the importers or proprietor of such goods the excess of duties paid, that is, the difference between their value, in a sound and proper state, and in their injured condition. If the duties have not been paid, the collector is empowered to assess according to present value.

The unpacking, assortment, and repackage of damaged merchandise are allowed, and collectors of customs are authorised to accept, the abandonment for the duties, of any quantity of tobacco, coffee, pepper, and pimento; and also, of any whole package of other merchandise.

Drawbacks. — Drawback is allowed and paid on all goods, wares, or merchandise, whereupon duties have been paid, and which are exported to any place beyond seas, from the port or place of original importation, but no privilege of drawback is extended to goods, wares, or merchandise exported or transported to the territory of any state or power immediately adjoining the republic of Texas. To obtain the benefit of drawback, goods must be exported within twelve months from the date of their entry, in the district into which they were imported or introduced.

Farming utensils, implements of husbandry, furniture which has been used and in use, to the amount of 500 dollars. And also the tools, or implements of trade, of persons arriving in the republic, their wearing apparel, and other personal baggage in use, — free.

By a treaty with France, the following articles, the production and manufacture of France, imported direct in French or Texian vessels, are subject to a reduction as follows: —

Brandy	- -	One fifth.
Wines	- -	Two fifths.
Silks	- -	Ten per cent. ad valorem.

Note. — According to a proclamation issued by President Houston, dated 21st December, 1841, the proclamation issued 11th February, 1840, by President Lamar, was revoked, and French wines, &c. made to pay duty as specified in the foregoing tariff.

An additional duty of 5 per cent. on all goods imported on foreign bottoms, excepting Great Britain, France, and the Netherlands, those powers having treaties with Texas. In consequence of the lapse of the treaty between Texas and the U. States, vessels of the latter country are at present subjected to this duty.

All articles not enumerated, pay 15 per cent.

(We are principally indebted for the foregoing statements, the most valuable hitherto published with regard to Texas, to the report made by the British Consul at Galveston, to the Foreign Office, on the 1st of June, 1843.)

Tariff of the Republic of Texas, now in operation, and which took effect from and after the 1st Day of February, 1842.

Articles.	Specific.	Ad valorem.
Arms, fire, of every description -	-	15 ℘ ct.
Allspice - - - - -	5 cts. lb.	
Butter - - - - -	6	
Beef, per barrel - - - -	3 dollars	
Bacon - - - - -	2 cts. lb.	
Beans, per bushel - - -	50 cts.	
Boots and shoes - - -	-	25
Bonnets, ladies' - - -	-	10
Bagging and bale rope - -	-	15
Books and stationery - -	-	
Bibles, testaments, and primary school books - - - - -	Free.	
Coffee - - - - -	2 cts. lb.	
Corn and corn meal, bushel of 50 lbs.	20 cts.	
Candles, sperm, lb. - - -	10	
tallow, lb. - - - -	4	
Cheese - - - - -	3	
Chocolate - - - - -	3	
Candies - - - - -	3	
Cigars, Spanish, per 1,000 -	5 dollars	
American - -	3	
Clothing, ready made - -	-	30
Conserves, and sweetmeats of all kinds	-	30
Crockery ware - - - -	-	30
Cabinet ware of all kinds -	-	30
Chairs of all kinds - - -	-	30
Cutlery of all kinds - - -	-	25
Carriages for pleasure - -	-	30
Flour, per barrel - - -	1 dollar	
Fruits, dry and green - -	-	30
Grains not enumerated, per bushel of 60 lbs. - - - - -	20 cts.	
Hats of all kinds - - - -	-	25
Hardware and cutlery - -	-	25
Harness of all kinds - -	-	35
Lard, per lb. - - - -	3 cts.	
Lumber and house frames -	-	15
Lead, powder, and fire-arms -	-	15
Manufactures of wood - -	-	30
Oil, sperm, per gallon - -	30 cts.	
Oats, per bushel of 30 lbs. -	15	
Pork, in barrels or otherwise -	3 dollars	
Peas and beans, per bushel -	50 cts.	
Pepper, per lb., black - -	5	
Pickles - - - - -	-	30
Rice, per lb. - - - - -	2 cts.	
Salt, per bushel - - - -	10	
Sugar, brown, per lb. - - -	1	
loaf, per lb. - - - -	3	
white, Havana, per lb. - -	2	
Soap, per bar - - - -	3	
shaving - - - -	-	30 ℘ ct.
Spices, allspice, per lb. - -	5 cts.	
all kinds - - - -	-	30
Saddlery - - - - -	-	30
Stock of all kinds - - -	Free.	
Stationery - - - - -	-	15
School books - - - - -	Free.	
Tea, per lb. - - - - -	15 cts.	
Tin ware of all kinds - - -	-	30
Tobacco, manufactured - -	-	30
Twine for packing cotton - -	-	10
Vinegar, per gallon - - -	10 cts.	
Wares, crockery, and porcelain -	-	30
Wearing apparel in use - -	Free.	
Liquors: —		
Brandy, 1st and 2d proof, per gall. -	50 cts.	
Do. 3d and 4th - - -	62½	
Do. over 4th - - -	75	
Gin and rum same as brandy.		
All other liquors, including cordials of all kinds, pay same as brandy.		
Whiskey, 1st and 2d proof, per gall.	25 cts.	
Do. 3d do. -	37½	
Do. 4th do. -	50	
Do. over 4th do. -	75	
Wines: —		
Claret in cases - - -	-	10
do casks, per gallon - -	10 cts.	
Burgundy, Hermitage, Chambertin, and all other varieties of Burgundy - - - -	-	15
French wines (white) - -	-	10
Champagne, per basket - -	2 dol. 50 cts.	
Oporto, or Port, per gallon -	37½ cts.	
Madeira and sherry, per gallon	75	
Teneriffe and Spanish (white and red), per gallon - - -	25	
German and Rhenish - -	50	
Cider and malt liquor - -	-	10

Probable Progress of Texas. — Our anticipations of the future progress of this newly formed state are not so sanguine as those that seem to be generally entertained. The

country, no doubt, is, speaking generally, highly productive, well watered, and well situated for commerce; but the climate, especially in the lower and more fertile districts, is too hot and relaxing, and the land too fruitful, to permit or require its cultivation being vigorously prosecuted by free labourers. Had the importation of slaves into Texas been permitted, its progress might, and most probably would, have been as rapid as that of the southern states of the American Union. But their importation, except from the U. States, is prohibited; and if the supply from this quarter should fail, and the prohibition of their importation from other quarters be really enforced, its progress will, we apprehend, be comparatively slow. It is a contradiction and an absurdity to suppose that free settlers in such a country should exhibit any considerable portion of the energy and industry they would exhibit if they had to cultivate a less fertile soil, or were placed under a severer climate. Mexico and the U. States may both be referred to in illustration of this principle: industry is, in the former, at the lowest possible ebb (see *Geog. Dict.*, art. *Mexico*), though it is needless to add, that the incentives to labour are there quite as great as in Texas. And does any one suppose that the cultivation of cotton and sugar would be carried to near its present extent in the Southern U. States, but for their all but unlimited command of slave labour? We, therefore, are well convinced that the future progress of Texas will depend principally on the fact, whether she can or cannot derive ample supplies of slave labour. If she can (whether with or without the sanction of the law is in this respect of no importance), the fair presumption is, that she will make a rapid progress; whereas, if she cannot, her progress will, most probably, be comparatively slow; and we should anticipate that, under such circumstances, her inhabitants will gradually fall into the same state of semi-barbarous indolence into which the Mexicans have already sunk.

In exchange for the cotton and other products sent to Great Britain, the Texans import British manufactured goods, not only for their own consumption, but partly, also, for the supply of the N. States of Mexico. Indeed, Santa Fé has been, since 1825, the great emporium of N. or New Mexico, and in it the traders of that country meet those of the U. States; the former purchasing the manufactures brought by the latter with peltry and bullion, so that a good deal of specie reaches the U. States by this route. The annual amount of the trade at Santa Fé was estimated, in 1834, at 2,000,000 dollars; and in 1841 Iken estimated it at 3,000,000 dollars. Most of the articles for this trade are purchased in Philadelphia, whence they are transported overland to Pittsburg, where they are shipped for St. Louis, being thence conveyed in wagons to Santa Fé, which they reach after a journey of at least 4,000 miles. From St. Louis to Santa Fé, about 1,200 m., the road is extremely bad, running through a country so infested by hostile Indians, that the U. States government is obliged usually to send an escort of cavalry with the larger caravans; indeed, 200 dragoons were sent in 1839 for the protection of one body of traders! — (*Kennedy*, ii. 417.) But Santa Fé is only 600 m. from the Texan coast; so that it may not unreasonably, perhaps, be anticipated, that eventually Galveston and the other Texan ports will be the principal routes by which European goods will reach N. Mexico. It may, also, be pretty confidently anticipated, that Texas will become the seat of an extensive smuggling trade into the southern and western states of the American Union. Seeing the high duties imposed by the American tariff on so many important articles, and the facilities which the country affords for smuggling into the Union, it is all but certain that it will be extensively carried on.

GAMBOGE (Fr. *Gomme gutte*; Ger. *Gummigutt*; It. *Gomma gutta*; Lat. *Gummi guttæ*, *Cambogia*; Arab. *Ossararewund*; Siamese and Cambojan, *Rong*), a concrete vegetable juice, or gum resin, the produce of the *Garcinia Cambogia*, a forest tree of the genus which affords the mangostein, the most exquisite fruit of the East. The districts which yield gamboge lie on the east side of the Gulph of Siam, between the latitudes of 10° and 12° north, comprising a portion of Siam and the kingdom of Camboja, whence its English name. It is obtained by making incisions in the bark of the tree, from which it exudes, and is collected in vessels placed to receive it. In these it assumes a firm consistence; and being formed into orbicular masses, or more frequently cylindrical rolls, it is at once fit for the market. It is of a bright yellow colour, opaque, brittle, breaks vitreous, has no smell, and very little taste. Specific gravity 1·22. When taken internally, it operates as a most violent cathartic. It forms a beautiful yellow pigment, for which purpose it is principally used. The Dutch began to import it about the middle of the seventeenth century. The greater part of the gamboge of commerce first finds its way to Bangkok, the Siamese capital, or to Saigon, the capital of lower Cochin China; from these it is carried by junks to Singapore, whence it is shipped for Europe. Its price at Singapore varies, according to quality, from 30 to 80 dollars per picul. Dark coloured pieces should be rejected. — (*Crawford's Embassy to Siam*, p. 425.; *Thomson's Chemistry.*)

GARNET, GARNETS (Fr. *Grenats*; Ger. *Granaten, Granatstein*; It. *Granati*; Lat. *Granati*; Rus. *Granatnoi kamen*; Sp. *Granadas*). There are two species of garnet, the precious and the common. The colour of the first is red; and hence the name of the mineral, from its supposed resemblance to the flower of the pomegranate; passes from Columbine red, to cherry and brown red; commonly crystallised. External lustre glistening, internal shining, vitreous; transparent, sometimes only translucent; specific gravity 4·08 to 4·35. The colour of the common garnet is of various shades of brown and green. Different colours often appear in the same mass: translucent; black varieties nearly opaque: specific gravity from 3·66 to 3·75. — (*Thomson's Chemistry.*) The finest varieties come from India, and some good specimens have been received from Greenland. When large and free from flaws, garnets are worth from 2*l.* to 5*l.* or 6*l.*, and even more; but stones of this value are of rare occurrence, and always in demand. — (*Mawe on Diamonds, &c.* 2d ed. p. 113.)

GAS COMPANIES, the term usually applied to designate the companies or associations established in most large towns for lighting the streets and houses with gas.

Every one must have remarked that most species of coal, when ignited, give out large quantities of gas, which burns with much brilliancy, yielding a great quantity of light as well as of heat. Dr. Clayton seems to have been the first who attempted, about 1736, to apply this gas to the purposes of artificial illumination; but his experiments were upon a very limited scale, and no further attention was paid to the subject till more than half a century afterwards. At length, however, Mr. Murdoch, of Soho, instituted a series of judicious experiments on the extrication of gas from coal; and, by his ingenuity and sagacity, succeeded in establishing one of the most capital improvements ever made in the arts. Mr. Murdoch found that the gas might be collected in reservoirs, purified, conveyed by pipes to a great distance from the furnace where it was generated; and that it affords, by its slow combustion, when allowed to escape through small orifices, a beautiful and steady light. This great discovery, which places Mr. Murdoch in the first rank among the benefactors of mankind, was first brought into practice at Redruth, in Cornwall. In 1802, it was applied to light Mr. Murdoch's manufactory at Soho; in 1805, it was adopted by Messrs. Philips and Lee, of Manchester, in the lighting of their great cotton mill; and is now employed in the lighting of the streets, theatres, and other public buildings, factories, &c. of *all* the considerable towns of the empire; and also in most considerable towns of the Continent and America.

Gas light is indebted, for its rapid diffusion, not more to its peculiar softness, clearness, and unvarying intensity, than to its comparative cheapness. According to Dr. Thomson (*Encyc. Brit.* art. *Gas Lights*), if we value the quantity of light given by 1 lb. of tallow in candles at 1*s.*, an equal quantity of light from coal gas will not cost more than 2½*d.*, being less than a *fourth part* of the cost of the former.

Oil and other substances have been used in furnishing gas for the purpose of illumination, but none of them has answered so well as coal. Most of the oil gas establishments have been abandoned.

The construction of gas works on a large scale, and the carrying of pipes through the streets and into houses, &c., is very expensive, and requires a large outlay of capital. Hence most of the gas lights in the different towns are supplied by joint stock companies. Many of them have turned out to be very profitable concerns.

The subjoined Table contains a statement of the most important particulars connected with the principal gas companies; viz. the number of shares in each, the nominal amount of each share, the sums actually paid up, the market price of shares, the dividend payable on them, &c. — (From the *Trade List* for the 27th of June, 1843.)

Names of Companies.	Number of Shares.	Amount of Shares.	Cost per Share.	Selling Price per Share.	Dividend per Annum.	Dividends payable.
		£	£ s.	£ s.		
Chartered	12,000	50	50 0	65 10	6 per cent.	May, Nov.
Ditto new	5,000	50	10 0	13 0	6 per cent.	May, Nov.
City	1,000	100	100 0	200 0	10 per cent.	Mar. Sept.
Ditto new	1,000	100	100 0	200 0	10 per cent.	Mar. Sept.
Imperial	10,000	50	50 0	75 10	6 per cent.	Apr. Oct.
Ditto debentures	56,500	100	100 0	100 0	4 per cent.	Jan. July.
Phœnix	9,000	50	39 0	32 10	5 per cent.	Feb. Aug.
British (London)	5,000	40	18 0	20 10	1*l.* 5*s.*	Apr. Oct.
Ditto (Country)	5,000	20	19 0	25 10	1*l.* 8*s.*	Apr. Oct.
Ditto debentures	-	100	- -	101 0	5 per cent.	Jan. July.
Independent	2,000	30	30 0	59 0	6 per cent.	Mar. Sept.
Gen. Un. Gas Light Company	9,000	50	48 0	28 0	4 per cent.	Mar. Sept.
Imperial Continental	4,000	75	62½ 0	125 0	- -	Jan. July.
Bradford	600	25	20 0	- -	10 per cent.	
Brentford	600	50	50 0	18 0		
Bath	2,500	20	16 0	25 0	1*l.* 4*s.*	Feb. Aug.
Barnsley	600	10	10 0	10 0	- -	Mar. Sept.
Birmingham	704	50	50 0	103 0	5*l.*	Feb. Aug.
Birmingham and Staffordshire	2,400	50	50 0	78 0	4*l.*	Feb. Aug.
Brighton	2,250	20	20 0	19 0	4 per cent.	Feb. Aug.

Table of Gas Companies — *continued.*

Names of Companies.	Number of Shares.	Amount of Shares.	Cost per Share.	Selling Price per Share.	Dividend per Annum.	Dividends payable.
		£	£ s.	£ s.		
Brighton, new	750	20	18 0	- -	- -	Feb. Aug.
Bristol	4,250	20	- -	32 0	7½ per cent.	
Canterbury	240	50	- -	56 10	6 per cent.	Jan. July.
Carlisle	- -	25	22 0	- -	10 per cent.	
Cheltenham	300	50	50 0	- -	10 per cent.	
Coventry	800	25	- -	20 0	5 per cent.	
Derby	200	50	50 0	- -	7 per cent.	
Dover	180	50	- -	62 0	5 per cent.	
Dudley	600	20	- -	20 0	6 per cent.	July.
Exeter	240	50	- -	- -	5*l.*	
Edinburgh	- -	25	25 0	- -	10 per cent.	
Great Yarmouth	780	20	20 0	19 0	19*s.*	Jan. July.
Guildford	- -	25	25 0	22 0	1*l.*	
Glasgow	- -	25	25 0	- -	10 per cent.	
Halifax	600	25	25 0	- -	8 per cent.	
Ipswich	- -	10				
Isle of Thanet	800	25	20 0	19 5	8 per cent.	Jan. July.
Kidderminster	760	50	50 0	- -	7½ per cent.	January.
Leeds	201	100	100 0	- -	7 per cent.	
Leicester	- -	50	50 0	- -	7½ per cent.	January.
Leith	- -	20	25 0	- -	6 per cent.	
Lewes	220	25	25 0	25 0		
Liverpool	500	100	100 0	- -	17 per cent.	
Ditto (new company)	- -	- -	120 0			
Lancaster	- -	- -	20 0	- -	7 per cent.	
Maidstone	200	50	50 0	100 0	10 per cent.	Mar. Sept.
Macclesfield	- -	50	50 0		6 per cent.	
Newcastle-upon-Tyne	- -	50	- -	- -	10 per cent.	
Newport, Isle of Wight	320	50	- -	16 0	1*l.*	
Northampton	542	20	19 0	- -	7½ per cent.	
Nottingham	320	50	50 0	- -	15 per cent.	
Oxford	120	150	150 0	- -	10 per cent.	
Poplar	600	150	- -	36 10		
Portsea Island	600	150	53 0	50 0	5 per cent.	Jan. July.
Plymouth	10,000	50	- -	70 0	5*l.*	July.
Ratcliff	1,000	100	80 0	70 0	5 per cent.	Mar. Sept.
Rochdale	480	25	25 0	45 0	7½ per cent.	
Sheffield	1,600	50	25 0	50 0	10 per cent.	
Shrewsbury	1,000	10	10 0	15 0	7 per cent.	
Stamford	- -	- -	50 0	55 0	5 per cent.	
Stockport	- -	50	50 0	90 0	10 per cent.	
Swansea	- -	55	55 0	80 0	8 per cent.	
South Metropolitan	4,000	50	20 10	18 10	3 per cent.	July.
Warwick	294	50	- -	50 0	5 per cent.	March.
Wakefield	400	25				
Warrington	100	20	- -	40 0	10 per cent.	
Wolverhampton	550	20	20 0	40 0	10 per cent.	
Worcester	600	20	20 0	22 0	5 per cent.	
York	- -	25	25 0	42 0	10 per cent.	

GENEVA (Du. *Genever;* Fr. *Genièvre;* Ger. *Gaud, Genever;* It. *Acqua di Ginepro;* Lat. *Juniperi aqua;* Sp. *Agua de Enebro*), a spirit obtained by distillation from grain, rectified with the addition of juniper berries. The latter give to the spirit that peculiar flavour by which it is distinguished, and are also said to render it diuretic. Geneva is a corruption of *genièvre*, the French term for the juniper berry.

By far the best Geneva is made in Holland, where its manufacture is carried on to a very great extent. The distilleries of Schiedam have long been famous, and are at present in a very prosperous condition. Schiedam geneva is made solely of spirit obtained from rye and barley, flavoured with juniper berries. It becomes milder, and acquires, as it gets old, an oily flavour disliked by the Hollanders; hence nearly the whole of the "Schiedam" is exported, principally to the East Indies. There are no fewer than 300 distilleries in Schiedam, 100 in other parts of Holland, and not more than 40 in Belgium. The entire annual produce of the distillery in Holland is estimated at 2,000,000 ankers, or 20,500,000 wine gallons, of which about two thirds are exported. — (*Cloet, Description Géographique des Pays Bas*, p. 32.)

In nothing, perhaps, has the destructive effect of heavy taxation been so strongly exhibited, as in the trade of geneva. It appears from the *Parl. Paper* No. 248. Sess. 1826, that during the 10 years ending with 1786, when the duty on geneva was about 10*s.* the wine gallon, the average annual consumption in Great Britain amounted to about 80,362 gallons. But in 1786, Mr. Pitt reduced the duties to 5*s.* a gallon; and the effect of this wise and politic measure was such, that in the next decennial period the average imports for home consumption amounted to 444,891 gallons! From 1796 to 1806, the duties fluctuated from 7*s.* 6*d.* to 14*s.*; but as the taste for geneva had been formed, and as the duties on other spirits had been increased in about the same proportion, the consumption went on increasing, having been, at an average of the 10 years, as high as 724,351 gallons a year. This was the maximum of consumption. Mr. Vansittart soon after began his inauspicious career, and immediately raised the duty from 14*s.* to 20*s* 8*d.* the consequence of this increase being, that in the 10 years ending with 1816, the average consumption amounted to only 272,898 gallons. Since then the duties have continued stationary, being at this moment 22*s.* 10*d.* the Imperial gallon, on an article which may be bought in bond for 2*s.* 3*d.* or 2*s.* 6*d.*! The duties on rum and British spirits having been materially reduced during the last 10 years, the consumption of geneva has gone on progressively diminishing, till it now amounts, as appears from the subjoined official

statement, to no more than 13,323 gallons; being only *one fifty-fourth* part of what it amounted to during the 10 years ending with 1806!

In Ireland the effects of this *felo de se* system have been more injurious than appears from this Table. During the 4 years ending with 1803, the books of the Irish Custom-house show that there were, at an average, 82,828 gallons of geneva entered for home consumption, producing at the then duty of 7*s.* 3½*d.*, 39,923*l.* a year; whereas, notwithstanding the vast increase of population, the consumption of geneva in Ireland, in 1842, was only 1,246 gallons, and the revenue only 1,406*l.*

To make any lengthened commentary on such statements would be useless. Our policy, if we may apply this term to so revolting a display of short-sighted rapacity, has had no other effect than to lessen the public revenue and enjoyments of the people, to injure our trade with Holland, and to foster and promote the ruinous and destructive practice of smuggling. The exorbitant duties on geneva, brandy, and tobacco have led to the formation of the coast guard and the preventive water guard, costing together about 400,000*l.* a year; and yet, notwithstanding this outlay, and notwithstanding the innumerable penalties and punishments to which he is exposed, the trade of the smuggler is not put down, but is, on the contrary, in a peculiarly flourishing condition; and so it will continue, in despite of every thing that can be done for its suppression, till these duties be adequately reduced.

We believe our gin manufacturers have nothing to apprehend from a reduction of the duties on geneva to 10*s.* a gallon. The lower classes, who are the great consumers, prefer English gin to every other stimulant. Nothing would have so much influence in improving the quality of the latter as the admission of geneva at a moderate duty. It would also have the beneficial effect of putting an end to the manufacture of the spurious compounds sold under its name.

The regulations as to the importation, &c. of geneva are similar to those affecting BRANDY; which see.

An Account of the Number of Gallons (Imperial Measure) of Geneva entered for Home Consumption in Great Britain and Ireland, the Rates of Duty on the same, and the entire Nett Produce of the Duty, each Year since 1814.

Years.	Quantities retained for Home Consumption.			Nett Produce of Duty (Customs and Excise).									Rates of Duty per Imperial Gallon (Customs and Excise).					
	Great Britain.	Ireland.	United Kingdom.	Great Britain.			Ireland.			United Kingdom.			Gt. Britain.			Ireland.		
	Imp. gall.	*Imp. gall.*	*Imp. gall.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1814	149,302	6,072	155,374	168,559	13	3	5,581	18	5	174,141	11	8	1	2	6¼	0	17	5½
1815	124,508	4,416	128,924	139,768	13	3	4,029	8	11	143,798	2	2						
1816	103,973	1,305	105,278	116,067	12	11	1,559	15	8	117,627	8	7						
1817	105,483	2,174	107,657	118,337	10	10	2,014	16	0	120,350	15	10						
1818	115,455	3,032	118,487	127,905	18	11	2,772	3	3	130,677	2	2						
1819	102,923	3,124	105,047	114,799	13	7	2,795	2	0	117,594	16	4	1	2	7½			
1820	105,067	3,383	108,450	114,903	15	2	2,943	17	11	117,847	13	1						
1821	89,443	3,324	92,767	100,065	15	9	2,940	2	10	103,005	18	7						
1822	88,670	2,917	91,587	99,081	16	2	2,923	14	3	102,005	10	5						
1823	82,784	8,164	90,948	93,412	0	0	7,020	14	5	100,432	14	5	-		-	1	2	8
1824	89,605	412	90,017	101,089	12	3	472	7	11	101,562	0	2						
1825	85,709	1,040	86,749	96,663	2	1	1,145	17	11	97,809	0	0						
1826	67,079	2,081	69,160	75,585	15	10	2,337	10	11	77,940	16	9	1	2	6	1	2	6
1827	50,799	1,908	52,708	57,304	11	11	2,147	12	6	59,452	4	5						
1828	43,037	2,223	45,260	48,433	9	1	2,500	11	10	50,934	0	11						
1829	35,301	1,845	37,146	39,647	17	2	2,075	12	6	41,723	9	8						
1830	29,089	1,793	30,730	32,650	0	0	2,018	0	0	34,668	0	0						
1831	22,510	1,388	23,898	25,332	0	0	1,562	0	0	26,894	0	0						
1832	20,509	1,402	22,301	23,114	0	0	1,577	0	0	24,691	0	0						
1833	19,240	1,278	20,518	21,660	0	0	1,437	0	0	23,097	0	0						
1834	19,367	2,065	21,432	21,795	0	0	2,346	0	0	24,301	0	0						
1835	18,026	1,624	19,648	20,330	0	0	1,826	0	0	22,156	0	0						
1836	18,447	1,495	19,942	20,815	0	0	1,681	0	0	22,496	0	0						
1837	16,793	1,141	18,234	18,907	0	0	1,622	0	0	20,529	0	0						
1838	17,072	1,155	18,227	19,211	0	0	1,306	0	0	20,517	0	0						
1839	17,350	1,270	18,620	19,452	0	0	1,429	0	0	20,881	0	0						
1840	14,757	1,255	15,992	16,759	0	0	1,401	0	0	18,160	0	0	1	2	10	1	2	10
1841	14,963	1,218	16,181	16,848	0	0	1,391	0	0	18,239	0	0						
1842	13,343	1,246	14,579	15,208	0	0	1,406	0	0	16,614	0	0						

GENOA, a maritime city of Italy, once the capital of the famous republic of that name, now of a province of the kingdom of Sardinia, at the bottom of the extensive gulph to which it gives its name; the light-house being in lat. 44° 24′ 40″ N., lon. 8° 52′ 55″ E. Population, in 1838, 115,257. Genoa is one of the finest cities of Europe. In general, the streets are inconveniently narrow; but some of the principal ones are moderately wide, and consist almost entirely of public buildings, and private palaces erected during the period of her prosperity. Being built on a rising ground, in the form of an amphitheatre, the appearance of the town from the sea is most magnificent, and justifies the epithet given to her of "*la superba.*"

Port. — The harbour is semicircular, the diameter being about 1,000 fathoms. It is artificial, being formed by two gigantic moles having opposite directions. That on the east side, called the old mole (*molo vecchio*), projects from the centre of the city W. by S. It is about 260 fathoms in length, and has a battery near its middle. The new mole (*molo nuovo*), on the opposite side of the port, adjoins the southern extremity of the suburb of St. Pietro d'Arena, projecting about 210 fathoms from shore in an E. S. E. direction. The mole heads bear from each other N. E. by E. and S. W. by W., the distance between them, forming the entrance to the harbour, being about 350 fathoms. The light-house is without the port, on the west side, near the extremity of a point of land, and contiguous to the bottom of the new mole. It is a lofty square tower; and as it stands on a high rock, and is painted white, it is visible in clear weather at a great distance. There is also a harbour light at the extremity of the new mole. There is no difficulty in entering the harbour; the ground is clean, and there is plenty of water, particularly on the side next the new mole; care, however, must be taken, in coming from the west, to give the light-house point a good offing. Moderate sized merchantmen commonly anchor inside the old mole contiguous to the *porto franco*, or bonded warehouses, having a hawser made fast to the mole, and an anchor ahead. Men of war and the largest class of merchantmen may anchor inside the new mole, but they must not come too near the shore. Ships sometimes anchor without the harbour in from 10 to 25 fathoms, the light-house bearing N. ½ W.; distant 2 or 3 miles. The S. W. winds occasion a heavy swell, but the bottom is clay and holds well. Within the town are two rather shallow basins designed for gallies and small trading vessels. There is also an arsenal.

Money. — Accounts were formerly kept at Genoa in lire of 20 soldi, each soldo containing 12 denari; and money was divided into *banco* and *fuori di banco*. But since the 1st of January, 1827, the ancient method of reckoning has ceased, and accounts are now kept in lire Italiane, divided into cents. The weight and fineness of the new coins are precisely the same as those of France: so that the par of ex-

change = 25·20 lire per 1*l.*, if estimated in silver at 5*s.* 2*d.* an oz., and 25·54, if estimated in silver at 5*s.* an oz. 6 old lire di banco are equal to 5 new lire very nearly.—(*Manuel de Nelkenbrecher.*) Sales of merchandise continue, however, to be, to some extent, made in the old currency. The prices given in a subsequent part of this article are in it.

The Bank of Genoa, or of St. George, was one of the most ancient and celebrated banks of circulation and deposit in Europe. Until 1746, when the bank was pillaged by the Austrians, it was customary to make all bills of exchange drawn upon Genoa payable in *banco*; but since then they have generally been made payable in money *fuori di banco*. In 1800, when the French were besieged in Genoa by the Austrians they took the treasure of the bank to pay their troops. The establishment has never recovered from this blow; some warehouses, and a part of the town's revenue, were assigned to it, but they yield a very poor dividend. It is no longer used as a place of deposit for money.

Weights and Measures.—The pound is of two sorts; the *peso sottile* = 4,891½ English grains, and the *peso grosso*. The latter is 10 per cent. heavier than the former: hence the cantaro of 100 lbs. peso sottile = 69·89 lbs. avoirdupos; and the cantaro of 100 lbs. peso grosso = 76·875 lbs. avoirdupois. The latter is used for weighing bulky commodities; the former is used in the weighing of gold and silver, and of all commodities of small bulk.

Corn is measured by the mina of 8 quarte or 96 gombette; 1 mina = 3¼ Winchester bushels nearly. Salt is sold by the mondino of 8 mine.

Of liquid measure, 100 pinte = 1 barilla.
2 barilla = 1 mezzarola = 39¼ English wine gallons. The barilla of oil = 17 English gallons.

Of long measures, the palmo = 9·725 English inches. The canna is of 3 sorts: the canna piccola, used by tradesmen and manufacturers, = 9 palme, or 87·5 English inches; the canna grossa, used by merchants, = 12 palmi = 116·7 English inches; and the canna used at the Custom-house = 10 palmi = 97·25 English inches. The braccio = 2⅔ palmi.

Trade, &c.—Genoa is the *entrepôt* of a large extent of country; and her commerce, though inferior to what it once was, is very considerable, and has latterly been increasing. She is a free port; that is, a port where goods may be warehoused and exported free of duty. The exports consist partly of the raw products of the adjacent country, such as olive oil (an article of great value and importance), rice, fruits, cheese, rags, steel, argol, &c.; partly of the products of her manufacturing industry, such as silks, damasks, and velvets (for the production of which she has been long famous), thrown silk, paper, soap, works in marble, alabaster, coral, &c.; the printed cottons of Switzerland, and the other products of that country and of the western parts of Lombardy, intended for the south of Europe and the Levant; and partly of the various foreign products brought by sea, and placed in *porto franco*. The imports principally consist of cotton and woollen stuffs; cotton wool, mostly from Egypt; corn from the Black Sea, Sicily, and Barbary; sugar, salted fish, spices, coffee, cochineal, indigo, hides, iron, and naval stores from the Baltic; hardware, and tin plates from England; wool, tobacco, lead (principally from Spain), wax, &c. Corn, barilla, Gallipoli oil, cotton, valonia, sponge, galls, and other products of the countries adjoining the Black Sea, Sicily, the Levant, &c. may in general be had here, though not in so great abundance as at Leghorn. The abolition of the various duties and Custom-house fees formerly charged on the transit of goods through Genoa and the Sardinian territories, has had a very beneficial influence on the trade of this port, particularly as regards the importation of raw cotton for Switzerland and Milan, as well as of the different descriptions of colonial produce

Statement of the Principal Articles of Raw Produce exported from Genoa, with their Prices there on the 3rd of January, 1843, in *Porto franco* (Bond), in Italian Money, Weights, and Measures, and free on Board in English Money, Weights, and Measures.—(From the *Circular of Grants, Balfour, and Co.*)

Exports.		Genoa Rates in Porto franco.		Price in English Money, and Weights, free on board.			
				Lbs.	£	*s.*	*d.*	
Almonds, sweet	liv.	44	to 45	100	2	7	5	
Brandy, 1*s.* 4*d.* proof Span. 3*s.* 6*d.* spirit		none						
		32	— 34		0	0	0	
Brimstone roll		16	— 0		12	9	0	
Cantharides		34	— 0		0	3	2	
Cheese, Parmesan		50	— 0		0	0	11	
Citron, preserved	sol.	9	— 0		0	0	5·35	
Cotton, Makò		none						
Cream of tartar	—	78	— 80		2	18	7	
Essence of Lemon	—		— 0		0	3	11	
Bergamotte	—		— 0		0	7	2	
Orange	—	34			0	4	0	
Galls, Turkey, blue	sols	18	— 19		4	18	3	
in sorts		10	— 11		2	16	10	
Gum Arabic, picked		22	— 32		8	4	3	
in sorts		16	— 17		4	7	3	
Myrrh in drops		24	— 30		7	14	0	
sorts		10	— 12		3	1	7	
Hemp, Bologna, Londrina	liv.	59	— 60	150	43	1	1	
Garden, 1st	—	56	— 57		40	18	0	
Cordage, 1st	—	49	— 50		35	17	7	
2nd	—	48	— 0		34	8	10	
Ferrara, Garden	—	51	— 52		37	6	3	
Cordage	—	46	— 47		33	14	6	
Piedmont, 1st	—	44	— 45		32	5	10	
Linseed	—	18	— 21		2	16	8	
Liquorice paste, Calabria	—	53	— 55	100	2	17	4	
Sicilian	—	32	— 36		1	17	6	
Manna in flakes	sol	100	— 0	1	0	4	9	1 lb.
sorts	—	36	— 38			1		—
Opium, Turkey	—	11	— 12	—		10	10	1 lb.

Exports.		Genoa Rates in Porto franco.			Price in English Money, and Weights, free on board.			
					£	*s.*	*d.*	
Oil, Genoa, superfine	liv	144	to 146	brl.	94	7	2	tun of 252
fine	—	105	— 115	—	74	6	6	Imp.
Gallipoli	—	64	— 66	—	43	14	5	gal.
Tunis	—	64	— 66	—	43	14	5	
Sicily	—	64	— 67	—	44	10	5	—
Paper, Floretta, 14 lbs.	—	5⅗	— 6⅘	p. rm. of 425 sheets	0	4	4	rm. of 175 sheets
Media, 14 lbs.	—	4⅘	— 5⅕		0	5	8	
Almasso, 17 lbs.	—	8⅘	— 8⅘		0	6	0	
Quicksilver	sols	84	— 85	1 lb.	0	4	1	1 lb.
Rice, Lombardy	liv.	16½	— 18	150lb.	0	12	10	cwt.
Saffron	—	34	— 41	1 lb.	1	17	2	1 lb.
Silks, sewing, black		21½	— 22	—	1	2	10	—
assorted	—	24½	— 25	—	1	5	10	—
Soap, white	—	48	— 50	150lb.	1	16	10	cwt.
Mottled	—	36	— 38	—	1	8	0	—
Shumac, Sicily	—	18	— 20	225lb.	0	9	10	—
Steel, Milan: —								
No. 00.								
No. 0. assort.	—	36½	— 0	150lb.	1	7	9	—
No. 1.								
Tallow, Russia	—	32	— 35	—	1	6	5	—
Candles	—	68	— 0	—	2	5	10	—
Wax, white	—	75	— 0	—	2	13	0	—
Wine, Catalonia	—	34	— 36	1 lb.	-	-	-	1 lb.
Velvet, 3 piles blue black	—	90	— 100	pipe	3	5	5	pipe
		4	— 4 1/20	palm	0	10	6	yard
Grain, wheat, Polish, soft	—	18½	— 20	mina	1	16	9	im. q.
Tangaroch, hard	—	19	— 20	—	1	16	9	—
Barley, Barbary	—	none						
Indian Corn, Black Sea	—	11½	— 0	—	1	1	0	—

Statement of the Quantities of some of the Principal Articles of Colonial and other Raw Produce imported into Genoa in 1840, 1841, 1842, with the Stocks on Hand on the 1st of January, 1842 and 1843.

Articles imported.		1840.	1841.	1842.	Stock 1st Jan. 1842.	Stock 1st Jan. 1843.
Cocoa, all quals.	bags	19,820	10,500	11,840	1,970	2,500
Coffee, ditto	tons	2,805	1,700	2,235	315	620
Cotton, ditto	bales	29,200	13,964	27,255	5,800	8,100
Cochineal	lbs.	8,000	28,000	25,000	2,800	1,000
Fish, Codfish	quint.	29,600	33,300	36,900	400	2,000
Stockfish	vogs.	20,200	38,400	20,900	- -	3,000
Pilchards	hhds.	927	3,586	750	350	800
Herrings	barls.	2,850	1,287	1,300	- -	350
Hides	numb.	216,600	331,400	366,000	20,500	41,000
Indigo, Bengal	cases	362	332	414	143	80
Spanish	serons	646	812	605	530	500
Lead	pigs	7,405	18,100	11,500	10,000	5,000
Pepper	lbs.	4,977,500	5,816,000	4,302,000	88,000	- -
Pimento		18,900	-	26,500	- -	22,000

Articles imported.		1840.	1841.	1842.	Stock 1st Jan. 1842.	Stock 1st Jan. 1843.
Sugar, loaves	boxes	1,765	534	- -	105	
crushed	casks	4,412	2,922	5,900	65	1,118
ditto	boxes	- -	1,684	2,075		
ditto	brls.	8,950	6,384	7,200	200	
Havannah,	boxes	12,800	15,075	10,050	6,360	4,425
Brazil	cases	3,950	3,690	2,990	461	510
ditto	brls. / bgs.	40,740	37,900	20,200	13,922	4,670
E. India	—	6,625	- -	2,800	- -	2,800
S. Jago & Porto Rico	casks	2,600	845	1,075	386	
ditto	brls. / bgs.	- -	3,560	1,700	326	
Tin plates	boxes	5,987	2,980	10,500	300	800

Tares.—Those of usage are,—on cotton, fish, tallow, valonea, and elephants' teeth, 4 per cent.; hemp, 1 per cent.; wood, 116 for 100 lbs.; almonds, wax, and galls, 104 for 100 lbs.; ginger, 112 for 100 lbs.; sugar in loaves, 2 per cent.; raw silk, 1 ounce per lb.; alum, argol, anchovies, barilla, brandy, flour, iron, lead, saltpetre, figs, hides, pepper, juniper berries, pumice stone, rags, raisins, rice, cream of tartar, essences, quicksilver, shumac, steel, and soap, have no tare; for all other articles sold by weight, 106 lbs. are given for every 100 lbs. These tares have been deducted from the proceeds of the imports as above stated.

The loss of weight on importations from the place of growth, partly arising from difference of tare, varies as follows:—

	Per cent.	
Sugar in chests from Rio de Janeiro, loses	1 to 3	taking 3½ arrobas as equal to 1 cwt. Eng.
bags, ditto	3 — 4	
chests from Pernambuco	4 — 6	
chests from Bahia	7 — 10	
boxes from Havannah and Cuba	4 — 6	taking 4½ ditto.
Muscovado in casks from Cuba and Porto Rico	12 — 15	

Importations from other quarters where the tares allowed are on a par with those of Genoa, generally render full weight; Havannah box sugars from the United States render 1 to 2 per cent. more than full weight.

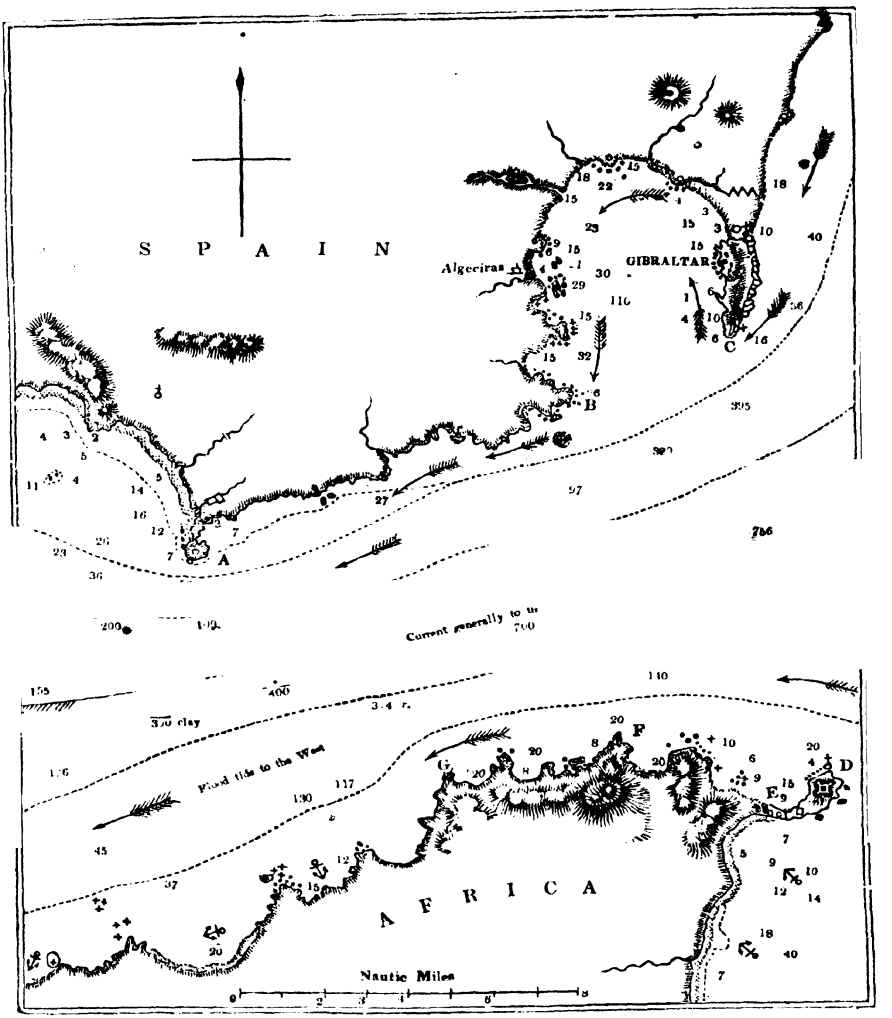
GENTIAN (Ger. *Enzian*; Fr. *Gentiane*; It. *Genziana*; Sp. *Jenciana*; Rus. *Enzian*; Lat. *Gentiana*), the roots of two alpine plants, *Gentiana lutea* and *Gentiana purpurea*, found growing in Switzerland and Austria, the Apennines, the Pyrenees, and in North America. Those brought to this country come from Germany. They are in pieces of various lengths and thickness, twisted, wrinkled on the outside, and covered with a brownish grey cuticle. They have no particular odour; and the taste is intensely bitter, without being nauseous.—(*Thomson's Dispensatory.*)

GHEE. See BUTTER.

GIBRALTAR, a famous fortress near the southernmost extremity of Spain, and contiguous to the narrowest part of the strait, to which it gives its name, joining the Atlantic and Mediterranean, lat. 36° 6′ 30″ N., lon. 5° 21′ 12″ W. It is situated on the west side of a rocky mountain or promontory, the *Mons Calpe* of the ancients, projecting into the sea, in a southerly direction, about 3 miles, being from ¼ to ¾ of a mile in width. The southernmost extremity of the rock is called Europa Point. Its northern side, fronting the isthmus which connects it with Spain, is almost perpendicular, and wholly inaccessible; the east and south sides are so rugged and precipitous, as to render any attack upon them, even if they were not fortified, next to impossible; so that it is only on the west side, fronting the bay, where the rock declines to the sea and the town is built, that it can be attacked with the least chance of success. Here, however, the strength of the fortifications, and the magnitude of the batteries, are such, that the fortress seems to be impregnable, even though attacked by an enemy having the command of the sea. It was taken by the English in 1704, but the fortifications were then very inferior to what they are at present. Towards the end of the American war, it was attacked by a most formidable armament fitted out jointly by Spain and France; but the strength of the place, and the bravery of the garrison, defeated all the efforts of the combined powers. Population about 16,000, exclusive of the troops, which usually amount, in time of peace, to from 3,000 to 4,000.

The bay of Gibraltar is spacious; and, being protected from all the more dangerous winds, affords a convenient station for ships. Two moles have been constructed, at a vast expense, for the protection of the shipping. The old mole projects from the north end of the town, N.W. by N., 1,100 feet into the sea: the new mole is 1½ mile more to the south, extending outwards about 700 feet; it has an elbow formed by the shore, and in winter large vessels anchor inside; the farthest out in from 5 to 6 fathoms. The plan on the opposite page gives a better idea of the position of Gibraltar, as well as of the Straits, than could be derived from any description. It is taken from Captain Smyth's beautiful chart of the Mediterranean.

Trade, Political Importance, &c.—Gibraltar is of very considerable consequence as a commercial station. Being a free port, subject to no duties and few restrictions, she is a convenient *entrepôt* for the English and other foreign goods destined for the supply, principally through illegitimate channels, of the contiguous Spanish provinces. Its importance, in this respect, has increased very rapidly during the last 10 years; so much so, that while the declared value of the various articles of British produce and manufacture exported to Gibraltar in 1833 amounted to only 385,460*l.*, they amounted to 1,111,176*l.* in 1840, and to 1,053,367*l.* in 1841. Of the exports in 1840, cotton goods amounted to 635,821*l.*, linen ditto 217,001*l.*, woollen ditto 97,092*l.*, hardware and cutlery 24,311*l.*, iron and steel 25,699*l.*, with a great variety of inferior articles. We also send to Gibraltar considerable quantities of foreign and colonial merchandise, nine-tenths of which are destined for the supply of Spain.



References to Plan. — A, point and light-house of Tariffa, lat. 36° 0′ 30″ N., lon. 5° 35′ 15″ W. The light-house was erected in 1813, and the light revolves. B. Cabrita Point. C, Europa Point, the extremity of the rock of Gibraltar. D, town and fortress of Ceuta, on the African coast. E, Little Ceuta Bay. F, Point Leona. G, Point Cires. The soundings and the direction of the currents are marked in the chart. Variation in the Straits, 22° 31′.

Gibraltar is also of great importance to Great Britain in a military and naval point of view, being, in fact, the key of the Mediterranean, and affording a convenient and secure station for the outfit, refreshment, repair, and accommodation of our ships of war and merchantmen. The revenue collected in the town amounts to from 30,000*l.* to 40,000*l.*, which is about sufficient to defray the public civil expenditure of the place. The expense annually incurred in Great Britain on account of the garrison, in time of peace, amounts to about 200,000*l.* — a small sum compared with the important political and commercial advantages it is the means of securing.

Money. — The effective or hard dollar = 4*s.* 4*d.*; the current dollar being estimated at ⅘ hard dollars = 3*s.* 10½*d.* Reals and quartos of both hard and current dollars are the same, being, the former = 4½*d.*, and the latter = 1$\frac{1}{16}$*d.*

Accounts are kept in current dollars (pesos), divided into 8 reals of 16 quartos each; 12 reals currency make a cob or hard dollar, by which goods are bought and sold; and 5 of these reals are considered equal to 5 Spanish reals vellon.

Gibraltar draws on London in effective dollars of 12 reals, and London on Gibraltar in current dollars of 8 reals.

The exchange of Gibraltar on Cadiz, and other cities of Spain, is in hard dollars at a percentage, which varies considerably, and mostly in favour of Gibraltar.

Weights and Measures are those of England, excepting the arroba = 25 lbs. English; grain is sold by the fanega, 5 of which make 1 Winchester quarter; wine is sold by the gallon, 100 of which are equal to 109·1 English wine gallons.

GILD, or GUILD, a company of merchants or manufacturers, whence the halls of such companies are denominated Gild or Guild Halls.

GILL, a measure of capacity. See WEIGHTS and MEASURES.

GIN. English geneva, or gin, is made of spirit obtained from oats, barley, or malt, rectified, or redistilled, with the addition of juniper berries, oil of turpentine, &c. All spirits manufactured in England, and most of the Scotch and Irish spirits imported into England, are subjected to the process of rectification. English gin is said to be one of the most wholesome spirits. —(See SPIRITS.)

GINGER (Ger. *Ingwer*; Du. *Gember*; Fr. *Gingembre*; It. *Zenzero*; Sp. *Jenjibre, Agengibre*; Rus. *Inbir*; Lat. *Zingiber*; Pers. *Zungebeel*; Arab. *Zingebeel*), the roots of a plant (*Amomum Zingiber*), a native of the East Indies and China, but which was early carried to and succeeds very well in the West Indies. After the roots are dug, the best are selected, scraped, washed, and dried in the sun with great care. This is called *white ginger*; while the inferior roots, which are scalded in boiling water before being dried, are denominated *black ginger*. Preserved ginger is made by scalding the green roots, or the roots taken up when they are young and full of sap, till they are tender; then peeling them in cold water, and putting them into a thin syrup, from which they are shifted into the jars in which they come to us, and a rich syrup poured over them. Dried ginger has a pungent aromatic odour, and a hot, biting taste. It is imported in bags, each containing about a cwt. The white brings the highest price, being more pungent and better flavoured. The external characters of goodness in both sorts of dried ginger are, soundness, or the being free from worm holes, heaviness, and firmness; the pieces that are small, light, and soft, or very friable and fibrous, should be rejected. The best preserved ginger is nearly translucent; it should be chosen of a bright yellow colour; rejecting that which is dark-coloured, fibrous, or stringy. —(*Milburn's Orient. Commerce*; *Thomson's Dispensatory.*)

The consumption of ginger does not exceed 10,000 cwt. a year. This is principally to be ascribed to the oppressive duties with which it was burdened previously to 1842, these being no less than 2*l.* 13*s.* a cwt. on foreign ginger, and 11*s.* on that brought from a British possession; but in the above mentioned year the duties were reduced to 10*s.* and 5*s.* a cwt. Of 16,004 cwt. of ginger imported in 1840, 5,381 came from the British West Indies, 9,727 from the East India Company's possessions and Ceylon, and 896 from Western Africa.

GINSENG (Du. *Ginseng, Ginsem*; Fr. *Ginseng*; Ger. *Kraftwerzel, Ginseng*; It. *Ginseng*; Sp. *Jinseng*; Chin. *Yansam*; Tart. *Orhota*), the root of a small plant (*Panax quinquefolium* Lin.), growing in China, Tartary, and several parts of North America. The latter is what we generally see in England, and is an article of trade to China, which is its only market. Large quantities were formerly exported from this country; but it is now carried direct to China by the Americans. It is sometimes exported crude, and sometimes cured or clarified. Within these few years, it has been discovered in the Himalaya mountains, and small quantities have been thence sent to Canton; but the speculation has not succeeded. It is only about 40 years since it began to be sent from America to China. Previously to the present century, the Chinese drew their supplies from the wilds of Tartary, and the root brought an exorbitant price. Crude ginseng now sells in the Canton market at from 60 to 70 dollars per picul, and prepared at from 70 to 80 dollars. In 1841, there were sent from the United States to China, 640,967 lbs. of ginseng, valued at 437,245 dollars. —(*Papers laid before Congress*, July 21. 1842.)

GLASS (Ger. and Du. *Glas*; Fr. *Vitre, Verre*; It. *Vetro*; Sp. *Vidrio*; Rus. *Steklo*; Lat. *Vitrum*), a transparent, brittle, factitious body. It is formed by mixing together some sort of siliceous earth, as fine sand, or pounded flint, with an alkali, such as soda, potash, or pearlash, and subjecting them to a strong heat. By this means they are melted into a transparent, soft, tenacious mass, that may, when hot, be formed into thin plates, bent and shaped in every possible way. When cool, it becomes brittle, and is denominated glass. Litharge, minium, borax, the black oxide of manganese, &c. are sometimes used in the manufacture of glass, according to the purposes to which it is to be applied.

The kinds of glass, and their ingredients, are stated by Dr. Ure as follows: —

"There are 5 distinct kinds of glass at present manufactured: —1. Flint glass, or glass of lead; 2. Plate glass, or glass of pure soda; 3. Crown glass, the best window glass; 4. Broad glass, a coarse window glass; 5. Bottle, or coarse green glass.

"1. *Flint Glass*, so named because the siliceous ingredient was originally employed in the form of ground flints. It is now made of the following composition: —

Purified Lynn sand	-	-	100 parts
Litharge, or red lead	-	-	60 —
Purified pearlash	-	-	30 —

To correct the green colour derived from combustible matter, or oxide of iron, a little black oxide of manganese is added, and sometimes nitre and arsenic. The fusion is accomplished usually in about 30 hours.

"2. *Plate Glass*. — Good carbonate of soda, procured by decomposing common salt with pearlash, is employed as the flux. The proportion of the materials is —

Pure sand - -	45·0
Dry subcarbonate of soda	25·5
Pure quicklime -	4·0
Nitre -	1·5
Broken plate glass -	25·0 — 100·0.

About 70 parts of good plate glass may be run off from these materials.

"3. *Crown, or fine Window Glass*. — This is made of sand vitrified by the impure barilla manufactured by incineration of sea weed on the Scotch and Irish shores. The most approved composition is —

	By Measure.	By Weight.
Fine and purified -	- 5 -	200
Best kelp ground -	- 11 -	330

"4. *Broad Glass*. — This is made of a mixture of soap-boilers' waste, kelp, and sand. The first ingredient consists of lime used for rendering the alkali of the soap-boiler caustic, the insoluble matter of his kelp or barilla, and a quantity of

water, all in a pasty state. The proportions necessarily vary. 2 of the waste, 1 of kelp, and 1 of sand, form a pretty good broad glass. They are mixed together, dried, and fritted.

"5. *Bottle Glass* is the coarsest kind.' It is made of soapers' waste and river sand, in proportions which practice must determine according to the quantity of the waste; some soapboilers extracting more saline matter, and others less, from their kelps. Common sand and lime, with a little common clay and sea salt, form a cheap mixture for bottle glass."

1. *Historical Notices with respect to Glass.* — The manufacture of glass is one of the very highest beauty and utility. It is most probable that we are indebted for this wonderful art, as we are for the gift of letters, to the Phœnicians. According to Pliny (*Hist. Nat.* lib. xxxvi. c. 26.), glass had been made for many ages, of sand found near the mouth of the small river Belus in Phœnicia. "The report," says he, "is, that the crew of a merchant ship laden with nitre (fossil alkali) having used some pieces of it to support the kettles placed on the fires they had made on the sand, were surprised to see pieces formed of a translucent substance, or glass. This was a sufficient hint for the manufacture. Ingenuity (*astuta et ingeniosa solertia*) was immediately at work, to improve the process thus happily suggested. Hence the magnetical stone came to be added, from an idea that it contained not only iron, but glass. They also used clear pebbles, shells, and fossil sand. Indian glass is said to be formed of native crystal, and is on that account superior to every other.* Phœnician glass is prepared with light dry wood, to which copper and nitre are added, the last being principally brought from Ophir. It is occasionally tinged with different colours. Sometimes it is brought to the desired shape by being blown, sometimes by being ground on a lathe, and sometimes it is embossed like silver." Sidon, he adds, is famous for this manufacture. It was there that mirrors were first invented. In Pliny's time, glass was made in Italy, of fine sand on the shore between Cumæ and the Lucrine bay.

Glass was manufactured at Rome into various articles of convenience and ornament. Pliny mentions that Nero gave 6,000 sesterces (50,000*l.* according to the ordinary method of reckoning) for two glass cups, each having two handles! These, however, must have been of an immense size and of exquisite workmanship; for glass was then in common use for drinking vessels, and was used even in the form of bottles in which to keep wine. — (*Mart. Epig.* lib. ii. 22. 10., and lib. iv. 86.)

There is no authentic evidence of glass being used in windows previously to the third or fourth century; and then, and for long after, it was used only in churches and other public buildings. In this country, even so late as the latter part of the sixteenth century, glass was very rarely met with. In a survey of Alnwick Castle, made in 1573, it is stated — "And, because throwe extreme winds, the glasse of the windowes of this and other my lord's castles and houses here in the country dooth decay and waste, yt were good the whole leights of everie windowe, at the departure of his lordshippe from lyinge at any of his said castels, and houses, and dowring the time of his lordship's absence, or others lyinge in them, were taken doune and lade up in safety: And at sooche time as ather his lordshippe or anie other sholde lye at any of the said places, the same might then be set uppe of newe, with smale charges, whereas now the decaye thereof shall be verie costlie and chargeable to be repayred." — (*North. Housh. Book*, xvii.) Sir F. M. Eden thinks it probable that glass windows were not introduced into farmhouses in England much before the reign of James I. They are mentioned in a lease in 1615, in a parish in Suffolk. In Scotland, however, as late as 1661, the windows of ordinary country houses were not glazed, and only the upper parts of even those in the king's palaces had glass; the lower ones having two wooden shutters, to open at pleasure, and admit the fresh air. From a passage in Harrison's *Description of England*, it may be inferred that glass was introduced into country houses in the reign of Henry VIII. He says, — "Of old time," (meaning, probably, the beginning of the century,) "our countrie houses instead of glasse did use much lattise, and that made either of wicker or fine rifts of oke in checkerwise. I read also that some of the better sort, in and before the time of the Saxons, did make panels of horne instead of glasse, and fix them in wooden calmes (casements); but as horne in windowes is now (1584) quite laid downe in everie place, so our lattises are also growne into disuse, because glasse is come to be so plentiful, and within verie little so good, cheape, if not better than the other." Glass is now introduced into the windows of almost every cottage of Great Britain; and in this cold, damp climate, it ought rather to be considered as a necessary of life, than as the most elegant and useful of conveniences. What Dr. Johnson has said as to glass deserves to be quoted. — "By some fortuitous liquefaction was mankind taught to produce a body at once in a high degree solid and transparent, which might admit the light of the sun, and exclude the violence of the wind; which might extend the sight of the philosopher to new ranges of existence, and charm him at one time with the unbounded extent of the material creation, and at another with the

* If this be a correct description of the glass of India in the age of Pliny, it has since fallen off very much; Indian glass being now about the very worst that is made. At present, the Hindoos manufacture it of fragments of broken glass, quartz sand, and impure soda, — an article found native in many parts of India, particularly in the south. The furnaces are so bad that they cannot melt our common bottle glass. — (*Hamilton's Mysore*, vol. iii. p. 370.) The glass of China is much better than that of India, though still very inferior to that Europe.

endless subordination of animal life; and, what is yet of more importance, might supply the decays of nature, and succour old age with subsidiary sight. Thus was the first artificer in glass employed, though without his own knowledge or expectation. He was facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures; he was enabling the student to contemplate nature, and the beauty to behold herself." — (*Rambler*, No. 9.)

Venice, for a long time, excelled all Europe in the manufacture of glass, but was subsequently rivalled by France. The manufacture was early introduced into England; but it was not carried on to any extent previously to the sixteenth century. The first plates for looking-glasses and coach windows were made in 1673, at Lambeth, by Venetian artists under the protection of the Duke of Buckingham. The British Plate Company was incorporated in 1773, when it erected its extensive works at Ravenhead, near St. Helen's, in Lancashire. The manufacture was at first conducted by workmen from France, whence we had previously brought all our plate glass. But that which is now made at Ravenhead, at Liverpool, and London, is equal or superior to any imported from the Continent.

It is difficult to form any precise estimate of the value of the glass annually produced in Great Britain. We believe, however, that it cannot amount to less than 2,000,000*l.*; and that the workmen employed in the different departments of the manufacture exceed 40,000.

Duties on Glass. — Considering the vast importance of glass, and the various necessary, convenient, and ornamental purposes to which it is applied, it were much to be wished that it could be exempted from all taxation. But if the public exigencies make its taxation indispensable, the duties on it should, at all events, be kept within reasonable limits, and imposed in the way least likely to be injurious. We regret, however, to have to state that these apparently obvious considerations have been all but wholly lost sight of in the taxing of glass in this country; the duties on it having been carried to a most exorbitant extent, and imposed in the most oppressive manner. After successive augmentations, the duties were raised in 1813 to the amount of 98*s.* a cwt. on flint and plate glass! And the consequence was, that, despite the increase of wealth and population in the interim, the consumption of both these sorts of glass was less than it had been in 1794, when the duty was only 32*s.* 2½*d.* a cwt.! The progress of the manufacture and of the duties since 1813 is exhibited in the subjoined tables, the influence of the various modifications of the latter on production being too obvious to require being pointed out. Still, however, there can be no doubt that the duty is at this moment a great deal too high, and that it is in other respects most objectionable.

We do not know whether it be possible materially to vary the mode in which the duties are assessed, without opening a still wider door to fraud than that which now exists. But at present they not only augment the price of a most indispensable article by their entire amount, but they farther augment it, and that in no inconsiderable degree, by fettering the operations of the manufacturers, and preventing them from making experiments and improvements, and introducing new processes. In this respect the duties are especially injurious. Nor can any one acquainted with the facts entertain any doubt that the Commissioners of Excise Inquiry were fully justified in expressing their conviction that "*no tax can combine more objections, or be more at variance with all sound principles of taxation, than this duty on glass.*"

If it be impossible otherwise to get rid of these duties, we incline to think that they might be advantageously commuted for an increase of the duty on windows in houses of 10*l.* a year and upwards. The greater cheapness of glass would more than compensate to most householders for the increase of the window tax, at the same time that the glass manufacture would be vastly increased and improved.

But, whatever may be done with the rest, that portion of the duty which is assessed on common bottle glass should certainly be repealed. It is oppressive without being productive, and might be abandoned without any considerable sacrifice. The duty on this description of glass produced, at an average of the 3 years ending with 1842, 172,518*l.* a year of gross income; but of this no less than 100,317*l.* a year was drawn back on exportation, making the nett revenue only 72,201*l.* a year! — a miserable compensation for the injury done to the manufacture and the public, and for the fraud inseparable from such a duty.

The excise regulations as to the manufacture of glass were formerly dispersed over various statutes, and were at once numerous and complicated in the extreme. Latterly, however, they have been consolidated in the statute 1 & 2 Vict. c. 44.; but, notwithstanding the regulations have been a good deal simplified, this statute is of great length, comprising no fewer than 95 sections; so that, were its length not a sufficient obstacle, it would be quite useless giving any abstract of it in this place, as no one would think of engaging in the manufacture without having beside him a copy of the act.

I. A Return of the Rates of Duty on Glass in 1813, with the Quantities of each Kind of Glass retained for Home Use, and the aggregate Nett Revenue in each Year, from 1813 to 1842, both included, noting the Periods when any Alteration of the Duty took place, and the Amount of such Alterations.

Years.	Flint.	Plate.	Crown.	German Sheet.	Broad.	Common Bottle.	Total.	Period and Amount of Alteration of Duty.	Aggregate Nett Revenue.
Rate of Duty in 1813, ℔ cwt.	98*s.*	98*s.*	73*s.* 6*d.*	73*s.* 6*d.*	30*s.*	8*s.* 2*d.*			
	Quantities of Glass retained for Home Use.								
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*		£
1813	23,370	9,398	84,441	- -	6,994	47,350	171,553		500,850
1814	21,227	6,778	84,251	- -	8,628	140,272	264,156		530,791
1815	24,911	419	77,485	- -	8,452	129,461	240,728		473,780
1816	20,011	-	56,151	- -	6,140	160,221	242,523		353,188
1817	22,117	1,739	76,561	- -	8,374	125,881	232,692		461,819
1818	26,978	6,391	88,893	- -	8,319	201,795	332,376		584,399
1819	28,809	6,473	90,726	- -	8,267	238,463	372,738	From 5th July, 1819, the duty on plate glass reduced from 4*l.* 18*s.* to 3*l.* per cwt.	606,176
1820	24,715	8,735	74,183	- -	7,782	171,495	286,940		500,595
1821	21,927	9,718	86,384	- -	8,035	137,117	263,181		521,075
1822	21,400	9,562	95,510	- -	8,353	154,492	289,317		559,029
1823	21,829	11,607	101,392	- -	9,172	198,456	342,456		607,378
1824	24,954	13,543	123,815	- -	9,295	238,725	410,362		728,342
1825	34,181	15,082	140,298	- -	8,347	251,932	449,813	From 5th July, 1825, the duty of 4*l.* 18*s.* on flint glass repealed, and a new duty of 12*l.* 10*s.* for every 1,000 lbs. of fluxed materials for flint glass imposed.	772,303
1826	47,090	12,527	115,731	- -	8,113	282,512	465,973		720,920
1827	46,688	14,209	114,381	- -	7,611	239,794	422,683		699,726
1828	54,255	17,096	121,158	- -	6,970	251,787	454,266	From 5th July, 1828, the duty on common bottle glass reduced in Great Britain from 8*s.* 2*d.* to 7*s.* per cwt., and the duty on every description of glass assimilated throughout the U. Kingdom.	752,097
1829	50,869	13,925	92,252	- -	6,864	218,901	382,811		609,406
1830	49,353	12,477	80,926	- -	4,815	180,945	328,716		512,261
1831	49,608	14,973	88,688	- -	5,915	150,520	299,104		551,718
1832	51,586	11,554	86,007	179	5,304	158,719	313,349	From 10th October, 1832, the duty on fluxed materials for flint glass reduced from 12*l.* 10*s.* per 1,000 lbs. to 20*s.* for every 100 lbs.	558,423
1833	54,818	13,893	105,134	- -	6,506	164,000	344,151		615,781
1834	52,890	16,306	106,389	- -	6,766	194,143	376,494		664,391
1835	43,936	16,941	111,651	4,248	5,847	201,613	384,236	From 10th October, 1835, the duty on fluxed materials for flint glass reduced from 20*s.* to 6*s.* 8*d.* per 100 lbs.	640,149
1836	86,866	19,993	117,041	- -	7,629	249,145	480,674		663,162
1837	78,121	21,640	131,309	707	7,190	247,446	486,413		608,993
1838	81,994	23,992	115,756	2,262	6,575	245,016	471,225		667,998
1839	82,309	26,465	113,310	5,170	8,514	252,808	488,606		691,467
1840	82,486	31,200	111,316	7,914	9,019	232,831	473,799	From 15th May, 1840, the duty on every description of glass increased 5 per cent.; and from 15th August, 1840, the duty on broad glass increased from 1*l.* 10*s.* to 3*l.* 15*s.* 6*d.* per cwt.	724,343
1841	74,444	22,088	93,033	11,298	- -	190,257	391,120		613,588
1842	68,098	18,396	81,715	17,117	- -	161,537	346,863		563,437

II. Account exhibiting the Quantities of the different Descriptions of Glass manufactured during each of the 3 Years ending with 1842, with the Quantities exported, the Rates and Produce of the Duties, &c. — (*Obtained from the Excise.*)

Description of Glass.		Quantity manufactured.	Quantity exported.	Rate of Duty.	Gross Amount of Duty.	Drawback on Glass exported.	Nett Amount of Duty (Excise) after deducting drawback and other legal allowances.
		Cwts.	*Cwts.*		£	£	£
Flint glass - - -	1840	104,889	19,913	To 15th May, 1840, 18*s.* 8*d.* per cwt.; since, 18*s.* 8*d.* per cwt. and 5 per cent.	101,029	21,199	79,830
Ditto - - -	1841	97,524	20,516		95,565	22,605	72,960
Ditto - - -	1842	83,653	13,696		81,973	15,098	66,875
		Sq. feet.	*Sq. feet.*				
Plate glass - - -	1840	33,623	58,879	To 15th May, 1840, 3*l.* per cwt.; since, 3*l.* per cwt. and 5 per cent.	104,117	7,412	96,705
Ditto - - -	1841	27,639	121,113		87,061	17,483	69,578
Ditto - - -	1842	21,528	68,318		67,812	9,866	57,946
		Cwts.	*Cwts.*				
Crown glass - -	1840	129,978	15,518	To 15th May, 1840, 3*l.* 13*s.* 6*d.* per cwt.; since, 3*l.* 13*s.* 6*d.* per cwt. and 5 per cent.	492,962	73,550	417,497
Ditto - - -	1841	116,895	19,118		451,064	92,070	357,337
Ditto - - -	1842	97,495	12,569		376,205	60,891	313,323
German sheet glass -	1840	16,859	8,219	To 15th May, 1840, 3*l.* 13*s.* 6*d.* per cwt.; since, 3*l.* 13*s.* 6*d.* per cwt. and 5 per cent.	65,986	35,604	30,382
Ditto - - -	1841	20,855	8,781		80,173	36,876	43,597
Ditto - - -	1842	25,500	7,701		98,397	32,348	66,049
Broad sheet glass -	1840	9,051	1¼	To 15th May, 1840, 1*l.* 10*s.* per cwt.	13,915	2	13,913
Ditto - - -	1841	- -	- -	To 15th Aug. 1840, 1*l.* 10*s.* per cwt. and 5 per cent.; since 3*l.* 13*s.* 6*d.* per cwt. and 5 per cent.			
Ditto - - -	1842	- -	- -				
Common bottle glass	1840	525,571	292,887	To 15th May, 1840, 7*s.* per cwt.; since, 7*s.* per cwt. and 5 per cent.	189,883	103,926	85,957
Ditto - - -	1841	501,177	310,937		184,174	114,109	70,065
Ditto - - -	1842	390,482	225,633		143,496	82,915	60,581
Total nett revenue collected during the 3 years ending with 1842						- -	£ 1,902,595
Annual average nett revenue of the 3 years ending with 1842						- -	£ 634,198

III. Account of the Quantities of Foreign Glass entered for Consumption during each of the 3 Years ending with 1842, with the Rates of Duty, and the Produce of the Duties on the same. — (*Obtained from the Customs.*)

Description of Glass.		Quantity entered for Home Consumption.	Amount of Duty.	Rate of Duty.	Until July 9th, 1842. £	s.	d.	From July 9th, 1842. £	s.	d.
		Cwts.	£		£	s.	d.	£	s.	d.
Flint glass -	1840	included with glass manufactures not otherwise described.		Flint and cut glass, per cent. ad valorem -	-	-		30	0	0
Ditto -	1841			Ditto, per cwt. - - -	-	-		1	0	0
Ditto -	1842	198	1,520							
		Square feet.								
Plate glass -	1840	1,183	403	Plate glass, superficial measure, and all glass exceeding 1-9th in. in thickness, viz.: —						
Ditto -	1841	1,007	343	Not containing more than 9 sq. feet, per sq. foot - - -	0	6	0	0	4	0
Ditto -	1842	1,989	511	Containing more than 9, and not more than 14 square feet, per square foot -	0	8	0	0	5	0
				Containing more than 14, and not more than 36 square feet, per sq. foot -	0	9	6	0	6	0
				Containing more than 36 sq. feet, per sq. foot - - -	0	11	0	0	7	0
		Cwts.								
Crown glass -	1840	12	100	Crown glass, per cwt. - - -	8	6	8			
Ditto -	1841	6	51	Ditto, not exceeding one ninth of an inch in thickness, per cwt. - - -	-	-		6	13	0
Ditto -	1842	12	88							
German sheet glass	1840	35	301	German sheet glass, per cwt. - -	10	0	0			
Ditto -	1841	48	485	Ditto, not exceeding one ninth of an inch in thickness, per cwt. - - -	-	-		5	14	0
Ditto -	1842	96	649							
		Quarts.								
Common bottle do.	1840	1,117,608	17,869	Bottles of glass covered with wicker, per dozen quarts - - - -	1	2	0			
Ditto -	1841	1,010,652	16,991	Ditto, per cwt. - - - -	4	0	0			
Ditto -	1842	583,842 *Cwts.* 1,5,847	15,618	Ditto, green or common, not being phials, empty, per doz. quarts -	0	2	0	0	11	per cwt.
				Ditto ditto, full, imported from any British possession, per dozen quarts -	0	1	0			
				Ditto ditto, imported from any foreign place, containing wine or spirits, per doz. quarts	0	4	0			
				Do. do., not containing do., per doz. quarts	0	2	0			
Glass bottles -	1840	181	1,167	Glass bottles, not otherwise described, per cent. ad valorem - - -	25	0	0	2	0	0
Do. not described)	1841	155	966	Ditto, per cwt. - - -	4	0	0			
Ditto do.	1842	174	783							
Glass manufactures	1840	885	5,007	Glass manufactures, not otherwise described, per cent. ad valorem -	20	0	0			
Do. not otherwise described)	1841	526	2,581							
Ditto do.	1842	138	851	Ditto, per cwt. - - - -	4	0	0	2	0	0
				And further, on the above rates, 5*l.* per centum, from the 10th of May, 1840.						

GLOVES (Ger. *Handschuhe*; Fr. *Gants*; It. *Guanti*; Sp. *Guantes*; Rus. *Rukawizii, Pertschatki, Golizii*), well known articles of dress used for covering the hands, usually made of leather, but frequently also of cotton, wool, silk, &c. The leather used in the manufacture of gloves is not, properly speaking, tanned, but prepared by a peculiar process that renders it soft and pliable. Some sorts of leather gloves admit of being washed, and others not. Woodstock and Worcester, but particularly the former, are celebrated for the manufacture of leather gloves of a superior quality; in which a great number of women and girls, as well as men, are employed. The produce of the Worcester manufacture has been estimated at about 42,000 dozen pairs of oil leather, or beaver gloves; and 470,000 dozen pairs of kid and lamb-skin gloves; the value of the whole, when finished, being about 375,000*l.* Besides Worcester and Woodstock, London, Yeovil, Ludlow, and Leominster are the principal seats of the leather glove manufacture. Gloves are sometimes sewed by machinery; but this is done only to improve the work by rendering the stitches more correctly equidistant, as it is not cheaper than manual labour. Limerick used to be famous for the manufacture of a sort of ladies' gloves, called chicken gloves. Large quantities of cotton gloves are made at Nottingham and Leicester.

Influence of Repeal of Prohibition of Importation. — The importation of leather gloves and mitts was formerly prohibited, under the severest penalties. This prohibition had the effect, by preventing all competition and emulation with the foreigner, to check improvement, and to render British gloves at once inferior in quality and high in price. This system was, however, permitted to continue till 1825, when the prohibition was repealed, and gloves allowed to be imported on payment of duties, which, though high, are not prohibitory. This measure was vehemently opposed; and many predictions were made of the total ruin of the manufacture; but in this, as in most other instances, experience has shown that the trade had not been materially benefited by the prohibition. The wholesome competition to which the manufacturers now felt themselves, for the first time, exposed, made them exert all their energies; and it is admitted on all hands, that there has been a more rapid improvement in the manufacture during the last dozen years than in the previous half century. There has been, no doubt, a great deal of complaining of a decay of trade among the leather glove manufacturers; but we are assured that, if there be any real foundation for their complaints, it is ascribable far more to the growing use of home-made cotton gloves than to the importation of foreign leather gloves; and had it not been for the improved fabric, and greater cheapness of British leather gloves, that has grown out of the new system, it is abundantly certain that cotton gloves would have gained still more rapidly on them. In point of fact, however, it does not appear, taking the smuggling that formerly existed into account, that there has been any falling off in the leather glove trade. At all events, there has been no serious falling off in the number of skins brought from abroad to be used in the manufacture, and consequently in the number of pairs of gloves produced from such skins; and there is no reason for thinking that it is different with the other departments.

Leather gloves must be imported in packages, containing each 100 dozen pairs at least, and in vessels of 70 tons burden or upwards, on penalty of forfeiture. — (7 *Geo.* 4. c. 48. § 7.)

Account of the Number of Pairs of Habit Gloves, Men's Gloves, and Women's Gloves and Mitts, imported into the United Kingdom, with the Amount of Duty paid thereon, in 1840, 1841, and 1842, and the Rates of Duty.

Description of Gloves.	Quantities.			Duties.								
	1840.	1841.	1842.	1840.			1841.			1842.		
	Pairs.	*Pairs.*	*Pairs.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Habit Gloves - - -	1,015,247	919,611	1,019,102	17,361	4	11	16,109	5	10	16,611	5	5
Men's ditto - - -	437,732	373,200	482,864	9,371	2	2	8,163	14	11	8,703	4	5
Women's ditto, or mitts -	56,667	62,890	90,056	1,697	7	1	1,926	0	1	2,150	7	6
Totals - -	1,509,646	1,355,701	1,592,022	28,429	14	2	26,199	0	10	27,464	17	4

Account of the Number of Lamb and Kid Skins entered for Home Consumption since 1820, with an Estimate of the Quantity of Gloves which such Skins would produce, on the Supposition that from each 120 Skins there would be manufactured 18 Dozen Pairs of Gloves.

Years.	Number of Lamb Skins.	Number of Kid Skins.	Total Lamb and Kid.	Doz. Gloves produced each year.	Years.	Number of Lamb Skins.	Number of Kid Skins.	Total Lamb and Kid.	Doz. Gloves produced each year.
1820	932,817	286,443	1,219,260	182,889	1831	2,892,934	1,008,307	3,901,241	585,180
1821	1,202,029	248,996	1,445,025	216,756	1832	1,901,141	709,337	2,610,478	391,572
1822	1,908,651	408,523	2,317,174	347,562	1833	2,418,489	817,028	3,235,517	485,328
1823	1,974,143	497,444	2,471,587	370,728	1834	2,794,343	799,006	3,593,349	539,002
1824	2,201,295	631,995	2,833,290			2,287,016	956,628	3,243,674	486,551
1825	2,098,553	771,522	2,870,075	430,506		2,692,721	715,679	3,436,403	515,460
						1,664,080	937,230	2,601,310	390,197
1827	2,749,797	640,863	3,390,260						8,625
1828	2,917,476	901,639	3,822,115	573,300	1839		690,968	2,811,441	421,716
1829	1,930,390	698,601	2,628,991	394,344	1840		697,012	2,249,540	337,431
1830	1,859,890	1,086,209	2,946,059	441,900					

GOLD (Ger. *Gold*; Du. *Goud*; Da. and Sw. *Guld*; Fr. *Or*; It. and Sp. *Oro*; Port. *Oiro*, *Ouro*; Rus. *Soloto*; Pol. *Zloto*; Lat. *Aurum*; Arab. *Tibr* and *Zeheb*; Sans. *Swarna*; Malay, *Mās*), the most precious of all the metals, seems to have been known from the earliest antiquity. It is of an orange red, or reddish yellow colour, and has no perceptible taste or smell. Its lustre is considerable, yielding only to that of platinum, steel, silver, and mercury. It is rather softer than silver. Its specific gravity is 19·3. No other substance is equal to it in ductility and malleability. It may be beaten out into leaves so thin, that one grain of gold will cover $56\frac{3}{4}$ square inches. These leaves are only $\frac{1}{282003}$ of an inch thick. But the gold leaf with which silver wire is covered has only $\frac{1}{12}$ of that thickness. An ounce of gold upon silver is capable of being extended more than 1,300 miles in length. Its tenacity is considerable, though in this respect it yields to iron, copper, platinum, and silver. From the experiments of Seckingen, it appears that a gold wire 0·078 inch in diameter, is capable of supporting a weight of 150·07 lbs. avoirdupois without breaking. It melts at 32° of Wedgwood's pyrometer. When melted, it assumes a bright bluish green colour. It expands in the act of fusion, and consequently contracts while becoming solid more than most metals; a circumstance which renders it less proper for casting in moulds. — (*Thomson's Chemistry.*)

For the quantities of gold produced, and the places where it is produced, see PRECIOUS METALS.

GOMUTI, OR EJOO, a species of palm (*Borassus Gomutus*), growing in the Indian islands. A valuable product is obtained from this palm, resembling *black horse hair*; it is found between the trunk and the branches, at the insertion of the latter, in a matted form, interspersed with long, hard, woody twigs of the same colour. When freed from the latter, it is manufactured by the natives into cordage. Its fibres are stronger and more durable, but less pliant, than those of the cocoa nut, or coir — (see COIR); and is, therefore, fitter for cables and standing rigging, but less fit for running rigging. The native shipping of the Eastern islands of all kinds are chiefly equipped with cordage of the gomuti; and the largest European shipping in the Indies use cables of it. It undergoes no preparation but that of spinning and twisting; no material similar to our tar or pitch, indispensable to the preservation of hempen cordage, being necessary with a substance that, in a remarkable degree, possesses the quality of resisting alternations of heat and moisture. The gomuti of Amboyna, and the other Spice islands, is the best. That of Java has a coarse ligneous fibre. Gomuti is generally sold in twisted shreds or yarns, often as low as 1 dollar a picul, and seldom more than 2. Were European ingenuity applied to the improvement of this material, there seems little doubt that it might be rendered more extensively useful. — (*Crawfurd's East. Archip.* vol. iii. p. 425.)

GOOD HOPE, CAPE OF. See CAPE TOWN.

GOTTENBURG, OR, more properly, GOTHABORG, on the south-west coast of Sweden, at the head of a fiord near the Cattegat, which receives the river Götha, lat. 57° 42′ 4″ N., lon. 11° 57′ 45″ E. Population 29,000, and increasing. Vessels do not come close to the city, but lie in the river or harbour at a short distance from the shore, goods being conveyed from and to them by lighters that navigate the canals

by which the lower part of the town is intersected. The depth of water in the port is 17 feet, and there is no tide, bar, or shallow. A vessel entering the Götha must take a pilot on board, whose duty it is to meet her ½ league west of Wingo beacon. After Stockholm, Gottenburg has the most extensive commerce of any town in Sweden. Iron and steel, the former excellent, but the latter inferior to that made in England, form the principal articles of export. They are brought from the rich mines of Wermeland, distant about 200 miles; being conveyed partly by the lake Wener, partly by the Tröllhætta canal — (see CANALS), — and partly by the river Götha. The exports of iron, in 1839, amounted in all to 191,150 sklb., of which 134,630 were taken by the U. States, and 35,180 by England. The original cost of iron is supposed to be increased about 5 per cent. by the expense of its conveyance to Gottenburg; and the shipping charges, inclusive of the export duty, are about 10 per cent. additional. The next great article of export is timber, particularly deals, which are also furnished by Wermeland. Of these, the exports, in 1839, were 148,650 dozen, of which 64,870 dozen went to Great Britain, and the residue to France, Holland, &c. The other articles of export are, linen, sail-cloth, tar, copper, alum, glass, cobalt, manganese, linseed, oak bark, bones, juniper berries, cranberries, rock moss for dyeing, &c. Grain is sometimes imported and sometimes exported. The principal articles of import are sugar, coffee, tobacco, cotton yarn and twist, salt, indigo, and dye woods, South Sea oil, rice, herrings, wine, spices, &c. There belonged to the port in 1837, exclusive of river craft, 72 vessels of the aggregate burden of 6,354 Swedish lasts, or 15,250 English tons, which had increased in 1839 to 8,100 lasts, and in 1840 to about 9,600 ditto.; and ship building has since been going on briskly. The opening of the Götha canal by which Gottenburg communicates with a large portion of the interior of Sweden, has exercised a powerful and beneficial influence over her commerce. She carries on an extensive trade with England, and English is generally understood. Steamers run once a week between Gottenburg and Hull for 8 months of the year; but in winter the intercourse with England is kept up by the tedious route of Lubeck and Hamburg.

Herring Fishery. — Gottenburg used, at no distant period, to be one of the principal seats of the herring fishery; but at present this branch of industry is quite extinct, and it has always been very capricious. From 1556 to 1588, great quantities of herrings were taken; from 1588 to 1660, they left the coast; during the next 15 years they were again abundant: but from 1675 to 1747, they entirely disappeared. From 1747 to 1770, they were abundant, 186,614 barrels being taken in 1763, and 151,483 in 1768. From 1786 to 1799, the fishery was very good, from 110,000 to 190,000 barrels being annually exported. In 1804, the export was 79,512 barrels. In 1808 and 1809, fish were very scarce; and in 1812 they entirely disappeared, and have not hitherto returned: so that Gottenburg, instead of exporting, at present imports considerable supplies of herrings.

Both iron and timber pay duties on exportation, but they are not heavy.

Custom-house Regulations and Port Charges.—On arriving in port, no person is allowed to board or to leave a vessel till she be in custody of the officers; who, having inspected the manifest and papers, send them to the Custom-house. An officer is appointed to superintend the unloading and also the loading. The public charges of all sorts on a Swedish ship and on a foreign ship not privileged, each of 300 tons burden, unloading and loading mixed cargoes at Gottenburg, would be, on the former 2*l.* 5*s.* 7*d.*, on the latter 4*l.* 5*s.* 7*d.* On a privileged foreign ship the charges are the same as on a Swedish ship.

Warehousing System. — Goods may be bonded for any length of time, on paying ½ per cent. *ad valorem* for the first 2 years, and ¼ per cent. annually thereafter.

Commission, Credit, &c. — The usual rate of commission is 2 per cent. Goods are commonly sold on credit. Raw sugar at 9 months, with 3 months' interest to the seller. Other goods at 3, 4, and 6 months.

Banking, &c.—There are no public or private banking establishments at Gottenburg for the issue of notes; but the national bank has two offices here which advance limited sums of money, at 5 per cent. on the security of goods, and in discount of bills. Some of the English insurance companies have agents here, who do a good deal of business.

Sea Stores, Water, &c.—These may be had here of excellent quality and cheap. Beef 1½*d.* per lb., best rye bread 2½*d.* per lb., and butter 6*d.* per lb.

Money, Weights, Measures, &c., same as at Stockholm, which see.

In compiling this article, we have made use of consular returns, *Coxe's Travels in the North of Europe*, vol. iv. pp. 267—275.; and some valuable *private communications*.

GRACE, DAYS OF. See EXCHANGE.

GRAPES (Ger. *Trauben*; Fr. *Raisins*; It. *Grappoli, Grappi*; Sp. *Uhas, Racimos*; Lat. *Uvæ*), a well known fruit, produced from the vine. France, Spain, Portugal, and Italy, as well as some parts of Germany and Hungary, produce grapes which yield wines of various qualities and flavour, many of them excellent. We import green grapes from Lisbon, and other parts of Portugal, Malaga, &c.: they are brought packed in jars, and secured from damage by means of saw-dust, plentifully strewed between the layers of fruit. The grapes grown in Great Britain in the open air are much smaller, and by no means so luscious, as those of foreign countries; but those raised in hot-houses are quite equal, if not superior, to the latter. Grapes are imported not only in their natural state, but dried and preserved, in which latter state they are denominated RAISINS; which see.

GRINDSTONES, flat circular stones of different diameters and thickness, mounted on spindles or axles, and made to revolve with different degrees of velocity, employed to polish steel articles, to give an edge to cutting instruments, &c. Grindstones not in constant use are commonly turned by winch handles; but at Sheffield and other places, where polished articles and cutlery are extensively manufactured, large numbers of grindstones, being mounted in buildings appropriated to that purpose, called grind or blade mills, are turned by straps, acting on their axles, the moving power being either water or steam. The stone best suited to form grindstones is what is called a sharp-grit; it

being chosen finer or coarser grained according to the purposes for which they are destined. The principal grindstone quarry in England is at Gateshead Fell, in the county of Durham; where they are produced in vast numbers, not only for home use, but for exportation to all parts of the world. But those principally in use at Sheffield are mostly quarried at Wickersley, in Yorkshire.

They are classed in eight different sizes, called *foots*, according to their dimensions, as in the following table:—

Denominations.	Diameter.	Thickness.	No. in a Chaldron.	Denominations.	Diameter.	Thickness.	No. in a Chaldron.
	Inches.	*Inches.*			*Inches.*		
1 foot	10	2	36	5 foots	35		5
2 foots	14	2½	27	6 foots	42		3
3 foots	20	4	18	7 foots	50		1¼
4 foots	28	4	9	8 foots	56		

A grindstone foot is 8 inches: the size is found by adding the diameter and thickness together. Thus, a stone 56 inches diameter by 8 thick, making together 64 inches, is an 8-foot stone, of 8 inches each foot.

Besides the above sizes, grindstones are made, when ordered, of any intermediate dimensions: many are made much larger than any of the above sizes; some as large as 76 inches diameter, and 14 or 15 inches thick, which are a great weight, a cubic foot weighing 1 cwt. 1 qr. 14 lbs. — (*Rees's Cyclopædia; Bailey's Survey of Durham*, p. 43.)

Grinding is an unhealthy and dangerous employment. For some purposes, the stones are made to revolve with an extreme degree of velocity, which makes them occasionally fly in pieces. But the greatest annoyance to which the grinder is exposed is from his inhaling the minute particles of stone, and of iron and steel, that are always flying about, particularly in the process termed dry grinding. Contrivances have been suggested for obviating this serious inconvenience; but whether it be owing to their unsuitableness, or to the carelessness of the workmen, none of them has succeeded in practice. — (*Treatise on Iron and Steel, Lardner's Cyclopædia*, p. 293.)

GUAIACUM, or LIGNUM VITÆ (Fr. *Gayac, Bois saint*; Ger. *Pockholz*; It. *Guajaco*; Lat. *Guaiacum, Lignum vitæ*; Sp. *Guayaco*), the wood of a tree, a native of Jamaica, Hayti, and the warmer parts of America. It is a dark-looking evergreen, growing to from 40 to 50 feet in height, and from 14 to 18 inches in diameter. The bark is hard, smooth, and brittle; the wood is externally yellowish, and internally of a blackish brown colour. Lignum vitæ is the weightiest timber with which we are acquainted, its specific gravity being 1·333. It is exceedingly hard, and difficult to work. It can hardly be split, but breaks into pieces like a stone, or crystallised metal. It is full of a resinous juice (*guaiac*), which prevents oil or water from working into it, and renders it proof against decay. Its weight and hardness make it the very best timber for stampers and mallets; and it is admirably adapted for the sheaves or pulleys of blocks, and for friction rollers or castors. It is extensively used by turners.

The *guaiac*, or gum, spontaneously exudes from the tree, and concretes in very pure tears. It is imported in casks or mats; the former containing from 1 to 4 cwt., the latter generally less than 1 cwt. each. Its colour differs considerably, being partly brownish, partly reddish, and partly greenish; and it always becomes green when left exposed to the light in the open air. It has a certain degree of transparency, and breaks with a vitreous fracture. When pounded, it emits a pleasant balsamic smell, but has scarcely any taste, although when swallowed it excites a burning sensation in the throat. When heated, it melts, diffusing, at the same time, a pretty strong fragrant odour. Its specific gravity is 1·229. — (See *Veget. Sub., Lib. of Entert. Knowledge; Thomson's Chemistry, &c.*)

GUANO, or HUANO (the Peruvian term for manure), a substance used as a manure found on certain small islands off the coast of Peru and Bolivia, and on parts of the shore of the mainland. It is friable and easily reduced to powder; its colour varies from a dull red to a dirty white, and it has a strong smell, and a fat, unctuous feel. At an average it may weigh from 50 to 60 lbs. a bushel. Humboldt was either the first, or one of the first, by whom this important substance was brought to Europe; but it was described at a much earlier date by Ulloa (*Voyage au Perou*, i. 481.), and has been used as a manure by the Peruvians from the age of the Incas downwards. Very different opinions have been entertained as to its nature and origin. Many have supposed that it was a peculiar mineral or earth; but Ulloa is clearly of opinion that it consists of the excrements of the sea-birds which are found in prodigious swarms all along the Peruvian and Bolivian shores; and there can hardly be any longer a doubt that such is the case. The localities where the deposit is principally met with being within a rainless region, it is accumulated with a rapidity of which we have no idea. Guano is of very different qualities: some authorities give the preference to the whitish varieties, which are believed to be more recent, while others prefer the red. According to Klaproth, a quantity of guano represented by 100 contained, urate of ammonia 16 parts, phosphate of lime 10 do., oxalate of lime 12¾ do., silica 4 do., common salt ¼ do., sand 28 do., and water, organic and combustible matter, 28¾ do.; but its composition is found to differ very materially. The best is that which contains the greatest proportion of ammoniacal salts.

Guano has been only very recently introduced into England; and there is a good

deal of discrepancy in the statements that have been put forth as to its operation. There can, however, be no doubt that it is a most efficient manure, and that about 2 or 2½ cwt. per acre of average guano mixed with about two-thirds the usual quantity of farm-yard manure (which is required to keep the soil loose) will produce, when applied to land that is well drained, nearly double the ordinary quantity of potatoes. In turnip husbandry, splendid crops are produced by the agency of guano only; but in this case from 4 to 5 cwt. per acre should be applied. It has, also, a powerful influence in improving crops of corn and the pasture following such crops. The effect of guano is very materially increased by its being covered up to some considerable depth as soon as it is laid on the soil; and top-dressing is certainly the most wasteful way of applying the manure. —(*Private information.*) Under such circumstances it becomes of very considerable importance to learn the probable supply of this valuable deposit, and the price at which it may be imported and sold in Europe.

Unfortunately, however, our information on both these points is less complete than might be desired. Since it began to be largely exported to this and other foreign countries, an apprehension has, we understand, begun to gain ground in Peru, that the deposits would in no very long time be wholly exhausted; and as this would occasion the ruin of those estates along the coast of Peru, and the department of Arequipa, in which guano has long been extensively used as a manure, government has been called upon to avert this catastrophe by prohibiting its export. We are, however, well convinced that this apprehension is entirely groundless, and that the deposits are in fact all but inexhaustible. At present guano is principally obtained from some small islands opposite Pisco, in about lat. 13° 55′ S., and long. 76° 30′ W., and it is stated by Mr. B. H. Wilson, the well-informed English consul in Peru, that though it is supposed that about 300 tons a year have been carried for centuries from Chincha, one of the islands in question, to the opposite coast, it is estimated that there is still upon that island the enormous quantity of 17,000,000 tons, and that the supply in the various islands of the group now alluded to, may be safely estimated at above 40,000,000 tons! But, exclusive of these, there are other islands more to the south, whence guano is shipped for Arequipa, and which are still very far from being exhausted; and, as already stated, vast deposits have been found on the coast of the mainland, especially near La Mar or Cobija; so that, making every allowance for exaggeration, the supply of guano cannot, for all practical purposes, be regarded otherwise than as inexhaustible.

The islands where the guano is found being uninhabted except by those employed in its shipment, it would, but for the interference of government, cost nothing save the expense of putting it on board and the freight home. But the governments of Peru and Bolivia were either so little aware of the value of the article, and of their duty to their constituents, or so corrupt, that they sold in 1839 to private parties, (Messrs. Quiros, Allier, and Co. of Lima,) for a mere trifle (40,000 dollars), the sole right to ship guano for the term of nine years; so that these parties had it in their power to exact any price they pleased for the article! This contract was, however, too ruinous to be allowed to continue; and was cancelled by the Peruvian government on the 27th of November, 1841, on the ground of enormous public lesion, and of ignorance of the value of the privilege that had been conceded. We cannot positively say whether the shipment of guano be now free, or whether it be again subjected to some species of restraint. We believe, however, that Quiros, Allier, and Co., and certain other houses, obtained, though with considerable modifications, a renewal of the monopoly held by the former in the course of last year, but we have not learned the terms of the new contract, nor whether it be still in force. But, supposing its exportation were free, the expenses attending the shipment of a cargo of 500 tons guano from Chincha, or other Peruvian island, would be —

	$	c.		£	s.	d.
Carriage to the shoot of 500 tons, at 5 rs.	312	4	=	59	17	11
Payment to master of the shoot	20	0	=	3	17	5
Seven men in launch shipping 36 tons daily, at 14 rs. each for 14 days	171	4	=	32	16	8
Anchorage	10	0	=	1	18	4
Agency	50	0	=	9	11	8
Payments, &c. for peons or labourers	6	0	=	1	3	0
	570	0	=	109	5	0
3750 bags at 2 rs. required for one half the quantity of guano, at 15 bags per ton, the other half of the guano being shipped in bulk	937	0	=	179	11	10
	1507	0	=	288	16	10

or about 3 dolls. or 12*s.* per ton. And adding to this, 5*l.* per ton for freight, and 1*l.* per ton for insurance, expenses of receiving and sale in England, profit, &c., the entire cost would be 6*l.* 12*s.* a ton, or about 6*s.* 7*d.* a cwt.

Between the 1st of January, 1842, and the 20th of August that year, 11,297 tons of guano were shipped from Peru, and 887 tons from Bolivia, and with the exception of a single cargo of about 350 tons for France, and one of 200 tons for Genoa, the whole of this quantity was shipped for England! This shows the already great and growing importance of the trade. And the probability is, that, unless the Peruvian government lay a heavy export duty on the article, or give a monopoly of its supply to private parties,

the export will be very greatly increased. It may be questioned, however, seeing that the guano islands are uninhabited, and at a considerable distance from the shore, whether the Peruvian government would be entitled to adopt measures in reference to them so hostile to the interests of other nations as those now alluded to. All vessels loading Peruvian guano for exportation must take their final departure from the port of Callao; but it is difficult to perceive the use of this regulation, unless it be to increase the trouble and expense of the shippers. — (Besides Ulloa, *ubi suprà*, in the French trans., we have derived the foregoing particulars from various sources, but principally from consular Reports and the communications of private parties resident in Peru.)

GUAYAQUIL, a city and port of Colombia, on the western coast of South America, lat. 2° 11′ 21″ S., long. 79° 43′ W. Population, 20,000? The town is situated on the banks of the river of the same name, about 6 or 7 leagues from the Isla Verde, or 9 leagues from the Isla Puña, in the Gulph of Guayaquil, opposite to the mouth of the river. Ships bound for Guayaquil generally call at the Isla Puña, where expert pilots may be had, who carry them up to the town by night or by day, according to the state of the tides. The town is old; but as the houses are of wood, and it has frequently suffered from fires, much of it is comparatively modern, and has a good appearance. There is a dry dock on the south bank of the river, where several ships of a superior construction have been built.

The district in which Guayaquil is situated has, for a considerable period, formed a part of the republic of Ecuador or Æquator. Like the other S. American states, it has been subjected to perpetually recurring revolutions; but Guayaquil has notwithstanding continued to enjoy a considerable commerce. Its principal article of export is cocoa, of which large quantities are shipped; and next to it are timber, tobacco, ceibo wool used in stuffing mattresses, &c. The principal articles of import are British manufactured cottons and hardware, silks, wine, flour, &c.

Account of the Export of Cocoa from Guayaquil, during each of the Six Years ending with 1838, specifying the Countries to which it was exported, and the Quantities sent to each.

Countries.	1833.	1834.	1835.	1836.	1837.	1838.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Spain	2,106,166	6,709,861	3,979,379	4,970,996	4,439,616	2,149,902	24,355,920
England	-	-	-	-	626,447	105,566	732,013
France	388,745	276,021	555,275	606,204	-	736,723	2,562,968
United States	830,536	747,647	4,388,150	688,011	1,516,383	992,673	9,163,410
Mexico	1,876,699	1,991,191	2,599,596	1,034,083	275,949	1,221,001	8,798,522
Central America	361,096	285,958	650,297	480,189	64,070	431,822	2,273,432
New Granada	56,954	2,106	69,822	49,993	54,712	33,939	267,526
Peru	675,901	605,270	658,167	2,137,172	711,821	767,378	5,556,009
Chili	259,847	228,017	588,711	450,253	264,750	150,699	1,740,307
Manilla	139,532	153,778	-	67,463	-	206,370	567,143
Hamburg	-	-	-	-	-	400,002	400,002
Genoa	-	-	-	-	325,377	-	325,377
San Tomas	-	-	405,000	-	-	-	405,000
Rio Janeiro	-	-	306,454	433,871	243,000	-	983,225
Total	6,695,776	10,999,862	13,800,851	10,918,565	8,520,125	7,196,075	58,131,354

Statement of the Number and Tonnage of Vessels, with the Value of their Cargoes, which entered inwards and cleared outwards at the Port of Guayaquil, distinguishing the Countries to which the same belonged, in the Year 1835. — (*Consular Return.*)

Inwards.			Outwards.			
Vessels.	Tonnage	Value of Cargoes.	Vessels.	Tonnage.	Value of Cargoes.	
		£				
11	2,086	43,575			25,436	About one third of the number of vessels, entered as Peruvian, and some entered as Mexican, belong to this port, but were put under those colours for better protection during the revolution of 1834.
12	1,727	14,010			5,470	
19	5,421	46,352			71,765	
4	1,027	4,908			7,825	
5	1,175	8,620	The same as entered.		10,714	
1	101	1,000			3,000	
2	407	5,000			11,500	
13	1,582	16,834			22,376	
11	1,716	25,680			12,225	
45	5,888	67,170			40,088	
123	21,430	221,680			210,429	

GUERNSEY. For the peculiar regulations to be observed in trading with Guernsey, Jersey, &c., see IMPORTATION AND EXPORTATION.

GUMS, RESINS, GUM-RESINS. In commerce, the term gum is not only applied to gums properly so called, but also to resins and gum-resins. But though these substances have many properties in common, they are yet sufficiently distinct.

I. *Gum* is a thick transparent fluid that issues spontaneously from certain species of plants, particularly such as produce stone fruit, as plum and cherry trees. It is very adhesive, and gradually hardens by exposure to the atmosphere. It is usually obtained in small pieces, like tears, moderately hard and somewhat brittle while cold; so that it can be reduced by pounding to a fine powder. When pure, it is colourless: but it has commonly a yellowish tinge; it is not destitute of lustre; it has no smell; its taste is insipid; its specific gravity varies from 1·3161 to 1·4317; it readily dissolves in water, but is insoluble in alcohol. Gum is extensively used in the arts, particularly in calico printing, to give consistence to the colours, and to hinder them from spreading. It is also used in painting, in the manufacture of ink, in medicine, &c.

The only important gums, in a commercial point of view, are *gum Arabic* and *gum Senegal*.

1. *Gum Arabic* (Fr. *Gomme Arabique*; It. *Gomma Arabica*; Ger. *Arabische gummi*; Arab. *Toth*), the produce of the *Acacia vera*, a tree growing in Arabia, and in many parts of Africa. The gum exudes naturally from the trunk and branches, and hardens by exposure to the air. "The more sickly the tree appears, the more gum it yields; and the hotter the weather, the more prolific it is. A wet winter and a cool or mild summer are unfavourable to gum." — (*Jackson's Morocco*, p. 84.) It is in irregularly shaped pieces, hard, brittle, and semi-transparent. When pure it is almost colourless, or of a pale yellowish hue; being insipid, inodorous, and dissolving completely in the mouth. Specific gravity 1·31 to 1·43. It is often mixed with gum Senegal. East India gum Arabic is, though a useful, a spurious article, not being the produce of the *acacia vera*, but of other species of plants. The best gum is either imported direct from Alexandria, Smyrna, Tripoli, Mogadore, Tangiers, &c., or at second hand from them through Gibraltar, Malta, and the Italian ports. The price depends principally on its whiteness and solubility, increasing and diminishing, according as the article has more or less of these qualities. — (*Thomson's Dispensatory*, and *private information.*)

At an average of the 3 years ending with 1842, the gum Arabic entered for consumption amounted to 18,176 cwt. a year. Previously to 1832, the duty on gum Arabic from a British possession was 6*s.* a cwt., and from other parts 12*s.*, but the duty on it and all other gums was then fixed at 6*s.* a cwt. without regard to origin, and in 1842 it was farther reduced to 1*s.* a cwt. Of 25,289 cwt. of gum Arabic imported in 1839, Tripoli, Barbary, and Morocco furnished 4,587; Turkey, 413; Italy, 1,585; Cape of Good Hope, 2,713; the East Indies, 15,431, &c. The price of gum Arabic in bond in the London market was, in June 1843, fine yellow from 42*s.* to 60*s.* a cwt., and brown in drops from 16*s.* to 30*s.* per do.; best Turkey from 9*l.* to 10*l.* per do.

2. *Gum Senegal*, principally brought from the island of that name on the coast of Africa, is obtained from various trees, but chiefly from two: one called *Verek*, which yields a white gum; the other called *Nebud*, which yields a red gum; varieties of the *acacia gummifera*. Gum Arabic is very often mixed with gum Senegal. The latter is nearly as pure as the former, but it is usually in larger masses, of a darker colour, and more clammy and tenacious. It is the sort of gum principally employed by calico printers. — (*Thomson's Chemistry*, *Thomson's Dispensatory*, *Ainslie's Materia Indica*, &c.) The entries of gum Senegal for consumption amounted, at an average of the three years ending with 1842, to 17,715 cwts. a year. It was worth in June 1843, when garbled, from 87*s.* 6*d.* to 95*s.* a cwt. The trade in gum Senegal is principally in the hands of the French.

II. *Resins*, for the most part, exude spontaneously from trees, though they are often obtained by artificial wounds, and are not uncommonly, at first, combined with volatile oil, from which they are separated by distillation. They are solid substances, naturally brittle; have a certain degree of transparency, and a colour most commonly inclining to yellow. Their taste is more or less acrid, and not unlike that of volatile oils; but they have no smell, unless they happen to contain some foreign body. They are all heavier than water, their specific gravity varying from 1·0182 to 1·1862. They differ from gums in being insoluble in water, whether cold or hot; while they are, with a few exceptions, soluble in alcohol, especially when assisted by heat. When heated, they melt; and if the heat be increased, they take fire, burning with a strong yellow flame, and emitting a vast quantity of smoke. Common *rosin* furnishes a very perfect example of a resin, and it is from this substance that the whole genus have derived their name. Rosin is, indeed, frequently denominated resin. The principal resins are *Animi*, *Elemi*, *Copal*, *Lac*, *Labdanum*, *Mastic*, *Rosin*, *Sandarach*, *Tacamahac*, &c.; which see, under their respective names. — (*Thomson's Chemistry.*)

III. *Gum-resins*, a class of vegetable substances consisting of gum and resin. They differ from resins in this — that they never exude spontaneously from the plant, being obtained either by bruising the parts containing them, and expressing the juice, which is always in a state of emulsion, generally white, but sometimes of a different colour, or by making incisions in the plant, from which the juice flows. The juice, being exposed to the action of the sun, is condensed and inspissated, till it forms the gum-resin of commerce. Gum-resins are usually opaque, or, at least, their transparency is inferior to that of resins. They are always solid, and most commonly brittle, and have, sometimes, a fatty appearance. When heated, they do not melt as resins do, neither are they so combustible. Heat, however, commonly softens them, and causes them to swell. They burn with a flame. They have almost always a strong smell, which, in several instances, is alliaceous. Their taste, also, is often acrid, and always much stronger than that of resins. They are usually heavier than resins. They are partially soluble in water, but the solution is always opaque, and usually milky. Alcohol partially dissolves them, the solution being transparent.

The most common gum-resins are *Aloes*, *Ammonia*, *Euphorbium*, *Galbanum*, *Gamboge*, *Myrrh*, *Olibanum*, *Sagapenum*, *Scammony*, &c.; which see, under their respective names. — (*Loudon's Ency. of Agriculture*; *Thomson's Chemistry.*)

GUNPOWDER (Ger. *Pulver, Schiesspulver;* Du. *Buskruid;* Da. *Krudt, Pulver;* Sw. *Krut;* Fr. *Poudre;* It. *Polvere;* Sp. and Port. *Polvora;* Rus. *Poroch;* Pol. *Proch;* Lat. *Pulvis pyrius*). This well known inflammable powder is composed of nitre, sulphur, and charcoal, reduced to powder, and mixed intimately with each other. The proportion of the ingredients varies very considerably; but good gunpowder may be composed of the following proportions; viz. 76 parts of nitre, 15 of charcoal, and 9 of sulphur. These ingredients are first reduced to a fine powder separately, then mixed intimately, and formed into a thick paste with water. After this has dried a little, it is placed upon a kind of sieve full of holes, through which it is forced. By this process it is divided into grains, the size of which depends upon the size of the holes through which they have been squeezed. The powder, when dry, is put into barrels, which are made to turn round on their axis. By this motion the grains of gunpowder rub against each other, their asperities are worn off, and their surfaces are made smooth. The powder is then said to be glazed. — (*Thomson's Chemistry.*)

Dr. Thomson, whose learning is equal to his science, has the following remarks with respect to the introduction of gunpowder into warlike operations: — "The discoverer of this compound, and the person who first thought of applying it to the purposes of war, are unknown. It is certain, however, that it was used in the fourteenth century. From certain archives quoted by Wiegleb, it appears that cannons were employed in Germany before the year 1372. No traces of it can be found in any European author previously to the thirteenth century; but it seems to have been known to the Chinese long before that period. There is reason to believe that cannons were used in the battle of Cressy, which was fought in 1346. They seem even to have been used three years earlier, at the siege of Algesiras; but before this time they must have been known in Germany, as there is a piece of ordnance at Amberg, on which is inscribed the year 1303. Roger Bacon, who died in 1292, knew the properties of gunpowder; but it does not follow that he was acquainted with its application to fire-arms."— (*Thomson's Chemistry.*) For further particulars as to the introduction of cannon, see that article.

The manufacture and sale of gunpowder is regulated by several statutes. By the 12 Geo. 3. c. 61. it is enacted, that no person shall use mills or other engines for making gunpowder, or manufacturing the same in any way, except in mills and other places which were *actually in existence* at the time of passing the act, or which, if erected afterwards, have been sanctioned by a licence, under pain of forfeiting the gunpowder, and 2*s.* a pound. It is further enacted, that no mill worked by a pestle, and usually termed a pestle mill, shall be used in making gunpowder, under the above-mentioned penalty; and that no more than 40 lbs. of gunpowder, or materials to be made into gunpowder, shall be made at any one time under a single pair of mill-stones, on pain of forfeiting all above 40 lbs., and 2*s.* for every pound; nor shall more than 40 cwt. be dried in any one stove or place at any one time, under forfeiture of all above that quantity, and 2*s.* for every pound thereof. The powder mills erected at Battle, Crowhurst, Saddlescombe, and Brede, in Sussex, previously to 1772, are exempted from the above regulations so far as relates to the making of fine fowling powder.

No dealer is to keep more than 200 lbs. of powder, nor any person not a dealer more than 50 lbs., in the cities of London or Westminster, or within 3 miles thereof, or within any other city, borough, or market town, or 1 mile thereof, or within 2 miles of the king's palaces or magazines, or ½ a mile of any parish church, on pain of forfeiture, and 2*s.* per lb.; except in licensed mills, or to the amount of 300 lbs. for the use of collieries, within 200 yards of them.

Not more than 25 barrels are to be carried by any land carriage, nor more than 200 barrels by water, unless going by sea or coastwise, each barrel not to contain more than 100 lbs.

All vessels, except his Majesty's, coming into the Thames, are to put on shore, at or below Blackwall, all the gunpowder they have on board exceeding 25 lbs. Vessels outward bound are not to receive on board more than 25 lbs. of gunpowder previously to their arrival at Blackwall. The Trinity House have authority to appoint searchers to inspect ships, and search for gunpowder. All the gunpowder found above 25 lbs., and the barrels containing it, and 2*s.* for every lb. above that quantity, are forfeited. Any person obstructing an officer searching for concealed gunpowder is liable to a penalty of 10*l.* The places of deposit for gunpowder are regulated by the 54 Geo. 3. c. 159.

The exportation of gunpowder may be prohibited by order in council. Its importation is prohibited on pain of forfeiture, except by licence from his Majesty; such licence to be granted for furnishing his Majesty's stores only. — (6 *Geo.* 4. c. 107.)

The act 1 Will. 4. c. 44. prohibits the manufacture and keeping of gunpowder in Ireland by any person who has not obtained a licence from the Lord Lieutenant; such licences may be suspended on notice from the chief secretary, and any one selling gunpowder during the suspension of such licence shall forfeit 500*l.* Gunpowder makers under this act are to return monthly accounts of their stock, &c. to the chief secretary. This act, which contains a variety of restrictive clauses, was limited to one year's duration, but has been prolonged.

GUNNY (Hind. *Tāt;* Ben. *Gūni*), a strong coarse sackcloth manufactured in Bengal for making into bags, sacks, and packing generally, answering at once the two purposes for which canvas and *bast* are used in Europe. The material from which this article is manufactured is the fibre of two plants of the genus Corchorus; viz. *Corchorus olitorius*, and *Corchorus capsularis* (Bengali, *pat*); both, but particularly the first, extensively cultivated throughout Lower Bengal. Besides a large domestic consumption of gunny, the whole rice, paddy, wheat, pulses, sugar, and saltpetre of the country, as well as the pepper, coffee, and other foreign produce exported from Calcutta, are packed in bags or sacks made of this article. There is also a considerable exportation of manufactured bags, each commonly capable of containing two maunds, or about 160 lbs. weight, to Prince of Wales Island, Malacca, Singapore, Java, and Bombay. In 1841-42 there were exported from Calcutta 5,330,899 gunny bags, of the value of 499,426 rup.

(49,942*l.*), and 95,412 pieces of gunny cloth, worth 4,83,321 rup. (43,332*l.*). — (*Wallich; Roxburgh; Review of the External Commerce of Bengal for* 1841-42.)

GYPSUM, OR SULPHATE OF LIME, is found in various parts of the Continent, in Derbyshire and Nottinghamshire, and in Nova Scotia, whence it is largely exported. When reduced to a powder, and formed into a paste with water, it is termed *plaster of Paris*, and is much used for forming casts, &c. It is also used for laying floors, and has been advantageously employed as a manure.

H.

HACKNEY COACHES are coaches stationed in the streets or other public places, and bound to carry such persons as require their services, for certain rates of hire according to the distances travelled. They have generally been licensed by authority, and subjected to certain regulations, intended to prevent strangers and others using them from fraud and imposition. It may be doubted, however, whether these regulations have had any good effect; and whether the public would not be as well accommodated, at least in all large towns, by throwing the business open, and trusting to competition to rectify abuses. As respects London, nothing can be said in favour of its hackney coach establishment. Speaking generally, the coaches are the dirtiest, most disagreeable vehicles that can well be imagined, and the horses and drivers are but little superior; forming a striking contrast to the elegance and commodiousness of the private carriages, the excellence of the horses, and the neatness of the servants.

Hackney coaches were first established in London in 1625; but they were not then stationed in the streets, but at the principal inns. In the reign of Charles II. their number was considerable. Commissioners for licensing and superintending hackney coaches were established by the act 9 Ann. c. 23.; and successive acts have been passed, specifying the number of coaches that might be licensed, the duties payable to government, and the conditions under which licences were to be granted. There are immense numbers of hackney coaches, chariots, and cabriolets annually licensed in the metropolis.

Hackney Coach Regulations, Fares, &c. — The regulations as to hackney coaches in the city of London are governed by the acts 6 & 7 Vict. c. 86. and the 1 & 2 Will. 4. c. 22. The first of these acts provides for the appointment of a registrar of metropolitan public carriages, who is to grant licences, costing 5*s.* each, to the drivers and conductors of stage, hackney, and other carriages, and to watermen. The persons so licensed receive metal tickets or badges, which they are to wear conspicuously on their breast, and persons acting as drivers, conductors, watermen, &c., without such licences and tickets, are to be fined 5*l.*; and proprietors who suffer drivers, conductors, &c. to act for them shall forfeit 10*l.* for every such offence. — §§ 8, 9, 10, &c.

In 1842 there were licensed under this act, in the metropolitan district, 4,546 hackney drivers; 1,412 stage drivers; 1,543 conductors; and 287 watermen.

The other act, 1 & 2 Will. 4. c. 22., regulates the licensing of carriages, the amount of fares, &c. We notice a few of the more important clauses.

Definition. — A hackney coach is any carriage with 2 or more wheels, standing or plying for hire in any public street or road. — § 4.

Licensing, Plates, &c. — A licence to keep a hackney coach costs 5*l.*, and a weekly sum of 10*s.* has to be paid per advance on every licence. A plate specifying the number of the licence is to be placed inside the coach; and 2 other plates, on which are painted the names of the proprietor, or of one of the proprietors of the coach, are to be placed externally, one on each side. Penalty on proprietor for letting or employing a hackney coach without having properly numbered plates properly fixed upon such coach, 10*l.*; ditto on driver, if proprietor, 10*l.*; if not, 5*l.* — §§ 22, 23.

Obligation to ply. — Carriages standing on the streets with plates, to be deemed hackney coaches; and, unless actually hired, shall be compellable, under a penalty of 40*s.*, to go with any person offering to hire the same. — § 35.

Distance. — Drivers of hackney coaches compellable, under a penalty of 40*s.*, to go any distance not exceeding 5 miles from the General Post Office, or from the place where they shall have been hired. — § 34.

Number of Passengers. — To prevent disputes, the number of persons to be carried by hackney coaches is to be painted in some conspicuous place outside; and they are compellable, under a penalty of 40*s.*, to carry this number if required. — § 46.

Rates and Fares. — These may be charged, at the option of the proprietor or driver, either by time or distance; that is, by the hour or mile, but not by the day. The terms are, when charged by *distance*,

For every hackney coach, drawn by 2 horses, for any distance within and not exceeding 1 mile, 1*s.*; and for every distance exceeding 1 mile after the rate of 6*d.* for every ½ mile, and for any fractional part of ½ a mile over and above any number of ½ miles completed.

Fares when taken by *time* are — For any time within and not exceeding 30 minutes, 1*s.*; above 30 minutes and not exceeding 45 do., 1*s.* 6*d.*; above 45 minutes and not exceeding 1 hour, 2*s.*; and for any further time exceeding 1 hour, then after the rate and proportion of 6*d.* for every 15 minutes; and 6*d.* for any fractional part of the period of 15 minutes.

Cabriolets, or carriages with one horse, are entitled to *two thirds*, and no more, of the rates and charges above mentioned. — s. 38. and schedules.

Back Fare. — The driver of a hackney coach discharged beyond the limits of the metropolis, that is, beyond 3 miles from the General Post Office, after 8 o'clock in the evening, or before 5 o'clock in the morning, shall be entitled to full fare from the place of such discharge to the nearest part of said limits, or to the stand where the coach shall have been hired beyond the limits, at the option of the hirer. Coaches discharged during the day beyond the limits, are entitled to a back fare at the rate of 6*d.* a mile; but such back fare is not payable for any distance less than 4 miles. — § 39.

Coaches waiting are entitled to a reasonable deposit, to be accounted for in the fare. Penalty on drivers refusing to wait, or to account for deposit, 40*s.* — § 47.

Refusal to pay Fare, or defacing or injuring any hackney coach, may be punished, unless reasonable satisfaction be made for the same, by imprisonment for 1 calendar month. — § 41.

Drivers exacting more than legal Fare liable to a penalty of 40*s*. — § 42.
Agreement to pay more than legal Fare, not binding; sum paid beyond such legal fare may be recovered back, and driver be liable in a penalty of 40*s*. — § 43
Drivers demanding more than Sum agreed upon, though distance be exceeded, or it be less than the legal fare, forfeit 40*s*. for each offence. — § § 44, 45.
Drivers to hold Check Strings, under a penalty of 20*s*. — § 48.
Property left in Hackney Coaches to be carried to Stamp Office, under a penalty of 20*l*. If not claimed within a year, to be given up to driver; or if not applied for, to be sold. — § 49.
Court of Aldermen authorised to make orders for regulating hackney coaches in city. — § 54.
Offences may be tried either by a justice appointed for that purpose by the secretary of state, or by any 2 of his Majesty's justices. — § 55.

HAIR, HUMAN (Ger. *Haare, Menschen-haar;* Du. *Hair;* Fr. *Cheveux;* It. *Capelli umani;* Sp. *Cabellos;* Lat. *Capilli*). "Human hair makes a very considerable article in commerce, especially since the mode of perruques has obtained. Hair of the growth of the northern countries, as England, &c., is valued much beyond that of the more southern ones, as Italy, Spain, the southern parts of France, &c. Good hair is well fed, and neither too coarse nor too slender; the bigness rendering it less susceptible of the artificial curl, and disposing it rather to frizzle; and the smallness making its curl of too short duration. Its length should be about 25 inches; the more it falls short of this, the less value it bears." — (*Ency. Brit.*)

HAIR OF BEASTS (Ger. *Haare, Huhaare;* Du. *Hair;* Fr. *Poil;* It. and Sp. *Pelo;* Lat. *Pelles*). The hair of horses is extensively used in the manufacture of chairs, sofas, saddles, &c.; while the hair or wool of beavers, hares, rabbits, &c. is much employed in the manufacture of hats, &c.

HAIR-POWDER (Ger. *Puder;* Fr. *Poudre à poudrer;* It. *Polvere di cipri;* Sp. *Polvos de peluca*) is used as an ornament for the hair, and generally made from starch pulverised, and sometimes perfumed. A tax of 1*l*. 3*s*. 6*d*. a year is laid upon all persons who wear hair-powder. Different statutes prohibit the mixing of hair-powder with starch or alabaster And hair-powder makers are prohibited having alabaster in their custody.

HALIFAX, the capital of Nova Scotia, on the south-east coast of that province, lat. 44° 36′ N., lon. 63° 28′ W. It is situated on a peninsula on the west side of Chebucto Bay, and has one of the finest harbours in America. Population, exclusive of the military, about 19,000. The town is irregularly built, and most of the houses are of wood. The government-house is one of the most splendid edifices in North America. Halifax was founded in 1749.

Port. — The best mark in sailing for Halifax is Sambro light-house, on a small island off the cape of the same name, on the west side of the entrance to the harbour, in lat. 44° 30′, lon. 63° 32′. The light, which is fixed, is 210 feet above the level of the sea; and a detachment of artillery, with two 24-pounders, is upon duty at the light-house, firing at regular intervals during the continuance of the dense fogs with which this part of the coast is very much infested. — (*Coulter, Tables des Principales Positions Geographiques*, p. 78.) The course into the harbour for large ships, after passing Sambro light, is between the main land on the west, and Macnab's Island on the east. On a spit projecting from the latter a light-house has recently been constructed; and when this is seen, ships may run in without fear. The harbour is defended by several pretty strong forts. Ships usually anchor abreast of the town, where the harbour is rather more than a mile in width. After gradually narrowing to about ¼ of that width, it suddenly expands into a noble sheet of water, called Bedford Basin, completely land-locked, with deep water throughout, and capable of accommodating the whole navy of Great Britain. The harbour is accessible at all times, and is rarely impeded by ice. There is an extensive royal dockyard at Halifax; which during war is an important naval station, being particularly well calculated for the shelter, repair, and outfit of the fleets cruising on the American coast and in the West Indies. Mr. M'Gregor has severely, and, we believe, justly censured the project for the removal of the dockyard from Halifax to Bermuda.

Trade, &c. of Halifax and Nova Scotia. — Halifax is the seat of a considerable fishery; but the British colonists seem to be, for what reason it is not easy to say, less enterprising and successful fishers than the New Englanders. The principal trade of the town and province is with the West Indies, Great Britain, and the United States. To the former they export dried and pickled fish, lumber, coals, grindstones, cattle, flour, butter, cheese, oats, potatoes, &c. They export the same articles to the southern ports of the United States, and gypsum to the eastern ports of New England. To Great Britain they send timber, deals; whale, cod, and seal oil; furs, &c. The principal exports of timber are from Pictou on the St. Lawrence. The imports consist principally of colonial produce from the West Indies; all sorts of manufactured goods from Great Britain; and of flour, lumber, &c. from the United States, principally for exportation to the West Indies.

In 1826 a company was formed for making a canal across the country from Halifax to the basin of Minas, which unites with the bottom of the Bay of Fundy. The navigation is formed, for the most part, by Shubenacadie lake and river. The legislature gave 15,000*l*. to this undertaking. The excavated part of the canal is 60 feet wide at top, 36 feet at bottom, and admits vessels drawing 8 feet water. It seems very questionable whether this canal will be profitable to the shareholders; but it is of very considerable service to the trade of Halifax.

There are two private banking companies at Halifax. Accounts are kept in pounds, shillings, and pence, the same as in England, and the weights and measures are also the same.

About 100 large square-rigged vessels, and about the same number of large schooners, with several smaller craft, belong to Halifax.

The splendid steam ships Hibernia, Caledonia, Britannia, and Acadia, of 1,200 tons each, conveying the mails to British North America, ply between this port and Boston in the U. States and Liverpool. They sail from the latter twice a month during the summer months, but only once a month in winter. The fare to Halifax or Boston from Liverpool, including provisions and steward's fee (but excluding wines and liquors), is 39 guineas. On arriving at Halifax, passengers are conveyed by coaches across the Peninsula to Pictou, whence they are carried by steamers to Quebec and Montreal. A steam intercourse is also kept up in summer with Boston.

In 1838 there were exported from Nova Scotia, and principally from Halifax —

Articles.			Quantities.	Value.	Articles.			Quantities.	Value.
				£					£
Beef and pork	-	barrels	5,559	20,270	Whalebone	-	cwts.	200	1,000
Coals	-	tons	32,794	32,799	Grindstones	-	-	-	3,394
Corn and meal	-	-	-	15,310	Wood of all sorts	-	-	-	137,716
Fish — cod, dry	-	cwts.	213,342	156,143	All other articles	-	-	-	72,697
other sorts	-	-	-	49,697					
Gypsum	-	tons	31,038	8,095	Total value of exports		- £	-	524,311
Oil, train and sperm	-	galls.	152,202	27,062					

Account exhibiting the Values of the Imports into and Exports from Nova Scotia, with the Number and Tonnage of the Ships entering inwards and outwards in 1842.

Imports from	Estimated Value.	Ships inwards. Number.	Tons.	Exports to	Estimated Value.	Ships outwards. Number.	Tons.
	£				£		
Great Britain - - -	337,564	107	40,090	Great Britain - - -	79,784	81	29,062
British West Indies - -	44,023			British West Indies - -	455,425		
British North American colonies - - -	204,979	1,909	132,238	British North American colonies - - -	237,891	2,202	167,445
British colonies elsewhere -	98,178			British colonies elsewhere -	6,012		
United States of America -	373,739	1,466	121,721	United States of America -	72,699	1,414	121,345
Foreign states - - -	113,275	175	22,390	Foreign states - -	29,113	57	7,771
Total - - -	1,171,558	3,457	316,442	Total - - -	859,234	3,554	325,623

HAMS. See BACON and HAMS.

HAMBURG, a free Hanseatic city, on the north bank of the river Elbe, about 70 miles from its mouth, lat. 53° 32′ 51″ N., lon. 9° 58′ 37″ E. Population, including the suburbs of St. George and St. Pauli, but excluding the territory attached to the city, 137,000. Hamburg is the greatest commercial city of Germany, and, perhaps, of the Continent. She owes this distinction principally to her situation. The Elbe, which may be navigated by lighters as far as Melnik, in Bohemia, renders her the *entrepôt* of a vast extent of country. Advantage, too, has been taken of natural facilities that extend still further her internal navigation; a water communication having been established, by means of the Spree and of artificial cuts and sluices, between the Elbe and the Oder, and between the latter and the Vistula; so that a considerable part of the produce of Silesia destined for foreign markets, and some even of that of Poland, is conveyed to Hamburg. —(See CANALS.) There is, also, a communication by means of the Steknitz canal, with the Trave, and, consequently, with Lubeck and the Baltic. She is, also, in the course of being connected by means of railways with Berlin, Hanover and Brunswick, Kiel, &c. Vessels drawing 14 feet water come up to the town at all times; and vessels drawing 18 feet may come safely up with the spring tides. The largest vessels sometimes load from and unload into lighters at Cuxhaven. The trade of Hamburg embraces every article that Germany either sells to or buys from foreigners. The exports principally consist of grain of all sorts, wool, clover seed, bark, spelter, butter, salted provisions, rags, wooden clocks and toys, linens, and all sorts of German manufactured goods, Rhenish wines, &c. Most sorts of Baltic articles, such as grain, flax, iron, pitch and tar, wax, &c., may generally be bought as cheap at Hamburg, allowing for difference of freight, as in the ports whence they were originally brought. The imports consist principally of sugar; coffee, which is the favourite article for speculative purchases; cotton wool, stuffs, and yarn; tobacco, hides, indigo, wine, brandy, rum, dyewoods, tea, pepper, &c. Being brought from many different places, there is a great variety of quality in the grain found at Hamburg; but a large proportion of the wheat is inferior. Some of the barley is very good, and fit for malting. The oats are feed of various qualities. It will be afterwards seen that the total annual value of the import and export trade of the port (including that of Altona, the merchants of which conduct their business on the Hamburg exchange,) may be estimated at about 20,000,000*l.* sterling a year, or upwards: and as the largest portion of this immense trade is in our hands, it will be necessary that we should be a little fuller than ordinary in our details as to this great emporium.

Hamburg was visited by a dreadful and most destructive fire in May, 1842. But, notwithstanding the heavy losses that were in consequence incurred, and the paralysis it occasioned in trade and industry, the shock was less severe than might have been anticipated. The system of mutual insurance having been generally adopted, the proprietors of houses and other property have been subjected to a tax, to defray the interest of a loan of 32 millions marks-banco raised to indemnify the sufferers, and to enable them to rebuild their houses. And we are glad to have to state that the work of reparation has been vigorously commenced, and that the probability is, that in a few years all traces of the recent calamity will have been obliterated. We have not, however, owing to the destruction of documents during the fire, been able to obtain any authentic accounts of the trade of Hamburg in 1842; and this is the less to be regretted, seeing that the fire, by interrupting for a while and otherwise deranging the ordinary channels of commercial intercourse, influenced the trade of that year too much to allow of its entering into any fair average statement of the trade of the port.

Table of the Principal Imports, Stocks, Exports, and Consumption, at the Port of Hamburg, from 1830 to 1839, both inclusive. — (Compiled by Messrs. Berinberg, Gosler & Co.)

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
Coffee	*Lbs.*	*Lbs.*	*Lbs.*	*Domingo. Schillings.*
1830	- -	24,000,000		
1830	24,000,000	45,250,000	45,250,000	5½ to 6
1831	21,000,000	42,750,000	50,750,000	5¾ - 6½
1832	16,000,000	53,750,000	47,250,000	5½ - 5⅞
1833	22,500,000	40,000,000	45,500,000	6 - 6½
1834	14,000,000	50,250,000	45,250,000	5 - 5¾
1835	19,000,000	42,750,000	47,750,000	5¾ - 6
1836	14,000,000	47,500,000	48,500,000	4⅜ - 5½
1837	13,000,000	51,625,000	49,625,000	4⅛ - 4¾
1838	15,000,000	53,250,000	56,250,000	4⅜ - 5⅛
1839	12,000,000	47,500,000	50,000,000	5 - 5¼
In 10 years - -	- -	498,625,000	489,125,000	
Stock, Jan. 1. 1840	- -	- -	9,500,000	
Annual average from 1830 to 1839		-	31,500,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
Sugar	*Lbs.*	*Lbs.*	*Lbs.*	*Br. Sygd. Har. Groten.*
1830	- -	14,000,000		
1830	14,000,000	101,000,000	86,000,000	4½ to 5
1831	9,000,000	109,250,000	117,250,000	4½ - 6⅛
1832	1,000,000	109,750,000	100,750,000	5 - 6½
1833	0,000,000	75,000,000	81,000,000	5¼ - 6½
1834	2,0 0,0000	68,500,000	75,500,000	6 - 7½
1835	5,000,000	85,750,000	77,750,000	7 - 8¾
1836	1,000,000	85,000,000	81,000,000	5¼ - 7
1837	5,000,000	86,000,000	100,000,000	5¼ - 7½
1838	9,000,000	99,750,000	95,756,000	5½ - 7
1839	5,000,000	85,250,000	85,250,000	5¼ - 6¾
In 10 years - -	- -	911,250,000	900,250,000	
Stock, Jan. 1. 1840	- -	- -	11,000,000	
Annual average from 1830 to 1839		-	81,750,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
Hides	*Pieces.*	*Pieces.*	*Pieces.*	*Buenos Ayres. Schillings.*
1830	- -	10,500		
1830	10,500	106,212	89,112	8½ to 10½
1831	27,600	127,522	108,522	7½ - 9½
1832	46,500	103,101	129,201	7½ - 9
1833	20,500	142,821	135,821	7½ - 9
1834	29,500	127,798	152,498	7½ - 8½
1835	24,800	122,674	118,474	6¾ - 7½
1836	29,000	83,749	101,549	6½ - 7½
1837	8,200	111,271	111,071	6·625 - 7
1838	8,000	142,535	142,035	6½ - 7½
1839	8,500	164,994	167,294	7½ - 8½
In 10 years - -	- -	1,212,777	1,250,777	
Stock, Jan. 1. 1840	- -	- -	6,000	
Annual average from 1830 to 1839		-	64,966	

	Hogsheads.	*Hogsheads.*	*Hogsheads.*	*Kentucky. Schillings.*
Tobacco	- -	2,050		
1830	2,050	3,140	3,640	2 to 3½
1831	1,550	5,166	4,566	1·875 - 3½
1832	2,150	5,297	6,017	1·875 - 3½
1833	1,400	3,308	3,948	2½ - 4½
1834	850	3,982	4,002	2·875 - 4½
1835	830	4,162	3,712	3 - 5½
1836	1,280	3,498	4 048	1·875 - 4½
1837	750	4,214	5,144	1·875 - 4½
1838	500	4,214	4,194	2¾ - 6¾
1839	250	1,917	1,767	3 - 7
In 10 years - -	- -	41,768	41,368	
Stock Jan. 1. 1840.	- -	- -	400	
Annual average from 1830 to 1839		-	4,305	

	Bales.	*Bales.*	*Bales.*	*Geo. Upland. Schillings.*
Cotton	- -	12,410		
1830	12,410	21,288	25,453	6 to 7
1831	8,215	21,458	26,658	5½ - 6½
1832	6,040	36,828	37,008	6 - 7
1833	5,865	22,790	26,670	7 - 8¾
1834	1,985	45,188	42,673	8 - 9½
1835	4,500	40,258	36,113	7 - 10
1836	9,115	66,106	56,751	7¾ - 10½
1837	18,500	55,450	57,350	6 - 8
1838	16,600	42,221	50,851	6 - 7¾
1839	7,960	40,556	40,556	6¼ - 8
In 10 years - -	- -	408,456	399,576	
Stock, Jan. 1. 1840	- -	- -	8,880	
Annual average from 1830 to 1839		-	22,650	

	Chs.	*Ser.*	*Chs.*	*Ser.*	*Chs.*	*Ser.*	*F. vio. & bl. Ben. Marcs.*
Indigo	- -	- -	1,200	455			
1830	1,200	455	5,864	672	6,259	607	5 to 6
1831	795	520	4,695	536	4,915	546	4½ - 5½
1832	575	510	8,054	269	8,044	339	4 - 5
1833	585	440	5,303	245	5,158	310	5 - 6
1834	730	375	4,715	480	4,770	445	4½ - 5
1835	675	420	5,699	438	5,904	708	4½ - 5½
1836	470	350	7,118	480	7,128	680	5½ - 6
1837	460	150	4,929	615	4,554	600	5½ - 6½
1838	835	165	6,236	163	6,476	223	6½ - 6¾
1839	595	105	5,923	944	6,273	984	7¼ - 7½
In 10 years - -	- -	-	59,736	5,307	59,191	4,242	
Stock, Jan. 1. 1840	- -	- -	- -	-	245	65	
Annual average from 1830 to 1839		-			4,196	423	

	Blls.	*Bgs.*	*Blls.*	*Bgs.*	*Blls.*	*Bgs.*	*Carolina. Marcs.*
Rice	- -	- -	5,800	3,100			
1830	5,800	3,100	10,326	3,907	11,326	4,957	10 to 13½
1831	4,800	2,350	17,157	9,520	15,457	8,970	11 - 15
1832	6,500	2,900	7,986	5,467	12,686	7,867	13 - 15½
1833	1,800	500	15,184	10,095	11,684	9,795	11 - 15½
1834	3,300	800	10,600	13,345	11,900	9,645	10 - 12½
1835	2,000	4,500	10,196	12,104	9,896	10,604	12 - 15½
1836	2,300	6,000	8,707	12,884	9,107	7,884	13 - 14½
1837	1,900	11,000	9,220	11,840	10,670	12,840	13 - 15
1838	450	10,000	5,771	30,902	5,471	30,902	16½ - 19
1839	750	10,000	10,067	27,112	7,517	26,312	13 - 14½
In 10 years -	-	-	109,014	140.576	105,514	129,776	
Stock, Jan. 1. 1840.	-	-	-	-	3,500	10,800	
Annual average from 1830 to 1839		-			10,613	5,210	

	Lbs.	*Lbs.*	*Lbs.*	*Sumatra. Schillings.*
Pepper	- -	1,250,000		
1830	1,250,000	980,000	1,130,000	3·125
1831	1,110,000	1,670,000	1,050,000	3·125
1832	800,000	1,500,000	1,720,000	3¼
1833	580,000	1,500,000	1,480,000	3·625
1834	600,000	1,280,000	1,530,000	3·875
1835	350,000	988,000	1,088,000	4¼
1836	250,000	2,500,000	1,980,000	3·625
1837	570,000	950,000	1,270,000	3·875
1838	250,000	1,260,000	1,110,000	4
1839	400,000	1,000,000	2,00 0,000	3¾
In 10 years - -	- -	15,538,000	15,258,000	
Stock, Jan. 1, 1840	- -	- -	300,000	
Annual average from 1830 to 1839		-	1,137,000	

	Bags.	*Bags.*	*Bags.*	*Schillings.*
Pimento	- -	4,000		
1830	4,000	9,561	10,561	4½ to 4¾
1831	2,800	7,004	6,804	5 - 5·375
1832	3,000	9,954	9,754	5 - 5·125
1833	3,200	16,444	13,644	4·625 - 4¾
1834	6,000	10,358	10,358	4¾ - 4·875
1835	6,000	14,276	6,276	4¼ - 4¾
1836	14,000	14,613	12,613	3·625 - 3·875
1837	16,000	8,053	15,053	3·375 - 3·625
1838	11,000	5,803	6,803	3·375 - 3¾
1839	10,000	5,466	8,466	3¼ - 3·375
In 10 years - -	- -	105,332	98,332	
Stock, Jan. 1. 1840	- -	- -	7,000	
Annual average from 1830 to 1839		-	6,185	

Money is generally reckoned in Hamburg in marks, of 16s., each of 12 pfennings; and is of two sorts, *banco* and *current*. The former consists of the sums inscribed in the books of the Bank, opposite to the names of those who have deposited specie or bullion in the bank, or got it transferred to them at the rate of 27½ marks banco to the Cologne mark of fine silver. The value of the marks banco, taking silver at 5s. an oz., is consequently 1s. 5½d., which makes the par of exchange 13 marks 10½ schill. banco per *l.* sterling. Banco is worth about 2½ per cent. more than currency; the agio varying from 120 to 131 per cent. Speaking generally, the value of the current mark may be taken at 1s. 2½d. or 1s. 3d. sterling. The silver coins current in Hamburg are, specie dollars (of which 34 are equal to a mark Cologne, fine silver); Prussian current dollar (14 dollars to the mark fine); new 2s. 3d. pieces (18 to the mark fine); Danish groats current, and Hamburg current (34 to the mark, fine). The gold coins comprise ducats = 9s. 4d. sterling, Louis and Frederick d'ors. The agios of these different coins, with banco, constantly vary. Hamburg has for many years ceased to coin monies, with the exception of ducats and the smaller coins.

Measures and Weights. — A new regulation of these was effected by an act passed on the 16th January, 1843.

There are in Hamburg 3 different sorts of *pound weights*:

1. The bank or silver weight (formerly the Cologne weight).
2. The commercial weight.
3. The apothecary weight.

One pound bank, or silver weight, is = 2 marks; 1 mark (Cologne) is 233·85489 grains, or 486·9537 Dutch As. = 100 marks = 62·6554 English troy pounds.

The old relation between the commercial weight and bank weight, by which the commercial pound is equal to $33\frac{5}{32}$ oz. bank weight, has been confirmed by the late act.

1 centner = 112 pounds; 1 pound = 32 oz.; 1 oz. = 4 drachms; 1 drachm = 4 pfennings.

100 commercial lbs.	=	106·338 English lbs. avoirdupois.
100	—	48·4609 kilogrammes.
100	—	86·5355 lbs. Vienna.
100	—	96·9219 lbs. German customs union.

1 "schiffpfund," in commerce, = 2½ centners, or 20 "liespfund" of 14 lbs. each, or 280 lbs.

1 "schiffpfund" by land carriage has 20 "liespfund," each of 16 pfund; is, therefore, = 320 lbs.

A pipe of oil is 880 lbs.; 1 barrel of butter (small willow and hoops) is taken at 224 lbs., but with common hoops, at 280 lbs. nett.

Long Measure. — The Hamburg foot, divided into 12 inches, of 8 parts each, = 0·28657 metres, = 127·036 Parisian lines, = 11·249 Eng. inches. Hence

100 Hamburg feet	=	94·021 Eng. feet.
100	—	28·657 French metres.
100	—	91·307 Prussian or Rhenish feet.
100	—	90·664 Vienna feet.

The Hamburg ell (short ell) = 2 Hamburg feet. 0·57314 metres = 254,072 Paris lines. 100 Hamburg ells = 62·681 Eng. yards.

The Brabant ells (or long ell) most commonly used in Hamburg, in measurement of piece goods, = 27·585 Eng. inches.

Liquid Measure. — 1 fuder = 6 aums, 1 aum = 4 ankers or 5 eimers; 1 anker = 5 viertels; 1 viertel = 4 stübchens; 1 stübchen = 4 kannen; 1 kannen = 4 quartiers of Dessel; 1 eimer = 4 viertels; 1 hogshead = 1½ aums, or 6 ankers, or 30 viertels, each of 8 quartiers or bottles.

The stübchen contains 256 Hamburg cubic inches, = 3·62 litres.

100 Hamburg viertels	=	139·39 English imperial gallons.
100	—	724·18 French litres.
100	—	639·45 Prussian quarters.
100	—	511·88 Vienna mass.

The full beer barrel contains 48 stübchens, or 192 quartiers; the small barrel only 32 stübchens, or 128 quartiers.

The vinegar barrel contains 30 stübchens, or 120 quartiers.

The whale and fish oil barrel contains 32 stübchens, or 128 quartiers. 2 whale oil barrels = 1 quartel.

Grain Measure. One last = 60 fass; 1 fass = 2 himpten, 1 himpten = 4 spint. The wispel of wheat, rye, and peas is 20 fass; but of oats and barley, 30 fass. The achetlet of wheat, rye, and peas, is 2 fass; of barley and oats, 3 fass.

The fass contains 3872 Hamburg cubic inches, = 52·734 litres, and 46·8 Parisian cubic inches, and

100 Hamburg fass	=	18·135 Imperial quarters.
100	—	52·734 hectolitres.
100	—	95·947 Prussian scheffels.
100	—	85·765 Austrian metzen.

100 Hamburg lasts = 108·81 Imperial quarters.

The mode of measuring grain has hitherto been by the meters throwing it into the fass, and striking off the surplus with a wooden roller pressed lightly along the upper edge; but an alteration is expected on a new corn law, now projected, coming into operation: there will probably be a new fass measure of 4037 Hamburg cubic inches), equal to the Prussian scheffel.

In practice, 1 Hamburg last is taken at 11 imperial quarters, 21 hectolitres, 77 Prussian scheffels, 25 Danish barrels, and 16½ Russian chetwerts.

The coal barrel contains (when the 1853 Hamburg cubic inches of head or heaped measure is added) 16,438 cubic inches.

The Hamburg ship last, or last of commerce, really weighs 4000 pounds, or 3 tons (not 4000 pounds, as is generally stated).

Account of the Ships and Tonnage which arrived at and departed from Hamburg in 1840 and 1841, specifying the Countries to which the Ship belonged, and the Number belonging to each.

Flags.	1840. Arrivals. Ships.	Arrivals. Lasts of 4,000 lbs.	Departures. Ships.	Departures. Lasts of 4,000 lbs.	1841. Arrivals. Ships.	Arrivals. Lasts of 4,000 lbs.	Departures. Ships.	Departures. Lasts of 4,000 lbs.
Belgian	19	1,582	21	1,488	4	194	4	191
Brazil an	1	327	1	327	1	369	1	369
Bremen	116	4,954	103	4,089	63	2,785	61	2,760
Danish	1,179	46,004	1,157	45,814	1,328	52,474	1,328	52,358
France	147	8,206	126	8,427	111	7,012	111	7,308
Greece	—	—	—	—	1	107	1	107
Great Britain	940	95,135	925	95,560	1,028	101,067	1,021	100,480
Hamburg	559	27,826	547	30,126	424	32,503	423	32,280
Hanoverian	580	10,365	579	10,350	709	16,562	708	16,555
Lubeck	5	147	5	147	7	622	5	458
Mecklenburg	3	242	3	242	6	478	3	253
Neapolitan	1	97	1	97	2	253	2	253
Netherlands	369	17,854	327	17,858	289	18,544	286	18,481
United States	62	9,262	55	8,310	36	5,242	35	5,367
Austrian	1	263	1	263	3	329	2	263
Oldenburg	81	1,554	81	1,554	114	1,922	114	1,910
Portuguese	17	979	16	913	14	953	14	933
Prussian	23	2,327	27	4,681	25	4,557	21	4,010
Russian	14	1,741	9	1,542	14	1,587	14	1,027
Swedish and Norwegian	218	13,282	222	13,765	226	15,780	229	15,850
Spanish	30	2,046	30	2,041	23	1,485	18	1,085
Venezuela	2	190	2	190	2	190	2	190
Total	4,075	244,921	4,038	245,958	4,513	273,513	4,486	271,247

Of the above there were—

	1840.	1841.
To Great Britain	1,130 ships.	1,900 ships.
From ditto	1,610	1,949
To transatlantic ports	376	361
From ditto	423	425

Hamburg possessed, at the close of 1841, 202 ships of the burden of 21,349 lasts, each of 4,000 lbs.

Besides the regular steamers which go to and from London, Hull, Amsterdam, Havre, and Dunkirk, smaller steamers sail to Magdeburg, Berlin, and to different places on the Elbe.

The river craft arrived at and departed from Hamburg consisted of —

	Arrivals. Craft.	Arrivals. Burden.	Departures. Craft.	Departures. Burden.
1840	4,581	113,414 lasts.	4052	98,693 lasts.
1841	5,154	128,012	4,722	88,548

Account of some of the principal Articles of Foreign and Colonial Produce imported into Hamburg during each of the Four Years ending with 1840.

Articles.	1837.	1838.	1839.	1840.
Sugar lbs.	87,458,000	97,006,000	86,928,400	91,973,000
Coffee —	50,179,000	48,630,000	41,501,400	55,840,800
Tea —	1,344,000	1,301,000	946,800	933,900
Cocoa —	903,000	1,505,000	613,600	902,100
Rice — lbs.	6,566,000	8,665,000	9,774,600	8,701,800
Cotton —	14,929,000	11,758,000	11,078,900	21,657,000
Hides —	2,916,800	4,117,700	4,357,000	5,395,000
Tobacco —	11,731,000	9,754,000	9,987,600	14,880,000
Indigo —	1,292,000	1,582,000	1,584,900	1,736,400
Palm oil —	104,000	120,100	1,100,700	1,086,700
Pepper and pimento —	1,770,000	1,975,000	2,028,000	3,965,500
Ginger —	650,300	1,125,000	1,111,100	769,500
Whale & fish oil casks	8,016	8,868	6,035	
Herrings bls.	35,280	24,347	23,047	25,493
Wine hhds.	37,950	48,940	40,900	50,170
Olive oil lbs.	2,904,000	1,105,000	1,555,400	1,339,100
Raisins —	4,748,000	7,000,000	7,345,100	4,155,700
Almonds —	1,410,000	1,216,000	2,580,100	1,679,000
Southern fruits boxes	30,606	34,988	42,916	34,225
Iron — lbs.	10,820,000	14,088,000	15,635,700	20,857,000
Coals — lasts	23,773	30,488	38,814	45,309
Cotton twist lbs.	33,267,000	34,541,000	36,449,000	38,428,000
Manufactured goods pkgs.		about	3,035,000	3,035,000

HAMBURG.

The total value of imports in the years 1839 to 1841, inclusive, is estimated as follows: —

	Banco.	£
1839 about	164,900,000	12,867,000
1840	177,000,000	13,575,000
1841	180,000,000	13,500,000

of which more than half was received from Great Britain.

The export of corn depends chiefly on the wants of England, which occasioned a very large export during 1839, 1840, and 1841, being in amount and value as follows: —

	Lasts.	Banco.	£
1839	43,191 ; estimated value	14,230,000, or	1,067,250
1840	44,288 —	13,344,000, or	1,000,800
1841	59,187 —	17,252,000, or	1,293,900

The prices of wheat during these years were —

	Highest price.	Lowest price.
1839	162 to 212 doll.	110 to 172 doll. currency. 35*s.* 6*d.* to 55*s.* 1*d.*
1840	135 to 188 doll.	88 to 130 doll. currency. 28*s.* 5*d.* to 41*s.* 7*d.*
1841	134 to 195 doll.	88 to 122 doll. currency. 28*s.* 5*d.* to 39*s.* 4*d.*

(See art. Corn Laws and Corn Trade.)

The export of wool (nearly the whole of which goes to Great Britain) was as follows: —

1839	55,642 bales, or about	18,531,000 lbs.
1840	54,975 —	18,142,000
1841	53,000 —	17,774,000

The once important trade in German linens to Spain and her former American possessions, has of late years greatly fallen off. This is a consequence of the competition of England, who, by means of her superior machinery, is able, not only to spin, but to produce cloth cheaper than any other country. On the other hand, however, the import of linen yarns from England is being progressively augmented.

The total value of the exports from Hamburg has been estimated as follows: —

	Banco.	£
1839	107,000,000 or	8,025,900
1840	105,500,000 or	7,912,500
1841	109,500,000 or	8,212,500

Navigation of the Elbe, Pilotage, &c. — The mouth of the Elbe is encumbered with sand banks. The channel leading to Cuxhaven is bounded on the north by the Vogel Sands and North Grounds, and on the south by the Schaarhorn Sands and Neuwerk Island. On the latter there are 2 light-houses and 2 beacons, and on the Schaarhorn is another beacon. The light-houses on Neuwerk Island are about 700 yards apart; the most southerly, which is also the most elevated, being in lat. 53° 54′ 57″ N., lon. 8° 29′ 40″ E. It is 188 feet high, being twice the height of the other. The channel is, in some places, hardly ¼ of a mile wide. The outer red buoy in the middle of the channel, at its mouth, bears from Heligoland S. E. by S., distant nearly 20 miles. But the best mark in entering the Elbe is the floating light, or signal ship, moored 2 miles N.W. by N. of the red buoy, in 11 fathoms at low water. This vessel never leaves her station, unless compelled by ice in the winter season. By night she exhibits a lantern light, 38 feet above deck, and in foggy weather rings a bell every quarter of an hour. A second signal ship is stationed 5½ miles S.E. by E. from the first, at the westernmost point of a sand bank dividing the fair way of the river. She is rigged like a galliot, to distinguish her by day from the first signal ship; and during night she exhibits *two* lights, one 18 feet above the other. The distance from the outer red buoy to Cuxhaven is about 16 miles; thence to Glückstadt the course is east, 28 miles; from the latter to Stade the course is south-easterly, 9 miles; and then easterly to Hamburg, 18 miles. The channel throughout is marked with black and white buoys, which are numbered and specified in the charts. The black ones are to be left, in passing up the river, on the starboard or right-hand side, and the white on the larboard side.

Every vessel coming from sea into the Elbe, and drawing 4 feet water, is directed to take a pilot on board, and must pay pilotage, though she do not take one. However well the signals, lights, beacons, and buoys, may be arranged, an experienced pilot is very necessary, in case of a fog in the night, or of a storm. To take in a pilot, a vessel must heave to by the pilot galliot, which lies, in good weather, near the red buoy, and in bad weather N.N.E. from Neuwerk, and is known by having at the flagstaff an admiral's flag, and a long streamer flying at the top. If the pilot boat have no pilot on board, or if the weather be so bad that the pilot cannot leave her, she lowers her flag, and then the vessel coming in must sail, with the signal for a pilot hoisted to Cuxhaven, and heave to there, where she is certain of getting one.

There are no docks or quays at Hamburg; and it is singular, considering the great trade of the port, that none have been constructed. Vessels moor in the river outside of piles driven into the ground a short distance from shore; and in this situation they are not exposed to any danger unless the piles give way, which rarely happens. There is a sort of inner harbour formed by an arm of the Elbe which runs into the city, where small craft lie and discharge their cargoes. Larger vessels load and unload from their moorings, by means of lighters. These carry the goods from and to the warehouses which front the various small arms and channels of the river, and the canals carried from it into different parts of the city. The charges on account of lighterage are extremely moderate.

Port Charges. — The charges of a public nature payable by vessels entering the port of Hamburg, unloading and loading, are pilotage and lastage. The separate items of which are given in the following Table.

Pilotage and Lastage. — The Hamburg pilots, generally speaking, take charge of vessels only from the *Red Buoy* to *Freyburgh* or *Glückstadt*, the pilotage for which is regulated by law of the 18th of February, 1750, as follows: —

	For each Foot Hamburg Measure which a Vessel draws.*			
	During the Six Summer Months, from 1st Mar. to 1st Sept.	During the remaining Six Winter Months		
	Marks Currency.		English Money.	
			s. d.	*s. d.*
Vessels coming northwards, and colliers	2 0	3 0	2 4	3 6
All vessels, smacks, and kayen drawing more than 4 feet water, and in ballast	2 0	3 0	2 4	3 6
Vessels laden with salt or corn, wheresoever they may come from	3 0	4 8	3 6	5 3
Vessels which, besides salt, corn, or ballast, have one third of the cargo consisting of piece goods	4 0	6 0	4 8	7 0
Vessels laden with herrings	2 0	3 0	2 4	3 6
All vessels laden with wine, oil, vinegar, train oil, iron, lead, packages, or bags, and all vessels coming from foreign parts, whether laden or not	4 0	6 0	4 8	7 0
All smacks going between Holland, Friesland, and Hamburg with piece goods	4 0	6 0	4 8	7 0

* Sixteen feet English are equal to 17 feet Hamburg.

Half Pilotage only. — *N.B.* In case the Hamburg pilots enter a vessel only within the first buoy beyond the Rosshacken, Strangly, or Cuxhaven, half the above mentioned pilotage is paid. Also half pilotage must be paid at all events, whether the vessel has taken a pilot from the pilot galliot or not.

Pilotage earned. — The above pilotage is earned if vessels are brought as far as *Freyburgh* or *Glückstadt*, and when from stress of wind or weather, which seldom happens, the Hamburg pilots take vessels to *Wittenberg* or *Neumühlen*, they are to pay, without distinction —

	Marcs currency.	d. stg.
To Wittenberg	1 0	14 0
Neumühlen	1 8	21 0

Pilotage all the way. — For pilotage the whole way from Cuxhaven to Hamburg there is no table of rates, for, generally speaking, the Hamburg pilots do not take vessels up beyond *Boesch*.

From Boesch to Hamburg. — Vessels are generally piloted from Boesch to Hamburg by Danish or Hanoverian pilots, to whom it is customary to pay 3 marcs.

Lastage and Custom-house Charges.—British and other foreign vessels pay the same as Hamburg vessels. For clearing in and clearing out, no separate charges are made; visiting the port is considered as *one* voyage, and the charges on vessels are paid as follows: —

For vessels arrived with cargoes from the undermentioned places; viz. —

Places.	For every Commercial Last of 6,000 lbs.	Sterling.
	Marcs.	£ *s. d.*
The East Indies	3 0	0 3 6
West Indies, North and South America	2 8	0 3 5
Portugal, Spain, and the Mediterranean	2 0	0 2 4
The rest of the European ports	1 8	0 1 9
Holland, East Friesland, the Weser, Eyder, and Jutland	0 12	0 0 10½
For vessels under 20 commercial lasts* without distinction	0 4	0 0 3½
Vessels arriving and departing in ballast, of upwards of 20 commercial lasts	0 8	0 0 7

*It is difficult to determine the exact ratio of a last to a ton; but it may be taken at about 3 or 2½ to 1. But in Hamburg all vessels are measured by the harbour-master; and it is upon his report that the lastage is calculated.

For all vessels laden with coals, wood, or turf, no lastage is paid, provided they do not take return cargoes.

Half Lastage. — Vessels arriving in ballast and departing with a cargo pay half the above lastage, according to their destination.

N.B. — Exclusive of the above dues, which are all remarkably moderate, vessels coming to the port of Hamburg are obliged to pay certain dues to Hanover, called Stade or Brunshausen dues. These are rated according to the number of the vessel's masts, and are over and above the Stade duties on the cargo. — (For the items, see Stade.)

Duties. — The import and export duty was formerly 1½ per cent. (courant for banco, or fl. on 125) on goods imported and exported by sea, and ¼ per cent. (courant for banco), for such as were received and transported by land or river conveyance; but for some years, these duties have been greatly reduced, and are now only ⅛ per cent. on imports, and ⅛ per cent. on exports. The greater part of the imports and exports are, how-

ever, entirely free even of those low duties, as is evident from the following statements: —

Goods entirely free of Duty on Import.

1. Linen, mixed linen and cotton, linen and woollen rags, used and new made linen cloths, yarn and manufactured girths of flax, hemp, and cotton, sheep and lambs' wool.
2. Wheat, rye, barley, buckwheat, malt, potatoes, and rapeseed.
3. Unmanufactured copper and brass, ship's copper, old ditto for smelting, certain copper and brass waste, copper and brass plates, rough spelter, tinned and untinned iron plates.
4. Bullion and coins, unworked gold and silver, waste derived from the precious metals.
5. Printed works, books, music, and maps.
6. Oilcakes, bark, bones.
7. Passenger luggage, accompanied by proprietor, and otherwise, as may be allowed by the collectors of customs under particular circumstances.

Articles of Export exempted from Duty.

1. Millet, peas, beans, lentils, tares, spelt, aniseed, caraway seed, flour, madder, seed oils, arsenic, smalts, calamine, gypsum, black lead, mineral earths, mortar, mill stones, red stone, potters' clay, terras stone, tripoli, tophus stone, fullers' earth, brimstone, spelter in blocks and plates, and coals.
2. Wood for building, staves, and fire-wood, coming down the Elbe, or received landwards, the last being exempted when it has come originally by sea.
3. Articles arriving by post waggons, coming to one party, not above the value of 50 ℔ cent. banco.

All articles defined as *transito goods* are likewise entirely free of duty if so declared at entry, whether imported on account of Hamburg citizens or of foreigners.

The privilege of *transito* generally extends to a period of 3 months from the time of entry; but an extension of 3 months may be obtained on petition, by paying ½ ℔ cent. courant for banco, on the value. Transit beyond a period of 6 months is not allowed.

The levy of duties in Hamburg is conducted in the simplest manner, and on the most liberal footing. No vexatious forms check the free intercourse or the free course of trade; the entry for duty is merely a declaration of the current value at the time; transito articles remaining in warehouse for exportation, require a mere declaration to that effect by a burgher or citizen.

In levying duties, no advantage is claimed by Hamburg for vessels bearing her own flag; goods by all vessels, from whatever quarter of the world, paying the same duties. Commercial treaties have been concluded by Hamburg alone, or in conjunction with the two other free Hanseatic cities, with Great Britain, France, the United States of America, Mexico, Venezuela, the Porte, Norway, and Sweden.

The low rates of duty in Hamburg is a proof of her anxious desire to encourage trade with all nations, and the more so when we consider the great expense she is put to in keeping up buoys along the Lower Elbe, and other necessary charges for the navigating the river; expenses which considerably exceed the total sum received for duties.

Stade Duties. — Besides the duties levied at Hamburg, all articles passing up the Elbe to Hamburg, whether for transit or not, pay duties to Hanover at Brunshausen, near Stade. These duties are rated according to a tariff, and are computed from the ship's manifest, bills of lading, and packets, which have all to be sent on shore for that purpose. On several articles, particularly those of British manufacture, these duties are very heavy, being frequently much larger than the Hamburg duties! They are particularly grievous, too, from heavy penalties being attached even to the slightest unintentional mistakes. It is really surprising, considering the source of this measure, that it has been allowed to exist so long. It ought, at all events, have been expected that British ships and goods would have been exempted from such a tax. With what force can we protest against the conduct of Prussia and other German states in throwing obstacles in the way of the free navigation of the Elbe, when we submit, without a murmur, to similar proceedings on the part of Hanover? — (For further particulars, see STADE.)

Custom House Regulations. — On passing Stade, the masters of vessels must send their papers, including the manifest, bills of lading, and cockets, on shore, that the amount of the Stade duties may be calculated. On the vessel's arrival at Hamburg the broker reports her to the Custom-house, and gives his guarantee for payment of the duties; he either delivers her papers, or undertakes to deliver them as soon as they can be got from Stade, and, upon a receipt being produced for the Stade duties by the Hanoverian authorities at Hamburg, the vessel is allowed to unload. On clearing, a manifest of the outward cargo, together with the consul's certificate of the regularity of the ship's papers, must be produced at the Custom-house by the *broker*, who obtains in return a clearance certificate, authorising the vessel to go to sea.

Quarantine. — Ships are visited at Cuhaven, a Hanoverian possession at the mouth of the Elbe. Suspected vessels are generally sent to a station on the Norwegian coast; but vessels which have undergone quarantine in an English port, or come from beyond the Cape of Good Hope or Cape Horn, or direct from the River Plate, are permitted to come directly to Hamburg.

Credit, Brokerage, &c. — Almost all goods are sold for ready money, with an allowance of 1 per cent. for discount. Sometimes, but not frequently, sales are made at 2 or 3 months' credit, and in such cases a higher price is obtained than for cash. Sometimes regards sold to the sugar baker at this credit.

Brokers are positively forbidden to act as merchants or factors. They are licensed by the Senate, and must conform to the established regulations.

Brokerage is paid wholly by the seller, and amounts to —

" Five stuivers per cent. on cotton, cotton twist, cocoa, cochineal, copper, hides, indigo, manufactured goods, nankeens, sugar, and teas.

" One per cent. on annotto, camphire, cinnamon, cardamoms*, cassia*, cloves*, drugs not denominated*, deer skins, dyewoods* ginger*, jalap*, mace*, nutmegs*, pepper, pimento, rotanbee, Peruvian bark, quercitron bark, rice*, saltpetre, sarsaparilla*, shellac*, tamarinds*, tobacco in leaves* and tobacco stems*, of the growth of the United States of America, whale oil*, vanellocs*.

" *N. B.* — Tobacco stems* of all other origin, segars, and other manufactured tobacco, pay 2 per cent.; all other leaf and roll tobacco* 1½ per cent.

" One and a half per cent. on wine, brandy, rum, and arrack, if sold in parcels amounting to 3,000 marcs banco and upwards.

" Two per cent on ditto, for sales of and under 3,000 marcs banco.

" In auction the selling broker is entitled to 1½ per cent. and the purchasing broker to 2 per cent., without regard to the amount."

All articles marked (*) pay the brokerage before mentioned, if the quantity sold amounts to 600 marcs banco, or higher; for smaller lots of less than 600 marcs banco, and down to 150 marcs banco, the brokerage is paid, with the addition of one half, and under 150 marcs banco, the double is allowed. All other merchandise pays 1½ per cent. at least for sales not exceeding 150 marcs banco.

It is, however, to be observed, that all augmentations, in proportion to the amount sold, are only to be understood for sale by private contract, and not for those by auction; and even not for such private sales, where a broker has made the purchase of a larger quantity of goods above the said amount of 600 marcs banco, and has afterwards divided it into smaller lots.

Conditions of Sale. Imports. — Coffee is sold per pound in schill. banco; discount, 1 per cent.; good weight is ½ per cent. Tare is as follows: viz. on casks, real weight; on bags of 150 lbs. or less, 2 lbs.; above 150 lbs. and not above 180 lbs., 3 lbs.; above 180 lbs. and not exceeding 300 lbs., 4 lbs. On Mocha bales of about 300 lbs., 14 lbs.; if 600 lbs., 20 lbs. On Bourbon single bales, 2 lbs.; on double, 4 lbs.

Cotton is sold per lb. in schill. banco; discount, 1 per cent.; good weight, 1 per cent.; tare on bales, West Indian and North American, 1 per cent.; on square bales, 6 per cent.; on Bombay and Surat bales, 8 per cent.; on Bourbon bales, and Manilla serons, 6 per cent.; on Egyptian and Guiana small serons, 10 per cent. For the regulation of the Stade duty, all packages should be called bags, and not bales, in the bill of lading.

East India piece goods are sold per piece, in marcs banco; discount, 1 per cent. For saving in the Stade duty, if more than 50 pieces are in a bale, the number of pieces should not be mentioned in the bill of lading, but only the number of bales.

Flour is sold per 100 lbs. in marcs currency, uncertain agio; discount 1 per cent.; good weight, 1 per cent.; tare, 20 lbs. per barrel.

Fustic is sold per 100 lbs. in marcs currency, agio 20 per cent.; discount, 1 per cent.; good weight, 1 per cent.; and frequently an allowance in weight is made, if the wood is not very solid.

Indigo is sold per lb. in schill. banco; discount, 1 per cent.; good weight, ½ per cent.; tare, if in single bales of 300 lbs., 5 lbs.; in double bales, 6 lbs.

Quercitron bark is sold per 100 lbs. in marcs currency; agio, 20 per cent.; discount, 2 per cent.; good weight, 1 per cent. To determine the tare, the American tare is reduced to Hamburg weight.

Rice is sold per 100 lbs. in marcs banco; discount, 1 per cent.; good weight, 1 per cent.; tare, real; and super-tare for tierces, 4 lbs.; for ½ tierces, 2 lbs.

Rum is sold per 50 quarts in rix doll. currency, agio uncertain.

Sugar, raw and clayed, is sold per lb. in banco groats, with a rebate of 8½ per cent.; discount, 1 per cent., and sometimes ½ per cent.; Brazil or Havannah chest, good weight, ½ per cent.; real tare; super-tare, 10 lbs. for Brazil, and 5 lbs. for Havannah sugar, per chest. Muscovados in casks, good weight, 1 per cent.; tare, if the casks weigh upwards of 1,000 lbs., 18 per cent.; if less, 20 per cent. Clayed sugars, good weight, 1 per cent.; tare, 16 per cent. East India sugars, in bags, good weight, ½ per cent.; tare for [redacted] 4 to 5 lbs.; for brown, 6 to 7 lbs.

Tea, per lb. in schill. currency, agio uncertain; discount, 1 per cent.; good weight, ½ per cent. Tare of lohea, in chests of 100 lbs., 70 lbs.; of 150 to 180 lbs., 15 lbs. All black tea, 28 lbs. tare; green, 24 lbs. For the regulation of the Stade duty, the net weight should likewise be mentioned in the bill of lading.

Tobacco. — Leaf tobacco is sold per lb. in schill. banco, agio uncertain; discount, 1½ per cent; good weight, 1 per cent.; tare per cask, 80 lbs. Brazil leaf in serons; tare, 5 per cent. In rolls; canister, in baskets of about 100 lbs.; good weight, 1 lb. per basket; tare, 14 lbs. if the basket is packed up in linen, and 12 lbs. if without linen. Porto Rico rolls, good weight, 1 per cent.; no tare, as the rolls are weighed by themselves. Brazil rolls, in serons of 400 to 600 lbs., are sold per lb., in schillings banco; good weight, ½ per cent.; tare, 8 lbs. per seron. Tobacco stems per 100 lbs., in marcs currency, agio uncertain; discount, 1½ per cent.; good weight, 1 per cent.; tare, if in casks, real weight; if packed up with cords, 2 to 4 per cent., according to the thickness of the rope. As there is a great difference in the Stade duty for the different sorts of tobacco, it is necessary that, on shipping leaf tobacco, there should be inserted in the bill of lading, *Leaf Tobacco*, omitting the weight. With tobacco in rolls, only the number of packages containing roll tobacco, and the nett weight, without mentioning the number of rolls, should appear in the bill of lading.

Glass (window) is sold per chest, in marcs currency, agio uncertain; other glass ware per piece, dozen, or hundred, in schillings or marcs currency, with uncertain agio; discount, 1 per cent.

Hares, wool is sold per 2 lbs., in marcs currency, agio uncertain; discount, 1 per cent.

Hare skins (German, grey) are sold per 100 pieces, in rixdollar. banco. Russian, grey, per 104 pieces, in rixdoll. banco. White, in marcs currency, agio uncertain; discount, 1 per cent.

Iron is sold per 100 lbs., in schill. currency, agio uncertain; discount 1 per cent.

Copper is sold per 100 lbs. in schill. banco; discount, 1 per ct.

The exchange business done at Hamburg is very great; for, besides the business of the place, most of the merchants in the inland towns have their bills negotiated there.

The usual charge for commission is, on sales 2 per cent. and

1 per cent. for *del credere*, if such guarantee be required; on purchases, 2 per cent. Under particular agreements, the rates sometimes vary considerably from the above.

Citizenship. — Foreigners cannot establish themselves as merchants, or carry on any business in their own names, at Hamburg, without becoming burghers; and to be manufacturers, they must also enter the guild or corporation peculiar to the trade they mean to follow. But, to become a burgher, one has only to comply with certain forms and pay certain fees, which do not, in all, exceed 10*l*. He then becomes, in the eye of the law, a Hamburg subject, and enjoys all the rights and privileges of a native.

Banking, Insurance, &c. — For an account of the Bank of Hamburg, see BANKS (FOREIGN). All sorts of insurances are effected at Hamburg. A municipal regulation compels the insurance of all houses within the city, the rate varying according to the number of fires, and the amount of loss. Marine insurance is principally effected by joint stock companies, of which there are several; their competition has reduced the premiums to the lowest level, and the business is not understood to be profitable. The high duties on policies of insurance in this country has led to the insuring of a good many English ships at Hamburg. Life insurance is not prosecuted in Germany to any considerable extent; but some of the English companies have agents here, who are said not to be very scrupulous.

Bankruptcy. — Considering the vast number of merchants and tradespeople at Hamburg, bankruptcy does not seem to be of frequent occurrence.

Much of the business transacted at Hamburg being on commission and for account of houses abroad, the failure of foreign merchants is a prevalent source of bankruptcy. Another source of bankruptcy is losses on goods imported or exported on speculation, and occasionally losses in the funds, in which a good deal of gambling goes on here. Expensive living is not nearly so prevalent a source of bankruptcy here as in London and other places.

The law of Hamburg makes 3 classes of bankrupts; — the unfortunate, the careless, and the fraudulent. The first class consists of those whose books show that misfortune alone has occasioned the bankruptcy; that the party has all along lived within his probable income, and can account to his assignees completely for all his losses. Whoever is adjudged by the court to belong to this class (which contains but few in number), is considered entirely free from his debts, and is not subject to be called upon hereafter. The second and most numerous class, contains those termed "careless" bankrupts. These are persons who have entered into speculations exceeding their means, who have gone on for a considerable time after they found their affairs in arrear, who have lived beyond their income, have not kept their books in good order, and so forth. They are liable to be confined in prison for a period of 3 or 6 months; and, provided they have not paid a dividend of 40 per cent., may be called upon for payment of their debt after 5 years from their discharge. If a claim be made by any creditor after this lapse of time, the bankrupt is obliged to pay whatever sum he is able for the benefit of his creditors. He must swear that he cannot pay any thing, or not above a certain sum, without depriving himself and his family of necessaries. Every 5 years the claim may be repeated. All careless bankrupts are disabled from holding offices of honour. The third class contains the "fraudulent" bankrupts, who are liable to be imprisoned, according to the extent of their frauds, for a limited period, or even for life, besides being rendered incapable of holding any office whatever. Should a bankrupt abscond, he is called upon by public advertisement to appear by a certain day, in default of which he is adjudged a fraudulent bankrupt, and his name is posted up on a black board on the Exchange.

General Remarks. — The trade of Hamburg is, in a great measure, passive; that is, it depends more on the varying wants and policy of others than on its own. There is nothing of such vital importance as the free navigation of the Elbe to the prosperity of Hamburg, and, indeed, of all the countries through which it flows. This, too, is a matter of paramount consequence as respects our interests; for the Elbe is the grand inlet by which British manufactures find their way into some of the richest and most extensive European countries. The principle that the navigation of the Elbe, the Rhine, the Weser, &c. should be quite free along their whole course, was distinctly laid down by the Congress of Vienna in 1815. But, no general tariff of duties being then established, this declaration has not had the practical effect that might have been expected. It is probable, however, that all impediments to the free navigation of the Elbe above Hamburg will be speedily removed. It is in an especial manner for the interest of Prussia, Saxony, Austria, and England, that these impediments should be abolished. So long, however, as the Stade duties are kept up, it would be folly to imagine that much attention should be paid to our remonstrances against other duties. If we cannot prevail on Hanover to emancipate our commerce from oppressive restrictions and burdens, we need hardly expect to succeed with any other power. Were the Stade duties and those in the upper parts of the Elbe wholly abolished, we have little doubt that the trade of Hamburg would be vastly increased; which, however advantageous to her, would be far more advantageous to the extensive countries of which she is the grand emporium.

In compiling this article we have made use of *Oddy's European Commerce*, pp. 412—439.; the *Dictionnaire de Commerce* (*Ency. Méthodique*), i. 44—53.; the *Circulars of Bercnberg, Gossler and Co., Anderson, Heber, and Co.*, and other eminent merchants; and of detailed statements transmitted to us from Hamburg, founded on the works of Dr. Soetber, and C. and F. Norback, &c. From the circumstance of no official returns being published or obtainable at Hamburg, the returns of imports given above must not be regarded as quite accurate, though the errors they involve cannot be material.

HANSEATIC LEAGUE, an association of the principal cities in the north of Germany, Prussia, &c., for the better carrying on of commerce, and for their mutual safety and defence. This confederacy, so celebrated in the early history of modern Europe, contributed in no ordinary degree to introduce the blessings of civilisation and good government into the North. The extension and protection of commerce was, however, its main object; and hence a short account of it may not be deemed misplaced in a work of this description.

Origin and Progress of the Hanseatic League. — Hamburg, founded by Charlemagne in the ninth, and Lubeck, founded about the middle of the twelfth century, were the earliest members of the League. The distance between them not being very considerable, and being alike interested in the repression of those disorders to which most parts of Europe, and particularly the coast of the Baltic, were a prey in the twelfth, thirteenth, and fourteenth centuries, they early formed an intimate political union, partly in the view of maintaining a safe intercourse by land with each other, and partly for the protection of navigation from the attacks of the pirates, with which every sea was at that time infested. There is no very distinct evidence as to the period when this alliance was consummated; some ascribe its origin to the year 1169, others to the year 1200, and others to the year 1241. But the most probable opinion seems to be, that it would grow up by slow degrees, and be perfected according as the advantage derivable from it became more obvious. Such was the origin of the Hanseatic League, so called from the old Teutonic word *hansa*, signifying an association or confederacy.

Adam of Bremen, who flourished in the eleventh century, is the earliest writer who has given any information with respect to the commerce of the countries lying round the Baltic. And from the errors into which he has fallen in describing the northern and eastern shores of that sea, it is evident they had been very little frequented and not at all known in his time. But from the beginning of the twelfth century, the progress of commerce and navigation in the North was exceedingly rapid. The countries which stretch along the bottom of the Baltic, from Holstein to Russia, and which had been occupied by barbarous tribes of Sclavonic origin, were then subjugated by the kings of Denmark, the dukes of Saxony, and other princes. The greater part of the inhabitants being exterminated, their place was filled by German colonists, who founded the towns of Stralsund, Rostock, Wismar, &c. Prussia and Poland were afterwards subjugated by the Christian princes and the Knights of the Teutonic Order. So that, in a comparatively short period, the foundations of civilisation and the arts were laid in countries whose barbarism had ever remained impervious to the Roman power.

The cities that were established along the coast of the Baltic, and even in the interior of the countries bordering upon it, eagerly joined the Hanseatic confederation. They were indebted to the merchants of Lubeck for supplies of the commodities produced in more civilised countries, and they looked up to them for protection against the barbarians by whom they were surrounded. The progress of the League was in consequence singularly rapid. Previously to the end of the thirteenth century, it embraced every considerable city in all those vast countries extending from Livonia to Holland, and was a match for the most powerful monarchs.

The Hanseatic confederacy was at its highest degree of power and splendour during the fourteenth and fifteenth centuries. It then comprised from 60 to 80 cities, which were distributed into 4 classes or circles. Lubeck was at the head of the first circle, and had under it Hamburg, Bremen, Rostock, Wismar, &c. Cologne was at the head of the second circle, with 29 towns under it. Brunswick was at the head of the third circle, consisting of 13 towns. Dantzic was at the head of the fourth circle, having under it 8 towns in its vicinity, besides several that were more remote. The supreme authority of the League was vested in the deputies of the different towns assembled in congress. In it they discussed all their measures; decided upon the sum that each city should contribute to the common fund; and upon the questions that arose between the confederacy and other powers, as well as those that frequently arose between the different members of the confederacy. The place for the meeting of congress was not fixed, but it was most frequently held at Lubeck, which was considered as the capital of the League, and there its archives were kept. Sometimes, however, congresses were held at Hamburg, Cologne, and other towns. They met once every 3 years, or oftener if occasion required. The letters of convocation specified the principal subjects which would most probably be brought under discussion. Any one might be chosen for a deputy; and the congress consisted not of merchants only, but also of clergymen, lawyers, artists, &c. When the deliberations were concluded, the decrees were formally communicated to the magistrates of the cities at the head of each circle, by whom they were subsequently communicated to those below them; and the most vigorous measures were adopted for carrying them into effect. One of the burgomasters of Lubeck presided at the meetings of congress; and during the recess the magistrates of that city had the sole, or at all events the principal, direction of the affairs of the League.

Besides the towns already mentioned, there were others that were denominated confederated cities, or allies. The latter neither contributed to the common fund of the League, nor sent deputies to congress,; even the members were not all on the same footing in respect to privileges: and the internal commotions by which it was frequently agitated, partly originating in this cause, and partly in the discordant interests and conflicting pretensions of the different cities, materially impaired the power of the confederacy. But in despite of these disadvantages, the League succeeded for a lengthened period, not only in controlling its own refractory members, but in making itself respected and dreaded by others. It produced able generals and admirals, skilful politicians, and some of the most enterprising, successful, and wealthy merchants of modern times.

As the power of the confederated cities was increased and consolidated, they became more ambitious. Instead of limiting their efforts to the mere advancement of commerce and their own protection, they endeavoured to acquire the monopoly of the trade of the North, and to exercise the same sort of dominion over the Baltic that the Venetians exercised over the Adriatic. For this purpose they succeeded in obtaining, partly in return for loans of money, and partly by force, various privileges and immunities from the northern sovereigns, which secured to them almost the whole foreign commerce of Scandinavia, Denmark, Prussia, Poland, Russia, &c. They exclusively carried on the herring fishery of the Sound, at the same time that they endeavoured to

obstruct and hinder the navigation of foreign vessels in the Baltic. It should, however, be observed, that the immunities they enjoyed were mostly indispensable to the security of their commerce, in consequence of the barbarism that then prevailed; and notwithstanding their attempts at monopoly, there cannot be the shadow of a doubt that the progress of civilisation in the North was prodigiously accelerated by the influence and ascendancy of the Hanseatic cities. They repressed piracy by sea and robbery by land, which must have broken out again had their power been overthrown before civilisation was fully established; they accustomed the inhabitants to the principles, and set before them the example, of good government and subordination; they introduced amongst them conveniences and enjoyments unknown by their ancestors, or despised by them, and inspired them with a taste for literature and science; they did for the people round the Baltic, what the Phœnicians had done in remoter ages for those round the Mediterranean, and deserve, equally with them, to be placed in the first rank amongst the benefactors of mankind.

"In order," as has been justly observed, "to accomplish their purpose of rendering the Baltic a large field for the prosecution of commercial and industrious pursuits, it was necessary to instruct men, still barbarous, in the rudiments of industry, and to familiarise them in the principles of civilisation. These great principles were laid by the confederation, and at the close of the fifteenth century the Baltic and the neighbouring seas had, by its means, become frequented routes of communication between the North and the South. The people of the former were enabled to follow the progress of the latter in knowledge and industry. The forests of Sweden, Poland, &c. gave place to corn, hemp, and flax; the mines were wrought, and in return the produce and manufactures of the south were imported. Towns and villages were erected in Scandinavia, where huts only were before seen: the skins of the bear and the wolf were exchanged for woollens, linens, and silks: learning was introduced; and printing was hardly invented before it was practised in Denmark, Sweden, &c."—(*Catteau, Tableau de la Mer Baltique*, tom. ii. p. 175.)

The kings of Denmark, Sweden, and Norway were frequently engaged in hostilities with the Hanse towns. They regarded, and, it must be admitted, not without pretty good reason, the privileges acquired by the League, in their kingdoms, as so many usurpations. But their efforts to abolish these privileges served, for more than 2 centuries, only to augment and extend them.

"On the part of the League there was union, subordination, and money; whereas the half-savage Scandinavian monarchies were full of divisions, factions, and troubles; revolution was immediately followed by revolution, and feudal anarchy was at its height. There was another circumstance, not less important, in favour of the Hanseatic cities. The popular governments established amongst them possessed the respect and confidence of the inhabitants, and were able to direct the public energies for the good of the state. The astonishing prosperity of the confederated cities was not wholly the effect of commerce. To the undisciplined armies of the princes of the North—armies composed of vassals without attachment to their lords—the cities opposed, besides the inferior nobles, whose services they liberally rewarded, citizens accustomed to danger, and resolved to defend their liberties and property. Their military operations were combined and directed by a council composed of men of tried talents and experience, devoted to their country, responsible to their fellow citizens, and enjoying their confidence. It was chiefly, however, on their marine forces that the cities depended. They employed their ships indifferently in war or commerce, so that their naval armaments were fitted out at comparatively small expense. Exclusive, too, of these favourable circumstances, the fortifications of the principal cities were looked upon as impregnable; and as their commerce supplied them abundantly with all sorts of provisions, it need not excite our astonishment that Lubeck alone was able to carry on wars with the surrounding monarchs, and to terminate them with honour and advantage; and still less that the League should long have enjoyed a decided preponderance in the North."—(*L'Art de vérifier les Dates*, 3me partie, tom. viii. p. 204.)

The extirpation of piracy was one of the objects which had originally led to the formation of the League, and which it never ceased to prosecute. Owing, however, to the barbarism then so universally prevalent, and the countenance openly given by many princes and nobles to those engaged in this infamous profession, it was not possible wholly to root it out. But the vigorous efforts of the League to abate the nuisance, though not entirely successful, served to render the navigation of the North Sea and the Baltic comparatively secure, and were of signal advantage to commerce. Nor was this the only mode in which the power of the confederacy was directly employed to promote the common interests of mankind. Their exertions to protect shipwrecked mariners from the atrocities to which they had been subject, and to procure the restitution of shipwrecked property to its legitimate owners, though, most probably, like their exertions to repress piracy, a consequence of selfish considerations, were in no ordinary

degree meritorious; and contributed not less to the advancement of civilisation than to the security of navigation.*

Factories belonging to the League. — In order to facilitate and extend their commercial transactions, the League established various factories in foreign countries; the principal of which were at Novogorod in Russia, London, Bruges in the Netherlands, and Bergen in Norway.

Novogorod, situated at the confluence of the Volkof with the Imler Lake, was, for a lengthened period, the most renowned emporium in the north-eastern parts of Europe. In the beginning of the eleventh century, the inhabitants obtained considerable privileges that laid the foundation of their liberty and prosperity. Their sovereigns were at first subordinate to the grand dukes or czars of Russia; but as the city and the contiguous territory increased in population and wealth, they gradually usurped an almost absolute independency. The power of these sovereigns over their subjects seems, at the same time, to have been exceedingly limited; and, in effect, Novogorod ought rather to be considered as a republic under the jurisdiction of an elective magistrate, than as a state subject to a regular line of hereditary monarchs, possessed of extensive prerogatives. During the 12th, 13th, and 14th centuries, Novogorod formed the grand *entrepôt* between the countries to the east of Poland and the Hanseatic cities. Its fairs were frequented by an immense concourse of people from all the surrounding countries, as well as by numbers of merchants from the Hanse towns, who engrossed the greater part of its foreign commerce, and who furnished its markets with the manufactures and products of distant countries. Novogorod is said to have contained, during its most flourishing period, towards the middle of the 15th century, upwards of 400,000 souls. This, however, is most probably an exaggeration. But its dominions were then very extensive; and its wealth and power seemed so great and well established, and the city itself so impregnable, as to give rise to a proverb, Who can resist the Gods and great Novogorod? *Quis contra Deos et magnam Novogordiam?* — (*Coxe's Travels in the North of Europe*, vol. ii. p. 80.)

But its power and prosperity were far from being so firmly established as its eulogists, and those who had only visited its fairs, appear to have supposed. In the latter part of the 15th century, Ivan Vassilievitch, czar of Russia, having secured his dominions against the inroads of the Tartars, and extended his empire by the conquest of some of the neighbouring principalities, asserted his right to the principality of Novogorod, and supported his pretensions by a formidable army. Had the inhabitants been animated by the spirit of unanimity and patriotism, they might have defied his efforts; but their dissensions facilitated their conquest, and rendered them an easy prey. Having entered the city at the head of his troops, Ivan received from the citizens the charter of their liberties, which they either wanted courage or inclination to defend, and carried off an enormous bell to Moscow, that has been long regarded with a sort of superstitious veneration as the palladium of the city. But notwithstanding the despotism to which Novogorod was subject, during the reigns of Ivan and his successors, it continued for a considerable period to be the largest as well as most commercial city in the Russian empire. The famous Richard Chancellour, who passed through Novogorod in 1554, in his way from the court of the czar, says, that "next unto Moscow, the city of Novogorod is reputed the chiefest of Russia; for although it be in majestie inferior to it, yet in greatness it goeth beyond it. It is the chiefest and greatest mart town of all Muscovy; and albeit the emperor's seat is not there, but at Moscow, yet the commodiousness of the river falling into the Gulf of Finland, whereby it is well frequented by merchants, makes it more famous than Moscow itself."

But the scourge of the destroyer soon after fell on this celebrated city. Ivan IV., having discovered, in 1570, a correspondence between some of the principal citizens and the King of Poland, relative to a surrender of the city into his hands, punished them in the most inhuman manner. The slaughter by which the bloodthirsty barbarian sought to satisfy his revenge was alike extensive and indiscriminating. The crime of a few citizens was made a pretext for the massacre of 25,000 or 30,000. Novogorod never recovered from this dreadful blow. It still, however, continued to be a place of considerable trade, until the foundation of Petersburg, which immmediately became the seat of that commerce that had formerly centred at Novogorod. The degradation of this ill-fated city is now complete. It is at present an inconsiderable place, with a population of about 7,000 or 8,000; and is remarkable only for its history and antiquities.

The merchants of the Hanse towns, or Hansards, as they were then commonly termed, were established in London at a very early period, and their factory here was

* A series of resolutions were unanimously agreed to by the merchants frequenting the port of Wisby, one of the principal emporiums of the League, in 1287, providing for the restoration of shipwrecked property to its original owners, and threatening to eject from the "*consodalitate mercatorum*," any city that did not act conformably to the regulations laid down.

of considerable magnitude and importance. They enjoyed various privileges and immunities; they were permitted to govern themselves by their own laws and regulations; the custody of one of the gates of the city (Bishopsgate) was committed to their care; and the duties on various sorts of imported commodities were considerably reduced in their favour. These privileges necessarily excited the ill-will and animosity of the English merchants. The Hansards were every now and then accused of acting with bad faith; of introducing commodities as their own that were really the produce of others, in order to enable them to evade the duties with which they ought to have been charged; of capriciously extending the list of towns belonging to the association; and obstructing the commerce of the English in the Baltic. Efforts were continually making to bring these disputes to a termination; but as they really grew out of the privileges granted to and claimed by the Hansards, this was found to be impossible. The latter were exposed to many indignities; and their factory, which was situated in Thames Street, was not unfrequently attacked. The League exerted themselves vigorously in defence of their privileges; and having declared war against England, they succeeded in excluding our vessels from the Baltic, and acted with such energy, that Edward IV. was glad to come to an accommodation with them, on terms which were any thing but honourable to the English. In the treaty for this purpose, negotiated in 1474, the privileges of the merchants of the Hanse towns were renewed, and the king assigned to them, in absolute property, a large space of ground, with the buildings upon it, in Thames Street, denominated the Steel Yard, whence the Hanse merchants have been commonly denominated the Association of the Steel Yard; the property of their establishments at Boston and Lynn was also secured to them; the king engaged to allow no stranger to participate in their privileges; one of the articles bore that the Hanse merchants should be no longer subject to the Judges of the English Admiralty Court, but that a particular tribunal should be formed for the easy and speedy settlement of all disputes that might arise between them and the English; and it was further agreed that the particular privileges awarded to the Hanse merchants should be published as often as the latter judged proper, in all the sea-port towns of England, and such Englishmen as infringed upon them should be punished. In return for these concessions, the English acquired the liberty of freely trading in the Baltic, and especially in the port of Dantzic and in Prussia. In 1498, all direct commerce with the Netherlands being suspended, the trade fell into the hands of the Hanse merchants, whose commerce was in consequence very greatly extended. But, according as the spirit of commercial enterprise awakened in the nation, and as the benefits resulting from the prosecution of foreign trade came to be better known, the privileges of the Hanse merchants became more and more obnoxious. They were in consequence considerably modified in the reigns of Henry VII. and Henry VIII., and were at length wholly abolished in 1597.—(*Anderson's Hist. Com.* Anno 1474, &c.)

The different individuals belonging to the factory in London, as well as those belonging to the other factories of the League, lived together at a common table, and were enjoined to observe the strictest celibacy. The direction of the factory in London was intrusted to an alderman, 2 assessors, and nine councillors. The latter were sent by the cities forming the different classes into which the League was divided. The business of these functionaries was to devise means for extending and securing the privileges and commerce of the association; to watch over the operations of the merchants; and to adjust any disputes that might arise amongst the members of the confederacy, or between them and the English. The League endeavoured at all times to promote, as much as possible, the employment of their own ships. In pursuance of this object, they went so far, in 1447, as to forbid the importation of English merchandise into the confederated cities, except by their own vessels. But a regulation of this sort could not be carried into full effect; and was enforced or modified according as circumstances were favourable or adverse to the pretensions of the League. Its very existence was, however, an insult to the English nation; and the irritation produced by the occasional attempts to act upon it, contributed materially to the subversion of the privileges the Hanseatic merchants had acquired amongst us.

By means of their factory at Bergen, and of the privileges which had been either granted to or usurped by them, the League enjoyed for a lengthened period the monopoly of the commerce of Norway.

But the principal factory of the League was at Bruges in the Netherlands. Bruges became, at a very early period, one of the first commercial cities of Europe, and the centre of the most extensive trade carried on to the north of Italy. The art of navigation in the thirteenth and fourteenth centuries was so imperfect, that a voyage from Italy to the Baltic and back again could not be performed in a single season; and hence, for the sake of their mutual convenience, the Italian and Hanseatic merchants determined on establishing a magazine or storehouse of their respective products in some intermediate situation. Bruges was fixed upon for this purpose; a distinction

which it seems to have owed as much to the freedom enjoyed by the inhabitants, and the liberality of the government of the Low Countries, as to the conveniency of its situation. In consequence of this preference, Bruges speedily rose to the very highest rank among commercial cities, and became a place of vast wealth. It was at once a staple for English wool, for the woollen and linen manufactures of the Netherlands, for the timber, hemp and flax, pitch and tar, tallow, corn, fish, ashes, &c. of the North; and for the spices and Indian commodities, as well as their domestic manufactures imported by the Italian merchants. The fairs of Bruges were the best frequented of any in Europe. Ludovico Guicciardini mentions, in his *Description of the Low Countries*, that, in the year 1318, no fewer than 5 Venetian galleasses, vessels of very considerable burden, arrived at Bruges in order to dispose of their cargoes at the fair. The Hanseatic merchants were the principal purchasers of Indian commodities; they disposed of them in the ports of the Baltic, or carried them up the great rivers into the heart of Germany. The vivifying effects of this commerce were every where felt; the regular intercourse opened between the nations in the north and south of Europe made them sensible of their mutual wants, and gave a wonderful stimulus to the spirit of industry. This was particularly the case with regard to the Netherlands. Manufactures of wool and flax had been established in that country as early as the age of Charlemagne; and the resort of foreigners to their markets, and the great additional vent that was thus opened for their manufactures, made them be carried on with a vigour and success that had been hitherto unknown. These circumstances, combined with the free spirit of their institutions, and the moderation of the government, so greatly promoted every elegant and useful art, that the Netherlands early became the most civilised, best cultivated, richest, and most populous country of Europe.

Decline of the Hanseatic League. — From the middle of the fifteenth century, the power of the confederacy, though still very formidable, began to decline. This was not owing to any misconduct on the part of its leaders, but to the progress of that improvement it had done so much to promote. The superiority enjoyed by the League resulted as much from the anarchy, confusion, and barbarism that prevailed throughout the kingdoms of the North, as from the good government and order that distinguished the towns. But a distinction of this sort could not be permanent. The civilisation which had been at first confined to the cities, gradually spread from them, as from so many centres, over the contiguous country. Feudal anarchy was every where superseded by a system of subordination; arts and industry were diffused and cultivated; and the authority of government was at length firmly established. This change not only rendered the princes, over whom the League had so frequently triumphed, superior to it in power; but the inhabitants of the countries amongst which the confederated cities were scattered, having learned to entertain a just sense of the advantages derivable from commerce and navigation, could not brook the superiority of the association, or bear to see its members in possession of immunities of which they were deprived: and in addition to these circumstances, which must speedily have occasioned the dissolution of the League, the interests of the different cities of which it consisted became daily more and more opposed to each other. Lubeck, Hamburg, Bremen, and the towns in their vicinity, were latterly the only ones that had any interest in its maintenance. The cities in Zealand and Holland joined it, chiefly because they would otherwise have been excluded from the commerce of the Baltic; and those of Prussia, Poland, and Russia did the same, because, had they not belonged to it, they would have been shut out from all intercourse with strangers. When, however, the Zealanders and Hollanders became sufficiently powerful at sea to be able to vindicate their right to the free navigation of the Baltic by force of arms, they immediately seceded from the League; and no sooner had the ships of the Dutch, the English, &c. begun to trade directly with the Polish and Prussian Hanse towns, than these nations also embraced the first opportunity of withdrawing from it. The fall of this great confederacy was really, therefore, a consequence of the improved state of society, and of the development of the commercial spirit in the different nations of Europe. It was most serviceable so long as those for whom its merchants acted as factors and carriers were too barbarous, too much occupied with other matters, or destitute of the necessary capital and skill, to act in these capacities for themselves. When they were in a situation to do this, the functions of the Hanseatic merchants ceased as a matter of course; their confederacy fell to pieces; and at the middle of the seventh century the cities of Lubeck, Hamburg, and Bremen were all that continued to acknowledge the authority of the League. Even to this day they preserve the shadow of its power; being acknowledged in the act for the establishment of the Germanic confederation, signed at Vienna, the 8th of June, 1815, as free Hanseatic cities. — (From an article in No. 13. of the *Foreign Quarterly Review*, contributed by the author of this work.)

HARBOUR, HAVEN, or PORT, a piece of water communicating with the sea, or with a navigable river or lake, having depth sufficient to float ships of considerable

burden, where there is convenient anchorage, and where ships may lie, load, and unload, screened from the winds, and without the reach of the tide.

Qualities of a good Harbour. — There is every variety in the form and quality of harbours. They are either natural or artificial; but, however formed, a good harbour should have sufficient depth of water to admit the largest ships at all times of the tide; it should be easy of access, without having too wide an entrance; the bottom should be clean and good; and ships should be able to lie close alongside quays or piers, that the expense and inconvenience of loading and unloading by means of lighters may be avoided. Ships lying in a harbour that is land-locked, and surrounded by high grounds or buildings, are, at once, without the reach of storms, tides, and currents; and may, in most cases, be easily protected from hostile attacks. Bar harbours are those that have bars or banks at their entrances, and do not, therefore, admit of the ingress or egress of large ships except at high water. These are most commonly river harbours; the sand and mud brought down by the stream, and driven back by the waves, naturally forming a bar or bank at their mouths.

Best British Harbours. — Good harbours are of essential importance to a maritime nation; and immense sums have been expended in all countries ambitious of naval or commercial greatness in their improvement and formation. Portsmouth, Milford Haven, and the Cove of Cork are the finest harbours in the British islands, being surpassed by very few, if any, in the world. Of these, Portsmouth is entitled to the pre-eminence. This admirable harbour is about as wide at its mouth as the Thames at Westminster Bridge, expanding within into a noble basin, almost sufficient to contain the whole navy of Great Britain. Its entrance is unobstructed by any bar or shallow; and it has, throughout, water adequate to float the largest men of war at the lowest tides. The anchorage ground is excellent, and it is entirely free from sunken rocks, sand banks, or any similar obstructions. The western side of the harbour is formed by the island of Portsea; and on its south-western extremity, at the entrance to the harbour, is situated the town of Portsmouth, and its large and important suburb Portsea. Here are docks and other establishments for the building, repair, and outfit of ships of war, constructed upon a very large scale, and furnished with every conveniency. The fortifications that protect this great naval *depôt* are superior, both as respects strength and extent, to any other in the kingdom. "Thus," to use the words of Dr. Campbell, "it appears that Portsmouth derives from nature all the prerogatives the most fertile wits and most intelligent judges could devise or desire; and that these have been well seconded by art, without consideration of expense, which, in national improvements, is little to be regarded. Add to all this the striking excellence of its situation, which is such as if Providence had expressly determined it for that use to which we see it applied, — the bridling the power of France, and, if I may so speak, the peculiar residence of Neptune." — (*Survey of Great Britain*, vol. i. p. 370.)

Portsmouth harbour has the additional and important advantage of opening into the celebrated road of Spithead, between the Hampshire coast and the Isle of Wight, forming a safe and convenient retreat for the largest fleets.

Milford Haven deeply indents the southern part of Pembrokeshire. It is of great extent, and has many subordinate bays, creeks, and roads. The water is deep, and the anchorage ground excellent; and being completely land-locked, ships lie as safely as if they were in dock.

Cork harbour has a striking resemblance to that of Portsmouth, but is of larger extent; it has, like it, a narrow entrance, leading into a capacious basin, affording a secure asylum for any number of ships.

Plymouth, which, after Portsmouth, is the principal naval *depôt* of England, has an admirable double harbour. The roadstead in Plymouth Sound has recently been much improved by the construction, at a vast expense, of a stupendous breakwater more than 1,700 yards in length. This artificial bulwark protects the ships lying inside from the effects of the heavy swell thrown into the Sound by southerly and south-easterly winds.

London stands at the head of the river ports of Great Britain. Considering the limited course of the Thames, there is, probably, no river that is navigable for large ships to so great a distance from sea, or whose mouth is less obstructed by banks. London is mainly indebted for the unrivalled magnitude of her commerce to her favourable situation on this noble river; which not only gives her all the advantages of an excellent port, accessible at all times to the largest ships, but renders her the emporium of the extensive, rich, and populous country comprised in the basin of the Thames.

The Mersey, now the second commercial river in the empire, is more incommoded by banks than the Thames; and is in all respects inferior, as a channel of navigation, to the latter. Still, however, it gives to Liverpool very great advantages; and the new channel that has recently been discovered in the banks promises to be of much importance in facilitating the access to and from the port. This channel will be found laid down in the map of Liverpool and its environs, attached to the article Docks in this work.

Bristol and Hull are both river ports. Owing to the extraordinary rise of the tide in the Bristol Channel, the former is accessible to the largest ships. The Humber is a good deal impeded by banks; but it also is navigable as far as Hull, by very large vessels. The Tyne admits vessels of very considerable burden as far as Newcastle, which, next to London, is the most important port, for the extent of the shipping belonging to it, of any in the empire.

The shallowness of the Clyde from Greenock up to Glasgow has been a serious drawback upon the commercial progress of the latter. Large sums have been expended in attempts to contract the course and to deepen the bed of the river; and they have been so far successful, that vessels of 400 tons burden may now (1843) ascend to the city, at high water. But there seems little probability of its ever becoming suitable for the navigation of ships of large burden.

Generally speaking, the harbours on the east coasts, both of Great Britain and Ireland, are, with the exception of the Thames, very inferior to those on their south and west coasts. Several harbours on the shores of Sussex, Kent, Lincoln, &c., that once admitted pretty large ships, are now completely choked up by sand. Large sums have been expended upon the ports of Yarmouth, Boston, Sunderland, Leith, Dundee, Aberdeen, &c. Dublin harbour being naturally bad, and obstructed by a bar, a new harbour has been formed, at a great expense, at Kingstown, without the bar, in deep water. There has also been a large outlay upon the harbours of Donaghadee, Portpatrick, &c.

For an account of the shipping belonging to the different ports of Great Britain and Ireland, the reader is referred to the article Ships in this work. The charges on account of Docks, Pilotage, &c. are specified under these articles.

Foreign Harbours and Ports. — The reader will find the principal foreign commercial harbours described in this work at considerable length under their respective titles. The principal French ports for the accommodation of men of war are Brest, Toulon, and Cherbourg. The latter has been very greatly improved by the construction of a gigantic breakwater, and the excavation of immense basins. Besides Cadiz, the principal ports for the Spanish navy are Ferrol and Carthagena. Cronstadt is the principal rendezvous of the Russian navy; Landserona, of that of Sweden; and the Helder, of that of Holland.

Law of England as to Harbours. — The anchorage, &c. of ships was regulated by several statutes. But most of these regulations have been repealed, modified, or re-enacted, by the 54 Geo. 3. c. 149.

This act authorises the Admiralty to provide for the moorings of his Majesty's ships; and prohibits any private ship from fastening thereto. It further authorises the Admiralty to prohibit the *breaming* of any ship or vessel at any place or places on shore they may think fit; and to point out the places where private ships shall deposit the gunpowder they may have on board exceeding 5 lbs. — (§ 6.) It prohibits the use of any fire on board any ship or vessel that is being breamed in any port, harbour, or haven, between the hours of 11 in the evening and 5 in the morning, from the 1st of October to the 31st of March inclusive; and between the hours of 11 in the evening and 4 in the morning from the 1st of April to the 30th of September inclusive: and it prohibits the melting or boiling of any pitch, tar, tallow, &c. within 250 yards of any of his Majesty's ships, or of his Majesty's dock-yards. By another section, the keeping of guns shotted, and the firing of the same in any port, is prohibited under a penalty of 5*s.* for every gun kept shotted, and 10*s.* for every gun discharged. — (§ 9.) The sweeping or creeping for anchors, &c. within the distance of 150 yards of any of his Majesty's ships of war, or of his Majesty's moorings, is prohibited under a penalty of 10*l.* for every offence. — (§ 10.) The loading and unloading of ballast is also regulated by this statute; but for the provisions with respect to it, see Ballast.

HARDWARE (Ger. *Kurze waaren*; Du. *Yzerkramery*; Da. *Isenkramvarer*; Sw. *Järnkram*; Fr. *Clinquaillerie*, *Quincaillerie*; It. *Chincaglio*; Sp. *Quinquilleria*; Port. *Quincalharia*; Rus. *Mjelotzchnue towarii*) includes every kind of goods manufactured from metals, comprising iron, brass, steel, and copper articles of all descriptions. Birmingham and Sheffield are the principal seats of the British hardware manufactures; and from these, immense quantities of knives, razors, scissars, gilt and plated ware, fire-arms, &c. are supplied, as well for exportation to most parts of the world, as for home consumption.

The hardware manufacture is one of the most important carried on in Great Britain; and from the abundance of iron, tin, and copper ores in this country, and our inexhaustible coal mines, it is one which seems to be established on a very secure foundation. The late Mr. Stevenson, in his elaborate and excellent article on the statistics of England, in the *Edinburgh Encyclopædia*, published in 1815, estimated the value of all the articles made of iron at 10,000,000*l.*, and the persons employed in the trade at 200,000. Mr. Stevenson estimated the value of all the articles made of brass and copper at 3,000,000*l.*, and the persons employed at 50,000: and he further estimated the value of steel, plated, and hardware articles, including toys, at 4,000,000*l.*, and the persons employed at 70,000. So that, assuming these estimates to be nearly correct, the total value of the goods produced from different sorts of metals in England and Wales, in 1815, must have amounted to the sum of 17,000,000*l.*, and the persons employed to 320,000.

There is reason to believe that this estimate, in so far, at least, as respects the value of

the manufacture, was at the time decidedly too high; but at this moment it is most probably within the mark. There has been a very extraordinary augmentation of the quantity of bar and pig iron produced within the last 15 years; and the rapid increase of Birmingham and Sheffield, as well as of the smaller seats of the hardware manufacture, shows that it has been increased in a corresponding proportion. We have been assured, by those well acquainted with most departments of the trade, that if to the iron and other hardware manufactures of England be added those of Scotland, their total aggregate value cannot now be reckoned at less than 17,500,000*l.* a year, affording *direct* employment, in the various departments of the trade, for at least 360,000 persons.

Fall of Prices. — Owing partly to the reduced cost of iron, but incomparably more to improvements in manufacturing, a very extraordinary fall has taken place in the price of most hardware articles during the last 12 or 15 years. In some articles the fall exceeds 80 per cent.; and there are but few in which it does not exceed 30 per cent. In consequence, the poorest individuals are now able to supply themselves with an infinite variety of commodious and useful articles, which, half a century ago, were either wholly unknown, or were too dear to be purchased by any but the richer classes. And those who reflect on the importance of the prevalence of habits of cleanliness and neatness will readily agree with us in thinking that the substitution of the convenient and beautiful hardware and earthenware household articles, that are now every where to be met with, for the wooden and horn articles used by our ancestors, has been in no ordinary degree advantageous. But it is not in this respect only that the cheapness and improvement of hardware is essential. Many of the most powerful and indispensable tools and instruments used by the labourer come under this description; and every one is aware how important it is that they should be at once cheap and efficient.

Account showing the Countries to which Brass and Copper Manufactures, Hardware and Cutlery, Iron and Steel, &c., were exported in 1841, with the Quantities and Values sent to each.

Countries.	Brass and Copper Manufactures.		Hardwares and Cutlery.		Iron and Steel, Wrought and Unwrought.		Plate, Plated Ware, Jewellery, & Watches.	Tin & Pewter Wares and Tin Plates.
	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Declared Value.	Declared Value.
	Cwts.	£	*Cwts.*	£	*Tons.*	£	£	£
Russia	77	512	5,897	30,969	1,929	20,411	2,254	2,507
Sweden	356	1,985	554	3,720	382	3,035	273	408
Norway	73	439	1,080	4,305	489	5,998	30	528
Denmark	189	1,012	832	5,895	12,949	75,671	61	4,707
Prussia	92	435	964	3,769	26,215	136,968	11	8,038
Germany	9,417	49,125	18,157	99,419	23,794	203,291	9,486	17,443
Holland	39,401	172,175	6,917	38,552	36,246	220,824	11,835	10,766
Belgium	8,406	37,356	4,199	20,221	1,628	21,188	1,329	5,756
France	133,005	573,633	13,787	67,779	19,089	95,943	2,034	7,513
Portugal Proper	2,962	15,737	3,254	20,876	10,176	73,510	201	6,275
Azores	7	42	51	256	158	1,679	- -	7
Madeira	9	48	61	300	152	1,521	230	221
Spain and the Balearic Islands	1,109	6,060	2,399	13,178	7,201	59,324	826	4,953
Canaries	16	94	154	8 9	139	1,931	87	167
Gibraltar	1,002	5,354	2,918	20,775	2,703	25,554	1,329	3,178
Italy and the Italian Islands	7,364	36,132	6,988	36,991	25,149	177,585	3,819	14,866
Malta	654	3,192	1,015	5,962	1,373	9,854	1,103	806
Ionian Islands	39	209	367	1,607	523	4,113	180	235
Morea and Greek Islands	- -	- -	114	457	3,053	19,927	22	793
Turkey	260	1,411	1,153	6,332	5,665	41,607	6,700	5,565
Syria and Palestine	- -	- -	18	142	152	1,138	59	306
Egypt	222	1,265	1,050	3,345	537	3,399	375	275
Tripoli, Tunis, Algiers, and Morocco	31	149	46	225	492	3,419	- -	952
Western coast of Africa	2,914	16,452	4,051	19,378	1,909	17,864	1,025	448
Cape of Good Hope	218	1,297	1,983	9,638	1,584	17,151	3,196	1,591
Cape Verd Islands	- -	- -	1	3	9	156		
St. Helena	- -	- -	37	210	11	196	112	47
Ascension Island	- -	- -	1	4	2	32	12	
Mauritius	375	1,970	1,660	8,082	1,813	20,387	1,266	2,569
E. India Comp. territories and Ceylon	69,638	339,902	18,185	101,796	36,938	317,127	46,317	15,136
Sumatra, Java, and other islands of the Indian seas	706	3,337	1,293	6,825	1,759	14,039	450	1,164
Philippine Islands	412	1,915	100	366	61	517		
China	490	2,530	352	1,963	2,358	17,488	595	56
British settlements in Australia	1,539	8,582	13,699	60,126	6,847	84,487	26,553	2,982
New Zealand	64	349	652	3,459	469	7,146	580	125
British North American colonies	5,478	29,997	36,725	155,750	25,693	253,640	15,823	22,488
West Indies	5,263	31,209	16,908	68,642	5,165	106,886	21,069	12,069
Hayti	44	342	446	1,320	107	2,416	80	294
Cuba and other foreign West Indian colonies	4,006	21,277	17,141	51,638	5,140	60,574	3,045	3,867
United States of America	20,995	104,153	124,444	584,400	79,186	626,532	34,002	217,220
Texas	2	15	114	533	39	555	161	
Mexico	11	70	2,525	17,893	734	6,293	279	663
Guatemala	5	25	- -	- -	41	507	- -	
Columbia	64	325	1,379	3,526	325	2,375	332	226
Brazil	6,297	33,503	13,297	48,071	4,421	59,200	3,952	5,064
States of the Rio de la Plata	13	64	15,613	44,066	3,305	35,715	2,434	4,611
Chili	400	2,002	3,785	19,542	682	7,940	3,859	500
Peru	297	1,915	4,198	19,304	699	7,629	487	1,222
Isles of Guernsey, Jersey, Alderney, and Man	3,318	16,149	2,721	10,793	2,486	22,138	6,293	784
Totals	327,247	1,523,744	353,318	1,623,961	360,875	2,877,278	214,126	390,621

Account of the real or declared Value of the different Articles of Hardware exported from Great Britain to Foreign Countries, during each of the 3 Years ended 5th of January, 1843.

	1840.	1841.	1842.
	£	£	£
Brass and copper manufactures - - -	1,444,174	1,523,615	1,810,714
Hardware and cutlery - - - -	1,348,556	1,622,821	1,398,082
Iron and steel, wrought and unwrought - -	2,515,918	2,870,487	2,454,350
Mathematical and optical instruments - -	36,971	24,237	22,761
Plate, plated ware, jewellery, and watches - -	204,192	213,940	201,240
Tin and pewter wares (exclusive of unwrought tin) - -	360,015	390,476	363,604
Totals -	£5,909,826	£6,645,576	£6,250,851

HARPOONER, the man that throws the harpoon in fishing for whales. By 35 Geo. 3. c. 92. § 34., no harpooner, line manager, or boat steerer, belonging to any ship or vessel fitted out for the Greenland or Southern whale fisheries, shall be impressed from the said service; but shall be privileged from being impressed so long as he shall belong to, and be employed on board, any ship or vessel whatever in the fisheries aforesaid.

HATS (Ger. *Hüte*; Du. *Hoeden*; Fr. *Chapeaux*; It. *Cappelli*; Sp. *Sombreros*; Rus. *Schlopi*), coverings for the head in very general use in Great Britain and many other countries, and known to every body. They are made of very various forms and sorts of material. They may, however, be divided into two great classes, viz. those felted or made of fur, wool, silk, &c., and those made of straw; the former being principally worn by men, and the latter by women.

I. Hats (Felted, Fur, Silk, &c.). We possess little information as to the importance of hats as a distinct branch of manufacture, anterior to the reign of Elizabeth.

Felted hats are stated to have been worn by the Saxons, but the earliest notice we find of "*beaver*" hats, is in an inventory of the effects of Sir John Falstoffe in 1459. Philip Stubbs, in his "Anatomie of Abuses," published in 1585, mentions amongst *other varieties*, "bever hats of 20, 30, and 40 shillings price being fetched from beyond the seas." In subsequent reigns, and particularly during the Commonwealth, the manufacture of both beaver and felted hats must have arrived at some importance; and not only the quality, but the shape of the hat, began to possess an influence in denoting the religious or political bias of the wearer, a characteristic of this article of dress, which obtains even at the present day. An interesting account of hats as worn at different periods of our history is given in the Archæologia, and the details of the manufacture, as it is now carried on, are given in a work called "Days in the Factories" (by Mr. George Dodd) published in the present year (1843).

Charles VII. of France wore a hat on his public entry into Rouen in 1449, which is believed to have been among the first manufactured in his kingdom. — (*Encyclopédie*, art. *Chapeaux*.)

The following details with respect to the species of hats manufactured, their value &c., furnished by a high practical authority, were published in the former edition of this work, and present a view of the trade as it existed in 1833; but material changes have since taken place in the manufacture.

1. *Stuff Hats.* — This term is applied by the trade only to the best description of hats, or to those brought to the highest perfection in London. Since the introduction of "waterproofing," it is found unnecessary to use so valuable a material as beaver in the foundation or frame-work of the best hats. Instead of it, fine seasoned backs of English coney wool, red Vigonia wool, Dutch carroted coney wool, and a small quantity of fine Saxony lambs' wool, are employed with equal advantage.

The covering, *i. e.* the "napping," of the best qualities is a mixture of *cheek* beaver, with white and brown stage beaver, or seasoned beaver, commonly called "*wooms*." Inferior stuffs are napped with mixtures of stage beaver, nutria, hares' wool, and musquash.

Of late years, hats have been much reduced in weight. This is principally owing to the new method of "waterproofing," which is effected in the bodies of the hats prior to their being napped. The elastic properties of the gums employed for this purpose, when dissolved in pure spirits of wine, give a body to the stuffs which allows a good deal of their weight to be dispensed with.

Not 20 years ago, 96 ounces of stuff were worked up into 1 dozen ordinary sized hats for gentlemen; at present, from 33 to 34 ounces only are required to complete the same quantity. It is proper to observe that the heavy duty on English spirits of wine is very injurious to the manufacture, as it causes the employment of inferior dissolvents, as naphtha and gas spirit, which injure the gums.

The manufacture of the best hats employs in London nearly 1,000 makers and finishers, besides giving employment to nearly 3,000 men in Gloucestershire and Derbyshire, in body-making and rufling. The gross returns amount to about 640,000*l.*

2. *Plated Hats.* — Next to fine hats are those designated "plated," so called from the *plate*, or napping, being of a distinct and superior nature to the foundation or body. The latter is generally formed of Kent, Spanish, or Shropshire wool; while the former consists of a mixture of fine beaver, hares' wool, musquash, nutria, and English back wool. From the cheapness of coal and the purity of the water in Lancashire, Cheshire, and Staffordshire, the whole of the plating trade is engrossed by them. The men employed in the 3 counties, including apprentices, do not exceed 3,000. The total returns amount to about 1,080,000*l.*, inclusive of bonnets and children's fancy beaver hats.

3. *Felt Hats* and *Cordies* are the coarsest species, being made wholly of Kent, Shropshire, and Italian wools. Cordies are distinguished by a fine covering of camel or goat hair. A very large trade was at one time carried on in these articles; but since the introduction of caps, and the manufacture of inferior plates, the returns have sunk from 1,000,000*l.* to scarcely 150,000*l.*! Atherstone, Rudgeley, Bristol, and Newcastle-under-Line are the principal places where they are manufactured.

4. *Silk Hats*, made from silk, plush, or shag, manufactured in Coventry, Banbury, and Spitalfields, form, at present, a very important branch of the hat trade. Many thousand dozen are exported to Italy, Gibraltar, the Cape, Sydney, and Van Diemen's Land. Little progress was made in this article for the first quarter of a century after its invention, in consequence of the hard appearance which the cane and willow framework necessarily gave the hats; but now that beaver hat bodies have been used, as well as those of lawn and muslin, this difficulty has been overcome, and silk hats have as soft an outline and as great a variety of shapes as beaver hats. London alone produces nearly 150,000 dozen silk hats annually; and the quantity manufactured in Manchester, Liverpool, Birmingham, and Glasgow is estimated at upwards of 100,000 dozen more, making a total of above 250,000 dozen The workmen are distinct from beaver hatters; and owing to the competition of labourers, the trade has advanced in a greater ratio. This branch gives employment to about 3,000 men.

5. *Machinery as applied to Hats.* — Mr. Williams, an American, introduced, a few years since, machinery for the bowing, breaking up, and felting wools for hats. The opposition of the journeymen body-makers, who refused to assist in the necessary process termed *bussining*, caused it to be laid aside; it is now used only in the preparation of the shells required for silk hats, which were formerly made to a great extent in Ireland, but is now nearly extinct in that quarter.

At present (1843) *silk hats* of a low quality are more extensively worn; and public taste has set strongly in favour of a new and showy kind of silk hat, made on the French plan, and of a material imported from France at a duty of 30 per cent. This change, which has reduced the consumption of both *stuff* and *plated* hats, probably arose, so far as regards the lower sorts of silk hats, from motives of economy, induced by the recent state of the country, and in the higher qualities, chiefly from the influence of fashion. But though there be no reason to conclude that this change will be permanent, it has at present depressed the trade, especially in the finer branches.

Machinery is extensively used in the preparation of the materials for the manufacture, but has hitherto been found inapplicable to the manufacture itself, which, in some processes, requires a certain amount of mental discretion. Particular districts are celebrated for particular branches of the trade, chiefly from special reasons respecting fuel, water, or lowness of wages; but the increased competition has of late had a tendency to concentrate the trade in a few localities rather than to disperse it, although it is still rather widely distributed. Hitherto the trade has not been exposed to foreign competition in the home market, but it has been of late years seriously affected in the Brazilian and West Indian markets.

Few beaver or ruffed hats meet the English manufacturer in the markets referred to; but chiefly hats of silk or felted hares' wool, of styles not adapted to our taste, though suited to that of Europe and South America. This competition originates most probably in the high duties paid by our manufacturers on the ingredients or materials used (spirits of wine paying 400 per cent. duty on its value, and silk 30 per cent.), or in the lower price of labour or materials, or in some other though not very appreciable causes.

English hats, though to a limited extent, and in an unfinished state, have been exported to the Continent. The hats chiefly exported to our colonies are silk, plated, and stuff hats, generally of a light description. Wool felts, which before the Emancipation Act were largely exported, have now materially decreased, the article termed "negro felts" being almost extinct.

This trade employs a great amount of labour, being supposed to furnish, at present, employment to not less than 30,000 persons. In the Lancashire district, the first and second manufacturing processes are chiefly carried on in the houses of the workmen. The labour of women and children is very largely employed in the trade generally, but less in the actual manufacture than in the preparation of the material; the proportions may be, in both departments, men 50 per cent., women 25 per cent., and children 25 per cent.; and their earnings, on a yearly average, are, men 25*s.*, women 7*s.*, and boys 5*s.* per week. The depression in the finer branches of the manufacture has doubtless affected the earnings of the workmen engaged in them, as a less amount of skill and labour is required in the production of low silk hats than beavers, and the increased quantity produced in the lower descriptions has not furnished an amount of employment equivalent to the decrease in the higher branch. Combinations on the part of the workmen have occasionally arisen, sometimes from questions affecting wages and disputes arising out of the existence of trades' unions, but not to any considerable extent, from attempts to introduce machinery.

No data exist on which to form any certain estimate of the value of the different branches of the manufacture or of its aggregate amount. But it is estimated, on good grounds, that on *plated* goods, the cost of the raw material varies from 25 to 40 per cent., the labour and manufacturing expenses from 75 to 60 per cent.; on stuff hats, materials 40 to 50 per cent., labour, &c. 60 to 50 per cent.; silk hats, materials 50 per cent., labour, &c., 50 per cent. The proportions in value are estimated as under: —

	£
Plated hats	1,200,000
Stuff do.	800,000
Silk do.	900,000
Wool felts	100,000
Estimated yearly value	£3,000,000

The duty on hats, which was formerly 10*s.* 6*d.* each, was reduced in 1842 to 2*s.* 6*d.* on fur and wool hats, and to 3*s.* 6*d.* on silk. In 1836, 53,894 dozen hats were exported, of the real or declared value of 148,282*l.*; but in 1841, the exports only amounted to 22,522 dozen, of the value of 81,583*l.* The falling off has been principally in the exports to the West Indies and Brazil.

N.B. — The materials for these supplementary details have been kindly furnished by H. Christy, Esq., of the eminent house of Christy's and Co., London, who employ about 1500 persons in this manufacture; and by J. Harris, Esq., of the house of John Harris and Sons, Southwark, also most extensive manufacturers.

II. HATS (STRAW). — It is most probable that the idea of *plaiting straws* was first suggested by the making of baskets of osiers and willow, alluded to by Virgil, in his Pastorals, as one of the pursuits of the agricultural population of Italy. We are ignorant of the period when the manufacture of straw plait first became of importance in that country; but it appears from Coryat's *Crudities*, published in 1611, that "the most delicate strawen hats" were worn by both men and women in many places of Piedmont, "many of them having at least an hundred seames." It is evident, therefore, that the art of straw plaiting must have arrived at great perfection upwards of two centuries since; but it does not appear to have been followed in England for more than 70 or 80 years, as it is within the remembrance of some of the old inhabitants of the straw districts, now alive, that the wives and daughters of the farmers used to plait straw for making their own bonnets, before straw plaiting became etablished as a manufacture. In fact, the custom, among the women of England, of wearing bonnets, is comparatively modern: it is scarcely 100 years since "*hoods and pinners*" were generally worn, and it was

only the ladies of quality who wore small silk hats. — (See *Malcolm's Manners and Customs.*)

British Plait. — The *straw plait district* comprises the counties of Bedford, Hertford, and Buckingham, being the most favourable for the production of the wheat straw, which is the material chiefly used in England. The manufacture is also followed in some places in Essex and Suffolk, but very partially in other counties. During the late war, the importation of straw hats from Leghorn having in a great measure ceased, an extraordinary degree of encouragement was given to our domestic manufacture, and a proportional degree of comfort was derived by the agricultural labourers in these places, by the wives and children of whom it was chiefly followed. This produced competition, and led to an improvement of the plait by *splitting* the straw, which had formerly been used entire — to a more careful selection of the straw itself — and also to improvements in finishing and bleaching. So successful was straw plaiting at this period, that it has been ascertained that women have earned as much as 22*s.* a week for their labour. (See *Evidence on the Poor Laws*, p. 277.) But at the conclusion of the war, Leghorn hats again came into the market; and from their superiority in fineness, colour, and durability, they speedily acquired a preference over those of home manufacture, which consequently began to decline. Still the wages continued good, as the fashion of wearing Dunstable straw hats had gradually established itself over the country, which kept up the demand for them; and many individuals abandoned the working of *pillow lace* (another domestic manufacture peculiar to Bedford and Bucks, which in 1820 had fallen into decay, owing to the application of machinery), and betook themselves to straw plaiting, as a more profitable employment. With the view of improving the condition of the straw plaiters, who from their increased numbers were reduced to great distress, and enabling them to meet the foreign competition, the Society of Arts, in the years 1822 to 1827, held out premiums for the successful application of some of our native grasses or straw, other than the wheat straw in general use, and for improvements in plaiting, finishing, and bleaching. Many specimens were sent to the Society; and, amongst other candidates, Mr. Parry, of London, in 1822, received the large silver medal for an imitation and description of the mode of plaiting the Leghorn hats. Mr. Cobbett, also, who had contributed samples of plaiting, made from 15 different sorts of grass indigenous to England, received a similar reward. The publication of these contributions in the Society's Transactions was followed by the most beneficial results to the British manufacture. Our native grasses were not found to promise much success, owing to the brittleness of their stems and the unevenness of their colour; but Mr. Parry's communication was of especial importance, as the straw of Tuscany speedily became an article of import. He immediately set the example, by teaching and employing above 70 women and children to plait the straw by the Italian method; and it is peculiarly gratifying to observe, as an evidence of its success, that while the importation of Leghorn hats has, during the last few years, been on the decline, *the unmanufactured material has been progressively on the increase.* This straw, which is imported at a nominal duty of 1*d.* a cwt., is chiefly plaited in our straw districts; and the Tuscan plait, which formerly paid a duty of 17*s.* per lb., reduced to 7*s. 6d.* in 1842, has likewise been largely imported, and made up into bonnets in this country, as fine and as beautiful as the genuine Leghorn hat.

There is, perhaps, no manufacture more deserving of encouragement and sympathy than that of straw plait, as it is quite independent of machinery, and is a domestic and healthful employment, affording subsistence to great numbers of the families of agricultural labourers, who without this resource would be reduced to parish relief. By the united efforts of many benevolent individuals, numerous schools of industry have of late years been established in Bedfordshire, where the children of the poor are taught the art of plaiting and bonnet-making, and are afterwards, by means of premiums arising from bequests left for that purpose, offered as apprentices to the trade. This has had a tendency not only to increase the number of hands, but by proper instruction and superintendence, materially to improve the quality of the plait, and has doubtless promoted that successful competition with the Italian manufacture, which has been progressively increasing of late years. From 1830 to the autumn of 1834, the English trade was on the decline, but a demand from America arose at that period, and continued to improve until the fall of 1839, when it again subsided and prices became considerably reduced. This state of things continued until the fall of 1842 when a favourable reaction took place, and the trade has since gradually recovered, and is now in a healthy and brisk state. At present (1843) it is believed that an increase has taken place in the manufacture of straw bonnets of about *two-thirds*, and of straw plait, about *one-third*, compared with the quantity produced in 1833. From an estimate made at that period by an intelligent individual, intimately acquainted with the manufacture, it was considered that every score (or 20 yards) of plait, consumed a pound of straw in the state in which it is bought of the farmer; that at an average, every plaiter made 15 yards per diem; that in the counties of Hertford, Bedford, and Bucks, there were at an average 10,000 scores brought to market every day, to make which 13,300 persons (women and children) must be employed. In Essex and Suffolk, it was estimated that 2,000 scores were the daily produce, to make which about 3,000 persons were employed, and that about 4,000 persons more must have been employed to convert these quantities into bonnets. Including other places where the manufacture was carried on in England, it was supposed that there were in all about 30,000 persons engaged in it at that period. At the present time (including about 1,500 sewers in London) it is believed there cannot be less than from 40,000 to 50,000 persons engaged in the manufacture. The earnings of the plaiters vary from 3*d.* to 3*s. 6d.* per score, or from 1*s. 6d.* to 10*s.* per week; women averaging about 3*s. 6d.* and children 1*s.*, while the sewers may earn from 3*s.* to 12*s.* weekly, or an average of about 8*s.* There are 7 descriptions of plait in general use; viz. *whole Dunstable* (the first introduced), plaited with 7 entire straws; *split straw*, introduced about 40 years since; *patent Dunstable*, or double 7, formed of 14 split straws, every 2 wetted and laid together, invented about 35 years since; *Devonshire*, formed of 7 split straws, invented about 20 years since; *Luton plait* (an imitation of whole Dunstable), formed of double 7, and coarser than patent Dunstable, invented about 20 years since; *Bedford Leghorn*, formed of 22 or double 11 straws, and plaited similarly to the Tuscan; and *Italian*, formed of 11 split straws. But there are other varieties in fancy straw plait, not generally in demand for the home trade, but chiefly required for exportation; such as the *backbone*, of 7 straws; the *lustre*, of 17 straws; the *wave*, of 22 straws; and *diamond*, of 23 straws. There were other plaits, called *rustic*, of 4 coarse straws split; and *pearl*, of 4 small straws entire; but these are now superseded. The principal markets are Luton, Dunstable, and St. Alban's, where the plait is usually brought every morning by the plaiters, and bought by the dealers.

The plaits above mentioned are almost exclusively used for women's bonnets or children's hats; but in addition to these a considerable trade has sprung up during the last few years in the manufacture of hats for men and boys, made from *Brazilian grass*, large quantities of which are imported at a mere nominal duty. This grass was first brought into use about 35 years ago, by Mr. Fraser, a nurseryman residing at Chelsea, who took out a patent for hats made from that material, and sold them as high as two guineas each. This article is now much in demand amongst the peasantry, from its strong and durable character as well as its lightness, and gives employment to upwards of 1,000 hands in the counties of Bedford and Herts, who earn from 3*s.* to 4*s.* weekly, being paid at the rate of from 5*d.* to 1*s.* a hat, according to quality.

But the advantages which followed the publication, by the Society of Arts, of the various attempts to improve the trade, were not confined to England. Messrs. J. & A. Muir, of Greenock, (who subsequently sent specimens to the Society, and received 2 different medals) were in consequence attracted to the manufacture, and in 1823 established straw plaiting, in imitation of Leghorn, in the Orkney Islands, with

singular success, adopting *rye* straw, dwarfed by being grown on poor land, as the material best suited for the purpose. In the estimation of persons largely employed in the trade in London, hats manufactured in Orkney were quite equal, both in colour and quality, to those of Leghorn; indeed, some of the plait sent to the Society was so fine, as to be capable of making a hat of 80 rows in the brim, being equal to 10 or 11 rows in an inch; but we learn with regret that the prevalence of mildew in that humid climate is so inauspicious to the bleaching of the straw, that it is equal to 50 per cent. on the value of the crop. To this circumstance, and to the low prices of Leghorn hats of late years, is to be ascribed the difficulty they have had, even with the protecting duty of 3*l.* 8*s.* per dozen, in withstanding the competition of the foreign manufacturer. In their letter to the Society of Arts, of the 10th of February, 1826, Messrs. Muir stated, — "We had last year about 5 acres of straw, which will produce about 12,000 score of plait, — suppose on the average of 3 score to the hat, will be 4,000 hats, not more. We think them one hundredth part of the consumption of the United Kingdom. These 4,000 hats may give to the manufacturer, including his profit, 5,000*l.* For seed and straw 7 acres of land would be required, and in manufacturing 500 persons would be constantly employed all the year. We suppose the consumption of Leghorn hats to be not less than 500,000*l.* in the United Kingdom; now, were these all made by our own industrious population, 700 acres of poor land would be required, and 50,000 persons would be employed in the manufacture." — (*Trans. of Soc. Arts.*) The plaiters in Orkney were earning, in 1827, only from 2*s.* to 2*s.* 6*d.* per week, and since that period the trade has declined; the hats from that quarter are not held in the same estimation, and plait making has much decreased owing to the Bedfordshire plaiters coming successfully into competition with them in price; time and practice having taught them to produce a greater number of yards per day.

Italian Plait. — In Italy, the manufacture is principally followed in the neighbourhood of Florence, Pisa, Sienna, and the Val d'Arno, in the Duchy of Tuscany; and it is also established at Venice and other places. There, as in England, it is purely a domestic manufacture, and the produce is collected by dealers who go round the country. There is no means of estimating, with any degree of accuracy, the number of individuals employed, as the government is entirely unprovided with statistical data, and is even opposed to any being collected. But supposing that England took about a third of the Italian manufacture (and it is believed that we have taken nearer a half), it would not appear that, even in the most prosperous times, more than 30,000 persons could have been engaged in it.

The description of straw used, which is cultivated solely for the purposes of the manufacture, and not for the grain, is the *triticum turgidum*, a variety of bearded wheat, which seems to differ in no respect from the spring wheat grown in the vale of Evesham and other parts of England.—(*Trans. of Soc. Arts.*) After undergoing a certain preparatory process, the upper parts of the stems (being first sorted as to colour and thickness) are formed into a plait of generally 13 straws, which is afterwards knitted together at the edges into a circular shape called a "flat," or hat. The fineness of the flats is determined by the number of rows of plait which compose them (counting from the bottom of the crown to the edge of the brim), and their relative fineness ranges from about No. 20. to 60., being the rows contained in the breadth of the brim, which is generally 8 inches. They are afterwards assorted into 1st, 2d, and 3d qualities, which are determined by the *colour* and *texture*; the most faultless being denominated the 1st, while the most defective is described as the 3d quality. These qualities are much influenced by the season of the year in which the straw is plaited. Spring is the most favourable, not only for plaiting, but for bleaching and finishing. The dust and perspiration in summer, and the benumbed fingers of the workwomen in winter, when they are compelled to keep within their smoky huts, plaiting the cold and wet straw, are equally injurious to the colour of the hats, which no bleaching can improve. The flats are afterwards made up in cases of 10 or 20 dozen, assorted in progressive numbers or qualities, and the price of the middle or average number governs the whole. The *Brozzi* make bears the highest repute, and the *Signa* is considered secondary; which names are given to the flats, from the districts where they are plaited. Florence is the principal market, and the demand is chiefly from England, France, Germany, and America; but the kinds mostly required are the lower numbers; the very finest hats, particularly of late, being considered too expensive by the buyers.

The importation of Leghorn straw hats has very sensibly decreased of late years, owing to the change of fashion in favour of silk bonnets, and also the prevailing and increasing practice of English dealers, from the high duty on the manufactured article, importing the straw plait, and the straw itself for the purpose of being knitted, plaited, and finished in this country. In 1830, not less than 168,525 hats were entered for home consumption, while in 1840 the quantity fell to 8,544 only! and these, ladies' and boys' and infants' hats of the *highest* quality, — the only article now imported: while in straw plaits the importation has fallen from 34,662 lbs. in 1838, to 13,035 lbs. in 1840, arising wholly from the improvements made by our own plaiters, in quality and quantity produced, attended with a consequent reduction in price. In Tuscan plaits, the only descriptions now imported are the best qualities, in the production of which the Italians still possess an advantage over us, though it is believed to be of a temporary nature. Notwithstanding the alterations in our tariff, which reduced the duty on straw plait from 17*s.* to 7*s.* 6*d.* per lb., it will be seen that the importation has only increased in a very trifling degree.* The reduction in the importation of unmanufactured straw is to be attributed rather to the change of fashion which has prevailed of late years amongst the higher and middling classes in England, than to any other cause. For some time the gradual cessation in the English demand was attended with serious consequences to the poor straw plaiters of Tuscany, many of whom abandoned the trade and betook themselves to other occupations, particularly to the working of red woollen caps for Greece and Turkey; immense quantities of which have been exported from Leghorn since the peace. With the view of counteracting the ruinous effects which our high duty entailed on their trade, the merchants and dealers in Tuscany, interested in the straw hat manufacture, petitioned their government, in 1830, to remonstrate with ours on the subject; but this remonstrance, if ever made, was not likely, from the condition of our own population, to be very favourably received. It is, however, understood that of late years, since the English demand has fallen off, America has more than supplied our place in the Leghorn hat trade.

The following prices of different numbers and qualities of Leghorn hats were in 1834 considered such as would encourage the workpeople in Tuscany to produce good work, and are believed to be about the prices paid at the present time: —

	First Quality.		Second Quality.		Third Quality.	
	Tuscan.	*English.* £ s. d.	*Tuscan.*	*English.* £ s. d.	*Tuscan.*	*English.* £ s. d.
No. 30.	11 lire =	0 7 4	10 lire =	0 6 8	8 lire =	0 5 4
40.	21 — =	0 14 0	20 — =	0 13 4	18 — =	0 12 0
45.	26 — =	0 17 4	25 — =	0 16 8	23 — =	0 15 4

The straw for plaiting a No. 30. at 8 lire costs 2 lire, about 1*s.* 4*d.* English; for bleaching and finishing, 1 lira = 8*d.*; the estimated loss of rows in a mass, that either go up into the crown in the process of finishing and pressing, or that must be taken from the brim to reduce it to London measure (22 inches), may be calculated at 1 lira more, or 8*d.* As it requires not less than 6 days for plaiting and knitting the hat, there therefore remains only 4 lire, *or 2s. 8d. English, for a week's work!* Cheap as subsistence may be in Tuscany, surely this miserable pittance is not calculated to excite the envy of the poorest labourer in England. But the earnings of the straw plaiters solely depend on their abilities and industry. The straw is furnished to them to be plaited and knitted, and they are paid according to the number or fineness of the hat. Some of the *Brozzi* women have earned as much as 4 lire, or about 2*s.* 9*d.*

to 3*s.* per day, when hats were at the highest (calculating the time in which they can plait and knit a hat, at 8 days for a No. 30., and a fortnight for a No. 40.); and these chosen few still earn about 1*s.* 6*d.* per day; but taking the whole plaiters, the following, in the opinion of a house largely interested in the trade in Italy, may be considered as a fair calculation of the average wages which have been paid during the last 25 years. —

Women earned per diem, in the year 1817, 1*s.* 6*d.*; 1819-20, 8*d.*; 1823-5, 1*s.* 6*d.*; 1826-7, 6*d.*; 1828-32, 5*d.* Men, for ironing the hats, 4*s.* a day; ditto, for pressing and washing, 1*s.* 6*d.* to 2*s.*; women, for picking straw, 1*s.* to 1*s.* 2*d.*

The following statement shows the imports into England of Italian straw hats, straw plait, and unmanufactured straw, since 1820: —

Years.	Hats or Bonnets of Straw.				Plaiting of Straw.				Unmanufactured Straw.	
	Imported.	Exported.	Consumption.	Nett Revenue.	Imported.	Exported.	Consumption.	Nett Revenue.	Imported.	Nett Revenue.
	No.	*No.*	*No.*	£	*Lbs.*	*Lbs.*	£	£	*Lbs.*	£
1820	62,510	2,652	71,999	20,468	2	- -	2	2		
1821	141,412	2,633	120,068	34,365	44	- -	30	26		
1822	143,225	12,595	117,020	31,537	518	- -	525	417		
1823	129,902	19,350	121,451	35,360	4,254	- -	3,034	2,529		
1824	199,432	5,075	195,568	55,771	4,233	- -	4,906	4,170		
1825	327,040	9,281	247,117	69,047	14,037	- -	11,830	10,073	629	82
1826	231,607	15,433	201,974	58,145	8,836	955	6,916	5,884	455	56
1827	255,553	14,334	255,640	74,168	5,928	904	5,947	5,350	787	79
1828	384,052	8,327	271,906	77,784	5,502	283	5,100	4,335	4,199	420
1829	160,195	27,050	234,264	66,393	6,212	487	5,340	2,834	6,050	605
1830	162,260	34,132	168,525	47,742	6,185	756	7,884	6,669	18,586	1,859
1831	84,066	21,980	93,917	26,641	23,554	2,104	16,480	13,285	22,544	2,252
1832	109,433	35,271	60,830	17,280	19,109	1,995	17,911	15,174	48,051	814

Years.	Unmanufact. Straw & Grass.			
	Imported	Exported	Consumption.	Nett Rev.
	Cwts.	*Cwts.*	*Cwts.*	£
1833	25,723	56,093	21,469	6,092	22,223	2,801	22,079	18,768	1,987	14	2,511	*
1834	16,530		11,487									
1835	7,172	13,117	5,038	1,011	27,183	7,656	31,311	26,512	3,201	136	3,024	13
1836	14,042	16,172	5,437	1,069	42,870	11,836	29,681	24,358	4,503	40	4,483	19
1837	26,254	12,714	5,421	1,052	30,302	7,346	25,962	20,983	2,741	26	2,670	11
1838	14,172	9,778	4,372	1,292	40,150	11,020	34,662	29,352	3,407	57	3,453	15
1839	21,356	22,013	5,775	1,072	14,111	14,011	22,510	18,960	3,350	13	3,208	14
1840	15,097	9,782	8,511	2,452	27,129	15,177	13,035	11,279	2,050	3	2,039	9
1841	24,535	7,174	9,266	2,871	15,779	11,721	7,971	7,103	2,075	110	1,949	9

The duty on hats of less than 22 inches in diameter was 5*l.* 8*s.* per dozen; above 22 inches, 9*l.* 15*s.* until 1842, when the duty was reduced to 8*s.* 6*d.* per lb.

The rate of duty was 17*s.* per lb. until 1842, when it was reduced to 7*s.* 6*d.*

The duty from 1840 to 1845, was 21 per cent.; from 1825 to 1832, 10 per cent. It is now 1*d.* per cwt.

* The repayments in this year exceed the gross receipts

We are indebted for this very excellent article on straw hats to Mr. Robert Slater, of Fore Street, London.

HAVANNAH, OR HAVAÑA, on the north coast of the noble island of Cuba, of which it is the capital, the Morro castle being, according to Humboldt, in lat. 23° 8′ 15″ N., lon. 82 22′ 45″ W. The population, exclusive of troops and strangers (which may amount to 25,000), is probably not far short of 135,000. In 1827, the resident population amounted to 94,023; viz 46,621 whites, 8,215 free coloured, 15,347 free blacks, 1,010 coloured slaves, and 22,830 black slaves. The port of Havannah is the finest in the West Indies, or, perhaps, in the world. The entrance is narrow, but the water is deep, without bar or obstruction of any sort, and within it expands into a magnificent bay, capable of accommodating 1,000 large ships; vessels of the greatest draught of water coming close to the quays. The city lies along the entrance to, and on the west side of, the bay. The suburb Regla is on the opposite side. The Morro and Punta castles, the former on the east, and the latter on the west side of the entrance of the harbour, are strongly fortified, as is the entire city; the citadel is also a place of great strength; and fortifications have been erected on such of the neighbouring heights as command the city or port. The arsenal and dock-yard lie toward the western angle of the bay, to the south of the city. In the city the streets are narrow, inconvenient, and filthy; but in the suburbs, now as extensive as the city, they are wider and better laid out. Latterly, too, the police and cleanliness of all parts of the town have been materially improved.

From its position, which commands both inlets to the Gulph of Mexico, its great strength, and excellent harbour, Havannah is, in a political point of view, by far the most important maritime station in the West Indies. As a commercial city it also ranks in the first class; being, in this respect, second to none in the New World, New York only excepted. For a long period, Havannah engrossed almost the whole foreign trade of Cuba; but since the relaxation of the old colonial system, various ports, such, for instance, as Matanzas, that were hardly known 30 years ago, have become places of great commercial importance. The rapid extension of the commerce of Havannah is, therefore, entirely to be ascribed to the freedom it now enjoys, and to the great increase of wealth and population in the city, and generally throughout the island.

The advance of Cuba, during the last half century, has been very great; though not more, perhaps, than might have been expected, from its natural advantages, at least since its ports were freely opened to foreigners, in 1809. It is at once the largest and

the best situated of the West India islands. It is about 605 miles in length; but its breadth from north to south nowhere exceeds 117 miles, and is in many places much less. Its total area, exclusive of that of the numerous keys and islands attached to it, is about 33,000 square miles. The climate is, generally speaking, delightful; the refreshing sea breezes preventing the heat from becoming excessive, and fitting it for the growth of a vast variety of products. Hurricanes, which are so destructive in Jamaica and the Caribbee Islands, are here comparatively rare; and, when they do occur, far less violent. The soil is of very various qualities: there is a considerable extent of swampy marshes and rocks unfit for any sort of cultivation; but there is much soil that is very superior, and capable of affording the most luxuriant crops of sugar, coffee, maize, &c. The ancient policy of restricting trade to 2 or 3 ports, caused all the population to congregate in their vicinity, neglecting the rest of the island, and allowing some of the finest land and best situations for planting to remain unoccupied. But since a different and more liberal policy has been followed, population has begun to extend itself over all the most fertile districts, wherever they are to be met with. Still, however, only a very small proportion of the best land of the island is under cultivation, and its products and population might both be doubled or trebled with the utmost facility. The first regular census of Cuba was taken in 1775, when the whole resident population amounted to 170,370 souls. Since this period the increase has been as follows: — 1791, 272,140; 1817, 551,998; and 1827, 704,867; exclusive of strangers. We subjoin a

Classification of the Population of Cuba according to the Censuses of 1775 and 1827

	1775.			1827.		
	Male.	*Female.*	*Total.*	*Male.*	*Female.*	*Total.*
Whites - - - -	51,555	40,864	92,419	168,653	142,398	311,051
Free mulattoes - - -	10,921	9,006	19,927	28,058	29,456	57,514
Free blacks - - - -	5,959	5,629	11,588	25,901	25,079	48,980
Slaves - - - -	28,774	15,562	44,336	183,290	103,652	286,942
Total - -	99,309	71,061	170,370	405,905	300,582	704,487

Another census has recently been taken (in 1842), according to which the population is said to amount to 1,007,620, viz.: whites, 418,291; free coloured, 152,838; and slaves, 436,491. But it is alleged that both the slave and white population, especially the former, is underrated in this census, and that the population is little, if at all, short of 1,150,000 or 1,200,000.

The rapid increase of the slave population is principally to be ascribed to the continued importation of slaves from Africa. In some years, since the peace of 1815, as many as 40,000 blacks are believed to have been imported into Cuba in a single year. Spain had indeed agreed by treaty in 1820 to abolish the trade; but this treaty was little better than a dead letter, and it is only since 1835, when a more efficient treaty with Spain was entered into, that the trade has sustained any considerable diminution. But though it be no longer continued under the Spanish flag, it is continued, though to a much less extent, under other flags. At present, perhaps, about 10,000 negroes may be annually imported. — (See Bandinel's clear and accurate *Account of the Trade in Slaves*, p. 285.)

But though it were to be wished, as well for the interests of the island as of humanity, that the further importation of slaves should be put a stop to, we are not of the number of those who think that it would be good policy rashly to agitate the question of the emancipation of slaves in Cuba. Their treatment in that island, as in all the other colonies of Spain, has always been singularly humane; and the results of their emancipation in Hayti and the British islands have not been such as to offer much inducement to the authorities in Cuba to take up this difficult question. It may, no doubt, be forced on their consideration; and the emancipation of so many slaves in their immediate vicinity will materially increase the difficulty of maintaining the existing order of things. Under these circumstances, good policy would seem to suggest that timely provision should be made for the gradual bringing about of that emancipation which is, perhaps, inevitable, coupling it, if that be practicable, with some scheme for insuring the supply of some sort of compulsory labour.

Whatever opinion may be formed of slavery in the abstract, we believe it would not be difficult to show that it has contributed, in no ordinary degree, to the rapid advancement of Cuba. Industry will always be proportioned to the strength of the motives by which it is occasioned; and in countries like Cuba, of great natural fertility and under a tropical sun, where a half or more of the articles indispensable in Europe would be useless, it were absurd to imagine that the inhabitants, supposing them to be free, should exhibit the persevering industry of free labourers in the temperate zone. The *dolce far niente* is in such countries the *summum bonum*; and we believe it will be found that the extensive cultivation of sugar, and of most other commercial products within the tropics, depends on the maintenance of slavery, or of compulsory labour of one kind or other. The people of England may be but little affected, at least directly, by these considerations, and may, therefore, on the principle of *fiat justitia, ruat cœlum*, think themselves warranted in using their influence to enforce the abolition of slavery wherever it exists. But to the Cubans, Brazilians, the inhabitants of the Southern States of America, and a host of others, this question is of the last importance. Were the slaves emancipated, not in law merely, but practically and in fact, the probability is that neither Cuba nor Brazil would, in a dozen years, export a single cwt. of sugar. Why should they do so any more than Hayti? The blacks, were they really emancipated, would be able to support themselves in that state in which they wish to live, without engaging in any thing like the severe labour of sugar planting; and under such circumstances it would be a contradiction to suppose they should engage in it. But it might be difficult, perhaps, to show what good consequences would result from such a change. It is at all events clear that the commerce of the world and the comforts of all civilised nations would be seriously impaired; and it is by no means clear that the condition of the blacks would be sensibly, or at all, improved.

Inasmuch as the blacks imported into Cuba since 1820 have been imported in opposition to the stipulations in the treaty of that date with this country, it has been proposed by some over zealous British functionaries to set on foot inquiries in the island for the purpose of emancipating the slaves so imported. And we regret to say that this extraordinary proposal appears to have received some countenance from the English government. It is clear, however, that, were it acted upon, it would be equivalent to the forcible emancipation of all the slaves in the island; for the fact of many thousands of their brethren having been set at liberty by foreign interference would effectually annihilate that prestige in favour of the whites which enables them to maintain the existing state of things. It is needless to say that this outrageous proposal has met with the most determined opposition from the authorities in Cuba, and

it is of so wild and dangerous a character that it is to be hoped it may be forthwith abandoned. The suppression of the slave trade is an object to effect which we may laudably exert all our energies; but we have no right to intermeddle with the domestic policy of others, or to tell them whether they should or should not emancipate their slaves.

Besides slaves, the planters employ free labourers mostly of an Indian mixed breed, who work for moderate wages. These, however, are little engaged in the fields, but in other branches of labour, and particularly in bringing sugar from the interior to the shipping ports.

The articles principally exported from Cuba are, sugar of the finest quality, coffee, copper ore, tobacco, bees' wax, honey, molasses, &c. Of these, the first is decidedly the most important. The following statements show the astonishing increase that has taken place in the exportation of this staple article.

Account of the Exportation of Sugar from Havannah, from 1786 to 1842.

From 1786 — 1790 - -	68,150	boxes at 400 lbs. =	27,260,000 lbs.
1790 — 1800 - -	110,091	—	44,036,400
1800 — 1810 - -	177,998	—	71,199,200
1810 — 1820 - -	207,696	—	83,078,400
1820 — 1825 - -	250,384	—	100,153,600
In 1826 - - -	271,013½	—	108,405,500
1830 - - -	292,732	—	117,092,800
1838 - - -	368,356	—	147,342,400
1840 - - -	440,144	—	176,057,600
1842 - - -	441,578	—	176,631,200

But Havannah having ceased to be the only port for the exportation of sugar, as it was in former times, we must advert to the trade of the other ports, to obtain a correct account of the whole exports of sugar. The following are the Custom-house returns for

Ports.	1841. Boxes.		lbs.	1842. Boxes.		lbs.
Exports of sugar from Havannah - -	440,144	=	176,057,600	441,578	=	176,631,200
Mantanzas - -	272,768	=	109,107,200	258,905½	=	103,562,200
Trinidad - -	70,999	=	28,399,600	65,716½	=	26,286,600
St. Iago de Cuba, -	28,281	=	11,3121,00	34,035	=	13,614,000
Total	812,192	=	324,876,800	800,235	=	320,094,000

But, exclusive of the above, small quantities of sugar are shipped from the ports of Nuevitas, Holguin, Manzanilla, &c.; and a good deal is also shipped without entry or payment of duty. We may, therefore, safely add 10 per cent. to the above quantities for the omissions now referred to; which will make the total exports in 1841, 357,364,480 lbs. or 159,537 tons, and in 1842, 352,103,400 lbs. or 157,189 tons. The consumption of the island is estimated at 100,000 boxes, making its total produce about 176,000 tons.

Next to sugar, coffee is the most valuable vegetable production of Cuba. Its cultivation increased, for a while, with unprecedented rapidity. In 1800, there were but 80 plantations in the island; in 1817, there were 779; and in 1827, there were no fewer than 2,067, of at least 40,000 trees each! In 1804, the exportation from Havannah was 1,250,000 lbs.; in 1809, it amounted to 8,0 0,000 lbs.; from 1815 to 1820, it averaged annually 18,186,200 lbs.; and in 1827 it amounted to 35,847,175 lbs! The exports from the other ports have increased with equal rapidity. They amounted, in 1827, to 14,202,405 lbs.; making the total exportation for that year 50,039,581 lbs. The consequent low prices, or rather, perhaps, the greater attention paid to the culture of sugar, appear to have checked the further increase of the coffee plantations. At an average of the years 1841 and 1842, the exports amounted, according to the Custom-house returns, to 1,567,762½ arrobas, or 39,596,910 lbs.; but to this 10 per cent. must be added for deficient entries, making the exports 43,544,611 lbs.

Tobacco differs much in quality; but the cigars of Cuba are esteemed the finest in the world. — (See TOBACCO.) Formerly, the culture and sale of this important plant were monopolised by government; but since 1821 this monopoly has been wholly relinquished, there being no longer any restrictions either on the growth or sale of the article. The cultivator pays a duty, which, however, is to a great extent evaded, of 1 per cent. *ad valorem* upon his crop. In consequence of the freedom thus given to the business, the culture and exportation of tobacco are both rapidly extending; so much so, that the value of the exports of cigars and tobacco amounted in 1841 to above 2 millions of dollars, being considerably more than the value of the exports of coffee. Molasses, rum (tafia), wax, and honey, are also largely produced and form important articles of trade.

The copper mines near Santiago and in other parts of the island, after having been abandoned for nearly a century, were reopened a few years ago, and are now worked, principally by Englishmen, with great vigour and success. The value of the exports of ore exceeds, at present, 4 millions of dollars, and is, next to sugar, the most valuable product of the island. It is mostly sent to England to be smelted: the imports of Cuba ore in 1841 and 1842 exceeded 32,000 tons a year.

The imports consist principally of corn, flour, and grain of all sorts, with provisions, principally from the United States, cotton goods from the latter and England; wines from Spain and France; linens from the Hanse towns and England; hardware and metals from England; silks from France and Spain; gold and silver from Mexico; spices, fruits, dye stuffs, lumber, haberdashery, &c. We subjoin some statements respecting the trade of Cuba in 1839, 1840, 1841, and 1842, derived from the *Balanza general de Comercio de la Isla de Cuba*, for these years, published in the Havannah.

Imports in 1841.

	Doll.
In Spanish vessels: —	
Merchandise from Spain - - -	5,841,325
Merchandise from foreign countries -	6,622,715
In foreign vessels: —	
Merchandise from foreign countries -	9,317,885
Stored in the bonding warehouses -	3,299,185
Total - - -	25,081,410
The imports amounted in 1840 to -	24,700,190
Increase in 1841 - -	381,220
The imports consisted of the following articles: —	
Wines - - - - -	2,429,875
Fresh and salt meat, pork, jerked beef, &c. -	2,180,265
Spices - - - - -	65,085
Fruits - - - - -	257,575
Grain - - - - -	4,023,615
Butter, lard, cheese, &c. - - -	1,437,885
Fish, viz. herrings, cod, &c. - -	458,160
Cotton goods - - - -	1,991,010
Woollens - - - - -	193,275
Linens - - - - -	1,045,880
Silks - - - - -	294,300
Leather - - - - -	381,685
Woods, viz. deals, casks, hoops, &c. -	1,379,155
Metals - - - - -	1,173,995
Other articles - - -	6,916,300
Total - - -	25,081,410

Exports in 1841.

	Doll.
In Spanish vessels: —	
Merchandise shipped for Spain - -	3,453,990
Merchandise for foreign countries -	2,269,340
In foreign vessels: —	
Merchandise shipped for foreign countries	18,201,590
Shipped from the bonding warehouses -	2,818,695
Total - - -	26,774,615
The exports amounted in 1840 to -	25,941,785
Increase in 1841 - -	832,830

The number of vessels that entered inwards and cleared from the harbours of the island of Cuba, in 1841, was 6,152, whereof

Engaged in the trade with Spain - - -				2,080
The United States - - - -				2,794
England - - - - -				702
France - - - - -				116
Belgium - - - - -				37
The Hanse Towns - - - -				199
Of these 6,152 vessels, there				
Entered - -	3,034	vessels, measuring	467,839	tons.
Cleared - -	3,118	ditto ditto	480,027	
Total	6,152	ditto ditto	947,866	
In 1840 the number of vessels was	6,095	ditto ditto	918,347	
Increase, in 1841	57	ditto ditto	32,519	

Of the 3,034 vessels that entered the harbours of Cuba in 1841, 1,053 were Spanish, and 1,981 foreign. The duties levied by the Custom-house office of Cuba in 1841, on the merchandise imported, amounted to 5,943,820 doll. In 1840, the customs had produced 6,107,057 doll., there being a falling off, in 1841, of 163,237 doll.

Account of the Values of the principal Articles of Native Produce, and of the aggregate Value of Foreign Produce and Bullion exported from Cuba in 1839, 1840, 1841, and 1842.

Articles.	1839.	1840.	1841.	1842.
Mahogany	$ 103,272	$ 64,398	$ 66,261	$ 56,161
Spirits from the cane	174,055	211,051	226,050	204,550
Cocoa	1,024	- -	2,538	32
Cotton	310,418	133,885	132,874	75,834
Coffee	1,950,419	2,143,574	1,852,509	2,998,269
Sugar	8,290,387	11,264,367	11,613,798	11,447,009
Cedar	51,065	25,901	21,671	40,101
Wax	147,686	115,311	307,131	290,828
Copper ore	2,418,450	3,706,951	4,505,490	4,981,405
Hides	15,054	6,991	22,633	21,130
Sweatmeats	14,168	19,429	14,394	7,091
Fruits	91,837	94,242	96,708	49,298
Honey	51,744	55,918	68,862	71,525
Molasses	999,163	1,346,890	821,188	741,608
Horses and mules	43,722	19,388	- -	1,205
Fustic	92,124	82,564	82,918	
Cattle	981	124		
Cigars	637,558	535,122	719,364	749,812
Tobacco	1,273,069	1,595,689	1,677,743	1,461,760
Other articles	79,371	87,979	51,215	200,289
Total native products	$16,526,620	$21,311,704	$22,283,347	$23,400,707
Aggregate value of the foreign produce and precious metals exported	4,855,112	4,641,166	4,491,860	3,283,048
Total exports	$21,381,732	$25,952,870	$26,775,207	$26,683,755

Account of the Exports from Cuba, in 1840, 1841 and 1842, specifying the Amount shipped from the different Ports, with the Number of Ships and Tonnage cleared out from the same, and the Amount of Import and Export Duties in 1842.

Ports.	Exports.			Ships, 1842.	Tonnage, 1842.	Import and Export Duties, 1842.
	1840.	1841.	1842.			
Havannah	$14,172,573	$14,203,292	$13,118,585	1,419	246,023	$5,159,828
Santiago	5,211,057	5,995,651	6,784,765	401	109,983	681,769
Nuevitas	181,750	71,595	205,116	37	4,568	75,083
Matanzas	4,333,744	4,374,780	4,365,926	417	62,659	853,430
Trinidad	1,046,181	1,157,571	1,129,501	192	31,416	306,297
Baracoa	45,075	85,918	85,233	21	2,224	21,673
Gibara	217,562	161,582	248,763	59	3,555	57,278
Cienfuegos	506,256	506,379	509,806	94	14,577	114,081
Manzanillo	151,866	137,164	170,984	66	8,155	61,092
Santa Espiritu	19,910	14,264	23,488	6	405	9,298
Santa Cruz	49,584	65,260	34,322	17	913	26,498
San Juan	8,220	4,878	8,208	8	337	8,080
Total	$25,941,778	$26,774,614	$26,684,697	2,728	485,095	$7,377,337

Account of the Exports and Imports of Cuba for 1842, distinguishing the Flags under which the Imports and Exports were effected.

Flags of	Imports.		Exports.	
	In Spanish Vessels.	Foreign Vessels.	Spanish Ships.	Foreign Ships.
Spain	$5,508,035	$ 49,516	$3,729,970	
United States	471,262	5,725,959	213,683	$5,038,891
France	989,951	186,821	515,678	1,102,034
England	2,000,212	1,110,485	697,502	8,562,103
Holland	129,198	195,822	18,536	434,801
Belgium	372,080	9,762	64,497	307,699
Germany	2,332,113	363,417	430,281	2,333,502
Italy	138,581	37,312	73,816	235,928
Portugal	160	15,611	10,999	5,907
Denmark	90,418	61,193	7,255	52,401
Spanish America	1,342,150	1,145,743	280,796	20,776
Brazils	- -	37,638	- -	- -
Russia	- -	- -	- -	710,411
Taken out of warehouse	2,021,394	- -	- -	1,807,536
Total	$15,398,430	$9,239,089	$6,072,813	$20,611,789

Account of the principal Exports of Native Produce from Cuba in 1842, distinguishing the Countries to which they were sent and the Value sent to each.

Countries.	Rum.	Sugar.	Coffee.	Molasses.	Tobacco.	Copper Ore.
Spain	$67,485	$1,697,007	$ 191,595	$ 1,392	$417,277	
United States of America	6,760	2,372,048	1,162,857	716,551	624,040	$ 82,088
France	2,335	407,493	799,595	- -	270,381	
Great Britain	26,035	5,569,179	215,025	16,848	372,599	4,899,320
Holland	560	305,701	25,254	- -	104,310	
Belgium	120	305,636	2,013	- -	45,341	
Germany	75,210	1,999,045	404,595	268	298,983	
Other places	20,046	779,900	94,535	9,549	118,681	
Total	$198,551	$11,437,009	$2,898,269	$744,608	$2,211,572	$4,981,408

N.B. There are some trifling discrepancies in these accounts arising from the omission of fractions.

Spain and the United States enjoy by far the largest share of the trade of Cuba. Of the total value of the imports, amounting in 1842 to 24,637,527 doll., those from the United Kingdom were estimated at only 3,110,698 doll., while those from the United States were estimated at 6,200,221 doll. Indeed the total value of our exports to Cuba in 1842 amounted to only 366,253*l.*, and though they happened in that year to be unusually low, their average value does not exceed 500,000*l.* or 550,000*l.* — (*Part. Paper* No. 437. Sess. 1843.) The small amount of our trade with this noble island is not, however, to be wondered at. Commerce is nothing but an exchange of equivalents; and as we load the sugar, coffee, cigars, and other products of Cuba, with oppressive duties, which all but exclude them from our markets, its inhabitants have no means of paying for our goods, except at second hand, thrpugh Hamburg and other parts indebted to them. But for this, our exports to Cuba might, no doubt, be doubled or trebled. During the year ended the 30th of September 1841, the United States imported from Cuba, produce worth 11,567,027 doll., while the exports from the United States to Cuba amounted to only 5,739,082 doll., the balance being paid by drafts on Hamburg, Holland, and other places indebted to America.—(*Papers printed by order of Congress*, 21st July 1842, p. 316.)

Monies. — One dollar = 8 reals plate = 20 reals vellon. One doubloon = 17 dollars. The merchants reckon 444 dollars = 100*l.* or 1 dollar = 4*s.* 6*d.* very nearly. There is an export duty of 1½ per cent. on gold, and 2½ per cent. on silver. It is a curious fact that no description of paper money has ever circulated in Cuba.

Weights and Measures. — One quintal = 100 lbs., or 4 arrobas of 25 lbs.; 100 lbs. Spanish = 101¼ lbs. English, or 46 kilogrammes. 108 varas = 100 yards; 140 varas = 100 French ells or aunes; 81 varas = 100 Brabant ells; 108 varas = 180 Hunburg ells. 1 fanega = 3 bushels nearly, or 100 Pes. Spanish. An arroba of wine or spirits = 4·4 English wine gallons nearly. A hogshead of sugar = 1500 lbs.; a bag of coffee = 150 lbs.; a hogshead of molasses = 110 gallons; a pipe of tafia or rum = 120 gallons; and a bale of tobacco = 100 lbs.

The usual Commission charged by merchants on the sale of goods is 5 per cent., with a *del credere of* 2½ per cent. if the sales are on credit and guaranteed, and a further commission of 2½ per cent. for the returns, whether in bills or produce. On purchases the commission is 2½ per cent., and a further 2½ per cent. if drawn for in bills of exchange. For procuring freight 5 per cent. is charged, and 2½ for insuring the amount. For advances of money the rate is 5 per cent. when no other commission is chargeable. Bill business is done at various rates, from 1 to 2½ per cent. according to its magnitude. These are the rates of the foreign houses; those of the Spanish and Creole merchants are generally higher. There is no obstacle whatever to the establishment of foreigners as merchants in the Island. The law says that those who are naturalised in Spain may freely carry on trade with the same rights and obligations as the natives of the kingdom, and that those who have not been naturalised, or have a legal domicile, may still carry on trade under the regulations stipulated in the treaties in force between the respective governments; and in default of such conventional regulations, the same privileges are to be conceded as those enjoyed by Spaniards carrying on trade in the country of which such foreigners are natives. In practice, this last condition is not much attended to; as foreigners are allowed to establish themselves as merchants without any inquiry as to the rights and privileges enjoyed by Spaniards in the country they come from. As to manufacturers and mechanics, the only difficulty that can arise regards their religion. On entering the island every stranger is required to find security in the following terms:—"I am responsible and become security in every case for the person and conduct of A. B., arrived from C. in the ship D., binding myself to present him if called on by the government, and to conduct him at my expense to any place that may be designated." This security is easily obtained, and, in fact, encouragement is given to mechanics, and white people of all classes to settle in the island. After landing it is only necessary to apply for a letter of domicile, and to present a certificate that the applicant is of a respectable character, and professes the Ro... Free coloured people, however, by a royal order of the 12th March 1837, are prohibited from landing under any pretence whatever; and rigorously is this order enforced, that such persons, though acting as seamen, are, on their arrival, taken out of the vessels in which they have come, and are kept in custody until her departure, when they are compelled to proceed again on board, and leave the island. A negotiation has been opened by Great Britain with the Spanish government for the purpose of obtaining a relaxation of this order in favour of the black and coloured inhabitants of the British West Indies; but as yet the object has not been obtained. The business of a broker is exercised under a royal licence, and no foreigner is eligible to the office unless naturalised in the form prescribed by law. In every commercial town a certain number only is allowed, corresponding with the population and trade of the place. In the great cities, the business of merchant is often combined with that of planter; and sometimes, also, the importing merchant keeps a shop or store, where he sells his goods by retail. The foreign merchants are generally regarded as transient visitors, who go there for the purpose of accumulating such a fortune as may enable them to live with some degree of comfort in their own country. As a class they are not considered wealthy, but they are almost in the full enjoyment of credit. The mercantile capital, as well as the proprietary wealth of the island, may be said to be concentrated in the hands of the Creoles. When the emigrants from the Peninsula make fortunes in the island, they seldom think of returning to Europe.

Customs Duties. — If the goods imported be of foreign origin and have arrived from Spain under the national flag, the duty is fixed at 10½ per cent. *ad valorem*, and, in some special cases, 13½ per cent. If of foreign origin and imported from a foreign country, but in Spanish vessels, the *ad valorem* duty is 11½ per cent., and in some cases 18½; but if the goods be imported not only from a foreign country but under a foreign flag, the duty *ad valorem* is 21½ and in some cases 27½ per cent. There is always to be added a supplementary duty of 3 per cent. on the value of the goods, besides the duty called the *balanza* of 1 per cent. on the gross amount of the duties previously ascertained. If the goods be of Spanish origin, and arrive direct *from* Spain under the national flag, they are liable only to a duty of 6½ per cent. *ad valorem*; but if such Spanish goods should be brought *from* Spain in foreign vessels, the duty would be 14½, and in some cases 18½ per cent. On exports of goods the produce of the island, the duty is fixed at 2½ per cent. *ad valorem*, if their destination be a Spanish port, and if the vessel bear a Spanish register. If the destination be foreign and the vessel Spanish, the duty is 4½ per cent., and if vessel and destination be both foreign, 6½. In each of these cases there is to be added the balance duty of 1 per cent., determined by the amount of the export duties. In every case of import, as well as export, the value is fixed, as far as that is possible, by the tariff; but in many cases the applicability of the specified duty to specific articles must necessarily remain to be fixed by the custom-house officers. The most material deviation from the *ad valorem* duties is in the case of flour, which, independent of the war contribution, if of the produce of Spain, and imported in Spanish vessels, is liable to a duty of ⅔ doll. per barrel; but if imported in foreign vessels, 6 doll. per barrel. If the flour be foreign and the flag national, the duty is 8¾ doll.; but if flour and flag be both foreign, the duty is 9½ doll.

In these cases, also, the *balanza* duty of 1 per cent. is to be added. On tobacco exported in foreign vessels, with a foreign destination, the duty is 12½ per cent.; in Spanish vessels, with a foreign destination, 6½; and in Spanish vessels to a Spanish port, 2½. On the precious metals there is an export duty, provided Spain be not the place of destination, of 1½ per cent. on gold, and 2½ per cent. on silver. The export duty on sugar is 75 cents per box, and that on coffee 56¼ cents. The articles admissible free of duty, are iron sugar kettles, iron or copper clarifiers, steam engines and machinery for sugar works, and the parts of it that may be required for future repairs; also, mills for cleaning rice, the Roville plough, stallions and mares. The articles exportable free of duty, are rum and molasses, green fruits, lime juice and syrup... over the ...

Deposit. — All goods imported ... foreign vessels exceeding 80, and in Spanish 60 tons bur... n, except perishable provisions, bulky articles, and liquors, ... ay be put in deposit (warehoused) for an indefinite term, p... ing 1 per cent. inward, and 1 per cent. outward duty on the ... situations in the tariff each year. When entered *for home co*... *sumption*, they are liable to the corresponding duty. If sold ... deposit, the exporter pays the outward duty.

Port Charges. — To show the effect of the different duties to which two vessels would be liable, the one a Spaniard the other a foreigner, suppose them to arrive with equal burdens of 500 tons each, bringing mixed cargoes of the same description of goods, which they discharge at the Hayannah, and receiving mixed cargoes in all respects similar to each other. In that case the foreign vessel would have to pay —

	$	ct.
For tonnage dues, at 12 reals per ton, with the addition of 1 per cent. of balanza	454	4
For the dredging machine, at 1½ real per ton	47	3
For wharf dues, at 10 reals per 100 tons per day, supposing that 8 days are necessary	30	0
For the custom-house charges on the visit of entry (if the ship had been in ballast, this article would have been reduced one half)	5	4
For assistance in discharging, at the rate of 5½ doll. per day	44	0
For an extract of the manifest	1	0
For the custom-house clearance visit (if the ship had sailed in ballast, this would have been reduced one half)	5	4
For the cocket of the outward cargo	8	0
For the cocket stamp	8	2
For a translation of the manifest	12	0
For the custom-house officers' fee, (if in ballast, this charge would be 5 dollars)	5	0
For the captain of the ports	6	0
For light-house dues	4	0
For government fees	4	0
For bill of health	8	0
For the visit of the health officer	2	0
Total	615	1

But were the vessel Spanish, she would have to pay —

For tonnage dues, at 5 reals per ton, with the addition of 1 per cent. of balanza	189	3
For wharf dues at the rate of 6 reals per 100 tons per day, supposing, as before, that 8 days are necessary	18	0
The charges for the dredging machine and the other items are the same on Spanish as on foreign vessels, amounting, in the supposed case, to	160	5
Total	368	0
As the charges on the foreign vessel amounted to	615	1
It follows, that the distinction in favour of the national flag amounts to	277	1

But by a late regulation, vessels taking an entire cargo of molasses are exempted from tonnage duty; and those which take 1,000 boxes sugar, 2,000 bags coffee, or 300 pipes of rum, have half their tonnage duty remitted.

Customs Regulations. — Every ship-master is bound to have on his arrival ready for delivery to the boarding officers of the revenue, a manifest, containing a detailed statement of his cargo and ship stores, and in the act of handing it over, has to write thereon an oath that he has no other cargo on board, and the hour when he delivers it, taking care that it be countersigned by the boarding officers. Within twelve hours, which begin

to count from the moment he delivers such manifest until 7 o'clock in the evening, and again from 6 o'clock in the morning until the moment the said 12 hours elapse, he can make any alteration by *presenting* a *separate note* in which he specifies the errors he may have committed in the manifest. After the expiration of these 12 hours no alteration will be permitted. *Goods not manifested* will be confiscated without remedy; and if their value should not exceed 1,000 dollars, the master of the vessel will be liable to pay a penalty of double the amount of such non-manifested goods; if they exceed that sum, and belong to the master or come consigned to him, his vessel, freight, and other emoluments will be forfeited to the revenue. *Goods over manifested* will pay duties as if they were on board. *Goods not manifested, but claimed in time by a consignee*, will be delivered up to the latter, but the master in this case will be subject to a fine equal in amount to that of such goods. *Gold and silver* not manifested by either master or consignee, are liable to a duty of 4 ½ cent. *Goods falling short* of the quantity manifested, when landed, and not being included in any invoice of consignee, will render the master liable to a penalty of 200 dollars for each package so falling short. *Every master* must present himself, within 24 hours after his arrival, at the Custom-house, in order to swear to his manifest, in neglect of which he is liable to a fine of 1,000 dollars. *Every consignee* is obliged to present a detailed note of goods within 48 hours after the arrival of a vessel; if not, such goods are liable to 2 ½ cent. extra duty: the same is the case if such notes do not contain a statement of the number of pieces, contents, quantity, weight, and measure. Every vessel is required to bring a bill of health certified by the Spanish consul at the port of her departure, or that nearest to it, otherwise they are placed in quarantine.

In compiling this article, we have consulted Humboldt's standard work, the *Essai Politique sur l'Isle de Cuba*, Paris, 1826; and the Supplement (*Tableau Statistique*) thereto, Paris, 1831; Turnbull on Cuba, Lond. 1840; *Geog. Dict.* arts. *Cuba* and *Havannah*; the *Balanza Mercantil* for various years; and *private communications* from Cuba.

HAVRE, or HAVRE DE GRACE, a commercial and strongly fortified sea-port town of France, on the English channel, near the mouth of the Seine, on its northern bank, lat. 49° 29′ 14″ N., lon. 0° 6′ 38″ E. Population, in 1836, 26,618, to which may be added 5,000 more for the crews of the shipping constantly in the port. It was a saying of Napoleon that "*Paris, Rouen, Le Havre, ne forment qu'une seule ville, dont la Seine est la grande rue.*" Havre being, in fact, the sea-port of Paris, most of the colonial and foreign products destined for its consumption are imported thither. Nearly double the quantity of goods, estimated by weight, is annually imported at Marseilles; but the total value of the imports at Havre amounts very nearly to that of those at the former port. The principal imports are cotton, sugar, coffee, linen thread and linen goods, rice, indigo, tobacco, hides, dyewoods, spices, drugs, timber, iron, tin, dried fish, &c.: grain and flour are sometimes imported and sometimes exported. The principal exports are silks, woollen and cotton stuffs, lace, gloves and shoes, trinkets, perfumery, champagne and other wines, brandy, glass, furniture, books, &c.

The Harbour, which is the best and most accessible on this part of the French coast, consists of 3 basins separated from each other and from the outer port by 4 locks, and capable of accommodating about 450 ships. A large body of water being retained by a sluice, and discharged at ebb tide, clears the entrance to the harbour and prevents the accumulation of filth, sand, &c. Cape de la Heve, forming the northern extremity of the Seine, lies N. N. W. from Havre, distant about 2½ miles. It is elevated 390 feet above the level of the sea, and is surmounted by 2 light-houses 50 feet high. Those, which are 325 feet apart, exhibit powerful fixed lights. There is also a brilliant harbour-light at the entrance to the port, on the extremity of the western jetty. Havre has 2 roadsteads. The great or outer road is about a league from the port, and rather more than ½ league W. S. W. from Cape de la Heve; the little or inner road is about ½ league from the port, and about ⅓ of a mile S. S. E. from Cape de la Heve. They are separated by the sand bank called Leclat; between which and the bank called *Les Hautes de la Rade* is the north-west passage to the port. The Hoc, or southern passage, lies between the last mentioned bank and that of Amfar. In the great road there is from 6 to 7¼ fathoms water at ebb: and in the little, from 3 to 3½. Large ships always lie in the former. The rise of the tide is from 22 to 27 feet: and by taking advantage of it, the largest class of merchantmen enter the port. The water in the harbour does not begin perceptibly to subside till about 3 hours after high water, — a peculiarity ascribed to the current down the Seine across the entrance to the harbour being sufficiently powerful to dam up for a while the water in the latter. Large fleets, taking advantage of this circumstance, are able to leave the port in a single tide, and get to sea, even though the wind should be unfavourable. — (See *Plan of Havre*, published by Laurie; *Annuaire du Commerce Maritime*; *Coulier sur les Phares*, p. 59, &c.)

The Chamber of Commerce of Havre have recently published the following information and instructions for the use of vessels frequenting the port: —

"Five buoys have been moored in the shallows Ruvun, under the design: of the Banc de l'Eclat, and Hautes de la Rade.

"These buoys are similar in form, but of different colours, viz.: The first to the northward is white; the second, white with a black top; the third is black; the fourth is black with a white top; the fifth is red.

"Vessels must always come to anchor at a distance of at least five cables' length outside the line of these buoys, which they may not pass without danger before one hour and a half prior to high water, or four hours after ebb; and they must at all times pass at a distance of five cables' length from the black as well as from the red buoy, both of which are moored on the shallowest parts of these banks. Nevertheless ships may at all hours of the tide frequent the north-western passage, comprised between Cape La Heve and the two northernmost buoys.

"All vessels using the north-western passage, and bound into the inner roadstead (Petit Rade), must steer for the white buoy, the farthest north, and after leaving it a little distance on the starboard hand, should then stand towards the second white buoy, taking care never to come so close to the shore as altogether to lose sight of the lantern of the northernmost lighthouse on Cape La Heve. When the light of the north-western pier head bears by compass S.E. and the lighthouses on the Heve bear by compass N. N.E., the ship may be brought to an anchor.

"Besides the five buoys herein described, one of lesser dimensions has been moored on the shallows of the inner roadstead, at about five cables' length W.N.W. of the north-west pier head. Vessels of light draught of water coming to an anchor in that part of the road, should give this buoy an offing of at least one cables' length."

Most part of the goods imported into Havre are destined for the internal consumption of France. The coasting trade has increased very largely of late years, as is proved by the great increase of French wines, soaps, and other produce imported at Paris from Havre, instead of being sent to the capital by land. The coasting vessels transfer their cargoes to large barges, called *chalands*, which are towed by steam tugs as far as Rouen, and thence by horses to Paris. The foreign trade of the port is also very extensive. It is seen from No. I. of the subjoined accounts that there entered the port in 1842 no fewer than 607 ships, of the burden of 221,000 tons from ports out of Europe. Lines of sailing packets are established between Havre and New York, New Orleans, &c. A regular intercourse by means of steam packets is kept up with London, Southampton, and other ports. The entrances to the basins are too narrow to admit the passage of the largest steamers, which have, in consequence, to remain in the outer port imperfectly sheltered from the winds. Indeed the port is at present inadequate to the proper accommodation of the great and growing trade of which it is the centre, and extensive works are about to be undertaken for its improvement.

There belonged to the port, on the 31st of December, 1841, 333 vessels of the aggregate burden of 63,257 tons. The customs duties, which in 1837 produced 18,123,993 francs, had increased in 1841 to 23,000,000 francs, and have since continued to advance.

The Monies, Weights, and Measures of Havre are the same as those of the rest of France; for which see arts. BORDEAUX, COINS, and WEIGHTS AND MEASURES.

I. Navigation of the Port of Havre during the Years 1842, 1841, and 1840.

1842.

Ships entered from	Ships.	Tons.	Ships departed for	Ships.	Tons.
New York	51	27,500	New York	75	37,500
New Orleans	92	46,000	New Orleans	73	39,500
Mobile	33	14,300	Mobile	40	16,000
Savannah	12	5,000	Savannah		
Charleston	53	19,300	Charleston		
Other ports in the United States	20	9,800	Other ports in the United States	55	25,000
	264	122,000		243	116,000
Brazil	36	10,800	Brazil	37	10,400
Hayti	42	10,200	Hayti	21	7,000
Foreign Colonies	26	7,000	Foreign Colonies	22	5,500
Monte Video and B. Ayres	34	8,500	Monte Video and B. Ayres	22	6,200
Peru, Chili, Mexico, and Colombia	30	8,900	Peru, Chili, Mexico, and Colombia	41	11,000
India	11	4,100	India	7	2,800
Bourbon and Mauritius	11	4,400	Bourbon and Mauritius	14	4,800
Senegal and Cayenne	9	1,600	Senegal and Cayenne	8	1,600
Whale Fishery	13	5,500	Whale Fishery	12	4,800
Martinique	49	13,800	Martinique	45	10,400
Guadaloupe	82	24,300	Guadaloupe	66	20,700
Total of foreign trade	607	221,000	Total of foreign trade	539	201,000
St. Petersburg	58	11,600	St. Petersburg	28	5,600
Hamburg	42	7,400	Hamburg	45	8,800
Amsterdam	5	1,000	Amsterdam		
Rotterdam	50	10,000	Rotterdam	45	9,000
Antwerp	41	6,300	Antwerp	25	4,000
Ostend	31	3,800	Ostend	12	1,500
Northern Ports	243	63,400	Northern Ports	215	55,200
England	785	97,000	England	610	75,000
Newfoundland	8	1,600	Newfoundland	6	1,200
Azores	1	200	Azores	1	200
Portugal	30	4,500	Portugal	27	5,000
Spain	44	8,800	Spain	28	5,600
Foreign Ports in the Mediterranean	48	9,600	Foreign Ports in the Mediterranean	19	3,800
French Ports in the Mediterranean	246	49,800	French Ports in the Mediterranean	53	10,400
Greater coasting trade (163)	2,239	496,000	Greater coasting trade (111)	1,651	386,000
Lesser coasting trade	3,624	248,000	Lesser coasting trade	3,755	412,000
Totals	5,863	744,000	Totals	5,406	798,000

1841.

Ships entered from	Ships.	Tons.	Ships departed for	Ships.	Tons.
New York	68	32,200	New York	80	38,500
New Orleans	111	48,500	New Orleans	76	35,200
Mobile	31	15,800	Mobile	27	10,800
Savannah	4	1,600	Savannah		
Charleston	32	11,000	Charleston		
Other ports in the United States	11	4,900	Other ports in the United States	59	23,500
	260	114,000		242	108,000
Brazil	36	11,200	Brazil	41	12,500
Hayti	43	11,200	Hayti	32	8,500
Foreign Colonies	26	6,500	Foreign Colonies	25	5,800
Monte Video and B. Ayres	31	7,800	Monte Video and B. Ayres	16	4,200
Peru, Chili, Mexico, and Colombia	26	6,900	Peru, Chili, Mexico and Colombia	36	9,000
India	12	4,000	India	5	2,000
Bourbon and Mauritius	10	3,600	Bourbon and Mauritius	13	4,400
Senegal and Cayenne	9	1,700	Senegal and Cayenne	6	1,100
Whale Fishery	26	10,400	Whale Fishery	21	9,200
Martinique	50	11,500	Martinique	29	9,000
Guadaloupe	42	18,000	Guadaloupe	71	21,500
Total of foreign trade	596	209,600	Total of foreign trade	548	195,000
St. Petersburg	35	7,400	St. Petersburg	27	5,600
Hamburg	41	7,200	Hamburg	51	9,500
Amsterdam	2	400	Amsterdam		
Rotterdam	43	8,100	Rotterdam	38	7,200
Antwerp	20	4,200	Antwerp	21	3,500
Ostend	16	2,200	Ostend	7	1,200
Northern Ports	151	45,300	Northern Ports	124	38,200
England	784	98,000	England	624	78,000
Newfoundland	7	1,400	Newfoundland	3	600
Azores	2	400	Azores	1	200
Portugal	15	3,000	Portugal	22	5,200
Spain	32	7,400	Spain	25	6,500
Foreign Ports in the Mediterranean	17	3,800	Foreign Ports in the Mediterranean	8	1,800
French Ports in the Mediterranean	216	43,200	French Ports in the Mediterranean	41	8,200
Greater coasting trade (1391)	1,987	441,200	Greater coasting trade (902)	1,540	360,700
Lesser coasting trade	5,186	240,800	Lesser coasting trade	5,270	358,500
Totals	5,125	682,200	Totals	4,810	719,000

1840.

Ships entered from	Ships.	Tons.	Ships departed for	Ships.	Tons.
New York	75	27,500	New York	98	43,000
New Orleans	148	55,000	New Orleans	107	45,000
Mobile	54	28,000	Mobile	33	13,000
Savannah	13	5,000	Savannah		
Charleston	43	16,000	Charleston		
Other ports in the United States	24	10,500	Other ports in the United States	66	32,000
	315	138,000		304	133,000
Brazil	26	7,500	Brazil	31	9,000
Hayti	40	10,000	Hayti	28	7,500
Foreign Colonies	29	8,000	Foreign Colonies	29	8,500
Monte Video and B. Ayres	14	4,000	Monte Video and B. Ayres	12	3,500
Peru, Chili, Mexico, and Colombia	33	8,500	Peru, Chili, Mexico, and Colombia	28	7,000
India	15	5,000	India	7	2,500
Bourbon and Mauritius	7	2,500	Bourbon and Mauritius	8	3,000
Senegal and Cayenne	9	1,500	Senegal and Cayenne	7	1,500
Whale Fishery	23	9,500	Whale Fishery	14	6,000
Martinique	44	12,500	Martinique	31	9,500
Guadaloupe	70	21,000	Guadaloupe	55	17,000
Total of foreign trade	625	228,000	Total of foreign trade	552	208,000
St. Petersburg	28	6,000	St. Petersburg	31	6,500
Hamburg	106	20,000	Hamburg	75	14,000
Amsterdam	12	2,400	Amsterdam	2	500
Rotterdam	55	10,000	Rotterdam	40	7,500
Antwerp	21	3,500	Antwerp	21	3,000
Ostend	10	1,500	Ostend	12	1,700
Northern Ports	185	52,000	Northern Ports	172	45,000
England	687	95,000	England	483	62,500
Newfoundland	9	1,800	Newfoundland	4	2,000
Azores	3	500	Azores	2	500
Portugal	10	2,000	Portugal	26	5,000
Spain	65	10,700	Spain	23	4,500
Foreign Ports in the Mediterranean	30	6,500	Foreign Ports in the Mediterranean	29	6,000
French Ports in the Mediterranean	162	32,500	French Ports in the Mediterranean	26	6,500
Greater coasting trade (1381)	2,006	472,000	Greater coasting trade (944)	1,496	376,000
Lesser coasting trade	3,117	208,000	Lesser coasting trade	3,347	370,000
Totals	5,123	680,000	Totals	4,843	746,000

N. B. Greater coasting trade ("Grand Cabotage") or ports in Europe and in the Mediterranean: Lesser coasting trade ("Petit Cabotage") or ports in France from Dunkirk to Bayonne.

II. Return of Importations at the Port of Havre for the Years 1842, 1841, 1840, 1839, and 1838.

	1842.	1841.	1840.	1839.	1838.
Cotton from —					
New Orleans	148,605 bales	171,850 bales	187,352 bales	113,081 bales	110,795 bales
Mobile	48,000 —	43,581 —	75,221 —	21,106 —	54,736 —
Charleston and Sara	89,023 —	49,938 —	65,509 —	41,327 —	66,995 —
Floridas & Virginia	15,571 —	13,591 —	12,532 —	118 —	3,612 —
New York	41,852 —	62,046 —	23,519 —	53,634 —	39,048 —
Brazil	11,830 —	5,898 —	2,769 —	16,724 —	11,120 —
Other countries	15,726 —	10,423 —	9,458 —	19,253 —	8,940 —
	370,107 bales	357,327 bales	376,156 bales	265,243 bales	295,246 bales
Sugar from —					
Martinique and Guadaloupe	64,000 casks	54,760 casks	51,900 casks	46,350 casks	53,490 casks
Bourbon	60,500 bags	61,711 bags	41,369 bags	45,465 bags	53,372 bags
Havannah	36 boxes	525 boxes	106 boxes	15 boxes	27 boxes
Brazil	68 hhds., 2,614 bags	2566 hs. 11,012 bags	3,015 hhds. 909 bgs.	1,578 hs., 33 hhds.	2,715hhds. 8,381 bs.
Other qualities	5960 hhds. 614 bales	4570 hhds. 5700 bgs.	631 hs., 56 hhds.	363 hs., 150 hhds.	165 bags
Coffee from —					
Martinique and Guadaloupe	782 tierces 3,650 quarters 397 bags	582 tierces 3,722 quarters —	1,020 tierces 3,812 quarters —	808 tierces 2,256 quarters —	1,912 tierces 5,290 quarters —
Bourbon	5,350 bales	1,407 bags	3,021 bags	5,564 bags	2,450 bags
several other qualities	86,500 bags 892 hhds. 95 tierces, 415 qrs.	83,120 — 712 hhds., 71 tierces 748 quarters	101,339 — 1,154 hhds. 1015 tier. 1648 hhd.	65,963 — 445 hhds. 1,676 quarters	63,290 — 1,390 hhds. 575 quarters
from Hayti direct	59,400 bags 78 quarters	57,814 bags 47 quarters	68,564 bags 42 quarters	56,883 bags 200 tierces	75,761 bags —
Alkali	1,225 jars	1,912 jars	1,920 jars	1,615 jars	3,190 jars
Annato	1,066 bales	311 hhds.	350 hhds.	401 hhds.	437 hhds.
Balsam	221 —	155 bales	480 bales	741 bales	612 bales
Barley (pearl)	195 —	310 —	520 —	465 —	98 —
Bees' wax	1,968 bs., 3 cargoes	1,610 —	845 bs., 1 cargo	540 —	472 bs., 1 cargo
Blacklead	2,302 bales	150 hhds.	2,660 hhds.	585 hhds.	372 hhds.
Cabinet woods	42 cargoes 4,500 pieces	43 cargoes 6,970 pieces	32 cargoes 5,150 pieces	33 cargoes 1,155 pieces	3 cargoes 172 —
Camphire	165 bs.	110 bs.	115 bs.	146 hhds.	47 bs.
Cocoa	6,237 bs.	10,312 bs., 1 cargo	15,567 bs.	5,411 bs.	9,670 bs.
Cords	210 cargoes	194 cargoes	190 cargoes	168 cargoes	180 cargoes
Chromate of iron	792 hhds.	588 hhds.	1,575 hhds.	470 hhds.	742 hhds.
Cigars, foreign	3,005 boxes	5,812 boxes	4,150 boxes	3,412 boxes	4,872 boxes
Cochineal	182 serons	183 serons	162 serons	367 —	115 —
Cocoa nuts	7 cargoes	3 cargoes & 50 sacks	4 cargoes	3 cargoes	—
Copper (new)	94,510 pieces	115,850 pieces	65,461 pieces	40,270 pieces	85,212 pieces
(old)	1,112 hhds. 31 cargoes	16 cargoes 3,240 hhds.	21 cargoes 5,325 hhds.	42 cargoes 4,180 hd ds.	28 cargoes 7,705 hhds.
Cheese, Dutch	45 —	53 cargoes	38 cargoes	49 cargoes	36 cargoes
Cloves	1,115 boxes	249 boxes	510 boxes	2,495 boxes	102 cases
Clover seeds	5,012 qrs. 780 hhds.	2,800 bags	5,250 bags	1,012 bags	—
Dye woods	15,800,000 ks.	23,100,000 lbs.	22,700,000 lbs.	16,900,000 lbs.	12,500,000 lbs.
Drugs	19,750 pack., 6 carg.	5,980 packages	4,960 packages	7,925 packages	7,805 packages
Fire-arms	372 boxes	392 boxes	288 boxes	222 boxes	277 boxes
Flour, foreign	2,080 barrels	1,119 barrels	51,772 barrels	19,571 barrels	—
Figs	3,012 pagas	6,012 pagas	2,550 pagas	4,250 pagas	7,750 pagas
Furs	648 packages	455 bales	300 bales	360 bales	292 bales
Feathers	712 bales	428 —	375 —	965 —	772 packages
Gums, Senegal	3,915 packages	4,377 packages	5,516 packages	2,010 packages	5,905 —
lac	612 —	1,607 boxes	2,020 —	1,115 boxes	1,542 boxes
copal	730 —	228 —	492 —	232 —	248 —
elastic	858 pack., 2 cargoes	582 pack., 2 cargoes	1,092 pack., 2 carg.	1,566 pack., 1 carg.	548 packages
divers	1,112 packages	612 packages	1,058 packages	1,548 packages	1,308 —
Gall nuts	10 —	10 bags	10 —	22 bags	279 bags
Goats' hair	644 bales	2.8 bales	505 bales	588 bales	664 bales
Hemp, foreign	2,112 bales, 6 carg.	648 —	785 —	1,862 —	2,192 bs., 2 cargoes
Horns	80 cargoes	25 pack., 67 cargoes	50 cargoes	58 cargoes	48 cargoes, 4 pack.
Hair (horse)	2,590 bales	1,340 bales	855 bales	356 bales	1,595 bales
Hides	85,725 bs. 5,180 bal.	45,342 bs. & bales	81,005 bs. & pack.	51,250bs. 50,880pk.	18,120bs. 150pk.
Hops	1,927 bales	130 bales	42 bales	975 bales	759 bales
Isinglass	98 hhds.	125 hhds.	66 hhds.	112 hhds.	98 hhds.
Iron, foreign	11,500,000 lbs.	7,900,000 lbs.	6,500,000 lbs.	5,200,000 lbs.	4,400,000 lbs.
Indigo, from India	4,995 boxes	4,584 boxes	4,737 boxes	4,488 boxes	3,495 boxes
Do. from America	244 serons, 11 bales	161 serons	308 serons	351 serons	96 serons
Ipecacuanha	58 serons	22 —	23 packages	22 barrels	56 bales
Ivory	4,012 teeth 125 pack., 1 cargo	4,392 teeth 81 packages	988 teeth 115 packages	978 teeth 142 packages	5,637 teeth 129 packages
Jewels (Brazil)	34 packages	12 —	6 —	4 —	4 —
Linseed, foreign	5,440 bales, 14 carg.	6,012 pack., 7 carg.	5,545 ps., 3 cargoes	3,014 hhds.	3,254 —
Lac-dye	165 boxes	456 boxes	591 boxes	617 boxes	858 boxes
Liqueurs and preserves, from colonies	275 —	318 —	160 —	160 —	220 —
Lead	58,200 pigs	40,210 pigs	71,029 pigs	43,240 pigs	46,667 pigs
Lignum vitæ	20 cargoes	28 cargoes	10 cargoes	4 cargoes	3 cargoes
Mahogany	21,210	24,092	13,734	34,274	35,300
Madder	535 hhds.	570 hhds.	690 hhds.	740 hhds.	912 hhds.
Mother-o'-pearl	690 pack., 2 cargoes	562 pack., 6 cargoes	532 pack., 15 carg.	902 packages	574 pack., 1 cargo
Nankeen	—	—	—	—	22 boxes
Nitrate of soda	7,512 bags	2,412 bags	3,203 bags	2,261 packages	2,519 packages
Oranges and lemons	16,500 boxes	9,820 boxes	7,750 boxes	8,625 boxes	8,812 boxes
Oils, whale	6,000,000 lbs.	15,660,000 lbs.	10,500,000 lbs.	11,600,000 lbs.	7,400,000 lbs.
cod	475 barrels	805 barrels	585 barrels	790 barrels	572 barrels
olive, foreign	1,550 —	950 —	740 —	986 —	344 —
divers	1,748 —	1,315 —	478 —	712 —	378 —
Pewter (English)	315 cases	178 cases	310 cases	340 cases	246 cases
Pearlash (American)	1,972 barrels	1,860 barrels	618 barrels	1,475 barrels	1,040 barrels
Pimento	1,484 bales	767 bags	1,027 bales	890 bales	378 bales
Pepper	6,150 bags and bales	5,950 bales	580 sacks	1,478 sacks	2,660 sacks
Potash (American)	6,850 barrels	4,516 barrels	2,707 barrels	4,856 barrels	6,270 barrels
Do. from the North and South	1,971 —	1,605 —	1,990 —	1,312 —	1,975 —
Pigs' bristles	996 packages	534 hhds.	219 hhds.	488 hhds.	266 hhds.
Peruvian bark	1,243 serons	178 packages	341 serons	1,568 packages	329 serons
Quicksilver	1,225 jars	1,912 jars	1,920 jars	1,615 jars	3,190 jars
Quercitron (America)	639 hhds.	301 hhds.	1,444 hhds.	1,011 hhds.	1,771 hhds.
Reeds (Indian)	7,510 bund., 4 carg.	2,512 bundles	6,558 bundles	6,010 bundles	9,905 bundles
Rocella	1,645 bales & bund.	3,882 —	1,824 bales	384 bales	1,113 bales
Raisins, foreign	34,500 boxes	26,880 boxes	24,540 boxes	23,578 boxes	32,188 boxes
Rice	9010 hhds. 9005 bgs.	9045 hhds. 4012 bgs.	8992 hhds. 1570 bgs.	9027hds. 22,765bgs.	5554 hhds. 7598 bgs.
Rhubarb	42 packages	44 boxes	25 boxes	48 boxes	75 boxes
Steel	1,272 bundles	1,592 packages	705 packages	1,008 packages	358 packages
Staves (American)	91 cargoes	86 cargoes	56 cargoes	36 cargoes	58 cargoes
Seeds, foreign	2 —	—	191 —	17 —	—
Salt cod	11 —	10 —	10 —	15 —	9 —

II. Return of Importations, &c. — *continued.*

	1842.	1841.	1840.	1839.	1838.
Salt provisions -	9,375 barrels	3,820 barrels	1,980 barrels	2,005 barrels	3,595 barrels
Saltpetre (Indian) -	19,012 bags	16,802 bags	3,435 bags	11,325 bags	7,050 bags
Sarsaparilla - -	915 bales	1,036 bales	1,026 packages	695 packages	372 bales
Seals - -	273 hhds., 3 cargoes	1 cargo	5 cargoes	2 cargoes, 70 bags	72 bags, 1 cargo
Sulphur - -	4,000,000 lbs.	5,200,000 lbs.	3,800,000 lbs.	3,800,000 lbs.	2,300,000 lbs.
Sulphate of potash -	—	—	78 hhds.	—	132 hhds.
Shumac - -	665 bags	2,248 packages	1,018 bags	4,007 bags	2,218 bags
Tapioca - -	1,088 hhds.	385 hhds.	312 hhds.	260 hhds.	210 hhds.
Tea - -	3,450 packages	7,770 boxes	1,988 packages	8,210 packages	4,212 packages
Turmeric - -	4,758 bags	1,256 bags	1,172 bags	4,274 bags	6,303 bags
Tortoiseshell - -	110 packages	70 packages	100 packages	98 packages	124 packages
Tin (British) - -	315 cases	178 cases	310 cases	340 cases	240 cases
Tar (North) - -	3,770 barrels	981 barrels	1,110 barrels	1,774 barrels	3,852 barrels
Tallow - -	26,595 hhds.	13,514 hhds.	6,909 hhds.	5,580 hhds.	9,266 hhds.
Tobacco - -	18,510 —	18,176 —	21,888 —	12,569 —	9,093 —
Tons (Colonies) -	3,240 barrels	1,805 barrels	1,594 barrels	2,448 barrels	555 barrels
Vanilla - -	50 jack cages	15 boxes	10 boxes	8 boxes	16 boxes
Woods (Baltic) -	216 cargoes	148 cargoes	130 cargoes	217 cargoes	172 cargoes
Do. (American) -	19 —	13 —	10 —	20 —	41 —
Whalebone - -	12,975 bundles	21,115 bundles	18,812 bundles	22,290 bundles	18,304 bundles
Wool, foreign -	6,012 bales	4,812 bales	1,785 bales	3,285 bales	3,862 bales
Wine, do. - -	1,810 casks	910 casks	647 casks	1,574 casks	1,329 casks
White lead (Dutch) -	358 barrels	275 barrels	401 barrels	110 barrels	172 barrels
Zinc - - -	128,900 sheets	265,300 sheets	216,150 sheets	195,220 sheets	252,111 sheets

III. Account of the annual Imports of Coffee into Havre, with the annual Sales thereof, and Stocks on hand on the 31st December in each Year, from 1842 to 1830, both inclusive.

Years.	Imports.	Sales.	Stock.	Years.	Imports.	Sales.	Stock.
	Lbs.	*Lbs.*	*Lbs.*		*Lbs.*	*Lbs.*	*Lbs.*
1842	19,250,000	20,500,000	3,300,000	1835	15,440,000	16,820,000	2,320,000
1841	17,650,000	15,280,000	4,550,000	1834	15,600,000	13,980,000	3,700,000
1840	25,920,000	25,270,000	2,100,000	1833	14,300,000	15,500,000	4,000,000
1839	14,000,000	15,550,000	1,750,000	1832	16,850,000	15,650,000	5,000,000
1838	19,740,000	20,014,000	2,700,000	1831	8,000,000	9,000,000	1,800,000
1837	18,550,500	20,110,000	3,014,000	1830	13,300,000	13,000,000	2,800,000
1836	17,726,745	15,171,745	4,875,000				

IV. Account of the annual Imports of Cotton into Havre, with the annual Sales thereof, and the Stocks on hand on the 31st December in each Year, from 1842 to 1830, both inclusive.

Years.	Imports.	Sales.	Stock.	Years.	Imports.	Sales.	Stock.
	Bales.	*Bales.*	*Bales.*		*Bales.*	*Bales.*	*Bales.*
1842	357,427	342,927	108,000	1835	214,509	217,709	18,800
1841	357,527	314,027	96,500	1834	201,419	213,419	22,000
1840	376,156	356,156	77,000	1833	210,593	193,593	34,000
1839	265,213	242,013	57,000	1832	184,228	185,228	17,000
1838	295,246	295,746	35,000	1831	137,501	134,501	18,000
1837	248,859	261,359	33,000	1830	119,186	103,686	45,000
1836	262,086	253,586	45,500				

V. Account of the annual Imports of Sugar into Havre, with the annual Sales thereof, and the Stocks on hand on the 31st December in each Year, from 1842 to 1830, both inclusive.

Years.	Imports.	Sales.	Stock.	Years.	Imports.	Sales.	Stock.
	Hhds.	*Hhds.*	*Hhds.*		*Hhds.*	*Hhds.*	*Hhds.*
1842	64,000	60,000	14,000	1835	55,549	58,549	9,000
1841	54,749	51,260	11,000	1834	69,130	60,130	12,000
1840	51,809	46,309	6,500	1833	50,300	51,330	5,000
1839	46,530	51,830	1,980	1832	46,000	57,000	4,000
1838	53,490	47,280	7,000	1831	58,150	56,150	14,000
1837	31,753	42,153	8,000	1830	49,820	44,820	12,000
1836	45,287	42,787	11,500				

Prices of Commodities Duty paid and in Bond, Duties, Tares, Commercial Allowances, &c. — These important particulars may be learned by the inspection of the subjoined Price Current for the 23d of August, 1843. The duties on some of the articles mentioned in it will, most probably, at no very distant period, be varied. But the other particulars embodied in it will always render it an important document.

	Duty paid.		In Bond.	
	Fr. c.	*Fr. c.*	*Fr. c.*	*Fr. c.*
Ashes, per 50 kil.				
Pot, New York -	38 25 to 38 75		0 0 to 0 0	
do. Canan -	44 0 - 44 50		0 0 - 0 0	
Pearl, American -	45 0 - 45 50		0 0 - 0 0	
Duty on nett weight: by French vessels from European ports, 9 fr. 90 ct.; from elsewhere 8 fr. 25 ct. By foreign vessels, 11 fr. 55 ct.—(See exceptions at Note A.)				
Commercial and Custom-house tare: 12 per cent.				
Bark, per ½ kil. -	0 0 to 0 0		0 0 to 0 0	
Callisaya, curled -	0 0 - 0 0		0 0 - 0 0	
do. flat -	0 0 - 0 0		0 0 - 0 0	
Duty on nett weight: by French vessels from any port whatever, 27 fr. 12 ct. From countries west of Cape Horn, 13½ ct. By foreign vessels, 55 ct.				
Custom house tare: on chests, 12 per cent.; on serons, 2 per cent.				
Commercial tare: on cases, real; on serons, of 70 kil. and upwards, 8 kil.; of 40 kil. and upwards, 6 kil.; and of 20 kil. and upwards, 4 kil.				
Bees' wax, per ½ kil.				
North American yellow -	1 95 to 2 0		0 0 to 0 0	
New Orleans, do. -	1 80 - 1 92		0 0 - 0 0	
Russia - -	0 0 - 0 0		0 0 - 0 0	
West India fair -	1 75 - 1 80		0 0 - 0 0	
Senegal - -	1 75 - 1 90		0 0 - 0 0	
Duty on gross weight: yellow, by French vessels from European ports, ¾ ct.; from elsewhere 4 2/5 ct. By foreign vessels from any port whatever, 8½ ct. (See Note A.)				

	Duty paid.		In Bond.	
	Fr. c.	*Fr. c.*	*Fr. c.*	*Fr. c.*
Commercial tare: real.				
Cassia lignea, per ½ kil.				
In mats and chests -	1 12 to 1 15		0 0 to 0 0	
Duty on nett weight: By French vessels from the East Indies, 18 3/20 ct.; from elsewhere, 33 3/10. By foreign vessels from any port whatever, 55 ct. (See exceptions at Note A.)				
Custom-house tare: on chests, 12 per cent.; on mats, 2 per cent.				
Commercial tare: real.				
Cochineal per ½ kil.				
foxy from ord. to fine -	0 0 to 0 0		5 50 to 6 0	
black, ditto - -	0 0 - 0 0		6 0 - 6 50	
Duty on nett weight: by French vessels from places out of Europe, 4½ ct.; from elsewhere, 55 ct. By foreign vessels, 82½ ct. (See Note A.)				
Custom-house tare: in casks, 12 per cent.; in serons, 2 per cent.				
Commercial tare: real.				
Cocoa, Caraccas, per ½ kil. none to 0 0			0 75 to 1 0	
St. Domingo - -	0 0 - 0 0		0 33 - 0 34	
Maranham and Para - by a French vessel			0 35 - 0 39	
Maracaibo - - none			0 70 - 0 75	
Duty on nett weight: By French vessels from the French colonies, 22 ct.; from countries west of Cape Horn, 27½ ct., from European ports, 54½ ct.; from elsewhere 50½ ct. By foreign vessels from any port whatever, 57½. (See exceptions at Note A.)				

	Duty paid.		In Bond.	
	Fr. ct.	Fr. ct.	Fr. ct.	Fr. ct.

Custom-house tare: on casks, 12 per cent.; on bags, 3 per cent.

Commercial tare: on casks, real; on bags, 2 per cent.

Coffee, per ½ kil.

St. Domingo, from ordinary to fine	0 0 to 0 0		0 34 to 0 36	
Porto Rico - none	0 0 - 0 0		0 45 - 0 80	
Havannah, from ordinary to fine	0 0 - 0 0		0 39 - 0 53	
Laguira	0 0 - 0 0		0 40 - 0 65	
Rio, from ordinary to fine	0 0 - 0 0		0 30 - 0 39	
Java	0 95 - 1 0		0 0 - 0 0	
Padang and Sumatra	0 75 - 0 82		0 0 - 0 0	
Mocha	1 25 - 1 35		0 0 - 0 0	

Duty on nett weight: by French vessels from the East Indies, 42 9/10 ct.; from European ports, 55 ct.; from elsewhere, 52½ ct. By foreign vessels from any port whatever, 57½ ct. (See Note A.)

Custom-house tare: on casks, 12 per cent.: bags, 3 per cent.

Commercial tare: on casks, real; on bags, 2 per cent.; on Mocha coffee the tare runs from 4½ to 12½ kil. upon bales of 75 to 200 kil.

Copper, S. America, per ½ kil.	0 95 to 0 0		0 0 to 0 0	
Russian and British	1 98 - 1 20		0 0 - 0 0	

Duty on gross weight: by French vessels from European ports, 1 1/10 ct.; from elsewhere, 1 1/20 ct. By foreign vessels from any port whatever, 1 13/20 ct. (See exceptions at Note A.)

Commercial tare: real.

Cotton, per ½ kil.				
Upland			0 54 to 0 81	0 43 to 0 70
Tennessee			0 53 - 0 67	0 42 - 0 56
Mobile			0 55 - 0 88	0 44 - 0 77
Louisiana			0 55 - 1 0	0 44 - 0 80
Sea Island			1 15 - 3 50	0 0 - 0 0
Pernambuco			0 72 - 1 0	0 61 - 0 89
Bahia			0 62 - 0 95	0 51 - 0 84
Maranham			0 60 - 0 95	0 0 - 0 0
St. Domingo			0 52 - 0 80	0 0 - 0 0
Surat and Madras			0 55 - 0 65	0 0 - nom.
Cumana			0 50 - 0 70	0 0 - 0 0
Porto Rico			0 70 - 0 0	0 0 - 0 0
Egyptian			0 80 - 1 0	0 0 - 0 0
Patta and Pisco			0 60 - 0 90	0 0 - 0 0

Duty on nett weight: on long or short staple, by French vessels from the French colonies, 2½ ct.; from European ports (Turkey excepted), 16½ ct.; from the East Indies and countries beyond Cape Horn, 5½ ct.; from other countries 11 ct. By foreign vessels (except from Turkey), 19½ ct. By French vessels from Turkey, 8½ ct.; by foreign vessels from Turkey, 13½ ct. (See exceptions at Note A.)

Custom-house tare: 6 per cent. on bales of 50 kil. and above, and 8 per cent. on bales under 50 kil.

Commercial tare: on United States cottons, 6 per cent., cords off; on Brazil cottons, 4 per cent.; on St. Domingo, in bales, 6 per cent.; on Cumana and Caraccas, 7 kil. per seron above 10 kil., and 6 kil. per seron of 40 kil. and under.

Draft: 2 kil. on Sea Island and Bengal; 3 kil. on all other descriptions in bales exceeding 50 kil.; and 1½ kil. upon bales under 50 kil.

Elephants' teeth, ½ kil.	3 0 to 8 50		0 0 to 0 0	

Duty on nett weight: whole or in pieces of more than 1 kil. By French vessels from Senegal, 13½ ct.; from other African settlements, 22 ct.; from the East Indies, 19½ ct.; from elsewhere, 50½ ct. By foreign vessels from any port whatever, 58½ ct. Pieces of 1 kil. and under, double the above duties. (See Note A.)

Gums, Senegal, per ½ kil.	0 90 to 0 91		0 0 to 0 0	
East Indies, copal scraped	2 0 - 2 20		0 0 - 0 0	
shellac, orange	0 80 - 0 85		0 0 - 0 0	
ditto, garnet	0 75 - 0 80		0 0 - 0 0	
ditto, liver	0 55 - 0 70		0 0 - 0 0	

Duty on Senegal, gross weight: By French vessels from Senegal, 5½ ct.; from European ports, 13½ ct.; from elsewhere, 11 ct. By foreign vessels from any port whatever, 16½ ct. (See Note A.)

Commercial tare: on casks, real; on bags, 2 per cent.

Duty on copal, gross weight, per 50 kil.: by French vessels from the East Indies, 1 fr. 54 ct.; from elsewhere, 4 fr. 40 ct. By foreign vessels from any port whatever, 6 fr. 27 ct. (See Note A.)

Commercial tare: real.

Duty on shellac, nett weight: by French vessels from the East Indies, 77/100 ct.; from elsewhere, 2 1/5 ct. By foreign vessels from any port whatever, 3 fr. 27/200 ct. (See Note A.)

Commercial tare: real.

Hides, per ½ kil.				
Buenos Ayres	0 72 to 0 82		0 0 to 0 0	
Pernambuco and Bahia, dry-salted	0 45 - 0 55		0 0 - 0 0	
Rio Janeiro	0 55 - 0 75		0 0 - 0 0	
Carthagena and Caraccas	0 55 - 0 70		0 0 - 0 0	
New Orleans, wet salted	0 30 - 0 33		0 0 - 0 0	

Duty on gross weight: by French vessels from European ports, 5½ ct.; from elsewhere, 23 ct. By foreign vessels from any port whatever, 8½ ct. (See exceptions at Note A.)

Five bull hides are admitted among 100 hides without allowance, and 1 kil. is allowed for every bull hide above that number to the extent of 12; when more than 12 the allowance is conditional.

Hops, American, 1842	0 70 to 0 85		0 0 to nom.	

Duty on nett weight: by French vessels from any port whatever, 33 fr. 30 50 kil. By foreign vessels, 36 fr. 2½ ct. (See Note A.)

Commercial tare: on bales, 2 per cent.

Horse hair, per ½ kil.				
Buenos Ayres, mixed	0 75 to 0 95		0 0 to 0 0	
Russia	0 60 - 0 70		0 0 - none	

Duty on gross weight: by French vessels, 1 5/8 ct.; by foreign vessels, 1 97/200 ct. (See Note A.)

Commercial tare: real.

Indigo, per ½ kil.				
Bengal	0 0 to 0 0		0 0 to 0 0	
superfine violet and blue	11 25 - 11 50		0 0 - 0 0	
superfine violet & purple	10 25 - 10 50		0 0 - 0 0	
fine violet and purple	9 75 - 10 0		0 0 - 0 0	
good violet	9 25 - 9 50		0 0 - 0 0	
fine red	8 75 - 9 0		0 0 - 0 0	
good red	7 75 - 8 25		0 0 - 0 0	
middling violet	7 75 - 8 25		0 0 - 0 0	
ordinary to fine copper	5 75 - 7 25		0 0 - 0 0	
Kurpah	4 0 - 8 25		0 0 - 0 0	
Madras, ordinary to fine	4 0 - 7 0		0 0 - 0 0	
Manilla, ditto	4 0 - 8 0		0 0 - 0 0	
Guatemala, flores	7 50 - 7 75		0 0 - 0 0	
sobre saliente	6 25 - 7 0		0 0 - 0 0	
cortes	4 0 - 6 25		0 0 - 0 0	
Caraccas	4 0 - 7 50		0 0 - 0 0	

Duty on nett weight: by French vessels from places of growth out of Europe, 27½ ct.; from European ports, 1 fr. 65 ct.; from Manilla direct, 22 ct.; from elsewhere, 1 fr. 10 ct. By foreign vessels from any port whatever, 2 fr. 20 ct. — (See exceptions at Note A.)

Custom-house tare: on chests, casks, and serons, real or at the option of the importer, 12 per cent. on chests or casks, and 9 per cent. on serons.

Commercial tare: on casks or chests, real; on serons of 100 to 110 kil., 11 kil.; on do. of 85 to 99 kil., 10 kil.; on do. of 70 to 84 kil., 9 kil.; on do. of 50 to 69 kil., 7 kil.

Allowance: 1 kil. per chest.

Lac dye, per ½ kil.	0 70 to 3 25		0 0 to 0 0	

Duty on nett weight: by French vessels from the East Indies, 27½ ct.; from elsewhere, 41½ ct. By foreign vessels from any port whatever, 55 ct. — (See exceptions at Note A.)

Commercial and Custom-house tare: real.

Lead, American, per 50 kil.	23 50 to 23 62		0 0 to 0 0	
Spanish and British	24 0 - 24 50		0 0 - 0 0	

Duty on gross weight: by French vessels from any port whatever, 2 fr. 75 ct. By foreign vessels, 3 fr. 85 ct. — (See Note A.)

Pepper, light, per ½ kil.	0 59 to 0 61		0 0 to 0 0	
half heavy	0 64 - 0 66		0 0 - 0 0	

Duty on nett weight: by French vessels from the East Indies, and from countries W. of Cape Horn, 22 ct.; from elsewhere, 44 ct. By foreign vessels from any port whatever 57½ ct. — (See exceptions at Note A.)

Custom-house tare: on bags, 3 per cent.

Commercial tare: on single bags, 2 per cent.

Pimento, per ½ kil.				
Jamaica	0 0 to 0 0		0 35 to 0 36	
Tobago	0 0 - 0 0		0 0 - none	

Duty: by French vessels from the East Indies, and from countries W. of Cape Horn, 24½ ct.; from elsewhere, 49½ ct. By foreign vessels, 63½ ct. Tares: as for pepper.

Quercitron, per 50 kil.				
Philadelphia, first sort	13 0 to 13 50		0 0 to 0 0	
Baltimore	0 0 - 0 0		0 0 - none	

Duty on gross weight: by French vessels from European ports, 3 fr. 85 ct.; from other countries, 2 fr. 20 ct. By foreign vessels from any port whatever, 4 fr. 95 ct. — (See Note A.)

Commercial tare: 12 per cent.

Quicksilver, per ½ kil.	5 25 to 5 35		nom. - none	

Duty on gross weight: by French vessels from any port whatever, 11 ct. By foreign vessels, 12 1/10 ct. — (See Note A.)

Commercial tare: real.

Rice, Carolina, 1841, per 50 kil.	0 0 to 0 0		0 0 to 0 0	
Ditto 1842	20 0 - 25 0		0 0 - 0 0	

Duty on gross weight: by French vessels from places of growth out of Europe, 1 fr. 37½ ct.; by do. from places of growth in Europe, 2 fr. 20 ct.; by do. from European ports, or from Piedmont by land, 3 fr. 30 ct. By foreign vessels from any port whatever, or by land from any country whatever, Piedmont exceeded, 4 fr. 95 ct. (See Note A.)

Commercial tare: 12 per cent.

Saltpetre, East India, per 50 kil.	0 0 to 0 0		37 0 to 38 0	
Nitrate of soda	0 0 - 0 0		25 0 - 26 0	

Duty on gross weight: by French vessels from countries out of Europe, 8 fr. 25 ct.; from elsewhere, 11 fr. By foreign vessels from any port whatever, 13 fr. 75 ct. Nitrate of soda, by French vessels from countries out of Europe, 8 fr. 25 ct.; from elsewhere, 11 fr. By foreign vessels, 13 fr. 75 ct.

Commercial tare: 6 kil. per double bale of the customary form.

Sarsaparilla, per ½ kil.				
Mexico	0 0 to 0 0		0 70 to 0 75	
Brazil	0 0 - 0 0		1 50 - 1 60	

Duty on nett weight: by French vessels from European port, 55 ct.; from elsewhere, 41½ ct. By foreign vessels from any port whatever, 68½ ct. — (See exceptions at Note A.)

Custom-house tare: on bales, 2 per cent.

Commercial tare: on bales, according to broker's estimation; on naked bundles, the cords are deducted.

Skins, deer, each	1 50 to 5 0		0 0 to 0 0	

Duty per 50 kil. on gross weight: by French vessels from any port whatever, 55 ct. By foreign vessels, 60½ ct. (See Note A.)

Spelter, per 50 kil.	31 0 to 31 50		nom.	

Duty on gross weight: 5½ ct. per 50 kil.

Sugar, per 50 kil.				
Mart. and Guad. bonne 4e	0 0 to 0 0		30 25 to 0 0	
Havannah, white	0 0 - 0 0		0 0 - 0 0	
yellow	0 0 - 0 0		27 0 - 29 0	
St. Yago	0 0 - 0 0		0 0 - 0 0	
Porto Rico, raw bonne 4e	0 0 - 0 0		23 50 - 24 0	
Brazil, white	0 0 - 0 0		30 0 - 33 0	
muscovades	0 0 - 0 0		18 0 - 24 0	
Benares	none		0 0 - 0 0	
Manilla	none		0 0 - 0 0	

Duty on nett weight: raw sugars, not white, by French vessels from the East Indies, 33 fr.; from European ports, 41 fr. 25 ct.; from elsewhere, 55 fr. 75 ct. By foreign vessels, 46 fr. 75 ct. Raw sugars, white or clayed, without distinction of quality or mode of fabrication, by French vessels from the East Indies, 44 fr.; from European ports, 52 fr. 25 ct.; from elsewhere, 46 fr. 75 ct. By foreign vessels, 57 fr. 75 ct. (See exceptions at Note A.)

Custom-house tare: on chests, 12 per cent.; on single bags, 2 per cent; on double bags, 4 per cent.

Commercial tare: Havannah and St. Yago chests, 13 per cent.; on bags under 75 kil., 5 kil. per bag; ditto of 75 kil. and upwards, 6 kil.

	Duty paid.	In Bond.
	Fr. ct. Fr. ct.	*Fr. ct. Fr. ct.*
Tallow, Russia, per 50 kil.	57 50 to 58 50	0 0 to 0 0
American - - -	51 0 to 58 25	0 0 - 0 0

Duty on gross weight: by French vessels from any port whatever, 5 fr. 50 ct. By foreign vessels, 7 fr. 26 ct. (See Note A.)

Commercial tare, 12 per cent.

Terra japonica, per ½ kil.		
brown - - -	0 26 to 0 32	0 0 to 0 0
yellow - - -	0 20 - 0 22	none

Duty on gross weight: by French vessels from the East Indies, 5 1/4 ct.; from European ports, 19 4/5 ct.; from elsewhere, 12 1/10 ct. By foreign vessels, 27½ ct.—(See note A.)

Commercial tare: real.

Teas, per ½ kil.		
Imperial - - -	4 15 to 5 50	2 75 to 3 0
Gunpowder - - -	4 40 - 5 50	2 75 - 3 0
Hyson - - -	4 15 - 4 85	2 50 - 3 0
Young Hyson - - -	4 25 - 0 0	0 0 - 0 8
Hyson skin - - -	3 50 - 4 0	1 10 - 1 80
Pekoe - - -	4 15 - 12 0	3 85 - 9 0
Souchong - - -	3 40 - 4 0	2 0 - 0 0
Pouchong - - -	3 90 - 4 50	2 50 - 3 0

Duty on nett weight: by French vessels from the East Indies, 82½ ct.; from China, 66 ct.; from elsewhere, 2 fr. 75 ct. By foreign vessels from any port whatever, 3 fr. 30 ct.—(See Note A.)

Custom-house tare: real.

Commercial tare: on imperial, gunpowder, young hyson, and pekoe, 10 kil. per chest: on hyson and hyson skin, 9 kil.: on souchong, 13 kil.: on ½ chests and boxes, conventional.

Tin, Straits and Banca, per ½ kil. - - -	0 75 to 0 76	0 0 to 0 0
British - - -	0 73 - 0 74	0 0 - 0 0
South American - - -	0 55 - 0 60	0 0 - nom.

Duty on gross weight: by French vessels from the East Indies, 27½ ct.; from elsewhere, 1 fr. 10 ct. By foreign vessels from any port whatever, 2 fr. 20 ct. per 50 kil.—(See exceptions at Note A.)

Commercial tare: on casks, real.

Whalebone, per ½ kil.		
northwest - - -	0 0 to 0 0	none
southern, Amer. fishery -	2 57 - 2 70	0 0 to 0 0

Duty on gross weight: by French vessels from any port whatever, 16½ ct. By foreign vessels, 19½ ct.

Commercial tare: real.

Allowance: 2 per cent. on southern bone.

Woods, per 50 kil.		
Logwood, Campeachy -	10 75 to 11 25	0 0 to 0 0
Honduras - - -	7 75 - 8 0	none

	Duty paid.	In Bond.
	Fr. ct. Fr. ct.	*Fr. ct. Fr. ct.*
St. Domingo - -	7 30 - 7 50	0 0 - 0 0
Fustic, Cuba - -	8 25 - 9 50	0 0 - 0 0
Carthagena - -	5 0 - 6 0	0 0 - 0 0
Santa Martha - -	18 0 - 19 0	0 0 - 0 0
Pernambuco - -	26 0 - 28 0	0 0 - 0 0

Duty on gross weight: Brazil, by French vessels from European ports, 4 fr. 40 ct.; from elsewhere, 2 fr. 75 ct. By foreign vessels, 6 fr. 60 ct.

Other dye-woods: by French vessels from the French colonies, 44 ct.; from European ports, 1 fr. 65 ct.; from elsewhere, 82½ ct. By foreign vessels, 3 fr. 30 ct.—(See Note A.)

Allowance: 1 to 2 per cent.

Explanatory Remarks.

The above duties include the surtax of 10 per cent.: the Custom-house admits the real tare whenever the importer desires it.

NOTE A.—The treaties of reciprocity entered into with the countries hereafter mentioned, introduce the following deviations from the above rates of duty.

United States.—The produce of the United States, except that of the fisheries, direct from the United States to United States vessels, pays the same duty as if imported by French vessels from the United States.

Brazils and Mexico.—The produce of the Brazils and Mexico, imported direct in national vessels, enjoys also the above privilege.

England.—The produce of Africa, Asia, or America, imported from any country whatever in British vessels, or from any port of the British dominions in Europe, either in French or foreign vessels, can only be admitted in bond for re-exportation.

The same regulation is applicable to all European produce (except that of Great Britain and its possessions in Europe) when imported by British vessels from other ports than those of Great Britain, or its possessions in Europe.

The weight of 50 kil. is equal to 110¼ lbs. English, or 100 lbs. English are equal to 45 3/5 (100 kil., and the cwt. equal to 50 7/20 kil.

Credit.—4½ months, except on coffee, pimento, pepper, quicksilver, and clayed sugars, which are sold at 3½ months, and wheat at 2½ ditto.

China and places beyond the Sunda Islands.—All natural produce, sugar excepted, imported direct, by French vessels, from countries situated beyond the Straits and the Sunda Islands, either to the north of the third degree of northern latitude, or to the east of the 106th degree of eastern longitude is admitted at 1-5th of the lowest rates of duty of the tariff, the French colonial duties alone excepted.

We avail ourselves of this opportunity to lay before our readers the following details with respect to the

Trade and Navigation of France in 1841.

VI. Account of the Exports from France in 1841, specifying the Value of those sent to each Country, and distinguishing between General and Special Commerce.—(*Administration des Douanes*, 1841, p. 7.)

Countries to which exported.	General Commerce.			Special Commerce.			Duties paid.	Money exported.
	Raw Products.	Manufactured Products.	Total.	Raw Products.	Manufactured Products.	Total.		
Europe.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Russia - - -	6,161,398	9,328,980	15,490,378	5,744,745	8,178,883	11,921,178	21,311	2,445,000
Sweden - - -	604,366	871,172	1,475,538	504,588	871,138	1,375,726	1,786	—
Norway - - -	1,457,309	562,576	2,019,875	1,353,206	543,590	1,896,796	8,427	—
Denmark - - -	1,252,115	968,934	2,201,049	1,170,910	873,564	2,044,474	3,603	—
German Commercial Association - -	12,790,034	38,534,764	51,324,798	10,880,192	37,108,053	47,997,245	93,185	18,806,265
Low Countries - -	10,345,131	10,936,978	21,282,109	7,744,555	10,512,149	18,256,482	50,669	88,200
Belgium - - -	20,151,813	33,406,409	53,558,222	15,578,511	30,893,390	45,845,701	169,574	715,163
Hanseatic Towns - -	12,458,591	9,554,079	21,812,670	8,715,901	8,570,001	17,285,902	28,289	2,770,000
Hanover - - -	91,071	110,314	201,385	93,120	110,314	203,434	212	—
Mecklenburg - -	416,129	35,949	452,078	411,907	53,519	480,226	3,091	—
England (C. K., Gibraltar, Malta, Ionian Isles) -	97,984,118	65,910,495	163,892,613	19,709,677	57,781,255	107,490,932	605,879	20,876,885
Portugal (incl. Madeira, Cape de Verde Islands, and Azores) - -	405,971	3,137,087	3,543,058	188,176	2,268,752	2,456,928	2,499	—
Spain (incl. the Canary and Balearic Islands - -	16,068,609	84,825,297	100,893,906	10,792,642	68,202,078	79,094,720	104,475	2,551,510
Austria (incl. Lombardy) -	3,112,172	1,981,628	5,127,100	955,908	1,725,829	2,677,737	7,513	2,100
Sardinia (island & cont.) -	10,562,047	42,270,166	62,112,513	7,813,274	31,091,258	38,909,532	53,136	7,307,110
Two Sicilies - -	3,659,320	9,165,480	12,824,800	1,221,526	5,933,585	7,155,111	6,972	500,000
Tuscany - - -	5,522,421	13,627,343	17,149,764	1,476,148	9,790,288	11,225,436	14,709	822,000
Roman States, Lucca -	1,161,816	1,954,994	3,119,810	233,007	1,505,751	1,685,758	1,931	—
Switzerland - -	37,016,331	52,349,544	89,379,878	10,895,180	28,254,229	39,147,409	72,681	10,776,910
Greece (incl. the Islands in the Archipelago) - -	855,140	1,364,026	2,219,166	578,311	1,254,216	1,832,527	1,328	—
Turkey (incl. the Islands in the Archipelago) - -	3,342,596	13,301,939	16,644,535	1,669,229	10,166,513	11,835,742	5,755	189,600
Africa.								
Egypt - - -	1,211,227	4,111,395	5,355,622	115,907	3,490,480	3,954,387	1,876	2,246,200
States of Barbary and Morocco - - -	1,731,038	2,530,164	4,261,202	376,857	2,023,849	2,360,706	1,022	411,000
Algiers - - -	17,129,031	22,065,281	39,194,312	10,035,220	19,595,226	29,630,446	39,115	635,000
W. coast (from Morocco to the C. of Good Hope, not incl. Senegal) -	259,196	960,082	1,219,278	192,853	377,842	570,695	614	—
English possess. (C. of G. Hope, & I. Mauritius) -	3,637,880	2,783,267	6,421,147	3,169,536	2,535,913	5,705,449	7,223	122,100
Other territories (incl. the Isle of Madagascar) -	37,630	403,713	441,352	30,578	359,387	390,415	903	48,000
Asia and Oceanica.								
India (English) and New South Wales - -	2,219,357	4,495,033	6,744,390	2,121,477	3,920,017	6,041,494	6,757	71,800
Ditto, Dutch (Java, Sumatra, &c.) - -	503,415	515,648	818,063	279,680	467,741	747,421	1,034	230,000
Philippines - -	285	21,128	21,413	251	21,128	21,362	10	—
China, Cochin China, and Oceanica - - -	24,064	37,139	61,201	23,906	37,139	61,045	20	—

Table VI. — *continued.*

Countries to which exported.	General Commerce. Raw Products.	General Commerce. Manufactured Products.	General Commerce. Total.	Special Commerce. Raw Products.	Special Commerce. Manufactured Products.	Special Commerce. Total.	Duties paid.	Money exported.
AMERICA.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
United States	30,845,089	152,716,926	183,562,015	16,720,954	104,512,645	121,233,599	64,521	659,200
Hayti	655,020	3,018,191	3,673,211	404,971	2,675,960	3,080,931	2,105	45,000
Possessions. English (Canada, Antilles, Guiana, &c.)	206,698	171,004	377,702	151,417	168,922	320,339	271	—
Possessions. Spanish (Cuba, Porto Rico, &c.)	1,649,916	13,958,162	15,608,078	1,367,101	7,484,589	8,851,690	7,194	43,200
Possessions. Danish (St. Thomas)	1,086,304	4,559,020	5,645,324	872,389	3,982,814	4,855,203	3,987	—
Possessions. Dutch, St. Eustache, Curaçoa, and Guiana	—	18,009	18,009	—	1,092	1,092	—	—
Brazil	4,527,283	28,148,831	32,676,114	3,778,974	16,521,251	20,300,225	22,695	—
Mexico	1,248,721	11,103,780	12,652,501	850,799	9,231,377	10,082,176	5,707	—
Guatemala	2,930	132,267	135,197	44	180,652	180,696	102	—
Venezuela	380,562	2,733,535	3,114,097	323,685	2,315,262	2,638,947	1,984	66,800
New Granada	161,737	399,085	560,822	99,601	195,871	295,472	309	4,200
Peru (Lower Peru)	201,418	2,161,926	2,363,344	156,063	1,221,138	1,377,201	977	—
Bolivia (Upper Peru)	6,901	12,932	19,833	6,901	12,932	19,833	36	—
Chili	1,517,508	12,633,188	14,150,696	1,221,173	11,302,776	12,523,919	6,346	—
Rio de la Plata (B. Ayres)	811,697	2,631,467	3,443,164	714,175	2,292,284	3,006,459	3,347	—
Uruguay (Montevideo)	2,271,633	7,305,589	9,580,222	1,850,185	6,797,716	8,647,901	7,417	21,000
Texas	22,658	43,582	66,240	20,195	43,582	63,777	176	—
Equator	435	86,384	86,819	—	86,384	86,384	—	—
FRENCH COLONIES.								
Guadaloupe	5,098,237	12,279,175	17,377,112	5,078,405	12,278,452	17,356,857	19	42,800
Martinique	5,539,925	12,990,478	18,530,403	5,523,050	12,992,141	18,515,191	10	81,810
Bourbon	3,778,264	12,234,113	16,012,574	3,735,889	12,914,829	15,978,718	367	1,018,700
Senegal	1,328,859	4,965,667	6,294,526	1,006,757	2,566,935	3,573,692	1	—
Cayenne	779,008	1,727,905	2,507,513	717,483	1,719,602	2,437,085	—	—
French possessions in India	261,801	442,238	704,059	242,058	394,155	636,513	—	—
St. Pierre, Miquelon, and French fisheries	1,926,234	3,059,385	4,985,619	1,885,027	2,518,077	4,403,104	58	4,800
Totals	343,780,159	721,577,444	1,065,357,603	198,331,743	562,321,818	760,653,561	1,422,479	72,892,083

NOTE. — *General commerce*, as applied to imports, means all articles imported by sea or land, without inquiring whether they are intended to be consumed, re-exported, or warehoused. *Special commerce*, as applied to imports, means such imported articles as have been admitted for home consumption, under payment of the customs duties.

The same distinction obtains in relation to exports. *General commerce*, in this case, means all exported articles, without regard to their origin; while *special commerce* means such only as are produced by the soil or manufactures of France.

VII.—Account of the Imports into France in 1841, specifying the Value of the Imports from each Country; distinguishing between General and Special Commerce. — (*Administration des Douanes*, 1841, p. 6.)

Countries from which imported.	General Commerce. Materials of Manufacture.	General Commerce. For Consumption. Raw.	General Commerce. For Consumption. Manufactured.	General Commerce. Total.	Special Commerce. Materials of Manufacture.	Special Commerce. For Consumption. Raw.	Special Commerce. For Consumption. Manufactured.	Special Commerce. Total.	Duties collected.	Money imported.
EUROPE.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Russia	14,354,501	56,932,675	240,144	52,107,123	13,687,860	21,279,804	119,635	35,087,299	2,224,307	—
Sweden	3,928,094	40,998	28,959	3,998,051	4,038,541	2,775	15,235	4,056,551	829,529	—
Norway	11,958,105	77,976	39,766	12,076,145	11,995,478	22,517	38,923	12,056,918	240,489	—
Denmark	226,906	691,976	8,779	950,661	201,652	681,622	622	883,886	42,758	—
German Commercial Association	52,781,887	9,506,165	20,270,427	82,561,779	38,205,847	8,467,672	5,480,674	52,154,193	7,127,679	11,062,677
Low Countries	15,555,717	4,185,558	12,235,146	32,274,701	13,856,559	4,117,944	760,569	19,095,072	3,623,798	1,681,796
Belgium	59,614,503	15,351,039	26,690,171	101,655,553	57,899,590	15,170,635	16,845,566	89,915,391	10,020,391	32,242,286
Hanseatic Towns	5,010,181	1,159,101	2,515,284	8,714,566	4,482,849	1,087,067	274,010	5,843,926	438,687	110,450
Hanover	—	—	—	—	—	—	—	—	—	—
Mecklenburg	6,558	88,949	—	95,507	6,558	88,949	—	95,507	1,319	—
England (U. Kingdom, Gibraltar, Malta, Ionian Isles)	84,011,770	9,170,901	50,865,921	144,048,592	77,784,894	7,939,894	16,183,086	101,907,874	11,288,796	65,402,822
Portugal (in. Madeira, C. de Verde Islands, and Azores)	1,257,259	499,947	31,305	1,788,511	755,175	415,541	12,252	1,182,968	201,761	68,700
Spain (incl. the Canary and Balearic Islands)	27,945,430	4,589,511	4,627,748	37,162,689	22,789,727	3,751,173	1,534,144	28,083,044	[illegible]7,773	9,170,343
Austria (inc. Lombardy)	9,624,645	445,335	380,292	10,450,272	9,406,761	367,739	102,054	9,876,554	[illegible]6,059	900
Sardinia (island and continent)	92,593,298	10,196,040	3,211,902	106,001,240	73,655,094	7,627,247	937,407	82,199,748	5,061,874	11,148,570
Two Sicilies	16,310,127	3,911,471	253,380	20,475,478	11,802,355	2,107,971	135,110	14,015,436	2,062,585	1,670,000
Tuscany	9,930,429	978,860	6,161,894	17,071,183	8,610,906	669,001	3,955,148	13,235,055	1,661,957	507,700
Roman States, Lucca	2,515,228	1,718,431	102,428	4,336,087	2,382,360	432,490	76,282	2,891,132	356,959	18,841
Switzerland	24,761,705	2,950,075	54,875,963	82,590,741	13,107,508	2,612,126	6,199,073	22,218,707	1,529,101	5,920,632
Greece (incl. the Islands in the Archipelago)	664,176	4,026	3,623	671,825	407,127	28,278	2,033	437,438	129,613	586,500
Turkey (incl. the islands in the Archipelago)	34,099,524	6,106,658	324,744	40,530,926	26,087,700	2,451,596	45,951	28,585,247	3,954,217	1,613,790
AFRICA.										
Egypt	5,263,797	3,682,082	12,785	8,958,664	2,895,739	1,891,081	6,611	4,793,431	432,185	146,800
States of Barbary and Morocco	7,046,964	83,337	107,536	7,237,837	5,090,188	80,812	21,011	5,192,011	954,126	643,300
Algiers	2,271,491	144,064	287,879	2,703,434	1,680,187	94,781	43,818	1,818,789	117,430	119,280
W. coast (from Morocco to the C. of G. Hope, not incl. Senegal)	759,[illegible]	34,096	18,207	791,553	719,289	27,748	5,180	752,217	73,600	268,400
English possessions (C. of G. Hope, and Isle Mauritius,	69,[illegible]	4,986	849	75,612	81,151	41,021	852	123,024	21,568	—
Other territories (in. the Isle of Madagascar)	336,286	148,885	3,502	488,673	150,435	124,437	1,516	276,388	148,924	—
ASIA AND OCEANICA.										
India (English) and New South Wales	24,748,709	748,385	159,334	25,656,428	20,001,738	1,122,030	97,689	21,221,457	1,238,135	1,000
Ditto, Dutch (Java, Sumatra, &c.)	968,942	4,358,443	27,500	5,354,885	914,070	2,977,479	25,413	3,916,962	1,833,876	—
Philippines	341,277	362,710	1,255,769	1,959,756	347,006	353,402	193,920	874,328	259,293	—
China, Cochin China, and Oceanica	66,209	120,225	40,087	226,521	86,991	1,181,768	120,049	1,391,811	323,048	—

Table VII. — *continued.*

Countries from which imported.	General Commerce.				Special Commerce.				Duties collected.	Money exported.
	Materials of Manufacture.	For Consumption: Raw.	For Consumption: Manufactured.	Total.	Materials of Manufacture.	For Consumption. Raw.	For Consumption. Manufactured.	Total.		
AMERICA.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
United States	152,412,308	3,815,583	811,800	157,070,691	119,013,341	2,059,597	388,016	121,490,954	12,521,997	30,739,535
Hayti	3,448,261	3,598,509	18,700	6,865,470	2,229,359	2,918,110	8,757	5,156,226	4,218,187	115,560
Possessions: English (Canada, W. Indies, Guiana)	32,552	1,830	1,626	36,008	74,467	31,465	1,613	110,545	45,446	—
Possessions: Spanish (Cuba, Porto Rico, &c.)	891,020	12,331,626	1,119,811	14,372,196	857,786	5,687,824	1,341,981	7,887,591	8,338,515	213,750
Possessions: Danish (S. Thomas)	197,011	955,330	48,049	1,200,393	135,170	300,733	2,488	438,391	311,021	47,725
Possessions: Dutch (S. Eustache) Curaçoa, & Guiana)	61	—	910	971	64	—	910	974	32	—
Brazil	5,823,390	6,545,650	35,011	12,404,051	4,817,372	3,152,161	23,288	7,992,821	3,878,879	224,136
Mexico	4,641,401	1,292,382	12,732	5,946,518	3,961,060	490,244	7,139	4,458,443	211,883	2,929,740
Guatemala	176,593	119	22,800	199,592	654,013	969	22,341	675,323	27,275	—
Venezuela	1,646,644	2,419,618	6,004	4,072,266	1,013,491	1,173,097	1,111	2,187,702	1,967,350	14,415
New Granada	1,029,272	5,180	4,302	1,038,694	547,370	27,203	2,875	557,448	59,156	17,850
Peru (Lower Peru)	1,027,880	911,310	15,267	1,954,487	1,251,918	120,872	2,122	1,374,912	150,689	651,900
Bolivia (Upper Peru)	19	—	9	28	19	66	9	94	44	—
Chili	3,669,376	489,907	23,782	4,183,065	3,407,660	288,669	9,148	3,705,477	427,365	5,872,248
Rio de la Plata (Buenos Ayres)	6,149,124	491	14,797	6,164,412	4,565,111	611	3,666	4,569,388	271,196	—
Uruguay (Montevideo)	9,233,301	5,467	35,408	9,274,176	8,122,588	327	5,251	8,128,166	208,810	16,160
Texas	—	—	—	—	—	—	—	—	—	—
Equator	—	—	—	—	113,260	26,579	—	139,839	30,854	—
FRENCH COLONIES.										
Guadaloupe	568,333	19,858,563	18,484	20,445,380	387,115	15,193,167	11,238	15,591,520	12,175,814	1,102,544
Martinique	996,739	13,731,781	25,660	16,664,125	760,048	13,765,761	18,212	14,544,021	11,046,875	1 715,778
Bourbon	342,194	21,631,805	71,412	22,045,411	175,495	20,728,867	36,351	20,940,713	12,076,242	72,790
Senegal	3,158,675	251,237	11,588	3,721,500	2,884,038	216,110	10,954	3,111,102	180,155	553,151
Cayenne	1,445,387	1,975,971	16,886	3,438,244	1,025,479	887,034	16,754	1,927,267	665,738	250,780
French possns. in India	855,985	140,866	2,017,928	3,014,779	815,996	178,341	5,870	1,000,087	85,483	—
St. Pierre, Miquelon, & French fisheries	6,762,387	7,133,982	26,209	13,922,578	6,709,315	6,852,593	21,780	13,583,598	21,982	—
Épaves et Sauvetages	180,965	35,805	178,304	395,074	109,781	38,590	123,491	271,863	39,510	—
Totals	714,517,790	217,557,370	189,349,056	1,121,424,216	587,249,257	162,009,473	55,299,201	804,557,931	129,679,125	186,080,851

VIII. — Account showing the Total Number of Ships, with their Tonnage and Crews, entering Inwards in the different Ports of France in 1841, specifying the Countries whence they came, and distinguishing between French and Foreign Ships. — (*Administration des Douanes for* 1841, p. 588.)

Countries.	French Ships entered.			Foreign Ships entered. Carrying the Flags of the Country whence they came.			Foreign Ships entered. Other Flags.			Foreign Ships entered. Total.			Total of French and Foreign Ships.		
EUROPE.	*Ships.*	*Tons.*	*Crew.*	*Ships.*	*Tons.*	*Crew.*	*Ships.*	*Tons.*	*Crew.*	*Ships.*	*Tons.*	*Crew.*	*Ships.*	*Tons.*	*Crew.*
Russia	83	12,194	958	81	26,684	1,118	381	82,442	4,567	462	109,126	5,685	545	121,320	6,643
Sweden	22	2,304	156	120	23,730	1,297	117	21,041	1,109	237	44,771	2,406	259	47,075	2,562
Norway	11	964	65	741	115,799	6,314	54	6,927	383	795	122,726	6,697	806	123,690	6,762
Denmark	—	—	—	14	1,320	90	8	805	53	22	2,125	143	22	2,125	143
Prussia	5	467	39	191	43,755	2,018	102	11,540	726	293	55,295	2,744	298	55,762	2,783
Low Countries	98	10,741	1,353	101	9,044	644	11	1,429	83	112	10,473	727	210	21,214	2,080
Belgium	65	4,865	370	26	2,470	165	21	2,592	117	47	5,062	312	112	9,927	682
Hanseatic Towns	103	13,788	1,801	15	1,701	103	31	3,051	187	46	4,752	290	149	18,540	2,091
Hanover	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mecklenburg	—	—	—	2	148	12	1	200	10	3	348	22	3	348	22
England (Gibraltar, Malta, Ionian Isles)	2,783	163,341	18,720	5,216	169,195	45,208	59	9,645	543	5,275	478,840	43,751	8,058	642,181	62,471
Portugal (Madeira, C. de Verde Islands, Azores)	48	5,778	370	15	1,358	129	7	1,014	63	22	2,372	192	70	8,150	562
Spain (the Canaries)	459	39,109	4,192	851	31,442	6,899	107	14,929	1,081	958	46,371	7,983	1,417	85,780	12,175
Austria	20	3,679	210	114	36,625	1,610	36	6,318	334	180	42,945	1,944	200	46,624	2,154
Sardinia	932	45,285	5,755	527	25,265	4,006	57	5,191	502	584	30,456	4,508	1,516	75,741	10,263
Two Sicilies	96	14,011	1,724	283	42,835	3,244	92	13,662	2,175	375	56,497	5,419	471	70,508	7,143
Tuscany	321	13,801	2,283	92	5,608	677	121	9,515	1,152	213	15,123	1,829	534	28,927	4,112
Roman States, Lucca, Monaco	55	5,400	407	156	7,934	1,012	146	10,854	1,148	302	18,788	2,160	357	24,188	2,567
Greece and its islands in the Archipelago	6	589	48	1	383	18	—	—	—	1	383	18	7	972	66
Turkey and Islands in the Archipelago	175	40,571	2,622	3	531	37	100	19,296	1,179	103	19,827	1,216	278	60,398	3,838
AFRICA.															
Egypt	36	6,673	401	—	—	—	41	10,327	501	41	10,327	501	77	17,000	902
States of Barbary (Tunis, Tripoli, and Morocco)	29	2,481	199	2	119	19	45	5,208	437	47	5,327	456	76	7,808	655
Algiers	581	51,174	4,222	—	—	—	197	38,764	2,133	197	38,764	2,133	778	89,938	6,355
W. coast (from Morocco to the C. of G. Hope)	5	1,177	79	1	134	9	—	—	—	1	134	9	6	1,311	79
English possessions, C. of G. Hope, Mauritius	1	193	12	—	—	—	—	—	—	—	—	—	1	193	12
Other countries (inc. Madagascar)	6	1,150	70	—	—	—	—	—	—	—	—	—	6	1,150	79
ASIA.															
India, English possns.	20	5,682	325	—	—	—	1	276	18	1	276	18	21	5,958	343
Dutch	17	5,013	281	—	—	—	—	—	—	—	—	—	17	5,013	281
Philippines	1	310	20	—	—	—	—	—	—	—	—	—	1	310	20
China, Cochin China, Oceanica Islands	2	671	39	—	—	—	—	—	—	—	—	—	2	671	39
AMERICA.															
United States	49	14,220	717	337	150,505	5,590	2	489	23	339	150,994	5,613	388	165,214	6,330
Hayti	65	13,480	767	—	—	—	—	—	—	—	—	—	65	13,480	767
English possessions	—	—	—	7	2,998	122	—	—	—	7	2,998	122	7	2,998	122
Spanish	75	16,866	966	47	5,686	508	6	1,032	56	53	6,718	564	128	23,584	1,530
Danish	9	2,026	117	1	264	18	—	—	—	1	264	18	10	2,290	135
Dutch	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Swedish	1	189	13	—	—	—	—	—	—	—	—	—	1	189	13
Brazil	50	10,679	629	—	—	—	5	907	62	5	907	62	55	11,586	691
Mexico	29	5,142	352	—	—	—	—	—	—	—	—	—	29	5,142	352
Guatemala	1	198	11	—	—	—	—	—	—	—	—	—	1	198	11

TABLE VIII. —*continued.*

Countries.	French Ships entered.			Foreign Ships entered.									Total of French and Foreign Ships.		
				Carrying the Flags of the Country whence they came.			Other Flags.			Total.					
	Ships.	*Tonn.*	*Crew.*	*Ships.*	*Tonn.*	*Crew.*	*Ships.*	*Tonn.*	*Crew.*	*Ships.*	*Tonn.*	*Crew.*	*Ships.*	*Tonn.*	*Crew.*
Venezuela	25	3,858	289	5	997	56	—	—	—	5	997	56	30	4,855	345
New Granada	18	3,367	207	—	—	—	2	303	21	2	303	21	20	3,670	228
Peru (Lower Peru)	3	755	51	—	—	—	—	—	—	—	—	—	3	775	51
Bolivia (Higher Peru)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chili	11	2,670	169	—	—	—	—	—	—	—	—	—	11	2,670	169
Rio de la Plata (Buenos Ayres)	27	4,891	303	—	—	—	3	620	33	3	620	33	30	5,511	336
Uruguay (Montevideo)	32	6,230	389	3	814	39	8	1,667	96	11	2,481	135	43	8,711	524
Texas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Equator	2	449	32	—	—	—	—	—	—	—	—	—	2	499	32
FRENCH COLONIES.															
Guadeloupe	145	32,323	1,822	—	—	—	—	—	—	—	—	—	145	32,323	1,822
Martinique	122	28,521	1,525	—	—	—	—	—	—	—	—	—	122	28,521	1,525
Bourbon	80	23,220	1,329	—	—	—	—	—	—	—	—	—	80	23,220	1,329
Senegal	37	3,778	331	—	—	—	—	—	—	—	—	—	37	3,778	331
Cayenne	26	4,345	278	—	—	—	—	—	—	—	—	—	26	4,345	278
French possns. in India	2	415	21	—	—	—	—	—	—	—	—	—	2	415	21
Fishery, cod	449	54,064	9,239	—	—	—	—	—	—	—	—	—	449	54,064	9,239
whale	27	10,549	799	—	—	—	—	—	—	—	—	—	27	10,549	799
Totals	7,255	693,449	67,083	8,982	1,007,344	78,962	1,761	280,044	18,825	10,743	1,287,388	97,787	18,008	1,980,837	164,870

IX. Account of the Value of the different Descriptions of Goods imported into and exported from France in 1841, specifying the Way in which they were imported and exported; the Value of the imported Goods entered for Home Consumption, with the Duty thereon, and on the Exports. — (*Administration des Douanes*, 1841, p. 72.)

IMPORTS. Description of Merchandise.	Goods imported.				Goods entered for Consumption.	
	By Sea.		By Land.	Total.	Value.	Duty received.
	Fr. Ships.	For. Ships.				
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Live animals	321,353	1,271,542	21,054,310	22,647,205	22,599,145	3,224,015
Products and parts of animals	55,550,532	40,910,659	143,270,735	239,521,926	173,418,181	13,135,743
Fish	14,991,600	2,976,044	1,247,395	19,215,039	18,929,300	288,066
Animal substances belonging to medicine and perfumery	939,637	560,117	391,792	1,891,726	1,462,952	144,081
Hard substances fit for cutting	2,063,871	778,266	231,423	3,073,560	3,121,594	142,789
Farinaceous articles	7,160,267	24,063,573	1,371,223	32,895,063	9,013,230	1,760,477
Fruits	8,502,612	41,872,797	11,791,825	62,170,234	58,049,664	2,732,780
Colonial products	98,737,591	31,682,964	1,359,547	131,760,102	101,764,082	58,570,553
Vegetable juices (gums, &c.)	28,471,522	3,693,107	691,355	32,858,984	29,186,081	9,257,852
Vegetable matters suitable for medicine	2,170,371	565,263	463,193	2,996,827	2,160,270	265,388
Common wood	1,131,139	25,588,188	14,786,749	41,506,086	38,386,836	875,228
Fine wood	7,720,770	587,757	63,315	8,371,842	6,503,204	1,215,161
Fruits, stalks, and filaments, as cotton, flax, raw silk, &c.	19,042,900	116,628,941	3,250,102	138,921,943	107,496,856	12,758,581
Tanning and dye stuffs	2,029,134	1,367,126	537,033	3,933,293	3,005,734	166,251
Various leguminous	109,281	178,103	1,989,806	2,277,190	2,386,532	605,063
Stones and minerals	2,944,246	7,025,611	22,219,688	32,217,545	31,222,191	4,547,998
Metals	22,151,393	26,566,376	12,473,943	61,145,582	57,085,336	4,733,691
Chemical products	4,007,720	3,106,060	535,855	7,649,635	6,527,845	1,821,206
Prepared dye stuffs	34,780,526	1,626,223	486,138	36,892,887	27,969,036	1,288,494
Colours	125,153	353,333	350,451	828,901	636,009	92,549
Different compounds (perfumery, soap, &c.)	998,383	1,555,754	4,019,086	6,573,223	1,628,209	22,873
Liquids (wines, brandy, &c.)	897,735	935,985	207,029	2,040,749	1,281,259	462,758
Glass and pottery	278,874	353,527	626,850	1,259,251	650,469	264,695
Thread	258,751	41,328,263	3,353,093	44,820,192	43,325,993	3,731,681
Woven goods and felt	17,454,242	44,809,144	77,763,316	140,026,702	29,766,178	3,868,817
Paper	398,516	816,097	900,000	2,114,613	1,257,521	79,132
Various prepared substances	6,626,152	14,508,736	20,276,728	41,411,616	25,498,275	3,416,871
Total	340,523,125	435,035,957	345,865,134	1,121,424,216	801,557,931	129,679,125

EXPORTS. Description of Merchandise.	French and Foreign Goods.				French Goods.	
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Live animals	1,912,444	1,421,224	8,793,366	12,127,034	12,075,190	114,202
Products and parts of animals	17,393,022	54,086,370	8,406,002	79,885,394	19,709,315	[illegible]595
Fish	2,070,073	453,966	443,671	2,967,710	2,638,359	[illegible]468
Animal substances belonging to medicine and perfumery	87,747	182,705	213,186	483,638	386,197	364
Hard substances fit for cutting	31,431	38,357	23,116	92,904	26,465	4,437
Farinaceous articles	17,967,959	15,651,418	2,163,276	35,782,653	19,329,889	269,486
Fruits	3,020,591	6,539,917	2,360,707	11,921,215	9,238,605	63,424
Colonial products	8,146,064	8,315,538	7,532,367	23,993,969	1,563,825	7,960
Vegetable juices (gums, &c.)	6,030,216	9,517,146	3,003,458	18,550,820	9,024,704	14,018
Vegetable matters suitable for medicine	609,751	1,232,133	344,996	2,185,880	906,339	1,134
Common wood	1,426,209	2,990,488	2,737,302	6,993,999	4,086,081	48,455
Fine wood	741,606	640,060	212,469	1,594,135	54,555	570
Fruits, stalks, and filaments, as cotton, flax, raw silk, &c.	2,828,131	4,035,099	17,048,267	23,911,497	2,711,542	6,216
Tanning and dye stuffs	572,280	9,880,090	4,476,011	14,928,381	13,819,673	92,613
Various leguminous	1,045,477	2,581,425	2,101,885	5,728,787	5,670,192	176,054
Stones and minerals	1,985,004	1,942,843	3,176,006	7,103,853	6,445,595	68,554
Metals	2,742,369	3,481,639	4,752,818	10,976,826	6,000,236	3,018
Chemical products	2,856,031	5,581,813	2,865,918	11,303,762	9,980,136	27,018
Prepared dye stuffs	2,322,364	1,180,159	4,287,710	7,790,233	1,147,553	540
Colours	1,211,023	1,046,504	2,613,972	4,871,499	4,762,221	1,877
Different compounds (perfumery, soap, compound medicines, &c.)	15,050,540	8,773,050	9,079,497	32,903,087	27,131,225	7,662
Liquids (wines, brandy, &c.)	26,820,621	42,356,418	6,797,580	75,974,559	75,285,618	48,383
Glass and pottery	7,021,737	6,679,511	5,823,362	18,124,610	17,510,136	51,751
Thread	795,828	889,435	4,471,260	6,156,523	4,268,761	754
Woven goods and felt	124,596,001	225,014,374	142,981,300	492,591,675	367,846,729	17,739
Paper	9,694,462	6,578,959	5,615,890	21,889,311	21,169,433	17,083
Various prepared substances	52,875,101	46,956,945	34,772,603	134,584,649	117,954,989	121,426
Total	312,302,082	467,957,586	285,097,935	1,065,357,603	760,653,561	1,422,479

X. — Account of the Quantities and declared Values of the Principal Articles exported from the United Kingdom to France, and of the Total declared Value of the Exports to the same, since 1814.

Years.	Coals, Cinders, and Culm.		Copper smelted in the U. Kingdom from Foreign Ore.		Cotton Manufactures. Calicoes, Muslins, Fustians, &c.		Lace and Patent Net.		Hosiery and Small Wares.	Hardware and Cutlery.		Linen Manufactures. Entered by the Yard.		Thread, Tapes, and Small Wares.	Linen Yarn.		Machinery. Mills and Mill-work.	Steam Engines.	Not specifically described.	Total declared Value of British Produce and Manufactures, exported from U. Kingdom to France.
	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Declared Value.	Quantity.	Declared Value.	Declared Value.	Declared Value.	Declared Value.	
	Tons.	£	*Cwts.*	£	*Yards.*	£	*Yards.*	£	£	*Cwt.*	£	*Yards.*	£	£	*Lbs.*	£	£	£	£	£
1814	13,146	6,408	-	-	989,807	125,180	3,521	100	11,993	1,067	9,889	37,314	3,703	368	-	-	-	-	327	582,703
1815	19,190	8,556	-	-	199,940	21,092	60	15	504	580	5,209	3,432	144	-	-	-	-	9	1,084	298,291
1816	17,432	6,180	-	-	221,358	25,898	1,701	213	420	765	6,020	4,400	311	6	-	-	-	-	3,905	407,700
1817	18,826	5,350	-	-	143,574	14,289	60	48	320	1,028	8,698	8,179	604	4	-	-	446	No return from Ireland in these years.	13,050	1,003,487*
1818	20,078	7,441	-	-	76,338	8,970	3,781	338	331	1,518	14,073	3,963	399	214	-	-	204		15,709	309,504
1819	22,068	6,036	-	-	45,382	4,185	-	-	166	1,210	12,101	513	67	-	-	-	1,307		15,571	299,493
1820	27,582	7,077	-	-	17,989	1,653	2,406	152	16	1,133	11,000	10,080	971	365	-	-	271	17,835	726	390,744
1821	27,747	7,579	-	-	14,179	1,364	15,032	370	49	1,836	15,936	2,322	201	-	224	20	173	24,268	728	438,266
1822	29,109	7,104	-	-	17,577	1,529	5,131	478	10	2,922	24,232	5,945	518	560	285	25	1,400	31,977	6,826	437,009
1823	22,163	5,477	-	-	8,329	794	48,006	930	4	2,465	21,917	25,111	3,173	-	4,928	222	211	18,120	6,115	349,636
1824	24,042	5,804	-	-	114,130	5,433	37,476	1,558	113	2,935	22,506	19,768	1,969	6	-	-	3,025	12,581	3,272	338,635
1825	27,202	6,693	-	-	117,476	6,658	114,896	4,716	519	3,194	24,772	16,106	1,899	324	-	-	2,903	23,393	16,486	360,709
1826	43,371	12,752	-	-	410,710	18,292	118,980	2,155	2,126	5,521	35,905	19,286	1,966	8	441	35	3,725	52,187	8,454	488,438
1827	46,123	14,033	-	-	365,100	16,055	517,100	6,765	1,141	4,044	29,821	78,037	9,060	155	29	5	5,598	23,930	10,496	446,951
1828	33,410	9,847	-	-	70,196	5,945	600,907	12,746	687	5,367	42,392	64,212	7,228	84	-	-	4,215	22,550	9,638	498,938
1829	41,881	11,176	148	666	509,630	15,462	449,805	2,325	1,010	5,733	22,088	58,118	6,126	72	55	11	965	20,496	12,021	491,388
1830	52,196	14,554	1,325	5,367	139,465	7,055	312,142	2,092	254	3,648	24,037	102,903	11,140	-	2,724	209	4,398	25,435	6,848	475,884
1831	33,686	10,573	1,921	7,688	946,660	35,357	1,274,490	11,468	2,145	2,416	18,166	102,042	8,265	12	17,563	1,095	360	5,165	4,781	602,688
1832	41,015	11,121	6,806	26,348	826,487	29,327	3,744,580	32,198	3,671	3,673	28,260	314,100	16,015	-	76,512	6,516	20	13,300	4,509	674,791
1833	45,218	12,622	13,275	74,882	1,514,075	46,247	4,746,608	34,064	1,656	3,504	33,145	183,508	13,055	663	807,285	68,229	849	3,970	13,666	848,333
1834	59,690	17,144	17,963	76,320	2,317,697	60,774	6,083,547	33,822	27,503	6,031	43,867	293,961	21,518	1,336	1,130,369	130,561	20	14,680	22,102	1,116,985
1835	104,178	31,647	41,109	181,784	2,432,403	72,253	5,511,411	32,842	73,312	6,298	43,274	1,247,901	61,612	703	2,384,674	198,823	694	18,949	26,828	1,453,636
1836	265,140	68,604	18,505	86,047	3,534,204	97,039	7,015,529	37,128	90,540	8,120	48,984	1,598,158	113,666	722	4,012,141	276,942	2,219	38,210	34,899	1,591,381
1837	272,133	89,504	63,068	271,191	2,430,077	70,212	7,180,128	32,420	61,318	10,157	61,561	3,368,388	142,812	1,786	7,010,983	401,607	729	27,025	33,949	1,643,204
1838	331,563	106,243	82,860	356,298	2,666,515	60,321	14,179,565	64,591	47,114	10,159	58,655	7,033,291	273,534	372	11,483,680	600,806	193	34,627	89,541	2,314,141
1839	340,373	116,961	84,567	363,537	2,721,578	58,528	11,814,800	53,092	40,259	12,018	67,478	6,253,476	246,820	857	12,250,254	644,144	1,269	60,872	120,188	2,298,307
1840	394,954	129,340	115,701	497,516	2,838,585	64,039	13,015,424	65,528	35,871	12,791	63,087	6,792,485	226,505	942	13,187,367	629,533	910	56,247	15,443	2,378,149
1841	481,003	155,243	131,886	567,110	3,426,896	71,191	14,466,012	63,160	46,803	13,787	67,779	8,823,503	281,982	1,809	20,832,875	866,336	1,183	59,350	36,046	2,902,002
1842	515,975	173,278	134,398	577,889	4,135,712	72,578	13,685,560	62,940	68,196	19,420	96,035	8,386,667	270,019	1,771	22,202,292	749,675	1,288	67,959	37,119	3,193,939

* *Sic* in official returns; but there can be no doubt that the statement is wrong.

XI.—Account of the Quantities and Official Values of the principal Articles imported into the United Kingdom from France since 1814.

Years.	Eggs.		Leather Manufacture.					Madder.		Madder Root.		Silk Manufacture.				Spirits, Brandy.		Wine, French.	
			Gloves.		Boots and Shoes.		Other Articles.					Silk or Satin, plain or figured, including Ribbons.		Gauze and Gauze Ribbons, plain and figured.					
	Quantity.	Official Value.	Quantity.	Official Value.	Quantity.	Value.	Value.	Quantity.	Official Value.	Quantity.	Official Value.	Quantity.	Official Value.	Quantity.	Official Value.	Quantity.	Official Value.	Quantity.	Official Value.
	Number.	£	*Pairs.*	£	*Pairs.*	£	£	*Cwt.*	£	*Cwt.*	£	*Lbs.*	£	*Lbs.*	£	*Imp. galls.*	£	*Imp. galls.*	£
1814	735,854	230	-	-	-	-	-	3,129	6,252	7,512	58,004	-	-	-	-	777,586	108,234	643,269	70,996
1815	804,746	251	-	-	-	-	-	1,755	3,510	14,881	102,567	-	-	-	-	866,026	122,706	453,738	49,761
1816	3,485,085	1,089	-	-	-	-	-	3,055	5,686	8,633	84,000	-	-	-	-	890,262	126,680	343,604	38,154
1817	5,165,573	1,614	-	-	-	-	-	11,125	27,181	6,929	67,903	-	-	-	-	724,844	102,968	179,438	20,254
1818	11,692,764	3,654	-	-	-	-	-	32,331	79,040	32,206	316,206	-	-	-	-	853,219	121,325	409,563	47,974
1819	21,436,280	6,699	-	-	-	-	-	2,825	5,651	425	4,161	-	-	-	-	1,363,425	191,340	358,316	40,477
1820	30,599,251	9,562	-	-	-	-	-	1,678	3,355	698	6,841	-	-	-	-	1,932,773	274,474	235,530	25,788
1821	39,695,364	12,405	-	-	-	-	-	7,253	14,761	25,577	239,754	-	-	-	-	1,095,585	155,679	234,221	26,510
1822	49,425,124	15,445	-	-	-	-	-	22,583	46,889	20,029	154,023	-	-	-	-	1,318,328	187,369	259,055	29,174
1823	48,418,187	15,131	-	-	-	-	-	19,182	40,086	14,069	84,163	-	-	-	-	2,443,677	347,022	328,930	36,615
1824	49,599,023	15,500	-	-	-	-	-	32,629	70,865	34,082	206,632	-	-	-	-	2,053,541	289,749	276,984	30,143
1825	60,754,344	18,986	1,324	66	-	-	-	29,819	61,527	14,657	127,771	-	-	-	-	1,745,321	246,043	1,013,502	118,520
1826	59,507,899	18,596	488,534	12,923	-	-	-	19,138	39,795	6,332	24,017	28,646	36,024	9,196	32,066	1,452,078	198,862	472,720	54,570
1827	63,109,618	19,722	858,572	21,465	-	-	-	30,237	63,870	19,237	115,162	60,992	119,167	23,151	80,310	1,097,309	234,720	367,092	40,783
1828	60,043,026	18,763	1,185,060	29,626	-	-	-	40,525	89,684	40,293	248,243	101,124	201,502	27,401	103,948	2,512,060	341,133	533,812	59,768
1829	56,370,479	17,616	850,395	21,260	42,359	8,506	4,180	31,352	67,291	14,592	85,076	60,237	139,984	20,767	79,446	1,984,388	270,515	481,934	56,844
1830	48,026,006	15,008	1,067,196	26,680	43,543	8,999	1,454	20,108	43,423	6,842	40,270	54,650	110,753	30,895	117,965	1,504,761	217,880	323,591	36,047
1831	50,401,506	15,750	1,169,377	29,234	44,605	9,199	1,882	22,637	47,458	23,628	169,633	87,667	174,955	31,740	132,881	1,337,950	183,063	335,430	37,769
1832	55,651,243	17,391	1,513,106	37,828	45,591	9,459	2,062	39,091	84,685	33,394	246,066	71,723	148,358	48,171	184,254	2,647,372	360,478	297,157	33,232
1833	62,327,058	19,477	1,422,634	35,566	53,736	11,177	2,568	25,715	56,377	23,010	119,637	65,811	134,516	66,687	255,078	2,440,711	328,393	258,386	28,950
1834	65,463,138	20,457	1,657,597	41,449	54,230	11,370	3,628	32,222	72,212	44,965	276,095	91,031	185,450	73,067	279,480	2,999,012	408,960	345,805	38,689
1835	55,934,711	17,480	1,243,045	31,076	46,653	9,802	3,142	48,250	107,325	35,394	196,184	97,537	204,847	60,870	213,200	2,665,569	280,304	352,108	39,675
1836	65,821,377	20,569	1,479,771	36,994	45,980	10,200	4,058	50,578	112,790	36,944	193,396	135,301	291,569	30,353	104,427	2,989,869	283,897	505,487	56,074
1837	71,699,702	22,406	1,244,072	31,102	56,294	12,301	4,630	49,058	109,253	53,516	262,391	119,396	246,151	31,195	113,086	2,069,731	282,069	690,658	77,862
1838	80,270,579	25,085	1,150,614	28,765	50,859	11,097	4,992	53,658	124,162	36,141	163,729	198,415	414,412	29,820	100,045	2,300,122	312,182	514,506	57,211
1839	90,834,163	28,386	1,097,889	25,447	48,824	12,191	5,748	58,044	135,863	13,211	60,116	220,517	466,092	18,127	62,970	1,936,172	261,854	485,051	54,244
1840	91,557,870	28,612	1,538,183	38,454	47,288	11,738	7,551	82,719	187,279	31,459	172,162	239,838	502,708	9,103	33,149	2,903,475	402,097	546,615	61,583
1841	87,053,628	27,079	1,369,277	34,232	43,677	10,708	12,506	62,166	141,786	40,409	199,684	230,480	484,619	7,975	29,783	2,642,145	358,112	462,515	52,935
1842	85,415,767	26,692	1,616,689	40,417	58,488	14,854	17,588	49,387	114,211	25,439	101,370	226,724	476,116	7,282	27,525	1,637,008	221,968	489,035	54,776

XII. Account of the Official and Real Value of all Exports from the U. Kingdom to France, in each Year, since 1811; distinguishing British from Colonial Produce; also, an Account of the Official Value of the Imports from France in each Year.

Years.	Imports into the U. Kingdom From France.			Exports from the U. Kingdom to France.									Declared Val British and I Produce and M factures expo to France		
				British and Irish Produce and Manufactures.			Foreign and Colonial Merchandise.			Total Exports.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1811	710,226	10	0	577,290	9	7	1,867,913	19	4	2,445,713	8	11	582,702	15	
1815	754,572	8	11	211,843	15	9	1,938,856	5	3	2,150,680	1	0	2088,991	10	
1816	417,282	17	2	321,020	1	11	1,313,151	17	8	1,634,222	2	7	407,699	11	
1817	627,865	13	6	546,735	7	0	1,054,361	9	9	1,601,014	16	9	1,005,186	12	
1818	1,162,153	15	7	518,850	19	1	827,541	15	0	1,346,763	12	1	566,503	11	
1819	642,011	11	2	248,407	9	2	851,579	9	10	1,099,757	10	7	299,143	6	
1820	775,132	5	6	553,056	13	2	892,384	2	6	1,445,901	2	8	500,744	10	
1821	865,616	17	9	384,104	2	1	1,027,100	15	5	1,411,204	17	9	458,265	18	
1822	878,272	15	0	516,810	13	1	870,150	11	4	1,188,961	6	5	457,009	2	
1823	1,115,800	7	0	211,832	12	11	745,574	16	1	985,112	9	5	349,656	1	
1824	1,156,753	17	5	260,398	9	9	861,360	16	1	1,124,909	6	1	538,655	8	
1825	1,855,984	19	0	276,212	3	7	895,102	18	1	1,171,615	1	8	560,709	10	
1826	1,837,420	0	6	196,819	13	9	655,134	10	9	1,082,944	4	6	488,458	6	
1827	2,055,242	11	10	416,256	0	8	135,203	14	6	1,560,499	15	2	446,954	0	
1828	3,178,845	5	9	148,915	2	7	1,7	0	2	611,112	11	9	498,957	12	
1829	2,080,093	10	10	509,521	1	3	337,896	11	6	847,817	12	9	491,588	3	
1830	2,748,187	14	11	189,284	0	1	181,065	1	5	667,349	1	6	475,884	3	
1831	3,056,154	12	1	635,937	15	5	256,081	19	7	892,019	13	0	602,688	0	
1832	3,152,804	0	0	317,187	0	0	657,842	0	0	1,469,309	0	0	674,791	0	
1833	3,577,215	0	0	993,741	0	0	544,317	0	0	1,511,658	0	0	858,533	0	
1834	2,808,696	0	0	1,250,667	0	0	546,975	0	0	1,842,590	0	0	1,116,885	0	
1835	2,716,099	0	0	1,561,215	0	0	985,346	0	0	2,646,561	0	0	1,153,676	0	
1836	3,125,578	0	0	1,150,665	0	0	641,240	0	0	1,791,905	0	0	1,591,581	0	
1837	2,707,787	0	0	1,078,811	0	0	830,407	0	0	1,909,218	0	0	1,645,204	0	
1838	3,431,119	0	0	1,242,923	0	0	641,080	0	0	1,884,003	0	0	2,314,111	0	
1839	4,092, 26	0	0	1,118,110	0	0	511,243	0	0	1,629,353	0	0	2,208,707	0	
1840	-	-	-	-	-	-	-	-	-	-	-	-	2,738,119	0	
1841	-	-	-	-	-	-	-	-	-	-	-	-	2,902,092	0	
1842	-	-	-	-	-	-	-	-	-	-	-	-	3,193,939	0	

HAWKERS AND PEDLARS. It is not very easy to distinguish between hawkers and pedlars. Both are a sort of itinerant retail dealers, who carry about their wares from place to place; but the former are supposed to carry on business on a larger scale than the latter. They are subject to the same regulations.

Regulations as to Hawkers and Pedlars. — The legislature has always looked with suspicion upon itinerant dealers; and has attempted, by obliging them to take out licences, and placing them under a sort of *surveillance*, to lessen their numbers, and to hinder them from engaging in dishonest practices. But the resident dealer has so many advantages on his side, that these precautions seem to be in a great measure superfluous. It should also be recollected, that before shops were generally established in villages and remote districts, hawkers and pedlars rendered material services to country people; and even now the competition which they excite is certainly advantageous.

By the 50 Geo. **3.** c. 41., hawkers and pedlars are to pay an annual licence duty of 4*l.*; and if they travel with a horse, ass, or other beast, bearing or drawing burden, they are subject to an additional duty of 4*l.* for each beast so employed. The granting of licences, and management of the duties, are, by a late act, placed under the control of the commissioners of stamps.

Hawkers and pedlars, unless householders or residents in the place, are not allowed to sell by auction to the highest bidder; penalty 50*l.*; half to the informer, the other half to the king. But nothing in the act extends to hinder any person from selling, or exposing to sale, any sort of goods, in any public market [illegible] him [illegible] edla [illegible] a hi [illegible] e he is [illegible] ided such sale is not by auction.

Every hawker, before he is licensed, must produce a certificate of good character and reputation, signed by the clergyman and two reputable inhabitants of the place where he usually resides.

Every hawker must have inscribed, in Roman capitals, on the most conspicuous part of every pack, box, trunk, case, cart, or other vehicle, in which he shall carry his wares, and on every room and shop in which he shall trade, and likewise on every hand-bill which he shall distribute, the words, "LICENSED HAWKER." Penalty, in default, 10*l.* Unlicensed persons wrongfully using this designation forfeit 10*l.*

Hawkers dealing in smuggled goods, or in goods fraudulently or dishonestly procured, are punishable by forfeiture of licence, and incapacity to obtain one in future, besides being liable to all the other penalties, forfeitures, &c. appleable to such illegal dealing.

By stat. 6 Geo. 4. c. 80. it is enacted, that any person or persons hawking, selling, or exposing to sale, any spirits on the streets, highways, &c., or in any boat or other vessel on the water, or in any place other than those allowed in this act, shall forfeit such spirits and 10*l.* for every such offence. Any person may detain a hawker of spirits, and give notice to a peace officer to carry the offender before a justice.

Hawkers trading without licence are liable to a penalty of 10*l.* So also, if they refuse to show their licence on the demand of any person to whom they offer goods for sale, or on the demand of any justice, mayor, constable, or other peace officer, or any officer of the customs or excise. By 5 Geo. 4. c. 83., hawkers trading without a licence are punishable as vagrants.

To forge or counterfeit a hawker's licence incurs a penalty of 300*l.* To lend or hire a hawker's licence subjects lender and borrower to 40*l.* each, and the licence becomes forfeited. But the servant of a licensed hawker may travel with the licence of his master.

Hawkers trading without a licence are liable to be seized and detained by any person who may give notice to a constable, in order to their being carried before a justice of peace. Constables refusing to assist in the execution of the act are liable to a penalty of 10*l.*

Nothing in the act extends to prohibit persons from selling fish, fruit, or victuals; nor to hinder the maker of any home manufacture from exposing his goods to sale in any market or fair, in every city, borough, town corporate, and market town: nor any tinker, cooper, glazier, plumber, harness-mender, or other person, from going about and carrying the materials necessary to their business.

A *single* act of selling, as a parcel of handkerchiefs to a particular person, is not sufficient to constitute a hawker within the meaning of the statutes. — (*Rex* v. *Little*, B. 613.)

By the 52 Geo. 3. c. 108., no person, being a trader in any goods, wares, or manufactures of Great Britain, and selling the same by *wholesale*, shall be deemed a hawker; and all such persons, or their agents, selling by *wholesale* only, shall go from house to house, to any of their customers who sell again by whole-

sale or retail, without being subject to any of the penalties contained in any act touching hawkers, pedlars, and petty chapmen.

No person committed under these acts for non-payment of penalties can be detained in custody for a longer period than 3 months.

Hawkers exposing their goods to sale in a market town, must do it in the market-place.

Persons hawking tea without a licence are liable to a penalty under 50 Geo. 3. c. 41.; and even though they had a licence, they would be liable to a penalty for selling tea in an unentered place. — (*Chitty's* edit. of *Burn's Justice*, vol. ii. p. 1113.)

Any person duly licensed to trade as a hawker and pedlar may set up any lawful trade in any place where he is resident, though he have not served any apprenticeship to the same, and, if prosecuted, he may plead the general issue and have double costs. — (See *Chitty's* edit. of *Burn's Justice*, vol. ii. pp. 1102–1124.)

The hawkers' and pedlars' duty produced in 1841, 33,762*l.* gross revenue; the charges of collection are very heavy, amounting to between 5,000*l.* and 6,000*l.* Whatever, therefore, may be the other advantages of this tax, it cannot, certainly, be said to be very productive.

HAY (Ger. *Heu*; Du. *Hovi*; Fr. *Foin*; It. *Fieno*; Sp. *Heno*; Lat. *Fœnum*), any kind of grass, cut and dried for the food of cattle. The business of hay-making is said to be better understood in Middlesex than in any other part of the kingdom. The great object is to preserve the green colour of the grass as much as possible, and to have it juicy, fresh, and free from all sorts of mustiness.

The sale of hay within the bills of mortality, and 30 miles of the cities of London and Westminster, is regulated by the act 36 Geo. 3. c. 88. It enacts that all hay shall be sold by the load of 36 trusses, each truss weighing 56 lbs., except new hay, which is to weigh 60 lbs. till the 4th of September, and afterwards 56 lbs. only; so that till the 4th of September a load of hay weighs exactly a ton, but thereafter only 18 cwt. The clerk of the market is bound to keep a regular book for the inspection of the public, specifying the names of the seller, the buyer, the salesman, and the price of each load. Salesmen and factors are prohibited from dealing on their own account.

There are three public markets in the metropolis for the sale of hay and straw; Whitechapel, Smithfield, and the Hay-market in the vicinity of the Regent's Park. The latter used formerly to be held in the street called the Haymarket.

Straw is sold by the load of 36 trusses, of 36 lbs. each, making in all 11 cwts. 64 lbs.

It is affirmed, we know not with what foundation, that considerable frauds are perpetrated in the sale of hay and straw.

HEMP (Ger. *Hanf*; Du. *Hennip, Kennip*; Da. *Hamp*; Sw. *Hampa*; Fr. *Chanvre*; It. *Canape*; Sp. *Cañamo*; Rus. *Konapli, Konopel*; Pol. *Konope*), a valuable plant (the *Cannabis sativa* of Linnæus), supposed to be a native of India, but long since naturalised and extensively cultivated in Italy, and many countries of Europe, particularly Russia and Poland, where it forms an article of primary commercial importance. It is also cultivated in different parts of America, though not in such quantities as to supersede its importation. It is stronger and coarser in the fibre than flax; but its uses, culture, and management are pretty much the same. When grown for seed, it is a very exhausting crop; but when pulled green, it is considered as a cleaner of the ground. In this country its cultivation is not deemed profitable; so that, notwithstanding the encouragement it has received from government, and the excellent quality of English hemp, it is but little grown, except in some few districts of Suffolk and Lincolnshire. The quantity raised in Ireland is also inconsiderable. — (*London's Encyc. of Agricult.*)

Exceedingly good *huckaback* is made from hemp, for towels and common tablecloths. Low-priced hempen cloths are a general wear for husbandmen, servants, and labouring manufacturers; the better sorts for working farmers and tradesmen in the country; and the finer ones, ⅞ wide, are preferred by some gentlemen for strength and warmth. They possess this advantage over Irish and other linens, — that their colour improves in wearing, while that of linen deteriorates. But the great consumption of hemp is in the manufacture of saileloth and cordage, for which purposes it is peculiarly fitted by the strength of its fibre. English hemp, when properly prepared, is said to be stronger than that of every other country, Russia not excepted; and would, therefore, make the best cordage. It is, however, but little used in that way, or in the making of saileloth; being principally made into cloth for the uses already stated.

Hemp has been cultivated in Bengal from the remotest antiquity, but not, as in Europe, for the purpose of being manufactured into cloth and cordage. In the Hindoo economy it serves as a substitute for malt; a favourite intoxicating liquor, called **bang**, being produced from it! This, also, is the use to which it is applied in Egypt. — (*Milburn's Orient. Commerce, &c.*)

The price of hemp fluctuated very much during the war. In consequence of difficulties in the way of its importation, it stood at a very high level from 1808 to 1814. This was the principal circumstance that originally brought iron cables into use; and the extent to which they are now introduced, has contributed materially to diminish the consumption and importation of hemp. — (*Tooke on High and Low Prices*, 2d ed. p. 345.)

We borrow the following particulars, with respect to the hemp trade of Petersburg, from the work of Mr. Borrisow on the commerce of that city: —

Hemp forms a very important article of export from Petersburg, and deserves particular notice. It is assorted, according to its quality, into *clean hemp*, or firsts; *out-shot hemp*, or seconds; *half-clean hemp* or thirds; and *hemp codilla*.

Of the first 3 sorts there are annually exported about 2,000,000 poods, the greatest part in English and American bottoms. It is brought to Petersburg, from the interior beyond Moscow, by water; and its quality depends very much on the country in which it is produced. That brought from Karatshev is the best; next to this, that produced in Belev; hemp from Gshatsk is considered inferior to the latter.

As soon as the hemp is brought down in the spring, or in the course of the summer, it is selected and made up in bundles; both operations being performed by sworn selectors (*brackers*) and binders appointed by government for this purpose; and it is a well-known fact, that this is done with great impartiality and exactness.

A bundle of clean hemp weighs from 55 to 65 poods; ditto out-shot, 48 to 55 ditto; ditto half-clean, 40 to 45 ditto. (1 pood = 36 lbs. avoirdupois.)

Binding of hemp is paid for at the rate of 2 roubles 50 copecks for *clean*, 2 roubles for *out-shot*, and 1 rouble 60 copecks for *half-clean*, per bundle; one half is paid by the seller, and the other half by the purchaser, and is charged accordingly by their agents.

The expense of selecting hemp is 50 copecks per bercovitz (or 10 poods), and is the same for every sort. To every bundle of assorted hemp is attached a ticket with the names of the selector, binder, and owner,

and the date and year. Every bundle has also affixed to it a piece of lead, stamped on one side with the name of the selector, and on the other with the sort of hemp and the time when it was selected. The external marks of good hemp are, its being of an equal green colour and free from spills; but its good quality is proved by the strength of the fibre, which should be fine, thin, and long. The first sort should be quite clean and free from spills; the *out shot* is less so; and the *half-clean* contains a still greater portion of spills, and is moreover of mixed qualities and colours.

As a perfect knowledge of the qualities of hemp and flax can only be acquired by experience and attention, agents usually employ men constantly occupied in this business; by which means they are sure of getting goods of the best quality, and have the best chance of giving satisfaction to their principals; because, although the hemp is selected by sworn selectors, yet, owing to the quantity of business and the speed with which it must be executed, &c., there are often great differences in the same sorts. The charges are in this way somewhat increased; but this is trifling in comparison of the advantage gained. The part separated, or picked out in cleaning hemp, is called *hemp codilla*; it is generally made up in small bundles of 1 pood, which are again, when shipped, bound together in large bundles, each consisting of about 30 small ones.

Particular care must be taken to ship hemp and flax in fine dry weather; if it get wet, it heats and is totally spoiled. For this reason every vessel taking in hemp or flax is furnished with mats to prevent its getting damp. Hemp, being light and bulky, is, when stowed, forced into the hold by means of winches, which renders the operation of loading rather slow.

It may be taken as a general rule, that the prices of hemp are highest in the months of May, June, July, and the early part of August, the demand for this article being then greatest, and the exportation to North America being principally effected at this season. Again, the prices of hemp are lowest in the month of September; the reason of which is, that the less opulent hemp-merchants return at the end of this month to their own country, in order to make new purchases for the ensuing year; and rather than be detained, sell the remainder of their stock some roubles below the market price. This causes a general decline; although an unusual demand for the article happening at the same time, or political events or rumours, occasionally produce a contrary effect. Two large warehouses, called *ambares*, are built in Petersburg for the special purpose of housing hemp, where the greatest order is observed.

Account of the Quantities of Hemp imported into the United Kingdom during the Seven Years from 1835 to 1841 inclusive; specifying the Countries from which they were imported, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
Russia	610,519	556,458	591,675	511,000	781,012	598,840	542,764
Italy and the Italian Islands	18,926	4,781	3,126	4,950	14,691	6,642	12,714
East India Company's territories and Ceylon	40,854	18,380	168,386	107,994	138,301	55,583	72,469
Philippine Islands	9,554	2,677	1,845	23,411	28,711	15,451	16,789
All other countries	7,706	4,703	8,598	13,021	32,978	7,592	7,599
Totals	687,559	586,032	773,621	730,376	995,693	684,068	652,165

Account of the Quantities of Hemp entered for Home Consumption, and the Amount of Duty paid thereon, in each of the Three Years 1840, 1841, and 1842.

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	1842.
Cwts. qrs. lbs.	*Cwts. qrs. lbs.*	*Cwts. qrs. lbs.*	£ *s. d.*	£ *s. d.*	£ *s. d.*
737,637 1 10	645,634 0 21	611,166 2 18	3,213 4 4	2,825 1 11	2,687 5 11

Sixty poods of hemp and 40 poods of codilla make a last at Petersburg; 63 poods make an English ton.—(pp. 47—52.)

Riga hemp fetches a higher price than that of Petersburg. It is divided into 3 sorts: viz. rein, rhine, or clean, out-shot, and pass or half-clean. The following are the prices of hemp, duty paid, as quoted in the London markets, June, 1843:—

	£ *s. d.*	£ *s. d.*	
Hemp, Riga Rhine	31 0 0	to 0 0 0	per ton.
Petersburg, clean	29 10 0	— 0 0 0	—
out-shot	28 0 0	— 0 0 0	—
half-clean	27 0 0	— 0 0 0	—
Italian	35 0 0	— 0 0 0	—
Manilla	22 10 0	— 23 0 0	—
Jute	12 0 0	— 14 0 0	—
Sunn	14 10 0	— 15 0 0	—

We subjoin a statement of the various charges on the exportation of hemp from Petersburg, and on its importation into this country.

Clean Hemp.—1 bundle = 63 poods = 1 ton.

	Rou. cop.
Duty, 3 rou. 60 cop. per bercovitz	22 68
Additional duty, 10 per cent.	2 27
Quarantine duty, 1 per cent.	0 22
R.	25 17
Custom-house charges, 4 per cent.	1 1
Receiving, weighing, and shipping, 3½ rou. per bundle	3 75
Bracking, 50 cop. per bercovitz	3 15
Binding, 40 cop. per ditto	2 52
Lighterage and attendance to Cronstadt, 8 rou. per bundle	8 0
Rebinding, 2½ rou. per bundle, ⅛ charged	1 12
Brokerage, 60 cop. per ton	0 60
R.	45 28

Brokerage, ½ per cent.

Commission and extra charges, 3 per cent.

Stamps on drafts, ¼ per cent. } ¾ per cent.
Brokerage, ½ per cent. }

Charges of importation per ton, taking the price at 40*l.* per ton.

	£ *s. d.*
Insurance, say 1*l.*, and policy	0 10 6
Freight, 5*l.* 6*d.* per ton	2 12 6
Customs and Russia dues	4 13 8
Landing charges	0 10 0
Sound dues	0 0 0
Discount, 3½ per cent.	1 10 0
Brokerage	0 4 0
Per ton	£10 5 8

In the above calculation, no allowance is made for damage; which, if care be taken to select a good vessel and an early season, does not amount to much. The estimates are nearly the lowest rates of charge. The insurance, indeed, is sometimes as low as 1*l.* 5*s.* 6*d.* per cent., and policy. That, however, is only in the very earliest part of the season; it rises to 5*l.* per cent. in the autumn.

Out-shot Hemp.—1 bundle = 63 poods = 1 ton.

	Rou. cop.
Fixed charges	46 71
Other charges same.	

Half-clean Hemp.—1 bundle = 63 poods = 1 ton.

	Rou. cop.
Fixed charges	46 71
Other charges same.	

Hemp the produce or manufacture of Europe may not be imported into the United Kingdom for home consumption, except in British ships, or in ships of the country of which it is the produce, or from

which it is imported, under penalty of forfeiting the same and 100*l.* by the master of the ship.—(3 & 4 *Will.* 4. c. 54. §§ 2. and 22.)

HEMP (MANILLA), commonly called Manilla white rope. Mr. Crawfurd gives the following account of this article:—"Of the wild banana one kind (*Musa textilis*) grows in great abundance in some of the most northerly of the spice islands. In the great island of Mindanao, in the Philippines, it fills extensive forests. From the fibrous bark or epidermis is manufactured a kind of cloth, in frequent use among the natives. It also affords the material of the most valuable cordage which the indigenous products of the Archipelago yield. This is known to our traders and navigators under the name of Manilla rope, and is equally applicable to cables, and to standing or running rigging."—(*Hist. of Archipelago*, vol. 1. p. 412.)

HEMP (INDIAN), or SUNN and JUTE. Sunn consists of the fibre of the *crotolaria juncea*, a totally different plant from the *cannabis sativa*, which, as already stated, is never used by the Hindoos for cloth or cordage. Sunn is grown in various places of Hindostan. The strongest, whitest, and most durable species is produced at Comercolly. During those periods of the late war when the intercourse with the Baltic was interrupted, and hemp borne an enormous price, large quantities of sunn were imported; but after the intercourse with the Continent was renewed the importation of sunn ceased for several years. But within the last dozen years it has been again imported to a considerable extent. It is, however, deficient in toughness.

JUTE consists of the fibres of two plants, called the chonch and isbund (*Corchorus olitorius and Corchorus capsularis*), extensively cultivated in Bengal, and forming, in fact, the material of which gunny bags and gunny cloth are made. It fetches nearly though not quite as high a price as sunn. It comes into competition with flax, tow, and codilla, in the manufacture of stair and other carpets, bagging for cotton and other goods, and such like fabrics, being extensively used for these purposes in Dundee. But it is unsuitable for cordage and other articles into which hemp is manufactured, from its snapping when twisted, and rotting in water. The quantities imported, and the prices, have fluctuated very greatly during the last dozen years; but from 12*l.* to 15*l.* a ton appears to be a fair average price. When first introduced into this country, in 1815, the price of jute varied from 35*l.* to 40*l.* a ton. It was then, however, very little used, and did not, in fact, begin to come into any thing like general use as bagging till 1827 or 1828.

HEMP-SEED (Fr. *Chenevis, Chenevi*; Ger. *Hanfsaat*; It. *Cannapuccia*; Lat. *Semen cannabinum*; Rus. *Konopljanoe Semja*), the seed of hemp. The best hemp-seed is that which is brightest, and will not break when rubbed. It is used either as seed, or for crushing for oil, or as food for fowls. Previously to 1832 it was loaded with a duty of 2*l.* per quarter, which was then reduced to 1*s.* per ditto. This duty produced in 1840, 128*l.*, showing that 2,560 quarters had been entered for consumption.

HERRINGS, AND HERRING FISHERY. The herring (*Clupea harengus* of Linnæus) is a fish too well known to require any description. It is every where in high esteem, both when fresh and when salted.

"Herrings are found from the highest northern latitudes yet known, as low as the northern coasts of France. They are met with in vast shoals on the coast of America as low as Carolina. In Chesapeake Bay is an annual inundation of those fish, which cover the shore in such quantities as to become a nuisance. We find them again in the seas of Kamtschatka; and probably they reach Japan. The great winter rendezvous of the herring is within the Arctic circle: there they continue for many months, in order to recruit themselves after the fatigue of spawning; the seas within that space swarming with insect food in a far greater degree than those of our warmer latitudes. This mighty army begins to put itself in motion in spring. They begin to appear off the Shetland Isles in April and May. These are only the forerunners of the grand shoal, which comes in June; and their appearance is marked by certain signs, such as the numbers of birds, like gannets and others, which follow to prey on them; but when the main body approaches, its breadth and depth is such as to alter the appearance of the very ocean. It is divided into distinct columns of 5 or 6 miles in length, and 3 or 4 in breadth; and they drive the water before them, with a kind of rippling. Sometimes they sink for the space of 10 or 15 minutes, and then rise again to the surface; and in fine weather reflect a variety of splendid colours, like a field of the most precious gems.

"The first check this army meets in its march southward, is from the Shetland Isles, which divide it into two parts; one wing takes to the east, the other to the western shores of Great Britain, and fill every bay and creek with their numbers: the former proceed towards Yarmouth, the great and ancient mart of herrings; they then pass through the British Channel, and after that in a manner disappear. Those which take towards the west, after offering themselves to the Hebrides, where the great stationary fishery is, proceed to the north of Ireland, where they meet with a second interruption, and are obliged to make a second division: the one takes to the western side, and is scarcely perceived, being soon lost in the immensity of the Atlantic; but the other, that passes into the Irish Sea, rejoices and feeds the inhabitants of most of the coasts that border on it. These brigades, as we may call them, which are thus separated from the greater columns, are often capricious in their motions, and do not show an invariable attachment to their haunts.

"This instinct of migration was given to the herrings, that they might deposit their spawn in warmer seas, that would mature and vivify it more assuredly than those of the frozen zone. It is not from defect of food that they set themselves in motion; for they come to us full of fat, and on their return are almost universally observed to be lean and miserable. What their food is near the pole, we are not yet informed; but in our seas they feed much on the *oniscus marinus*, a crustaceous insect, and sometimes on their own fry.

"They are full of roe in the end of June, and continue in perfection till the beginning of winter, when they deposit their spawn. The young herrings begin to approach the shores in July and August, and are then from ½ an inch to 2 inches long. Though we have no particular authority for it, yet, as very few young herrings are found in our seas during winter, it seems most certain that they must return to their parental haunts beneath the ice. Some of the old herrings continue on our coast the whole year." — (*Pennant's British Zoology.*)

The herring was unknown to the ancients, being rarely, if ever, found within the Mediteranean. The Dutch are said to have engaged in the fishery in 1164. The invention of pickling or salting herrings is ascribed to one Beukels, or Beukelson, of Biervliet, near Sluys, who died in 1397. The emperor Charles V. visited his grave, and ordered a magnificent tomb to be erected to his memory. Since this early period, the Dutch have uniformly maintained their ascendancy in the herring fishery; but, owing to the Reformation, and the relaxed observance of Lent in Catholic countries, the demand for herrings upon the Continent is now far less than in the fourteenth and fifteenth centuries.

Importance of the Herring Fishery. Progress of it in Great Britain. — There is, perhaps, no branch of industry, the importance of which has been so much over-rated as that of the herring fishery. For more than 2 centuries, company after company has been formed for its prosecution, fishing villages have been built, piers constructed, boards and regulations established, and vast sums expended in bounties; and yet the fishery never got into a healthy state till it was left to its own resources. The false estimates that have been long current with respect to the extent and value of the Dutch herring fishery, contributed more, perhaps, than any thing else, to the formation of exaggerated notions of the importance of this business. That the Hollanders prosecuted it to a greater extent, and with far greater success, than any other people, is, indeed, most true. There is not, however, the shadow of a ground for believing that they ever employed, as has often been stated, about 450,000 individuals in the fishery and the employments immediately subservient to it. We question whether they ever employed so many as 50,000. At the time when the Dutch carried on the fishery to the greatest extent, the entire population of the Seven United Provinces did not certainly exceed 2,400,000; and deducting a half for women, and from a half to two thirds of the remaining 1,200,000 for boys and old men, it would follow, according to the statement in question, that every able-bodied man in Holland must have been engaged in the herring fishery! It is astonishing how such ridiculously exaggerated accounts ever obtained any circulation; and still more so, that they should have been referred to and quoted, without, apparently, any doubt being ever entertained of their authenticity, down to our own times! * Had they been sifted ever so little, their falsehood would have been obvious; and we should have saved many hundreds of thousands of pounds that have been thrown away in attempting to rival that which never existed.

It would be impossible, within the limits to which this article must be confined, to give any detailed account of the various attempts that have been made at different periods to encourage and bolster up the herring fishery. In 1749, in pursuance of a recommendation in his Majesty's speech at the opening of parliament, and of a report of a committee of the House of Commons, 500,000*l.* was subscribed for carrying on the fisheries, under a corporation called "The Society of the Free British Fishery." The Prince of Wales was chosen governor of the Society, which was patronised by men of the first rank and fortune in the state. But this Society did not trust entirely to its own efforts for success. The duties were remitted upon the salt used in the fisheries; and besides this reasonable encouragement, a high tonnage bounty was granted upon every buss fitted out for the deep sea fishery. In consequence, many vessels were sent out, as Dr. Smith has truly stated, not to catch herrings, but to *catch the bounty;* and to such an extent was this abuse carried, that in 1759, when the tonnage bounty was 50*s.* the almost incredible sum of 159*l.* 7*s.* 6*d.* was paid as bounty *upon every barrel of merchantable herrings that was produced!* — (*Wealth of Nations*, p. 231.) But notwithstanding this encouragement, such was the waste and mismanagement of the Company's affairs, that it was speedily destroyed. Smith says, that in 1794 hardly a vestige remained of its having ever been in existence.

But notwithstanding this ill success, a new company was formed, for nearly the same objects, in 1786, of which George III. was patron. It has had nearly the same fate. "For a season or two, busses were fitted out by the society; but if every herring caught had carried a ducat in his mouth, the expense of its capture would scarcely have been repaid. The bubble ended by the society for fishing in the deep sea becoming a kind of building society, for purchasing ground in situations where curers and fishermen find it convenient to settle, and selling or letting it in small lots to them, at such advance of price as yields something better than fishing profits." — (See an excellent article on the *Herring Fishery* in the 11th Number of the *Quarterly Journal of Agriculture.*)

In 1808, a fresh attempt was made for the improvement and extension of the fishery. The act 48 Geo. 3. established a distinct set of commissioners for the superintendence of all matters connected with the fishery, and authorised them to appoint a sufficient number of fishery officers, to be stationed at the different ports, whose duty is to see that the various regulations with respect to the gutting, packing, &c. of the herrings, and the branding of the barrels, are duly carried into effect. In 1809, a bounty of 3*l.* per ton was granted on all vessels employed in the deep sea herring fishery, of above 60 tons burden, but payable only on 100 tons; and in 1820, a bounty of 20*s.* per ton, which, under certain specified circumstances, might be increased to 50*s.*, was granted on all vessels of from 15 to 60 tons, fitted out for the shore herring fishery; and, exclusively of these bounties on the tonnage, a bounty of 2*s.* a barrel was allowed on all herrings cured gutted during the 6 years ending the 5th of April, 1815, and a bounty of 2*s.* 6*d.* a barrel on their exportation, whether cured gutted or ungutted. During the 11 years ending the 5th of April, 1826, the bounty on herrings cured gutted was 4*s.* a barrel.

It is stated in the article already referred to, that the cost of a barrel of cured herrings is about 16*s.*, the half going to the fisherman for the green fish, the other half to the curer for barrel, salt, and labour. The bounty of 4*s.* a barrel was, therefore, equal to *half* the value of the herrings as sold by the fisherman, and to *one fourth* of their value as sold by the curer! In consequence of this forced system, the fishery was rapidly increased. The following statement, extracted from the *Report of the Commissioners of the Fishery Board*, dated 27th of July, 1843, shows the progress it has made since 1809: —

* They seem to have been first set forth in a treatise ascribed to Sir Walter Raleigh; and, what is singular, they were admitted by De Witt into his excellent work, the *True Interest of Holland.* They have been implicitly adopted by Sir John Barrow, in the article *Fisheries* in the *Encyclopædia Britannica.*

Abstract of the Total Quantity of White Herrings cured, branded for Bounty, and exported, in so far as the same have been brought under the Cognizance of the Officers of the Fishery, from the 5th of April, 1810, distinguishing each Year, and the Herrings cured gutted, from those cured ungutted.—(*Parl. Paper* No. 495. Sess. 1843.)

Years ending April 5.	Total Quantity of Herrings cured.			Total Quantity of Herrings branded.	Total Quantity of Herrings exported.		
	Gutted.	Ungutted.	Total.		Gutted.	Ungutted.	Total.
	Barrels.	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*
1811	65,430	26,397½	91,827½	55,662½	18,880	19,253	38,313
1812	72,515½	39,004	111,519½	58,450½	27,564	35,254	62,820
1813	89,900½	63,587½	153,488	70,092½	40,109½	69,625	109,735½
1814	52,931½	57,611	110,542½	38,184	34,929	83,474½	118,403½
1815	105,372½	54,767	160,139½	83,376	68,938	72,567½	141,505½
1816	135,981	26,670½	162,651½	116,436	81,544½	26,143½	107,688
1817	155,776	36,567½	192,343½	140,018½	115,480½	23,148	138,628½
1818	204,270½	23,420½	227,691	183,089½	148,147½	14,192	162,339½
1819	303,777½	37,116½	340,894	270,029½	212,301½	14,860½	227,162
1820	347,190½	35,301	382,491½	309,700½	244,096	9,420	253,516
1821	413,308	28,887½	442,195½	363,872	289,445½	5,350	294,805½
1822	291,626½	24,897½	316,524½	263,205½	212,890½	2,065½	214,956
1823	225,037	23,832	248,869	203,110	169,459½	985½	170,445
1824	335,450	56,740½	392,190½	299,631	238,505½	1,125	239,630½
1825	303,397	44,268½	347,665½	270,944½	201,882½	134	202,016½
1826	340,118	39,115½	379,233½	294,422½	217,053½	80	217,133½
1827	259,171½	29,324	288,495½	223,606	165,741	695	166,436
1828	339,360	60,418	399,778	279,317½	210,766	893	211,659
1829	300,242½	55,737	355,979½	234,827	202,813½	3,062	205,875½
1830	280,933½	48,623½	329,557	218,418½	177,778	3,878½	181,654½
1831	371,096	68,274	439,370	237,085	260,976	3,927	264,903
1832	313,145½	49,547	362,692½	157,839½	211,820½	2,679½	217,490½
1833	353,684½	63,279½	416,964½	168,259½	218,422½	2,255	220,684½
1834	382,677½	68,853½	451,531½	178,000½	269,133½	2,960	272,093½
1835	217,244½	60,074½	277,317	85,079½	156,229½	2,580	158,805½
1836	399,334	98,280½	497,614½	192,317	270,846½	2,547	273,393½
1837	290,169	107,660½	397,829½	114,192	187,238½	2,027	189,265½
1838	389,400	125,374½	507,774½	141,552	229,160½	5,997	235,158
1839	382,229	173,330½	555,559½	153,699½	233,690½	6,040	239,730½
1840	405,379½	138,565½	543,945	152,251	250,554½	1,968	252,522½
1841	431,157	126,105½	557,262½	154,189	246,851	3,286	250,137
1842	489,620½	177,624½	667,245½	190,922½	283,530	1,206	284,736

On looking at this Table, it is seen that the fishery made no progress under the new system till 1815, when the bounty was raised to 4*s*. This is a sufficient proof of the factitious and unnatural state of the business. Its extension, under the circumstances in question, instead of affording any proof of its being in a really flourishing condition, was distinctly the reverse. Individuals without capital, but who obtained loans sufficient to enable them to acquire boats, barrels, salt, &c. on the credit of the bounty, entered in vast numbers into the trade. The market was most commonly glutted with fish; and yet the temptation held out by the bounty caused it to be still further overloaded. Great injury was consequently done to those fish curers who possessed capital; and even the *fishermen* were injured by the system. "Most of the boats employed in the fishery never touch the water but during 6 weeks, from the middle or end of July to the middle of September. They are owned and sailed, not by regular fishermen following that vocation only, but by tradesmen, small farmers, farm-servants, and other landsmen, who may have sufficient skill to manage a boat at that season, but who do not follow the sea except for the 6 weeks of the herring fishery, when they go upon a kind of gambling speculation, of earning a twelvemonth's income by 6 weeks' work."—(*Quarterly Journal*, No. 11. p. 653.)

It has been often said, in vindication of the bounty system, that by extending the fishery it extended an important nursery for seamen; but the preceding statement shows that such has not been its effect. On the contrary, it has tended to depress the condition of the genuine fisherman, by bringing a host of interlopers into the field; and it has also been prejudicial to the little farmers and tradesmen, by withdrawing their attention from their peculiar business, that they may embark in what has hitherto been little less than a sort of lottery adventure.

These consequences and the increasing amount of the sum paid for bounties, at length induced the government to adopt a different system. By an act passed in 1825, the bounty of 2*s*. 8*d*. on exported herrings was made to cease in 1826, and 1*s*. was annually deducted from the bounty of 4*s*. a barrel paid on gutted herrings, till it ceased in 1830. And the above table shows conclusively that those who contended that the best way to promote the fishery was to let it alone, were in the right; the quantity of herrings cured and the quantity exported having been both nearly doubled since the cessation of the bounties. The fishery is now, for the first time these hundred years, placed on a secure foundation; the supply is proportioned to the real demand, while the genuine fishermen, and those curers who have capital of their own, are no longer injured by the competition of landsmen and others allured to the business by factitious encouragement and trading on capital furnished by government.

The repeal of the salt laws, and of the duty on salt, which preceded the repeal of the bounty, was of signal service to the fishery. It is true that salt used in the fisheries was exempted from the duty; but in order to prevent the revenue from being defrauded, so many regulations were enacted, and the difficulties and penalties to which the fishermen were in consequence subjected were so very great, that some of them chose rather to pay the duty upon the salt they made use of, than to undertake compliance with the regulations.

It is to be regretted, that when government repealed the bounty, it did not also abolish the "Fishery Board," and the officers and regulations it had appointed and enacted. So long as the bounty existed, it was quite proper that those who claimed it should be subjected to such regulations as government chose to enforce; but since it has been repealed, we see no reason why the fishery should not be made perfectly free, and every one allowed to prepare his herrings as he thinks best. It is said, indeed, that were there no inspection of the fish, frauds of all sorts would be practised: that the barrels would be ill made, and of a deficient size; that the fish would not be properly packed; that the bottom and middle of the barrels would be filled with bad ones, and a few good ones only placed at the top; that there would not be a sufficiency of pickle, &c. But it is obvious that the reasons alleged in vindication of the official inspection kept up in the herring fishery, might be alleged in vindication of a similar inspection in almost every other branch of industry. It is, in point of fact, utterly useless. It is an attemp[illegible] selves. S[illegible] of the cur[illegible] thus be effectually obviated, they would be left at liberty to prepare their herrings in any way that they pleased, without being compelled, as at present, to follow only one system, or to prepare fish in the same way for the tables of the poor as for those of the rich. So far, indeed, is it from being true that the inspection system tends to put down trickery, that there is much reason to think that its effect is directly the reverse. The *surveillance* exercised by the officers is any thing but strict; and the official *brand* is often affixed to barrels which, were it not for the undeserved confidence that is too frequently

placed in it by the unwary, would lie on the curer's hands. It is rather a security against the detection of fraud than against its existence.

The grand object of the herring fishery "Board" has been to enforce such a system of curing as would bring British herrings to a level with those of the Dutch. In this, however, they have completely failed; Dutch herrings generally fetching double the price of British herrings in every market of Europe. Neither is this to be wondered at. The consumers of Dutch herrings are the inhabitants of the Netherlands and of the German towns, who use them rather as a luxury than as an article of food, and who do not grudge the price that is necessary to have them in the finest order. The consumers of British herrings, on the other hand, are the negroes of the West Indies, and the poor of Ireland and Scotland. Cheapness is the prime requisite in the estimation of such persons; and nothing can be more entirely absurd, than that a public Board should endeavour to force the fish curers to adopt such a system in the preparation of herrings as must infallibly raise their price beyond the means of those by whom they are bought. Why should not the taste of the consumers be consulted as much in this as in any thing else? It would not be more ridiculous to attempt to have all cheese made of the same richness and flavour as Stilton, than it is to attempt to bring up all herrings to the standard of the Dutch.

We do, therefore, hope that an end may be put to this system; and that our legislators and patriots will cease to torment themselves with schemes for the improvement of the fisheries. The very best thing they can do for them is to let them alone. It is not a business that requires any sort of adventitious encouragement. Every obstacle to the easy introduction of fish into London and other places should certainly be removed; but all direct interferences with the fishery are sure to be in the last degree pernicious.

Of the 284,736 barrels of herrings exported from Great Britain in the year ending the 5th of April, 1842, 187,953 went to Ireland, 5,713½ to places out of Europe (chiefly the West Indies), and 91,069½ to places in Europe other than Ireland. The exportation of herrings to the W. Indies has of late years rapidly declined, in consequence, no doubt, of the emancipation of the slaves.

HIDES (Ger. *Haüte*; Du. *Huiden*; Fr. *Peaux*; It. *Cuoja*; Sp. *Pellejos, Pieles*; Rus. *Koshi*), signify, generally, the skins of beasts; but the term is more particularly applied to those of large cattle, such as bullocks, cows, horses, &c. Hides are raw or green; that is, in the state in which they are taken off the carcase, or dressed with salt, alum, and saltpetre, to prevent them from putrefying; or they are cured or tanned. The hides of South America are in the highest repute, and vast quantities of them are annually imported into Great Britain. Large quantities are also imported from various parts of the Continent; and from India, the Cape of Good Hope, &c.

An Account of the Weight of the Hides imported into the United Kingdom in each of the Ten Years ending with 1841; specifying the Countries whence the Hides were imported and the Quantities brought from each.

Countries.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
Russia	8,771	5,027	37,129	27,696	11,414	3,066	6,345	9,131	14,441	8,568
Denmark	7,256	8,991	8,451	5,099	11,452	9,301	9,845	4,511	1,041	1,936
Germany	18,804	19,168	17,726	18,874	25,975	14,877	16,797	8,564	6,744	854
Holland	11,845	6,381	6,614	10,723	21,809	10,875	8,218	3,651	566	1,180
Belgium		847	740	1,974	3,012	1,285	8,197	1,994	1,211	749
Western coast of Africa	3,575	1,492	5,526	2,951	1,769	1,520	1,110	701	5,235	4,943
Cape of Good Hope	13,193	18,734	20,365	20,296	16,498	18,098	10,377	12,412	8,036	11,171
East India Company's territories, and Ceylon	9,788	29,337	31,213	41,964	40,883	40,714	37,474	63,533	52,559	86,014
Philippine Islands	418	7,963	6,718	8,676	1,021	5,533	6,079	6,886	1,582	5,796
British settlements in Australia	6,719	5,150	7,658	10,181	6,534	6,562	2,629	2,508	2,430	393
Do. West Indies	1,807	3,157	4,196	3,864	3,997	4,514	5,401	4,321	4,158	4,755
U. States of America	12,316	25,395	24,787	8,141	18,332	22,528	12,081	4,587	5,872	1,699
Brazil	17,767	28,507	149,791	37,705	26,835	16,006	28,463	27,961	24,190	13,815
States of the Rio de la Plata	65,643	121,612	87,470	125,590	139,914	170,572	181,519	252,877	206,067	394,526
Chili	1,253	6,334	6,055	5,231	885	403	1,464	2,580	6,513	1,462
All other countries	7,525	7,904	22,856	25,732	21,731	12,998	12,344	12,774	14,242	13,557
Totals	186,680	296,299	437,295	350,697	352,061	338,652	348,343	418,391	352,867	551,448

His Majesty is authorised to prohibit, by proclamation or order in council published in the *London Gazette*, the importation of any hides or skins, horns or hoofs, or any other part of any cattle or beast, in order to prevent any contagious distemper from being brought into the kingdom. — (3 & 4 *Will.* 4. c. 52. § 58.)

Hides and skins paying duty by weight, may be delivered from the bonded warehouses, on the parties entering an average weight, due care being taken that the lockers actually retally and reweigh the hides and skins on delivery; and in the case of delivery for exportation, to express in cart notes the exact number delivered from the warehouse, in order to enable the export officer on the quay to check the quantity; and the merchant is to indorse on the cocket and bill the total number and weight shipped, before the vessel is suffered to clear. — (*Customs Order*, 4th Dec. 1824.)

HOGSHEAD, a measure of capacity, containing 52½ Imperial gallons. A hogshead is equal to ½ a pipe. — (See WEIGHTS AND MEASURES.)

HOLIDAYS, are understood to be those days, exclusive of Sundays, on which no regular public business is transacted at particular public offices. They are either fixed or variable. They are not the same for all public offices. Those kept at the Bank of England have recently been reduced a full half.

The *variable holidays* are, Ash Wednesday, Good Friday, Easter Monday and Tuesday, Holy Thursday, Whit Monday and Tuesday.

It is enacted by stat. 6 Geo. 4 c. 106. § 13., that no holidays shall be kept by the Customs except Christmas-day and Good Friday, the King's birthday, and such days as may be appointed by proclamation for the purpose of a general fast.

The 7 & 8 Geo. 4. c. 53. § 16. enacts that no holidays shall be kept at the Excise, except Christmas-day and Good Friday, the birthdays of his Majesty and the Prince of Wales, the anniversaries of the Restoration of Charles II., and of his Majesty's coronation, and such days as may be appointed by proclamation for the celebration of a general fast, or such days as may be appointed as holidays by any warrant issued for that purpose by the Lords of the Treasury.

HONEY (Du. *Honig, Honing;* Fr. *Miel;* Ger. *Honig;* It. *Mele;* Lat. *Mel;* Rus. *Med;* Sp. *Miel*), a vegetable juice collected by bees. "Its flavour varies according to the nature of the flowers from which it is collected. Thus, the honeys of Minorca, Narbonne, and England are known by their flavours; and the honey prepared in different parts even of the same country differs. It is separated from the comb by dripping and by expression: the first method affords the purest sort; the second separates a less pure honey; and a still inferior kind is obtained by heating the comb before it is pressed. When obtained from young hives, which have not swarmed, it is denominated *virgin honey.* It is sometimes adulterated with flour, which is detected by mixing it with tepid water: the honey dissolves, while the flour remains nearly unaltered."—(*Thomson's Dispensatory.*)

By stat. 23 Eliz. c. 8. § 4., all vessels of honey are to be marked with the initial letters of the name of the owner, on pain of forfeiting *6s. 8d.*; and contain, the barrel 32 gallons, the kilderkin 16 gallons, and the firkin 8 gallons, or forfeit *5s.* for every gallon wanting; and if any honey sold be corrupted with any deceitful mixture, the seller shall forfeit the honey, &c.

HOPS (Ger. *Hopfen;* Du. *Hoppe;* Fr. *Houblon;* It. *Luppoli, Bruscandoli;* Sp. *Oblon;* Rus. *Chmel;* Lat. *Humulus Lupulus*). The hop is a perennial rooted plant, of which there are several varieties. It has an annual twining stem, which, when supported on poles, or trees, will reach the height of from 12 to 20 feet or more. It is a native of Britain, and most parts of Europe. When the hop was first used for preserving and improving beer, or cultivated for that purpose, is not known—(see ALE); but its culture was introduced into this country from Flanders in the reign of Henry VIII. Hops are first mentioned in the Statute Book in 1552, in an act 5 & 6 Edward 6. c. 5.; and it would appear from an act passed in 1603 (1 Jac. 1. c. 18.), that hops were at that time extensively cultivated in England. Walter Blithe, in his *Improver Improved,* published in 1649 (3d ed. 1653, p. 240.), has a chapter upon improvement by plantations of hops, in which there is this striking passage. He observes, that "hops were then grown to be a national commodity; but that it was not many years since the famous city of London petitioned the parliament of England against two nuisances; and these were, Newcastle coals, in regard to their stench, &c., and hops, in regard they would *spoyl the taste of drink,* and endanger the people: and had the parliament been no wiser than they, we had been in a measure pined, and in a great measure starved; which is just answerable to the principles of those men who cry down all devices, or ingenious discoveries, as projects, and thereby stifle and choak improvement."

After the hops have been picked and dried, the brightest and finest are put into pockets or fine bagging, and the brown into coarse or heavy bagging. The former are chiefly used in the brewing of fine ales, and the latter by the porter brewers. A *pocket* of hops, if they be good in quality, well cured and tight trodden, will weigh about 1¼ cwt.; and a *bag* of hops will, under the same conditions, weigh about 2¼ cwt. If the weight of either exceeds or falls much short of this medium, there is reason to suspect that the hops are of an inferior quality, or have been badly manufactured. The brighter the colour of hops, the greater is the estimation in which they are held. Farnham hops are reckoned best. The expense of forming hop plantations is very great, amounting in some instances to from 70*l.* to 100*l.* an acre; and the produce is very uncertain, the crop being frequently insufficient to defray the expenses of cultivation.

The hop growers are placed under the *surveillance* of the excise, a duty of 2*d.* per lb. being laid on all hops produced in this country. A hop planter is obliged to give notice to the excise, on or before the 1st of August each year, of the number of acres he has in cultivation; the situation and number of his oasts or kilns for drying; the place or places of bagging, which, with the storerooms or warerooms in which the packages are intended to be lodged, are entered by the officer. No hops can be removed from the rooms thus entered, before they have been weighed and marked by a revenue officer; which marks, or ought to mark, its weight, and the name and residence of the grower, upon each bag, pocket, or package. Counterfeiting the officer's mark is prohibited under a penalty of 100*l.*, and defacing it under a penalty of 20*l.* A planter or grower knowingly putting hops of different qualities or values into the same bag or package, forfeits 20*l.* And any person mixing with hops any drug, or other thing, to change or alter the colour or scent, shall forfeit 5*l.* a cwt. on all the hops so changed or altered. The malicious cutting or destroying of hop plantations may be punished by transportation beyond seas for life, or any term not less than 7 years, or by imprisonment and hard labour in a common gaol, for any term not exceeding 7 years.—(*Loudon's Ency. of Agriculture; Stevenson's Surrey; Burn's Justice, &c.*)

The duty on hops of the growth of Great Britain produced, in 1842, 260,978*l.* 18*s.* 10½*d.* The land under hops in England comprises about 52,000 acres, of which there are in Kent about 27,500, in Sussex 10,500, in Hereford, 12,500, in Worcestershire 2,000, &c.

Hops exported from Great Britain are, on being again imported, to be treated as foreign, whether originally so or not.

HORN (Du. *Hoorn;* Fr. *Corne;* Ger. *Horn;* Lat. *Cornu*), a substance too well known to require any description. Horns are of very considerable importance in the arts, being applied to a great variety of useful purposes. They are very extensively used in the manufacture of handles for knives, and in that of spoons, combs, lanterns, snuff-horns, &c. When divided into thin plates, horns are tolerably transparent, and were formerly used instead of glass in windows. Glue is sometimes made out of the refuse of horn. We annually import considerable quantities. At an average of 1840 and 1841, the entries of foreign horn for home consumption amounted to 22,888 cwt.

HORSE (Ger. *Pferd;* Du. *Paard;* Da. *Hest;* Sw. *Häst;* Fr. *Cheval;* It. *Cavallo;* Sp. *Caballo;* Rus. *Loschad;* Pol. *Kon;* Lat. *Equus;* Gr. Ἵππος), a domestic

quadruped of the highest utility, being by far the most valuable acquisition made by man among the lower animals.

There is a great variety of horses in Britain. The frequent introduction of foreign breeds, and their judicious mixture, having greatly improved the native stocks. Our race horses are the fleetest in the world; our carriage and cavalry horses are amongst the handsomest and most active of those employed for these purposes; and our heavy draught horses are the most powerful, beautiful, and docile of any of the large breeds.

Number and Value of Horses in Great Britain. — The number of horses used in Great Britain for different purposes is very great, although less so, perhaps, than has been generally supposed. Mr. Middleton (*Survey of Middlesex*, 2d ed. p. 639.) estimated the total number of horses in England and Wales, employed in husbandry, at 1,200,000, and those employed for other purposes at 600,000. Dr. Colquhoun, contrary to his usual practice, reduces this estimate to 1,500,000 for Great Britain; and in this instance we are inclined to think his guess is pretty near the mark. In 1814, when the horses employed in husbandry were taxed, the numbers of the various descriptions of horses in England and Wales, which paid duty, amounted to 1,204,307. But this account did not include stage-coach, mail-coach, and hackney-coach horses, nor did it include those used in posting. Poor persons keeping only one horse were also exempted from the duty; as were all horses employed in the regular regiments of cavalry and artillery, and in the volunteer cavalry. In Mr. Middleton's estimate, already referred to, he estimated the number of post-chaise, mail, stage, and hackney-coach horses, at 100,000; and from the inquiries we have made, we are satisfied that if we estimate the number of such horses in Great Britain, at this moment, at 125,000, we shall be decidedly beyond the mark.

On the whole, therefore, it may be fairly estimated that there are in Great Britain from [illegible]0,000 to 1,500,000 horses employed for various purposes of pleasure and utility. They may, probably, be worth at an average from 10*l.* to 12*l.*, making their total value from 14,000,000*l.* to 18,000,000*l.* sterling, exclusive of the young horses.

The duties begin to be charged as soon as horses are used for drawing or riding, and [illegible] previously.

An Account of the Number of Horses charged with Duty in the Years ending the 5th of April, 1825, 1832, and 1841, the Rates of Duty, and the Produce of the Duties.

Horses used for riding or drawing carriages, and charged at progressive rates: —	1825. No. of Horses.	1825. Rates of Duty for each Horse.	1825. Amount of Duty.	1832. No. of Horses.	1832. Rates of Duty for each Horse.	1832. Amount of Duty.	1841. No. of Horses.	1841. Rates of Duty for each Horse.	1841. Amount of Duty.
		£ s. d.	£ s. d.			£ s. d.			£ s. d.
Persons keeping 1 -	116,529	1 8 9	167,510 8 9	123,668	Same as 1825.	177,772 15 0	89,319	Same as 1825.	128,396 1 3
— 2 -	27,418	2 7 3	64,775 0 6	31,073	do.	73,409 19 3	34,671	do.	81,910 4 9
— 3 -	10,281	2 12 3	26,859 2 3	10,740	do.	28,058 3 0	11,770	do.	30,749 2 6
— 4 -	5,748	2 15 0	15,807 0 0	5,845	do.	16,073 15 0	6,356	do.	17,479 0 0
— 5 -	3,190	2 52 9	8,892 2 6	3,210	do.	8,947 17 6	3,276	do.	9,131 17 0
— 6 -	2,172	2 18 0	6,293 16 0	2,138	do.	6,200 4 0	2,215	do.	6,510 10 0
— 7 & 8 -	2,279	2 19 9	6,808 10 3	2,204	do.	6,584 9 0	2,280	do.	6,811 10 0
— 9 -	585	3 0 9	1,756 18 9	582	do.	1,615 19 0	613	do.	1,861 19 8
— 10 to 12 -	1,486	3 6 6	4,718 1 0	1,354	do.	4,298 19 0	1,253	do.	3,978 5 6
— 13 - 16 -	250	3 3 9	1,657 10 0	719	do.	2,291 16 3	853	do.	2,718 18 9
— 17 -	34	3 4 0	108 16 0	51	do.	163 4 0	49	do.	156 16 0
— 18 -	54	3 4 6	174 3 0	126	do.	406 7 0	162	do.	522 9 0
— 19 -	133	3 5 0	432 5 0	76	do.	247 0 0	96	do.	312 0 0
— 20 & upwards -	1,018	3 6 0	3,309 8 0	1,142	do.	3,708 12 0	1,343	do.	4,431 11 0
Total -	[illegible]1,447	- -	309,178 2 0	182,878	- -	329,839 2 0	154,286	- -	294,970 12 6
Horses let to hire -	1,702	1 8 9	2,116 12 6	2,073	do.	2,979 18 9	2,179	do.	3,132 6 3
Race horses - -	711	2 17 6	1,022 1 3	997	do.	1,433 3 9	1,095	3 10 0	3,832 10 0
Horses used for riding or drawing carriages, and not exceeding 15 hands	19,121	1 1 0	20,077 1 0	24,639	do.	25,870 19 0	22,594	Same as 1825.	23,723 14 0
Horses rode by farming bailiffs - -	1,251	1 5 0	1,563 15 0	1,438	do.	1,797 10 0	55	do.	68 15 0
Do. by butchers, where 1 only is kept - -	2,089	1 8 9	4,296 13 9	3,364	do.	4,835 15 0	3,389	do.	4,871 13 9
Do. where 2 are kept solely for trade - -	1,085	0 10 6	569 12 6	1,213	do.	636 16 6	1,030	do.	540 15 0
Horses not chargeable to any of the foregoing duties, and not exempted - - -	112,989	0 10 6 for the 2d horse	59,319 4 6	123,728	do.	64,957 4 0	132,342	do.	69,479 11 0
Mules - - -	410	0 10 6	215 5 0	348	do.	182 14 0	381	do.	200 0 6
Totals -	310,805			340,678			163,065	- -	105,849 5 6

Exemptions. — Besides the above account of the horses charged with duty, an account is published of the numbers exempted from the duty. This account is not, however, to be relied on; inasmuch as very many of those whose horses are not liable to the duties never think of making any returns. By not attending to this circumstance, we inadvertently, in a former edition of this work, under-rated the number of horses engaged in certain departments of industry.

Influence of Railroads on Horses. — The statements now made, show the dependence that ought to be placed on the estimates occasionally put forth by some of the promoters of railroads and steam carriages. These gentlemen are pleased to tell us, that by superseding the employment of horses in public conveyances, and in the regular carriage of goods, the full adoption of their projects will in the end enable 1,000,000 horses to be dispensed with; and that, as each horse consumes as much food as 8 men, it will at once provide subsistence for 8,000,000 human beings! To dwell upon the absurdity of such a statement would be worse than useless; nor should we have thought of noticing it, but that it found its way into a report of a committee of the House of Commons. It is sufficient to observe, that though *all* the stage

and mail coaches and *all* the public waggons, vans, &c. employed in the empire, were superseded by steam carriages, they would not, even then, have rendered 120,000 horses superfluous. The notion that 1 horse consumes as much as 8 men, at least if we suppose the men to be reasonably well fed, is too ridiculous to deserve notice.

The rates of duty payable at present (1843) on horses, are the same as those specified in the above Table for 1841. A horse *bonâ fide* kept and usually employed for the purpose of husbandry, on a farm of less value than 200*l.* a year, though occasionally used as a riding horse, is exempted from the duty. And husbandry horses, whatever may be the value of the farms on which they are kept, may be rode, free of duty, to and from any place to which a burden shall have been carried or brought back; to procure medical assistance, and to or from markets, places of public worship, elections of members of parliament, courts of justice, or meetings of commissioners of taxes.

Brood mares, while kept for the sole purpose of breeding, are exempted from all duty.

Horses may be let or lent for agricultural purposes, without any increase of duty.

Mules employed in carrying ore and coal are exempted from any duty. — See the Statutes in *Chitty's* edition of *Burn's Justice*, vol. v. tit. *Assessed Taxes*.)

The facility with which horses may be stolen has led to the enactment of several regulations with respect to their sale, &c. The property of a horse cannot be conveyed away without the express consent of the owner. Hence, a *bonâ fide* purchaser gains no property in a horse that has been stolen, unless it be bought in a *fair*, or an *open* market. It is directed that the keeper of every fair or market shall appoint a certain open place for the sale of horses, and one or more persons to take toll there, and keep the place from 10 in the forenoon till sunset. The owner's property in the horse stolen is not altered by sale in a legal fair, unless it be openly ridden, led, walked, or kept standing for *one hour at least, and has been registered*, for which the buyer is to pay 1*d.* Sellers of horses in fairs or markets must be known to the toll-takers, or to some other creditable person known to them, who declares his knowledge of them, and enters the same in a book kept by the toll-taker for the purpose. Without these formalities, the sale is void. The owner of a horse stolen may, notwithstanding its legal sale, redeem it on payment or tender of the price any time within 6 months of the time of the theft. — *Burn's Justice of the Peace, Chitty's* ed. vol. iii. p. 264.)

In order to obviate the facility afforded by means of slaughtering houses for the disposal of stolen horses, it was enacted in 1786 (26 Geo. 3. c. 71.), that all persons keeping places for slaughtering horses, geldings, sheep, hogs, or other cattle not killed for butcher's meat, shall obtain a licence from the quarter sessions, first producing from the minister and churchwardens, or from the minister and 2 substantial householders, a certificate of their fitness to be intrusted with the management and carrying on of such business. Persons slaughtering horses or cattle without licence are guilty of felony, and may be whipped and imprisoned, or transported. Persons licensed are bound to affix over the door or gate of the [redacted] where their business is carried on, in legible characters, the words "*Licensed for slaughtering Horses pursuant to an Act passed in the 26th Year of his Majesty King Geo. III.*" The parishioners entitled to meet in vestry are authorised to choose annually, or oftener, inspectors, whose duty it is to take an account and description, &c. of every living horse, &c. that may be brought to such slaughtering houses to be killed, and of every dead horse that may be brought to be flayed. Persons bringing cattle are to be asked an account of themselves, and if it be not deemed satisfactory, they may be carried before a justice. This act does not extend to currlers, fellmongers, tanners, or persons killing aged or distempered cattle, for the purpose of using or curing their hides in their respective businesses; but these, or any other persons, who shall knowingly or wilfully kill any sound or useful horse, &c., shall for every such offence forfeit not more than 20*l.*, and not less than 10*l.*

The stealing of horses and other cattle is a capital crime, punishable by death. The maliciously wounding, maiming, killing, &c. of horses and other cattle, is to be punished, at the discretion of the court, by transportation beyond seas for life, for any term not less than 7 years, or by imprisonment for any term not exceeding 4 years; and if a male, he may be once, twice, or thrice publicly or privately whipped, should the court so direct. — (7 & 8 *Geo.* 4. c. 29. § 25.; 7 & 8 *Geo.* 4. c. 30. § 16.)

French Trade in Horses.—The horses of France are not, speaking generally, nearly so handsome, fleet, or powerful as those of England. Latterly, however, the French have been making great efforts to improve the breed of horses, and have, in this view, been making large importations from England and other countries. At an average of the 5 years' ending with 1827, the excess of horses imported into France, above those exported, amounted to about 13,000 a year. — *Bulletin des Sciences Géographiques*, tom. xix. p. 5.) The imports from England have, in some late years, amounted to nearly 2,000 horses.

HORSE DEALERS, persons whose business it is to buy and sell horses.

Every person carrying on the business of a horse dealer is required to keep a book, in which he shall enter an account of the number of the horses kept by him for sale and for use, specifying the duties to which the same are respectively liable; this book is to be open, at all reasonable times, to the inspection of the officers; and a true copy of the same is to be delivered quarterly to the assessor or assessors of the parish in which the party resides. Penalty for non-compliance, 50*l.* — (43 *Geo.* 3. c. 161.) Horse dealers are assessed, if they carry on their business in the metropolis, 25*l.*; and if elsewhere, 12*l.* 10*s.*

In 1841 there were in the metropolis 1,839 licensed horse-dealers, and in other parts of Great Britain 12,312, making a grand total of 14,151.

HUNDRED WEIGHT, a weight of 112 lbs. avoirdupois, generally written cwt.

I. AND J.

JALAP, OR JALOP (Ger. *Jalapp*; Fr. *Jalap*; It. *Sciarappa*; Sp. *Jalapa*), the root of a sort of convolvulus, so named from Xalapa, in Mexico, whence we chiefly import it. The root, when brought to this country, is in thin transverse slices, solid, hard, weighty, of a blackish colour on the outside, and internally of a dark grey, with black circular striæ. The hardest and darkest coloured is the best; that which is light, spongy, and pale coloured, should be rejected. The odour of jalap, espeically when in powder, is very characteristic. Its taste is exceedingly nauseous, accompanied by a sweetish bitterness. — (*Lewis's Mat. Med.*; *Brande's Pharmacy.*) The entries of jalap for home consumption amounted, at an average of 1840 and 1841, to 44,962 lbs. a year.

JAMAICA PEPPER. See PIMENTO.

JAPANNED WARES (Ger. *Japanisch ware*; Du. *Japansch lakwerk*; Fr. *Marchandises de Japon*), articles of every description, such as tea-trays, clock-dials, candlesticks, snuff-boxes, &c. covered with coats of japan, whether plain, or embellished with

painting or gilding. Birmingham is the grand staple of this manufacture, which is there carried on to a great extent. Pontypool, in Monmouthshire, was formerly famous for japanning; but it is at present continued there on a very small scale only. It is prosecuted with spirit and success at Bilston and Wolverhampton.

JASPER (Ger. *Jaspiss*; Du. *Jaspis*; Fr. *Jaspe*; It. *Diaspro*; Sp. *Jaspe*; Rus. *Jaschma*). This stone is an ingredient in the composition of many mountains. It occurs usually in large amorphous masses, sometimes in round or angular pieces; its fracture is conchoidal; specific gravity from 2 to 2·7. Its colours are various: when heated it does not decrepitate: it is usually divided into 4 species, denominated Egyptian jasper, striped jasper, porcelain jasper, and common jasper. It is sometimes employed by jewellers in the formation of seals.

JERSEY. See GUERNSEY.

JET, OR PITCH COAL (Du. *Git, Zwarte barnsteen*; Fr. *Jais, Jayet*; Ger. *Gagat*; It. *Gagata, Lustrino*; Lat. *Gagus, Gagates*), of a black velvet colour, occurs massive, in plates; sometimes in the shape of branches of trees, but without a regular woody texture. Internal lustre shining, resinous, soft; rather brittle; easily frangible: specific gravity 1·3. It is used for fuel, and for making vessels and snuff-boxes. In Prussia it is called black amber, and is cut into rosaries and necklaces. It is distinguished by its brilliancy and conchoidal fracture. — (*Thomson's Chemistry.*)

JETSAM. See FLOTSAM.

IMPORTATION AND EXPORTATION, the bringing of commodities from and sending them to other countries. A very large portion of the revenue of Great Britain being derived from customs duties, or from duties on commodities imported from abroad; and drawbacks being given on many, and bounties on a few articles exported; the business of importation and exportation is subjected to various regulations, which must be carefully observed by those who would avoid incurring penalties, and subjecting their property to confiscation. The regulations referred to are principally embodied in the act 3 & 4 Will. 4. c. 52., which is subjoined, with the modifications made in it by subsequent acts.

GENERAL REGULATIONS.

No Goods to be landed nor Bulk broken before Report and Entry. — No goods shall be unladen from any ship arriving from parts beyond the seas at any port or place in the United Kingdom or in the Isle of Man, nor shall bulk be broken after the arrival of such ship within 4 leagues of the coasts thereof, before due report of such ship and due entry of such goods shall have been made, and warrant granted, in manner herein-after directed; and no goods shall be so unladen except at such times and places, and in such manner, and by such persons, and under the care of such officers, as is and are herein-after directed; and all goods not duly reported, or which shall be unladen contrary hereto, shall be forfeited; and if bulk be broken contrary hereto, the master of such ship shall forfeit the sum of 100*l.*; and if, after the arrival of any ship within 4 leagues of the coast of the United Kingdom or of the Isle of Man, any alteration be made in the stowage of the cargo of such ship, so as to facilitate the unlading of any part of such cargo, or if any part be staved, destroyed, or thrown overboard, or any package be opened, such ship shall be deemed to have broken bulk: provided always, that the several articles herein-after enumerated may be landed in the United Kingdom without report, entry, or warrant (that is to say,) diamonds and bullion, fresh fish of British taking, and imported in British ships, turbots and lobsters fresh, however taken or imported. — § 2.

MANIFEST.

All British Ships, and all Ships with Tobacco, to have Manifests. — No goods shall be imported into the United Kingdom, or into the Isle of Man, from parts beyond the seas, in any British ship, nor any tobacco in any ship, unless the master shall have on board a manifest of such goods or of such tobacco, made out, dated, and signed by him at the place or respective places where the same or the different parts of the same was or were taken on board, and authenticated in the manner herein-after provided; and every such manifest shall set forth the name and the tonnage of the ship, the name of the master and of the place to which the ship belongs, and of the place or places were the goods were taken on board respectively, and of the place or places for which they are destined respectively, and shall contain a particular account and description of all the packages on board, with the marks and numbers thereon, and the sorts of goods and different kinds of each sort contained therein, to the best of the master's knowledge, and of the particulars of such goods as are stowed loose, and the names of the respective shippers and consignees, as far as the same can be known to the master; and to such particular account shall be subjoined a general account or recapitulation of the total number of the packages of each sort, describing the same by their usual names, or by such descriptions as the same can best be known by, and the different goods therein, and also the total quantities of the different goods stowed loose: provided always, that every manifest for tobacco shall be a separate manifest*, distinct from any manifest for any other goods, and shall, without fail, contain the particular weight of tobacco in each hogshead, cask, chest, or case, with the tare of the same; and if such tobacco be the produce of the dominions of the Grand Seignior, then the number of the parcels or bundles within any such hogshead, cask, chest, or case shall be stated in such manifest. — § 3.

To be produced to Officers in Colonies, &c. — Before any ship shall be cleared out or depart from any place in any of the British possessions abroad, or from any place in China, with any goods for the United Kingdom or for the Isle of Man, the master of such ship shall produce the manifest to the collector or comptroller of the customs, or other proper officer, who shall certify upon the same the date of the production thereof to him: provided always, that in all places within the territorial possessions of the East India Company the servant of the said Company by whom the last despatches of such ship shall be delivered *shall be the proper officer to authenticate the manifest as aforesaid*; and in all places in China the chief supercargo of the said Company shall be the proper officer for such purpose. — § 4.

To be produced to Consuls. — Before the departure of any ship from any place beyond the seas not under the British dominions, where any tobacco has been taken on board such ship for the United Kingdom or for the Isle of Man, the master of such ship shall produce the manifest of such tobacco to the British

* This regulation is repealed by the act 5 & 6 Victoria, c. 47. § 9., which also repeals the clause requiring the weight of tobacco to be marked on the casks, and authorises its importation by *bill of store*.

consul or other chief British officer, if there be any such resident at or near such place; and such consul or other officer shall certify upon the same the date of the production thereof to him. — § 5.

If wanting, Master to forfeit 100l. — If any goods be imported into the U. Kingdom or into the Isle of Man, in any British ship, or any tobacco in any ship, without such manifest, or if any goods contained in such manifest be not on board, the master of such ship shall forfeit the sum of 100*l.* — § 6.

Manifest to be produced within 4 Leagues. — The master of every ship required to have a manifest on board shall produce such manifest to any officer of the customs who shall come on board his ship after her arrival within 4 leagues of the coast of the U. Kingdom or of the coast of the Isle of Man, and who shall demand the same, for his inspection; and such master shall also deliver to any such officer who shall be the first to demand it, a true copy of such manifest signed by the master; and shall also deliver another copy to any other officer of the customs who shall be the first to demand the same within the limits of the port to which such ship is bound; and thereupon such officers respectively shall notify on such manifest and on such copies the date of the production of such manifest and of the receipt of such copies, and shall transmit such copies to the collector and comptroller of the port to which such vessel is first bound, and shall return such manifest to the master; and if such master shall not in any case produce such manifest, or deliver such copy, he shall forfeit the sum of 100*l.* — § 7.

REPORT.

Master, within 24 Hours, and before breaking Bulk, shall report. — The master of every ship arriving from parts beyond the seas at any port in the U. Kingdom or in the Isle of Man, whether laden or in ballast, shall, within 24 hours after such arrival, and before bulk be broken, make due report of such ship, and shall make and subscribe a declaration to the truth of the same, before the collector or comptroller of such port; and such report shall contain an account of the particular marks, numbers, and contents of all the different packages or parcels of the goods on board such ship, and the particulars of such goods as are stowed loose, to the best of his knowledge, and of the place or places where such goods were respectively taken on board, and of the burden of such ship, and of the country where such ship was built, or, if British, of the port of registry, and of the country of the people to whom such ship belongs, and of the name and country of the person who was master during the voyage, and of the number of the people by whom such ship was navigated, stating how many are subjects of the country to which such ship belongs, and how many are of some other country; and in such report it shall be further declared, whether and in what cases such ship has broken bulk in the course of her voyage, and what part of the cargo, if any, is intended for importation at such port, and what part, if any, is intended for importation at another port in the U. Kingdom, or at another port in the Isle of Man respectively, and what part, if any, is prohibited to be imported, except to be warehoused for exportation only, and what part, if any, is intended for exportation in such ship to parts beyond the seas, and what surplus stores or stock remain on board such ship, and, if a British ship, what foreign-made sails or cordage, not being standing or running rigging, are in use on board such ship; and the master of any ship, who shall fail to make such report, or who shall make a false report, shall forfeit the sum of 100*l.* — § 8.

Masters of Vessels coming from Africa to report how many Natives they have on board. — The master of every vessel coming from the coast of Africa, and having taken on board at any place in Africa any person or persons being or appearing to be natives of Africa, shall, in addition to all other matters, state, in the report of his vessel, how many such persons have been taken on board by him in Africa; and any such master failing herein shall forfeit the sum of 100*l.*: provided also, that the master or owner or owners of such vessel, or some or one of them, at the time of making such report, be required to enter into bond to his Majesty in the sum of 100*l.*, conditioned to keep harmless any parish, or any extra-parochial or other place maintaining its own poor, against any expense which such parish or other place may be put to in supporting any such person during their stay in the U. Kingdom; and any such master, owner or owners refusing or neglecting to enter into such bond shall forfeit the sum of 200*l.* — § 9.

Packages reported "Contents unknown," may be opened and examined. — If the contents of any package so intended as aforesaid for exportation in the same ship to parts beyond the seas shall be reported by the master as being unknown to him, it shall be lawful for the officers of the customs to open and examine such package on board, or to bring the same to the king's warehouse for that purpose; and if there be found in such package any goods which may not be entered for home use, such goods shall be forfeited; or if the goods be such as may be entered for home use, the same shall be chargeable with the duties of importation; unless in either case the commissioners of his Majesty's customs, in consideration of the sort or quality of such goods, or the small rate of duty payable thereon, shall see fit to deliver the same for exportation. — § 10.

Master to deliver Manifest, &c. — The master of every ship shall, at the time of making such report, deliver to the collector or comptroller the manifest of the cargo of such ship, where a manifest is required, and if required by the collector or comptroller, shall produce to him any bill or bills of lading, or a true copy thereof, for any and every part of the cargo laden on board; and shall answer all such questions relating to the ship and cargo, and crew and voyage, as shall be put to him by such collector or comptroller; and in case of failure or refusal to produce such manifest, or to answer such questions, or to answer them truly, or to produce such bill of lading or copy, or if such manifest, or bill of lading, or copy, shall be false, or if any bill of lading be uttered by any master, and the goods expressed therein shall not have been *bonâ fide* shipped on board such ship, or if any bill of lading uttered or produced by any master shall not have been signed by him, or any such copy shall not have been received or made by him previously to his leaving the place where the goods expressed in such bill of lading or copy were shipped, then and in every such case such master shall forfeit the sum of 100*l.* — § 11.

Part of Cargo reported for another Port. — If any part of the cargo of any ship for which a manifest is required be reported for importation at some other port in the U. Kingdom, or at some other port in the Isle of Man, the collector and comptroller of the port at which some part of the cargo has been delivered shall notify such delivery on the manifest, and return the same to the master of such ship. — § 12.

Ship to come quickly to Place of unlading, &c. — Every ship shall come as quickly up to the proper place of mooring or unlading as the nature of the port will admit, and without touching at any other place; and in proceeding to such place shall bring to at stations appointed by the commissioners of customs for the boarding of ships by the officers of the customs; and after arriving at such place of mooring or unlading such ship shall not remove from such place except directly to some other proper place, and with the knowledge of the proper officer of the customs, on penalty of 100*l.*, to be paid by the master of such ship: provided always, that it shall be lawful for the commissioners of customs to appoint places to be the proper places for the mooring or unlading of ships importing tobacco, and where such ships only shall be moored or unladen; and in case the place so appointed for the unlading of such ships shall not be within some dock surrounded with walls, if any such ship after having been discharged shall remain at such place, or if any ship not importing tobacco shall be moored at such place, the master shall in either case forfeit and pay the sum of 20*l.* — § 13.

Officers to board ships. — It shall be lawful for the proper officers of the customs to board any ship arriving at any port in the U. Kingdom or in the Isle of Man, and freely to stay on board until all the goods laden therein shall have been duly delivered from the same; and such officers shall have free access to every part of the ship, with power to fasten down hatchways, and to mark any goods before landing, and to lock up, seal, mark, or otherwise secure any goods on board such ship; and if any place, or any box or chest, be locked, and the keys be withheld, such officers, if they be of a degree superior to tidesmen or watermen, may open any such place, box, or chest in the best manner in their power; and

if they be tidesmen or watermen, or only of that degree, they shall send for their superior officer, who may open or cause to be opened any such place, box, or chest in the best manner in his power; and if any goods be found concealed on board any such ship, they shall be forfeited; and if the officers shall place any lock, mark, or seal upon any goods on board, and such lock, mark, or seal be wilfully opened, altered, or broken before due delivery of such goods, or if any of such goods be secretly conveyed away, or if the hatchways, after having been fastened down by the officer, be opened, the master of such ship shall forfeit the sum of 100*l.* — § 14.

National Ships, British or Foreign, having Goods on board, Person in charge to deliver an Account, or forfeit 100*l.* — If any ship (having commission from his Majesty, or from any foreign prince or state) arriving as aforesaid at any port in the U. Kingdom or in the Isle of Man shall have on board any goods laden in parts beyond the seas, the captain, master, purser, or other person having the charge of such ship or of such goods for that voyage shall, before any part of such goods be taken out of such ship, or when called upon so to do by any officer of the customs, deliver an account in writing under his hand, to the best of his knowledge, of the quality and quantity of every package or parcel of such goods, and of the marks and numbers thereon, and of the names of the respective shippers and consignees of the same, and shall make and subscribe a declaration at the foot of such account, declaring to the truth thereof, and shall also truly answer to the collector or comptroller such questions concerning such goods as shall be required of him; and on failure thereof such captain, master, purser, or other person shall forfeit the sum of 100*l.*; and all such ships shall be liable to such searches as merchant ships are liable to; and the officers of the customs may freely enter and go on board all such ships, and bring from thence on shore into the king's warehouse any goods found on board any such ship as aforesaid; subject, nevertheless, to such regulations in respect of ships of war belonging to his Majesty as shall from time to time be directed in that respect by the commissioners of his Majesty's treasury of the U. Kingdom of Great Britain and Ireland. — § 15.

Master to deliver List of Crew of Ships from West Indies. — The master of every British ship arriving at any port in the U. Kingdom, on her return from any British possessions in the West Indies, shall, within 10 days of such arrival, deliver to the collector or comptroller a list, containing the names and descriptions of the crew which was on board at the time of clearing from the U. Kingdom, and of the crew on board at the time of arrival in any of the said possessions, and of every seaman who has deserted or died during the voyage, and also the amount of wages due at the time of his death to each seaman so dying, and shall make and subscribe a declaration at the foot of such list, declaring to the truth thereof; and every master omitting so to do shall forfeit the sum of 50*l.*; and such list shall be kept by the collector for the inspection of all persons interested therein. — § 16.

N. B. — In consequence of frauds being practised on the revenue from reporting packages of goods as "contents unknown," it is enacted by the 6 & 7 Vict. c. 84., that all masters of vessels arriving from any foreign place in Europe at any port in the U. K. shall, in addition to the particulars required by the act 3 & 4 Will. 4. c. 52, &c. to be inserted in the reports and manifests of their respective vessels, insert the general denominations and the contents of every package containing cambrics or lawns, leather gloves, manufactures of silk, tobacco, cigars, or snuff; and all such articles as shall be found on board any vessel arriving as aforesaid, or landed therefrom, and not so manifested or reported, shall be forfeited. — § 5.

ENTRY.

After 14 *Days, Officer may land Goods not entered, &c.* — Every importer of any goods shall, within 14 days after the arrival of the ship importing the same, make perfect entry inwards of such goods, or entry by bill of sight, in manner herein-after provided, and shall within such time land the same; and in default of such entry and landing it shall be lawful for the officers of the customs to convey such goods to the king's warehouse; and whenever the cargo of any ship shall have been discharged, with the exception only of a small quantity of goods, it shall be lawful for the officers of the customs to convey such remaining goods, and at any time to convey any small packages or parcels of goods, to the king's warehouse, although such 14 days shall not have expired, there to be kept waiting the due entry thereof during the remainder of such 14 days; and if the duties due upon any goods so conveyed to the king's warehouse shall not be paid within 3 months after such 14 days shall have expired, together with all charges of removal and warehouse rent, the same shall be sold, and the produce thereof shall be applied, first to the payment of freight and charges, next of duties, and the overplus, if any, shall be paid to the proprietor of the goods. — § 17.

Bill of Entry to be delivered. — The person entering any goods inwards (whether for payment of duty, or to be warehoused upon the first perfect entry thereof, or for payment of duty upon the taking out of the warehouse, or whether such goods be free of duty,) shall deliver to the collector or comptroller a bill of the entry of such goods, fairly written in words at length, expressing the name of the ship, and of the master of the ship in which the goods were imported, and of the place from whence they were brought, and the description and situation of the warehouse, if they are to be warehoused, and the name of the person in whose name the goods are to be entered, and the quantity and description of the goods, and the number and denomination or description of the respective packages containing the goods, and in the margin of such bill shall delineate the respective marks and numbers of such packages, and shall pay down any duties which may be payable upon the goods mentioned in such entry; and such person shall also deliver at the same time 2 or more duplicates, as the case may require, of such bill, in which all sums and numbers may be expressed in figures, and the particulars to be contained in such bill shall be written and arranged in such form and manner, and the number of such duplicates shall be such as the collector and comptroller shall require; and such bill being duly signed by the collector and comptroller, and transmitted to the landing waiter, shall be the warrant to him for the landing or delivering of such goods. — § 18.

Unauthorised Persons not permitted to make Entries. — Every person who shall make or cause to be made any such entry inwards of any goods, not being duly authorised thereto by the proprietor or consignee of such goods, shall for every such offence forfeit the sum of 100*l.*: provided always, that no such penalty shall extend or be deemed to extend to any person acting under the directions of the several dock companies or other corporate bodies authorised by law to pass entries. — § 19.

Not valid unless agreeing with Manifest, Report, and other Documents. — No entry, nor any warrant for the landing of any goods, or for the taking of any goods out of any warehouse, shall be deemed valid, unless the particulars of the goods and packages in such entry shall correspond with the particulars of the goods and packages purporting to be the same, in the report of the ship, and in the manifest, where a manifest is required, and in the certificate or other document, where any is required, by which the importation or entry of such goods is authorised, nor unless the goods shall have been properly described in such entry by the denomination and with the characters and circumstances according to which such goods are charged with duty or may be imported, either to be used in the U. Kingdom, or to be warehoused for exportatation only; and any goods taken or delivered out of any ship, or out of any warehouse, or for the delivery of which, or for any order for the delivery of which, from any warehouse, demand shall have been made, not having been duly entered, shall be forfeited. — § 20.

Goods by Number, Measure, or Weight, &c. — If the goods in such entry be charged to pay duty according to the number, measure, or weight thereof, such number, measure, or weight shall be stated in the entry; and if the goods in such entry be charged to pay duty according to the value thereof, such value shall be stated in the entry, and shall be affirmed by the declaration of the importer or his known agent, written upon the entry, and attested by his signature; and if the goods in such entry be chargeable at the option of the officers of customs, either according to the number, measure, or weight thereof, or

according to the value thereof, then as well such number, measure, or weight, as also such value, shall be in like manner stated in the entry, and attested; and if any person make such declaration, not being the importer or proprietor of such goods, nor his agent duly authorised by him, such person shall forfeit the sum of 100*l.*; and such declaration shall be made in manner and form following, and shall be binding upon the person by or in behalf of whom the same shall be made; (that is to say,)

"I *A. B.* of [*place of abode*] do hereby declare, that I am [the importer, or authorised by the importer] of the goods contained in this entry, and that I enter the same [*stating which, if part only*] at the sum of ——————. Witness my hand the —————— day of ——————.

"*A. B.*" — § 21.

Goods undervalued, Officers may detain. — If upon examination it shall appear to the officers of the customs that such goods are not valued according to the true value thereof, it shall be lawful for such officers to detain and secure such goods, and (within 5 days from the landing thereof if it be in the ports of London, Leith, or Dublin, or within 7 days if in any other port in the U. Kingdom, or if in any port in the Isle of Man,) to take such goods for the use of the Crown; and if a different rate of duty shall be charged upon any goods according as the value of the same shall be described in the entry to be above or to be below any particular price or sum, and such goods shall be valued in the entry so as to be liable to the lower rate of duty, and it shall appear to the officers of the customs that such goods, by reason of their real value, are properly liable to the higher rate of duty, it shall be lawful for such officers in like manner to take such goods for the use of the Crown; and the commissioners of his Majesty's customs shall thereupon in any of such cases cause the amount of such valuation, together with an addition of 10*l.* per cent. thereon, and also the duties paid upon such entry, to be paid to the importer or proprietor of such goods in full satisfaction for the same, and shall dispose of such goods for the benefit of the Crown; and if the produce of such sale shall exceed the sums so paid and all charges incurred by the Crown, one moiety of the overplus shall be given to the officer or officers who had detained and taken the goods; and the money retained for the benefit of the Crown shall be paid into the hands of the collector of the customs, with the knowledge of the comptroller, and carried to account as duties of customs. — § 22.

East India Company to sell Goods. — The value of goods imported by the East India Company shall be ascertained by the gross price at which the same shall have been sold by auction at the public sales of the said Company; and that the said Company shall fairly and openly expose to sale and cause to be sold all such goods so charged to pay duty according to the value thereof by way of public auction in the city of London, within 3 years from the importation thereof, and shall give due notice at the Custom-house in London to the officers appointed to attend such sales of the time and place thereof. — § 23.

Bill of Sight if Goods be not known. — If the importer of any goods, or his agent after full conference with him, shall declare before the collector or comptroller that he cannot for want of full information make a full or perfect entry of such goods, and shall make and subscribe a declaration to the truth thereof, it shall be lawful for the collector and comptroller to receive an entry by bill of sight for the packages or parcels of such goods by the best description which can be given, and to grant a warrant thereupon, in order that the same may be provisionally landed, and may be seen and examined by such importer, in presence of the proper officers; and within 3 days after any goods shall have been so landed, the importer shall make a full or perfect entry thereof, and shall either pay down all duties which shall be due and payable upon such goods, or shall duly warehouse the same, according to the purport of the full or perfect entry or entries so made for such goods, or for the several parts or sorts thereof: provided always, that if, when full or perfect entry be at any time made for any goods provisionally landed as aforesaid by bill of sight, such entry shall not be made in manner herein-before required for the due landing of goods, such goods shall be deemed to be goods landed without due entry thereof, and shall be subject to the like forfeiture accordingly: provided also, that if any sum of money shall have been deposited upon any entry by bill of sight, on account of the duties which may be found to be payable on the goods intended therein, it shall be lawful for the officers of the customs to deliver, in virtue of the warrant for landing the same, any quantity of goods the duty on which shall not exceed the sum so deposited. — § 24.

N. B. — It is enacted by the 6 & 7 Vict. c. 84., that in all cases in which an entry shall be made for the landing or examining of goods by bill of sight, the importer or his agent shall, before the same be granted, deposit with the proper officer a sum of money sufficient to cover the duties payable on the goods intended to be landed or examined under such bill, and shall subscribe a declaration that he has no reason to believe the duty will exceed such sum deposited. — § 3.

Goods to be taken to King's Warehouse. — In default of perfect entry within such 3 days, such goods shall be taken to the king's warehouse by the officers of the customs; and if the importer shall not, within 1 month after such landing, make perfect entry or entries of such goods, and pay the duties thereon, or on such parts as can be entered for home use, together with charges of removal and of warehouse rent, such goods shall be sold for payment of such duties (or for exportation, if they be such as cannot be entered for home use, or shall not be worth the duties and charges,) and for the payment of such charges; and the overplus, if any, shall be paid to the importer or proprietor thereof. — § 25.

East India Company may enter by Bill of Sight. — It shall be lawful for the East India Company, without making the proof herein-before required, to enter by bill of sight, to be landed and secured in such manner as the commissioners of his Majesty's customs shall require, any goods imported by them, and also any goods imported by any other person from places within the limits of the charter of the said company, with the consent of such person, upon condition to cause perfect entry to be made of such goods within 3 months from the date of the importation thereof, either to warehouse the same or to pay the duties thereon within the times and in the manner herein-after mentioned; (that is to say,) if such goods be charged to pay duty according to the value, then to pay such duty within 4 months from the sale of the goods; and if such goods be charged to pay duty according to the number, measure, or weight thereof then to pay one moiety of such duties within 6 calendar months from the time of the importation of such goods, and the other moiety within 12 calendar months from such time; and such goods shall be secured in such places and in such manner as the commissioners of his Majesty's customs shall require, until the same shall have been duly entered, and the duties thereon shall have been duly paid, or until the same shall have been duly exported: provided also, that it shall be lawful for any other person who shall have imported any goods from places within the said limits into the port of London in like manner to enter such goods by bill of sight in his own name, upon giving sufficient security by bond, to the satisfaction of the commissioners of his Majesty's customs, with the like conditions as are required of the said company for making perfect entries, and for the securing and the paying of duties, provided such goods be entered by such bill of sight to be warehoused in some warehouse under the superintendence of the said company, and in which goods imported by the said company may be secured in manner before mentioned. — § 26.

In default of Payment of Duties, Goods to be sold. — In default of perfect entry within 3 months as aforesaid, or of due entry and payment of duty within the times and in the manner herein-before respectively required, it shall be lawful for the commissioners of his Majesty's customs to cause any such goods in respect of which such default shall have been made to be sold for the payment of such duties, (or for exportation, if they be such as cannot be entered for home use,) and for the payment of all charges incurred by the Crown in respect of such goods; and the overplus, if any, shall be paid to the proprietor thereof. — § 27.

Goods landed by Bill of Sight fraudulently concealed, forfeited. — Where any package or parcel shall have been landed by bill of sight, and any goods or other things shall be found in such package or parcel concealed in any way, or packed with intent to deceive the officers of his Majesty's customs, as well all such

goods and other things as the package or parcel in which they are found, and all other things contained in such package or parcel, shall be forfeited. — § 28.

East India Company to pay Duties to Receiver-general. — The East India Company shall pay into the hands of the receiver-general of the customs every sum of money due from the said Company on account of the duties of customs at the respective times when the same shall become due; and the said receiver-general shall give to the said Company a receipt for the monies so paid, on the account of the collector of the customs, which receipt, when delivered to such collector, shall be received by him as cash. — § 29.

Goods damaged on Voyage. — Any goods which are rated to pay duty according to the number, measure or weight thereof (except certain goods herein-after mentioned) shall receive damage during the voyage, an abatement of such duties shall be allowed in proportion to the damage so received; provided proof be made to the satisfaction of the commissioners of his Majesty's customs, or of any officers of customs acting therein under their directions, that such damage was received after the goods were shipped abroad in the ship importing the same, and before they were landed in the U. Kingdom; and provided claim to such abatement of duties be made at the time of the first examination of such goods — § 30.

Officers to examine Damage, and state Proportion, or choose two Merchants. — The officers of the customs shall thereupon examine such goods with reference to such damage, and may state the proportion of damage which, in their opinion, such goods have so received, and may make a proportionate abatement of duties; but if the officers of customs be incompetent to estimate such damage, or if the importer be not satisfied with the abatement made by them, the collector and comptroller shall choose two indifferent merchants experienced in the nature and value of such goods, who shall examine the same, and shall make and subscribe a declaration, stating in what proportion, according to their judgment, such goods are lessened in their value by reason of such damage, and thereupon the officers of customs may make an abatement of the duties according to the proportion of damage so declared by such merchants. — § 31.

No Abatement for certain Goods. — No abatement of duties shall be made on account of any damage received by any of the sorts of goods herein-after enumerated; (that is to say,) cocoa, coffee, oranges, pepper, currants, raisins, figs, tobacco, lemons, and wine. — § 32.

Returned Goods. — It shall be lawful to re-import into the U. Kingdom from any place, in a ship of any country, any goods (except as herein-after excepted) which shall have been legally exported from the U. Kingdom, and to enter the same by bill of store, referring to the entry outwards, and exportation thereof, provided the property in such goods continue in the person by whom or on whose account the same have been exported, and that such re-importation take place within 6 years from the date of the exportation; and if the goods so returned be foreign goods, which had before been legally imported into the U. Kingdom, the same duties shall be payable thereon as would, at the time of such re-importation, be payable on the like goods under the same circumstances of importation as those under which such goods had been originally imported, or such goods may be warehoused as the like goods might be warehoused upon a first importation thereof: provided always, that the several sorts of goods enumerated or described in the Table following shall not be re-imported into the U. Kingdom for home use upon the ground that the same had been legally exported from thence, but that the same shall be deemed to be foreign goods, whether originally such or not, and shall also be deemed to be imported for the first time into the U. Kingdom; (that is to say,)

A Table of Goods exported which may not be re-imported for Home Use.

Corn, grain, meal, flour, and malt, hops, tobacco, tea.	All goods for which bill of store cannot be issued in manner herein-after directed, except small remnants of British goods by special permission of the commissioners of his Majesty's customs, upon proof to their satisfaction that the same are British, and had not been sold. — Sect. 33.
Goods for which any bounty or any drawback of excise had been received on exportation, unless by special permission of the commissioners of his Majesty's customs, and on repayment of such bounty or such drawback.	

Bill of Store, by whom may be taken out. — The person in whose name any goods so re-imported were entered for exportation shall deliver to the searcher at the port of exportation an exact account, signed by him, of the particulars of such goods, referring to the entry and clearance outwards and to the return inwards of the same, with the marks and numbers of the packages, both inwards and outwards; and thereupon the searcher, finding that such goods had been legally exported, shall grant a bill of store for the same; and if the person in whose name such goods were entered for exportation was not the proprietor thereof, but his agent, he shall declare upon oath on such bill of store the name of the [redacted] by whom he was employed as such agent; and if the person to whom such returned goods are consigned shall not be such proprietor and exporter, he shall make and subscribe a declaration on such bill of store of the name of the person for whose use such goods have been consigned to him; and the real proprietor, ascertained to be such, shall make and subscribe a declaration upon such bill of store, to the identity of the goods so exported and so returned, and that he was at the time of exportation and of re-importation the proprietor of such goods, and that the same had not during such time been sold or disposed of to any other person; and such declaration shall be made before the collectors or comptrollers at the ports of exportation and of importation respectively; and thereupon the collector and comptroller shall admit such goods to entry by bill of store, and grant their warrant accordingly. — § 34.

Surplus Stores subject as Goods. — The surplus stores of every ship arriving from parts beyond the seas in the U. Kingdom or in the Isle of Man, shall be subject to the same duties, and the same prohibitions, restrictions, and regulations, as the like sorts of goods shall be subject to when imported by way of merchandise; but if it shall appear to the collector and comptroller that the quantity or description of stores is not excessive or unsuitable, under all the circumstances of the voyage, it shall be lawful for them to permit such surplus stores to be entered for the private use of the master, purser, or owner of such ship, or of any passenger of such ship to whom any such surplus stores may belong, on payment of the proper duties, or to be warehoused for the future use of such ship, although the same could not be legally imported by way of merchandise. — § 35.

Goods from Plantations, &c. — No goods shall be entered as being of or from any British possession in America (if any benefit attach to such distinction) unless the master of the ship importing the same shall have delivered to the collector or comptroller a certificate, under the hand of the proper officer of the place where such goods were taken on board, of the due clearance of such ship from thence, containing an account of such goods. — § 36.

Certificate of Growth of Sugar, Coffee, Cocoa, or Spirits from Plantations. — Before any sugar, coffee, cocoa, or spirits shall be entered as being of the produce of some British possession in America, or the Island of Mauritius, the master of the ship importing the same shall deliver to the collector or comptroller a certificate, under the hand of the proper officer of the place where such goods were taken on board, testifying that proof had been made in manner required by law that such goods are of the produce of some British possession in America, or of the Island of Mauritius, stating the name of the place where such goods were produced, and the quantity and quality of the goods, and the number and denomination of the packages containing the same, and the name of the ship in which they are laden, and of the master thereof; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as are mentioned therein. — § 37.

Certificate of Sugar from Limits of Charter. — Before any sugar shall be entered as being the produce of any British possession within the limits of the East India Company's charter, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand and seal of the proper officer at the place were such sugar was taken on board, testifying that oath had been made

before him, by the shipper of such sugar, that the same was really and *bonâ fide* the produce of such British possession; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such sugar was taken on board, and that the sugar so imported is the same as is mentioned therein. — § 38.

Certificate of Wine, Produce of Cape of Good Hope. — Before any wine shall be entered as being the produce of the Cape of Good Hope, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand of the proper officer of the Cape of Good Hope testifying that proof had been made, in manner required by law, that such wine is of the produce of the Cape of Good Hope or the dependencies thereof, stating the quantity and sort of such wine, and the number and denomination of the packages containing the same; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the Cape of Good Hope, and that the wine so imported is the same as is mentioned therein. — § 39.

Goods of Guernsey, Jersey, &c. — It shall be lawful to import into the U. Kingdom any goods of the produce or manufacture of the islands of Guernsey, Jersey, Alderney, Sark, or Man, from the said islands respectively, without payment of any duty (except in the cases herein-after mentioned); and such goods shall not be deemed to be included in any charge of duties imposed by any act hereafter to be made on the importation of goods generally from parts beyond the seas: provided always, that such goods may nevertheless be charged with any proportion of such duties as shall fairly countervail any duties of excise, or any coast duty, payable on the like goods the produce of the part of the U. Kingdom into which they shall be imported: provided also, that such exemption from duty shall not extend to any manufactures of the said islands made from materials the produce of any foreign country, except manufactures of linen and cotton made in and imported from the Isle of Man. — § 40.

Master to deliver Certificate of Produce, and declare to Certificate. — Before any goods shall be entered as being the produce of the said islands (if any benefit attach to such distinction), the master of the ship or vessel importing the same shall deliver to the collector or comptroller a certificate from the governor, lieutenant-governor, or commander-in-chief of the island from whence such goods were imported, that proof had been made, in manner required by law, that such goods were of the produce of such island, stating the quantity and quality of the goods, and the number and denomination of the packages containing the same; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as are mentioned therein. — § 41.

Treasury may permit Produce of colonial Fisheries to be imported from Guernsey, &c. — It shall be lawful for the Lords Commissioners of his Majesty's Treasury, when and so long as they shall see fit, to permit any goods the produce of the British possessions or fisheries in N. America, which shall have been legally imported into the islands of Guernsey or Jersey direct from such possessions, to be imported into the U. Kingdom for home use direct from those islands, under such regulations as the said commissioners shall direct, any thing in the law of navigation to the contrary notwithstanding. — § 42.

Vessels with Stone from Guernsey, &c. not to be piloted. — No vessel arriving on the coast of England from Guernsey, Jersey, Alderney, Sark, or Man, wholly laden with stone the production thereof, shall be liable to be conducted or piloted by pilots appointed and licensed by the corporation of the Trinity House of Deptford Strond, any law, custom, or usage to the contrary notwithstanding. — § 43.

Fish, British taking and curing, and Lobsters and Turbots, free of Duty on Importation. — Fresh fish of every kind of British taking, and imported in British ships, and fresh lobsters and turbots, however taken or in whatever ship imported, and cured fish of every kind, of British taking and curing, imported in British ships, shall be imported free of all duties, and shall not be deemed to be included in any charge of duty imposed by any act hereafter to be made on the importation of goods generally: provided always, that before any cured fish shall be entered free of duty, as being of such taking and curing, the master of the ship importing the same shall make and subscribe a declaration before the collector or comptroller, that such fish was actually caught and taken in British ships, and cured by the crews of such ships, or by his Majesty's subjects. — § 44.

Certificate of Blubber, Train Oil, &c. British colonial taking. — Before any blubber, train oil, spermaceti oil, head matter, or whale fins, shall be entered as being the produce of fish or creatures living in the sea taken and caught wholly by his Majesty's subjects usually residing in some part of his Majesty's dominions, and imported from some British possession, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand of the proper officer of such British possession where such goods were taken on board, (or if no such officer be residing there, then a certificate under the hands of two principal inhabitants at the place of shipment,) notifying that oath had been made before him or them, by the shipper of such goods, that the same were the produce of fish or creatures living in the sea taken wholly by British vessels owned and navigated according to law; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as mentioned therein; and the importer of such goods shall also make and subscribe a declaration before the collector or comptroller, at the time of entry, that to the best of his knowledge and belief the same were the produce of fish or creatures living in the sea taken wholly by British vessels in manner aforesaid. — § 45.

Before entry of Blubber, &c. of British fishing, Master and Importer to make Declaration of the same. — Before any blubber, train oil, spermaceti oil, head matter, or whale fins, imported direct from the fishery, shall be entered as being the produce of fish or creatures living in the sea taken and caught wholly by the crews of ships cleared out from the U. Kingdom, or from one of the islands of Guernsey, Jersey, Alderney, Sark, or Man, the master of the ship importing such goods shall make and subscribe a declaration, and the importer of such goods (to the best of his knowledge and belief) shall make and subscribe a declaration, that the same are the produce of fish or creatures living in the sea taken and caught wholly by the crew of such ship, or by the crew of some other ship (naming the ship) cleared out from the U. Kingdom, or from one of the islands of Guernsey, Jersey, Alderney, Sark, or Man (stating which). — § 46.

Blubber from Greenland may be boiled, and entered as Oil imported, and be exported as such. — It shall be lawful upon the return of any ship from the Greenland seas or Davis's Straits to the U. Kingdom with any blubber, being the produce of whales or other creatures living in the sea, for the importers thereof to cause the same to be boiled into oil at the port of importation, under the care and inspection of the proper officers of the customs; and the oil so produced shall be admitted to entry, and the duties be paid thereon, as if imported in that state, and such oil shall not afterwards, if the same come to be exported, be subject to duty of exportation as a manufacture of the U. Kingdom. — § 47.

N. B. — The act 6 & 7 Victoria, § 10. permits blubber oil, &c. to be imported direct into the U. Kingdom in colonial vessels cleared out from such fishery or from any British possession.

Importation direct. — No goods shall be deemed to be imported from any particular place unless they be imported direct from such place, and shall have been there laden on board the importing ship, either as the first shipment of such goods, or after the same shall have been actually landed at such place. — § 48.

Salvor may sell Goods sufficient to defray Salvage. — It shall be lawful for the owner or salvor of any property liable to the payment of duty saved from sea, and in respect of which any sum shall have been awarded under any law at the time in force, or in respect of which any sum shall have been paid or agreed to be paid by the owner thereof or his agent, to the salvors, to defray the salvage of the same, to sell so much of the property so saved as will be sufficient to defray the salvage so awarded, or such other sum so paid or agreed to be paid; and upon the production of an award made in execution of any such law to the commissioners of customs, or upon proof to the satisfaction of the said commissioners that such sum of money has been paid, or has been agreed to be paid, the said commissioners are hereby empowered

and required to allow the sale of such property aforesaid, free from the payment of all duties, to the amount of such sum so awarded, paid, or agreed to be paid, or to the amount of such other sum as to the said commissioners shall seem just and reasonable: provided always, that if such owner or salvor shall be dissatisfied with any determination of the said commissioners as to the amount of such property to be sold duty free, it shall be lawful for such owner or salvor to refer any such determination of the said commissioners to the judgment and revision of the High Court of Admiralty; and in that case such sale shall be suspended until the decision of such court shall have been had thereon. — § 49.

Foreign Goods derelict, &c. to be subject to same Duties as on Importation. — All foreign goods, derelict, jetsam, flotsam, and wreck, brought or coming into the U. Kingdom or into the Isle of Man, shall at all times be subject to the same duties as goods of the like kind imported into the U. Kingdom respectively are subject to: provided alway, that if, for ascertaining the proper amount of duty so payable any question shall arise as to the origin of any such goods, the same shall be deemed to be of the growth, produce, or manufacture of such country or place as the commissioners of customs shall upon investigation by them determine: provided also, that if any such goods be of such sorts as are entitled to allowance for damage, such allowance shall be made under such regulations and conditions as the said commissioners shall from time to time direct: provided also, that all such goods as cannot be sold for the amount of duty due thereon shall be delivered over to the lord of the manor or other person entitled to receive the same, and shall be deemed to be unenumerated goods, and shall be liable to and be charged with duty accordingly. — § 50.

Persons having such Goods in possession, without Notice, liable to a Penalty of 100l. — If any person shall have possession of any such goods, either on land or within any port in the U. Kingdom, and shall not give notice thereof to the proper officer of the customs within 24 hours after such possession, or shall not on demand pay the duties due thereon, or deliver the same into the custody of the proper officer of the customs, such person shall forfeit the sum of 100*l.*; and if any person shall remove or alter in quantity or quality any such goods, or shall open or alter any package containing any such goods, or shall cause any such act to be done, or assist therein, before such goods shall be deposited in a warehouse in the custody of the officers of the customs, every such person shall forfeit the sum of 100*l.*; and in default of the payment of the duties on such goods within 18 months from the time when the same were so deposited, the same may be sold in like manner and for the like purposes as goods imported may in such default be sold: provided always, that any lord of the manor having by law just claim to such goods, or if there be no such lord of the manor, then the person having possession of the same, shall be at liberty to retain the same in his own custody, giving bond, with 2 sufficient sureties, to be approved by the proper officer of the customs, in treble the value of such goods, for the payment of the duties thereon at the end of 1 year and 1 day, or to deliver such goods to the proper officer of the customs in the same state and condition as the same were in at the time of taking possession thereof. — § 51.

Goods under Excise Permit Regulations. — No goods which are subject to any regulations of excise shall be taken or delivered out of the charge of the officers of customs, (although the same may have been duly entered with them, and the full duties due thereon may have been paid,) until such goods shall also have been duly entered with the officers of excise, and permit granted by them for delivery of the same, nor unless such permit shall correspond in all particulars with the warrant of the officers of the customs: provided always, that such entry shall not be received by the officers of the excise, nor such permit granted by them, until a certificate shall have been produced to them of the particulars of the goods, and of the warrant for the same, under the hand of the officers of the customs who shall have the charge of the goods: provided also, that if upon any occasion it shall appear necessary, it shall be lawful for the proper officers of excise to attend the delivery of such goods by the officers of the customs, and to require that such goods shall be delivered only in their presence; and it shall be lawful for such officers of excise to count, measure, gauge, or weigh any such goods, and fully to examine the same, and to proceed in all respects relating to such goods in such manner as they shall be authorised or required by any act for the time being in force relating to the excise. — § 52.

Commissioners of Customs may direct certain Goods to be stamped. — The commissioners of customs are hereby authorised, after any goods have been entered at the Custom-house, and before the same shall be discharged by the officers, and delivered into the custody of the importer or his agent, to mark or stamp such goods in such manner and form as they may deem fit and proper for the security of the revenue, and by such officer as they shall direct and appoint for that purpose. — § 53.

Orders for stamping Goods to be published. — Every order made by the said commissioners for his Majesty's customs in respect of marking or stamping any goods shall be published in the *London Gazette* and *Dublin Gazette*. — § 54.

Penalty 200l. on forging such Stamps. — If any person or persons shall at any time forge or counterfeit any mark or stamp to resemble any mark or stamp which shall be provided and used for the purposes of this act, or shall forge or counterfeit the impression of any such mark or stamp, or shall sell or expose to sale, or have in his, her, or their custody or possession, any goods with a counterfeit mark or stamp, knowing the same to be counterfeit, or shall use or affix any such mark or stamp to any other goods required to be stamped as aforesaid other than that to which the same was originally affixed, all and every such offender or offenders, and his, her, or their aiders, abettors, and assistants, shall for every such offence forfeit and pay the sum of 200*l.* — § 55.

Times and Places for landing Goods. — No goods whatever (except diamonds, bullion, fresh fish of British taking and imported in British ships, and turbots and lobsters,) shall be unshipped from any ship arriving from parts beyond the seas, or landed or put on shore, but only on days not being Sundays or holidays, and in the day-time, (that is to say), from the first day of September until the last day of March between sun-rising and sun-setting, and from the last day of March to the first day of September between the hours of 7 o'clock in the morning and 4 o'clock in the afternoon; nor shall any goods, except as aforesaid, be so unshipped or landed unless in the presence or with the authority of the proper officer of the customs; and such goods, except as aforesaid, shall be landed at one of the legal quays appointed by his Majesty for the landing of goods, or at some wharf, quay, or place appointed by the commissioners of the customs for the landing of goods by sufferance; and no goods, except as aforesaid, after having been unshipped shall be transhipped, or after having been put into any boat or craft to be landed shall be removed into any other boat or craft previously to their being duly landed, without the permission or authority of the proper officer of the customs. — § 56.

Goods to be unshipped, &c. at the Expense of Importer. — The unshipping, carrying, and landing of all goods, and the bringing of the same to the proper place after landing, for examination or for weighing, and the putting of the same into the scales, and the taking of the same out of and from the scales after weighing, shall be performed by or at the expense of the importer. — § 57.

Prohibitions and Restrictions absolute or modified. — The several sorts of goods enumerated or described in the Table following, denominated "A Table of Prohibitions and Restrictions inwards," shall either be absolutely prohibited to be imported into the U. Kingdom, or shall be imported only under the restrictions mentioned in such Table, according as the several sorts of such goods are respectively set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions Inwards.

*A List of Goods absolutely prohibited to be imported.**

Arms, ammunition, and utensils of war, by way of merchandise, except by licence from his Majesty, for furnishing his Majesty's public stores only.	Books; viz. first composed or written or printed in the U. Kingdom, and printed or reprinted in any other country, of which there is an existing copyright in the U. Kingdom.

* We have excluded the articles from this Table allowed to be imported by the 5 & 6 Vict. c. 47, &c.

Clocks and watches of any metal, impressed with any mark or stamp appearing to be or to represent any legal British assay mark or stamp, or purporting by any mark or appearance to be of the manufacture of the U. Kingdom, or not having the name and place of abode of some foreign maker abroad visible on the frame and also on the face, or not being in a complete state, with all the parts properly fixed in the case.

Coin; viz. false money, or counterfeit sterling.
silver, of the realm, or any money purporting to be such, not being of the established standard in weight or fineness.

Gunpowder; except by licence from his Majesty, such licence to be granted for the furnishing his Majesty's stores only.

Snuff-work.

Spirits from the Isle of Man.

Tobacco stalks stripped from the leaf, whether manufactured or not.

Tobacco stalk flour.

List of Goods subject to certain Restrictions on Importation.

East India; goods of places within the limits of the East India Company's charter, unless into such ports as shall be approved of by the Lords of the Treasury, and declared by order in council to be fit and proper for such importation.

Gloves of leather, unless in ships of 70 tons or upwards, and in packages containing 100 dozen pairs of such gloves.

Hides, skins, horns, or hoofs, or any other part of cattle or beast, his Majesty may by order in council prohibit, in order to prevent any contagious distemper.

Parts of articles; viz. any distinct or separate part of any article not accompanied by the other part or all the other parts of such article, so as to be complete and perfect, if such article be subject to duty according to the value thereof.

Silk; manufactures of silk, being the manufactures of Europe, unless into the port of London, or into the port of Dublin direct from Bordeaux, or into the port of Dover direct from Calais, and unless in a ship or vessel of 70 tons or upwards, or into the port of Dover in a vessel of the burden of 60 tons at least, with licence of the commissioners of the customs.

Spirits, not being perfumed or medicinal spirits; viz. all spirits, unless in ships of 60 tons or upwards.
rum of and from the British plantations, if in casks, unless in casks containing not less than 20 gallons.
all other spirits, if in casks, unless in casks containing not less than 40 gallons.

Tobacco and snuff; viz. unless in a ship of the burden of 120 tons or upwards.
tobacco of and imported from the state of Colombia, and made up in rolls, unless in packages containing at least 320 lbs. weight of such rolls.
segars, unless in packages containing 100 lbs. weight of segars.
all other tobacco and snuff, unless in hogsheads, casks, chests, or cases, each of which shall contain of nett tobacco or snuff at least 100 lbs. weight if from the East Indies, or 450 lbs. weight if from any other place, and not packed in bags or packages within any such hogshead, cask, chest, or case, nor separated nor divided in any manner whatever, except tobacco of the dominions of the Turkish empire, which may be packed in inward bags, or packages, or separated or divided in any manner within the outward package, provided such outward package be a hogshead, cask, chest, or case, and contain 450 lbs. nett at least.
and unless the particular weight of tobacco or snuff in each hogshead, cask, chest, or case, with the tare of the same, be marked thereon.
and unless into the ports of London, Liverpool, Bristol, Lancaster, Cowes, Falmouth, Whitehaven, Hull, Port Glasgow, Greenock, Leith, Newcastle-upon-Tyne, Plymouth, Belfast, Cork, Drogheda, Dublin, Galway, Limerick, Londonderry, Newry, Sligo, Waterford, and Wexford.
or into some other port or ports which may hereafter be appointed for such purpose by the Lords Commissioners of his Majesty's Treasury; such appointments in Great Britain being published in the *London Gazette*, and such appointments in Ireland being published in the *Dublin Gazette*.
but any ship wholly laden with tobacco may come into the ports of Cowes or Falmouth to wait for orders, and there remain 14 days, provided due report of such ship be made by the master with the collector or comptroller of such port.

And all goods from the Isle of Man, except such as be of the growth, produce, or manufacture thereof.

Forfeiture.—And if any goods shall be imported into the U. Kingdom contrary to any of the prohibitions or restrictions mentioned in such table in respect of such goods, the same shall be forfeited. —§ 58.

But goods may be warehoused for Exportation only, although prohibited. — Any goods, of whatsoever sort, may be imported into the U. Kingdom to be warehoused under the regulations of any act in force for the time being for the warehousing of goods, without payment of duty at the time of the first entry thereof, or notwithstanding that such goods may be prohibited to be imported into the U. Kingdom to be used therein, except the several sorts of goods enumerated or described in manner following; (that is to say,) goods prohibited on account of the package in which they are contained, or the tonnage of the ship in which they are laden; tea and goods from China in other than British ships, or by other persons than the East India Company during the continuance of their exclusive privileges of trade; gunpowder, arms, ammunition, or utensils of war; dried or salted fish, not being stock-fish; infected hides, skins, horns, hoofs, or any other part of any cattle or beast; counterfeit coin or tokens; books first composed or written or printed and published in the U. Kingdom, and reprinted in any other country or place; copies of prints first engraved, etched, drawn, or designed in the U. Kingdom; copies of casts of sculptures or models first made in the U. Kingdom; clocks or watches, being such as are prohibited to be imported for home use.—§ 59.

Goods to be entered to be warehoused for Exportation only. — If by reason of the sort of any goods, or of the place from whence, or the country or navigation of the ship in which, any goods have been imported, they be such or be so imported as that they may not be used in the U. Kingdom, they shall not be entered except to be warehoused, and it shall be declared upon the entry of such goods that they are entered to be warehoused for exportation only.—§ 60.

ENTRY OUTWARDS.

Goods not to be shipped till Entry of Ship and Entry of Goods, and Cocket granted; nor till cleared.— No goods shall be shipped, or waterborne to be shipped, on board any ship in any port or place in the U. Kingdom or in the Isle of Man, to be carried to parts beyond the seas, before due entry outwards of such ship and due entry of such goods shall have been made, and cocket granted, nor before such goods shall have been duly cleared for shipment in manner herein-after directed; and no stores shall be shipped for the use of any such ship bound to parts beyond the seas, nor shall any goods be deemed or admitted to be such stores, except such as shall be borne upon the victualling bill duly granted for such ship; and no goods shall be so shipped, or waterborne to be so shipped, except at such times and places, and in such manner, and by such persons, and under the care of such officers, as is and are herein-after directed; and all goods and stores which shall be shipped, or be waterborne to be shipped, contrary hereto shall be forfeited.—§ 61.

Ships to be cleared, or Master to forfeit 100l. — No ship on board of which any goods or stores shall have been shipped in any port in the U. Kingdom or in the Isle of Man, for parts beyond the seas, shall depart from such port until such ship shall have been duly cleared outwards for her intended voyage, in manner herein-after directed, under forfeiture of the sum of 100*l.* by the master of such ship.—§ 62.

Victualling Bill for Stores. — The master of every ship which is to depart from any port in the U. Kingdom or in the Isle of Man, for parts beyond the seas, shall, upon due application made by him, receive from the searcher a victualling bill for the shipment of such stores as he shall require, and as shall be allowed by the collector and comptroller, for the use of such ship, according to the voyage upon which she is about to depart; and no articles taken on board any ship shall be deemed to be stores except such as shall be borne upon the victualling bill for the same.—§ 63.

Master to deliver Certificate of Clearance of last Voyage, and to make Entry outwards. — The master of every ship in which any goods are to be exported from the U. Kingdom or from the Isle of Man to parts beyond the seas shall, before any goods be taken on board, deliver to the collector or comptroller a certificate from the proper officer of the clearance inwards or coastwise of such ship of her last voyage, specifying what goods, if any, have been reported inwards for exportation, and shall also deliver to the collector or comptroller an account, signed by the master or his agent, of the entry outwards of such ship for her intended voyage, setting forth the name and tonnage of the ship, the name of the place to which she belongs if a British ship, or of the country if a foreign ship, the name of the master, and the name or

names of the place or places for which she is bound, if any goods are to be shipped for the same, and the name of the place in such port at which she is to take in her lading for such voyage; and if such ship shall have commenced her lading at some other port, the master shall state the name of any port at which any goods have been laden, and shall produce a certificate from the searcher that the cockets for such goods have been delivered to him; and the particulars of such account shall be written and arranged in such form and manner as the collector and comptroller shall require; and such account shall be the entry outwards of such ship, and shall be entered in a book to be kept by the collector, for the information of all parties interested; and if any goods be taken on board any ship before she shall have been entered outwards, the master shall forfeit the sum of 100*l.*; provided always, that where it shall become necessary to lade any heavy goods on board any ship before the whole of the inward cargo is discharged, it shall be lawful for the collector and comptroller to issue a stiffening order for that purpose, previous to the entry outwards of the ship. — § 64.

Bill of the Entry to be delivered. — The person entering outwards any goods to be exported to parts beyond the seas, from any port in the U. Kingdom or in the Isle of Man, shall deliver to the collector or comptroller a bill of the entry thereof, fairly written in words at length, expressing the name of the ship and of the master, and of the place to which the goods are to be exported, and of the person in whose name the goods are to be entered, and the quantities and proper denominations or descriptions of the several sorts of goods, and shall pay down any duties which may be due upon the exportation of any such goods; and such person shall also deliver at the same time 1 or more duplicates of such bill, in which all sums and numbers may be expressed in figures; and the particulars to be contained in such bill shall be written and arranged in the form and manner, and the number of duplicates shall be such as the collector and comptroller shall require; and thereupon the collector and comptroller shall cause a cocket to be written for such goods, making it known that such goods have been so entered; and every cocket shall be signed by such collector and comptroller, and be delivered to the person who shall have made such entry, and such person shall keep and be responsible for the proper use of the same. — § 65.

Goods for Drawback or Bounty. — If any drawback or bounty be allowable upon the exportation of any such goods, or any duty be payable thereon, or any exemption from duty claimed, or if any such goods be exportable only according to some particular rule or regulation, or under some restriction or condition, or for some particular purpose or destination, such goods shall be entered and cleared for shipment by such denominations or descriptions as are used, mentioned, or referred to in the granting of such drawback or bounty, or in the levying of such duty, or granting such exemption, or in the directing of such rules, regulations, restrictions, conditions, purpose, or destination; and if the goods in such entry are charged to pay duty according to the value thereof, such value shall be stated in the entry, and shall be affirmed by the declaration of the exporter or his known agent, to be made upon the entry, and attested by his signature; and if any person shall make such declaration, not being the exporter of such goods, nor his agent duly authorised by him, such person shall forfeit the sum of 100*l.*; and such declaration shall be made in manner and form following, and shall be binding upon the person making the same; (that is to say,)

"I, *A. B.*, of [*place of abode*] do hereby declare, that I am the exporter of the goods mentioned in this entry, [*or*, that I am duly authorised by him,] and I do enter the same at the value of ————. Witness my hand the ——— day of ————. *A. B.*" — § 66.

Goods undervalued detained. — If upon examination it shall appear to the officers of the customs that such goods are not valued according to the true value thereof, the same may be detained, and (within 2 days) taken and disposed of for the benefit of the Crown, in like manner as is herein-before provided in respect of goods imported, except that no sum in addition to the amount of the valuation and the duties paid shall be paid to the exporter or proprietor of the goods. — § 67.

For Drawback, or from Warehouse, or Duties to be first paid. — The person intending to enter outwards any foreign goods for drawback, at any other port than that at which the duties inwards on such goods had been paid, shall first deliver to the collector or comptroller of the port where the duties on such goods were paid 2 or more bills, as the case may require, of the particulars of the importation of such goods, and of the entry outwards intended to be made; and thereupon such collector and comptroller, finding such bills to agree with the entry inwards, shall write off such goods from the same, and shall issue a certificate of such entry, with such particulars thereof as shall be necessary for the computation of the drawback allowable on such goods, and setting forth in such certificate the destination of the goods, and the person in whose name they are to be entered for exportation, and also the name of such other port; and such certificate, together with 2 or more bills of the same, as the case may require, in which all sums and numbers may be expressed in figures, being delivered to the collector or comptroller of the port from which the goods are to be exported, shall be the entry outwards of such goods; and such collector and comptroller shall thereupon cause a cocket to be written and delivered for such goods, in manner herein-before directed. — § 68.

Coals Export Bond to Isle of Man and British Possessions. — No cocket shall be granted for the exportation of any coals to the Isle of Man, or to any British possession, until the exporter thereof shall have given security by bond in a penal sum of 40*s.* the chaldron, with condition that the same shall be landed at the place for which they shall be exported, or otherwise accounted for to the satisfaction of the commissioners of the customs; and also with condition to produce (within such time as the said commissioners shall require, to be expressed in such bond) a certificate of the landing of such coals at such place, under the hand of the collector or comptroller or other proper officer at such place: provided always, that the bond so to be given in respect of coals shall not be liable to any duty of stamps. — § 69.

Clearance of Goods.

Packages to be indorsed on Cocket. — Before any part of the goods for which any cocket shall have been granted shall be shipped, or waterborne to be shipped, the same shall be duly cleared for shipment with the searcher; and before any goods be cleared for shipment, the particulars of the goods for each clearance shall be indorsed on such cocket together with the number and denomination or description of the respective packages containing the same; and in the margin of each such indorsement shall be delineated the respective marks and numbers of such packages; and to each such indorsement shall be subjoined, in words at length, an account of the total quantities of each sort of goods intended in such indorsement, and the total number of each sort of package in which such goods are contained, distinguishing such goods, if any, as are to be cleared for any bounty or drawback of excise or customs, and also such goods, if any, as are subject to any duty on exportation, or entitled to any exemption from such duty, and also such goods, if any, as can only be exported by virtue of some particular order or authority, or under some particular restriction or condition, or for some particular purpose or destination; and all goods shipped or waterborne to be shipped, not being duly cleared as aforesaid, shall be forfeited. — § 70.

Cocket indorsed, &c. — The person clearing such goods for shipment shall upon each occasion produce the cocket so indorsed to the searcher, and shall also deliver a shipping bill or copy of such indorsement, referring by names and date to the cocket upon which such indorsement is made, and shall obtain the order of the searcher for the shipment of such goods; and the particulars to be contained in such indorsement and in such shipping bill shall be written and arranged in such form and manner as the collector and comptroller shall require. — § 71.

Coals brought coastwise may be exported without landing. — If any coals shall have been brought coastwise from one port of the U. Kingdom to another, and the master shall be minded to proceed with such coals, or any part of them, to parts beyond the seas, it shall be lawful for such master to enter such

ship and such coals outwards for the intended voyage, without first landing the coals intended for exportation, provided the officers of the customs shall be satisfied that the quantity of coals left on board does not exceed the quantity so entered outwards. — § 72.

Account of Value to be delivered to the Searcher. — Upon the clearance for shipment of any goods, the produce or manufacture of the U. Kingdom, not liable to any export duty, an account, containing an accurate specification of the quantity, quality, and value of such goods, together with a declaration to the truth of the same, signed by the exporter or his known agent, shall be delivered to the searcher by the person clearing such goods; and if such declaration be false, the person signing the same shall forfeit the sum of 20*l.*; and it shall be lawful for the searcher to call for the invoice, bills of parcels, and such other documents relating to the goods, as he may think necessary for ascertaining the true value of the same: provided always, that if such exporter or agent shall make and subscribe a declaration before the collector or comptroller that the value of the goods cannot be ascertained in time for the shipment of the same, and such declaration shall be delivered to the searcher at the time of clearance, a further time of 3 months shall be allowed for the delivery of such separate shipping bill, on failure whereof such exporter or agent shall forfeit the sum of 20*l.* — § 73.

Goods for Excise Drawback. — No drawback of excise shall be allowed upon any goods so cleared, unless the person intending to claim such drawback shall have given due notice to the officer of excise, in form and manner required by any law in force relating to the excise, and shall have obtained and have produced to the searcher, at the time of clearing such goods, a proper document, under the hand of the officer of excise, containing the necessary description of the goods for which such drawback is to be claimed; and if the goods to be cleared and shipped under the care of the searchers shall, upon examination, be found to correspond in all respects with the particulars of the goods contained in such document, and such goods shall be duly shipped and exported, the searcher shall, if required, certify such shipment upon such document, and shall transmit the same to the officer of excise. — § 74.

Officer of Excise may attend Examination. — It shall be lawful for the officer of excise, if he see fit, to attend and assist at such examination, and to mark or seal the packages, and to keep joint charge of the same, together with the searcher, until the same shall have been finally delivered by him into the sole charge of the searcher, to be shipped and exported under his care. — § 75.

Goods for Duty, Bounty, or Drawback, &c. brought for Shipment. — If any goods which are subject to any duty or restriction in respect of exportation, or if any goods which are to be shipped for any drawback or bounty shall be brought to any quay, wharf, or other place, to be shipped for exportation, and such goods shall not agree with the indorsement on the cocket, or with the shipping bill, the same shall be forfeited; and if any goods prohibited to be exported be found in any package brought as aforesaid, such package and every thing contained therein shall be forfeited. — § 76.

Searcher may open any Package; but if correct, must repack. — It shall be lawful for the searcher to open all packages, and fully to examine all goods shipped or brought for shipment at any place in the U. Kingdom or in the Isle of Man; and if the goods so examined shall be found to correspond in all respects with the cocket and clearance purporting to be for the same, such goods shall be repacked at the charge of such searcher, who may be allowed such charge by the commissioners of the customs, if they shall see fit so to do. — § 77.

Clearance of Ship.

Content to be delivered to Searcher, &c. — Before any ship shall be cleared outwards at any port in the U. Kingdom or in the Isle of Man, for parts beyond the seas, with any goods shipped on board the same in such port, the master shall deliver a content of such ship to the searcher, setting forth the name and tonnage of such ship, and the place or places of her destination, and the name of the master, and also an account of the goods shipped on board, and of the packages containing such goods, and of the marks and numbers upon such packages, and a like account of the goods on board, if any, which had been reported inwards for exportation in such ship, so far as any such particulars can be known by him; and also, before the clearance of such ship, the cockets, with the indorsements and clearances thereon for the goods shipped, shall be finally delivered by the respective shippers of such goods to the searcher, who shall file the same together, and shall attach with a seal a label to the file, showing the number of cockets contained in the file, and shall compare the particulars of the goods in the cockets with the particulars of the goods in such content, and shall attest the correctness thereof by his signature on the label, and on the content; and the master of the ship shall make and sign a declaration before the collector or comptroller to the truth of such content, and shall also answer to the collector or comptroller such questions concerning the ship, the cargo, and the intended voyage, as shall be demanded of him; and thereupon the collector or comptroller shall clear such ship for her intended voyage, and shall notify such clearance, and the date thereof, upon the content, and upon the label to the file of cockets, and upon the victualling bill, and also in the book of ships' entries outwards, for the information of all parties interested, and shall transmit the content, and the cockets, and the victualling bill to the searcher; and the particulars to be contained in such content shall be written and arranged in such form and manner as the collector and comptroller shall require. — § 78.

File of Cockets, &c. delivered to Master. — The file of cockets and the victualling bill shall thereupon be delivered by the searcher to the master of such ship, at such station within the port, and in such manner as shall be appointed by the commissioners of his Majesty's customs for that purpose; and such file of cockets and victualling bill, so delivered, shall be kept by the master of such ship as the authority for departing from the port with the several parcels and packages of goods and of stores on board, so far as they shall agree with the particulars in the indorsements on such cockets or with such victualling bill. — § 79.

In Ballast. — If any ship is to depart in ballast from the U. Kingdom or from the Isle of Man for parts beyond the seas, having no goods on board except the stores of such ship borne upon the victualling bill, or any goods reported inwards for exportation in such ship, the master of such ship shall, before her departure, answer to the collector or comptroller such questions touching her departure and destination as shall be demanded of him; and thereupon the collector or comptroller shall clear such ship in ballast, and shall notify such clearance and the date thereof on the victualling bill, and also in the book of ships' entries outwards, for the information of all parties interested; and such victualling bill shall be kept by the master of such ship as the clearance of the same. — § 80.

Part of former Cargo reported for Exportation. — If there be on board any ship any goods of the inward cargo which were reported for exportation in the same, the master shall, before clearance outwards of such ship from any port in the U. Kingdom or in the Isle of Man, deliver to the searcher a copy of the report inwards of such goods, certified by the collector and comptroller; and such copy, being found to correspond with the goods so remaining on board, shall be the authority to the searcher to pass such ship with such goods on board; and being signed by the searcher, and filed with the cockets, shall be the clearance of the ship for those goods. — § 81.

If any Passengers, Master may enter Baggage in his Name. — If any passengers are to depart in any ship from the U. Kingdom or from the Isle of Man for parts beyond the seas, it shall be lawful for the master of such ship to pass an entry and to receive a cocket in his name for the necessary personal baggage of all such passengers, and duly to clear such baggage for shipment in their behalf, stating in such clearances the particulars of the packages and the names of the respective passengers; and if such ship is to take no other goods than the necessary personal baggage of passengers actually going the voyage, it shall be lawful for such master to enter such ship outwards in ballast for passengers only; and if no other goods than such baggage duly entered and cleared be taken on board such ship, the same shall be deemed to be a ship in ballast, notwithstanding such baggage, and shall be described in the clearance, on the con-

tent, and on the label to the cocket or cockets, and on the victualling bill, and in the book of ship's entries, as a ship cleared in ballast, except as to the necessary personal baggage of passengers going the voyage.—§ 82.

Master may enter Goods for private Use of Self and Crew.—If the master and crew of any foreign ship which is to depart in ballast from the U. Kingdom for parts beyond the seas shall be desirous to take on board chalk rubbish by way of ballast, or to take with them for their private use any small quantities of goods of British manufacture, it shall be lawful for such master, without entering such ship outwards, to pass an entry in his name, and receive a cocket free of any export duty for all such goods, under the general denomination of British manufactures not prohibited to be exported, being for the use and privilege of the master and crew, and not being of greater value than in the proportion of 20*l.* for the master, and 10*l.* for the mate, and 5*l.* for each of the crew, and stating that the ship is in ballast; and the master shall duly clear such goods for shipment in behalf of himself and crew, stating in such clearances the particulars of the goods and packages, and the names of the crew who shall jointly or severally take any of such goods under this privilege; and such ship shall be deemed to be a ship in ballast, and be cleared as such, and without a content, notwithstanding such goods or such cocket or cockets; and such clearance shall be notified by the collector or comptroller on the label to the cocket or cockets, and on the victualling bill, and in the book of ships' entries, as a clearance in ballast, except as to the privilege of the master and crew.—§ 83.

Officers may board any Ship after Clearance.—It shall be lawful for the officers of the customs to go on board any ship after clearance outwards, within the limits of any port in the U. Kingdom or in the Isle of Man, or within 4 leagues of the coast thereof, and to demand the file of cockets and the victualling bill; and if there be any goods or stores on board not contained in the indorsements on the cockets, nor in the victualling bill, such goods or stores shall be forfeited; and if any goods contained in such indorsements be not on board, the master shall forfeit the sum of 20*l.* for every package or parcel of goods contained in such indorsements and not on board; and if any cocket be at any time falsified, the person who shall have falsified the same, or who shall have wilfully used the same, shall forfeit the sum of 100*l.*—§ 84.

Ships to bring-to at Stations.—Every ship departing from any port in the U. Kingdom or in the Isle of Man shall bring-to at such stations within the port as shall be appointed by the commissioners of his Majesty's customs for the landing of officers from such ships, or for further examination previous to such departure.—§ 85.

Debenture Goods.

Entry in Name of real Owner.—No drawback or bounty shall be allowed upon the exportation from the U. Kingdom of any goods, unless such goods shall have been entered in the name of the person who was the real owner thereof at the time of entry and shipping, or of the person who had actually purchased and shipped the same, in his own name and at his own liability and risk, on commission, according to the practice of merchants, and who was and shall have continued to be entitled in his own right to such drawback or bounty, except in the cases herein-after provided for.—§ 86.

Declaration to Exportation, and to Property, and to Right to Drawback or Bounty.—Such owner or commission merchant shall make and subscribe a declaration upon the debenture that the goods mentioned therein have been actually exported, and have not been relanded, and are not intended to be relanded in any part of the U. Kingdom, nor in the Isle of Man (unless entered for the Isle of Man), nor in the islands of Faro or Ferro, and that he was the real owner thereof at the time of entry and shipping, or that he had purchased and shipped the said goods in his own name and at his own liability and risk, on commission, as the case may be, and that he was and continued to be entitled to the drawback or bounty thereon in his own right: provided always, that if such owner or merchant shall not have purchased the right to such drawback or bounty, he shall declare under his hand upon the entry and upon the debenture the person who is entitled thereto, and the name of such person shall be stated in the cocket and in the debenture; and the receipt of such person on the debenture shall be the discharge for such drawback or bounty.—§ 87.

Agent may pass Entry, and receive Drawback, and make the Declaration, &c.—If such owner or merchant shall be resident in some part of the U. Kingdom, being more than 20 miles from the custom-house of the port of shipment, he may appoint any person to be his agent to make and pass his entry, and to clear and ship his goods, and to receive for him the drawback or bounty payable on his debenture, if payable to him, provided the name of such agent and the residence of such owner or merchant be subjoined to the name of such owner or merchant in the entry and in the cocket for such goods; and such agent, being duly informed, shall make declaration upon the entry, if any be necessary, and also upon the debenture, in behalf of such owner or merchant, to the effect before required of such owner or merchant, and shall answer such questions touching his knowledge of the exportation of such goods and the property therein, and of the right to the drawback or bounty, as shall be demanded of him by the collector or comptroller; and if any such goods be exported by any corporation or company trading by a joint stock, it shall be lawful for them to appoint any person to be their agent for the like purposes, and with the like powers to act in their behalf.—§ 88.

Property of Persons Abroad.—If any goods which are to be exported for drawback be the property of any person residing abroad, having been consigned by the owner thereof to some person as his agent residing in the U. Kingdom, to be exported through the same to parts beyond the seas, by such agent, upon account of such owner, it shall be lawful for such person (being the consignee by whom and in whose name the duties inwards on such goods had been paid, or his legal representative), in like manner, as agent for such owner, to enter, clear, and ship such goods for him, and upon like conditions to receive for him the drawback payable thereon.—§ 89.

Shipment within 3 Years, and Payment within 2 Years.—No drawback shall be allowed upon the exportation of any goods unless such goods be shipped within 3 years after the payment of the duties inwards thereon, and no debenture for any drawback or bounty allowed upon the exportation of any goods shall be paid after the expiration of 2 years from the date of the shipment of such goods, and no drawback shall be allowed upon any goods which by reason of damage or decay shall have become of less value for home use than the amount of such drawback; and all goods so damaged which shall be cleared for any drawback shall be forfeited, and the person who caused such goods to be so cleared shall forfeit the sum of 200*l.*, or treble the amount of the drawback in such case, at the election of the commissioners of the customs.—§ 90.

Issuing and passing Debenture.—For the purpose of computing and paying any drawback or bounty payable upon any goods duly entered, shipped, and exported, a debenture shall, in due time after such entry, be prepared by the collector and comptroller, certifying in the first instance the entry outwards of such goods; and so soon as the same shall have been duly exported, and a notice containing the particulars of the goods shall have been delivered by the exporter to the searcher, the shipment and exportation thereof shall be certified to the collector and comptroller, upon such debenture, by the searcher, and the debenture shall thereupon be computed and passed with all convenient despatch, and be delivered to the person entitled to receive the same.—§ 91.

Certificate of landing in Isle of Man.—No drawback or bounty shall be allowed for any goods exported from the U. Kingdom to the Isle of Man, until a certificate shall be produced from the collector and comptroller of the customs of the Isle of Man of the due landing of such goods.—§ 92.

Press-packing, and Declaration of Packer.—No drawback or bounty shall be allowed for any goods exported from the U. Kingdom in bales cleared as being press-packed, unless the quantities and qualities of the goods in each of such bales shall be verified by the master packer thereof, or, in case of un-

avoidable absence, by the foreman of such packer, having knowledge of the contents of the bales, by declaration made and subscribed upon the cocket before the collector or comptroller; or if such packer reside more than 10 miles from the port, then by declaration made and subscribed upon an account of such goods, before a magistrate or justice of the peace for the county or place where such packer shall reside; and if such bales be not cleared as being press-packed, then the searcher, having opened any such bale, shall not be required to repack the same at his charge. — § 93.

Licensed Lightermen, &c. — No goods cleared for drawback or bounty, or from the warehouse, shall be carried waterborne, to be put on board any ship for exportation from the U. Kingdom, by any person, unless such persons shall be authorised for that purpose by licence under the hands of the commissioners of the customs; and before granting such licence, it shall be lawful for the said commissioners to require such security by bond for the faithful and incorrupt conduct of such person as they shall deem necessary; and after granting such licence, it shall be lawful for the said commissioners to revoke the same, if the person to whom the same shall have been granted shall be convicted of any offence against the laws relating to the customs or excise: provided always, that all such licences which shall be in force at the time of the commencement of this act shall continue in force as if the same had been afterwards granted under the authority of this act. — § 94.

Warehouse or Debenture Goods not exported. — If any goods which have been taken from the warehouse to be exported from the same, or any goods which have been cleared to be exported for any drawback or bounty, shall not be duly exported to parts beyond the seas, or shall be relanded in any part of the U. Kingdom (such goods not having been duly relanded or discharged as short-shipped under the care of the proper officers), or shall be landed in the islands of Faro or Ferro, or shall be carried to any of the islands of Guernsey, Jersey, Alderney, Sark, or Man (not having been duly entered, cleared, and shipped to be exported directly to such island), the same shall be forfeited, together with the ship from or by which the same had been so relanded, landed, or carried, and any other ship, vessel, boat, or craft which may have been used in so relanding, landing, or carrying such goods; and any person by whom or by whose orders or means such goods shall have been so taken or cleared, or so relanded, landed, or carried, shall forfeit a sum equal to treble the value of such goods. — § 95.

Drawback of Duties on Wine allowed for Officers in the Navy. — Drawback of the whole of the duties of customs shall be allowed for wine intended for the consumption of officers of his Majesty's navy, on board such of his Majesty's ships in actual service as they shall serve in, not exceeding the quantities of wine, in any one year, for the use of such officers, herein-after respectively mentioned; (that is to say,)

	Gallons.		Gallons.
For every admiral -	1,260	For every captain of the third, fourth, and fifth rate	420
— vice-admiral -	1,050	— captain of an inferior rate -	210
— rear-admiral -	840	— lieutenant, and other commanding officer, and for every marine officer -	105
— captain of the first and second rate -	630		

provided always, that such wine be shipped only at one of the ports herein-after mentioned; (that is to say,) London, Rochester, Deal, Dover, Portsmouth, Plymouth, Yarmouth, Falmouth, Belfast, Dublin, Cork, Leith, or Glasgow. — § 96.

Persons entering Wine for Drawback to declare the Name and Rank of Officer claiming same. — The person entering such wine, and claiming the drawback for the same, shall state in the entry and declare on the debenture the name of the officer for whose use such wine is intended, and of the ship in which he serves; and such wine shall be delivered into the charge of the officers of the customs at the port of shipment, to be secured in the king's warehouse until the same shall be shipped under their care; and such officers having certified upon the debenture the receipt of the wine into their charge, the debenture shall be computed and passed, and be delivered to the person entitled to receive the same. — § 97.

Officers leaving the Service, &c. such Wine permitted to be transferred to others. — If any such officer shall leave the service or be removed to another ship, it shall be lawful for the officers of the customs of any of the ports before mentioned to permit the transfer of any such wine from one officer to another, as part of his proportion, whether on board the same ship or another, or the transhipment from one ship to another for the same officer, or the relanding and warehousing for future reshipment; and it shall also be lawful for the officers of customs at any port to receive back the duties for any of such wine, and deliver the same for home use: provided always, that if any of such wine be not laden on board the ship for which the same was intended, or be unladen from such ship without permission of the proper officer of the customs, the same shall be forfeited. — § 98.

Pursers of his Majesty's Ships of War may ship Tobacco for Use of Crew free of Duty, on giving Bond. — It shall be lawful for the purser of any of his Majesty's ships of war in actual service to enter and ship at the ports of Rochester, Portsmouth, or Plymouth, in the proportions herein-after mentioned, any tobacco there warehoused in his name or transferred into his name, for the use of the ship in which he shall serve; provided such purser shall deliver to the collector or comptroller of such port a certificate from the captain of such ship, stating the name of the purser and the number of men belonging to the ship, and also give bond, with one sufficient surety, in treble the duties payable on the tobacco, that no part thereof shall be relanded in the U. Kingdom without leave of the officers of the customs, or be landed in either of the islands of Guernsey, Jersey, Alderney, Sark, or Man. — § 99.

Purser removed from one Ship to another may tranship Tobacco with Permission of Collector. — If any purser shall be removed from one ship to another, it shall be lawful for the collector and comptroller of the port where such ship shall be to permit the transhipment of the remains of any such tobacco for the use of such other ship, upon due entry of such tobacco by such purser, setting forth the time when and the port at which such tobacco was first shipped; and if any such ship shall be paid off, it shall be lawful for the collector and comptroller of any port where such ship shall be paid off to permit the remains of any such tobacco to be landed, and to be entered by the purser of such ship, either for payment of duties, or to be warehoused for the term of 6 months for the supply of some other such ship, in like manner as any tobacco may be warehoused and supplied at either of the ports before mentioned, or for payment of all duties within such 6 months: provided always, that all tobacco warehoused for the purpose of so supplying his Majesty's ships of war shall be subject to the provisions made for the warehousing of tobacco generally, as far as the same are applicable, and are not expressly altered by any of the provisions herein particularly made. — § 100.

Quantity of Tobacco not to exceed, &c. — No greater quantity of such tobacco shall be allowed to any ship of war than 2 lbs. by the lunar month for each of the crew of such ship, nor shall any greater quantity be shipped at any one time than sufficient to serve the crew of such ship for 6 months, after such rate of allowance; and the collector and comptroller of the port at or from which any such tobacco shall be supplied to any such ship, or landed from any such ship, or transferred from one such ship to another, shall transmit a particular account thereof to the commissioners of his Majesty's customs, in order that a general account may be kept of all the quantities supplied to and consumed on board each of such ships under the allowances before granted. — § 101.

Times and Places for shipping Goods. — No goods shall be put off from any wharf, quay, or other place, or shall be waterborne in order to be exported, but only on days not being Sundays or holidays, and in the day-time; (that is to say,) from the first day of September until the last day of March, betwixt sunrising and sunsetting, and from the last day of March until the first day of September, between the hours of 7 of the clock in the morning and 4 of the clock in the afternoon; nor shall any such goods be then put off or waterborne for exportation unless in the presence or with the authority of the proper officer of the customs, nor except from a legal quay appointed by his Majesty, or at some wharf, quay, or place appointed by the commissioners of his Majesty's customs for the shipping of such goods by sufferance. — § 102.

Penalty for exporting prohibited Goods. — If any goods liable to forfeiture for being shipped for exportation shall be shipped and exported without discovery by the officers of the customs, the person or persons who shall have caused such goods to be exported shall forfeit double the value of such goods. — § 103.

PROHIBITIONS OUTWARDS.

Prohibitions and Restrictions absolute or modified. — The several sorts of goods enumerated or described in the Table following (denominated "A Table of Prohibitions and Restrictions Outwards") shall be either absolutely prohibited to be exported from the U. Kingdom, or shall be exported under the restrictions mentioned in such table, according as the several sorts of such goods are respectively set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions Outwards.

Clocks and watches; viz. any outward or inward box, case, or dial plate, of any metal, without the movement in or with every such box, case, or dial plate, made up fit for use, with the clock or watchmaker's name engraven thereon.

Lace; viz. any metal inferior to silver which shall be spun, mixed, wrought, or set upon silk, or which shall be gilt, or drawn into wire, or flatted into plate, and spun or woven, or wrought into or upon, or mixed with lace, fringe, cord, embroidery, tambour work, or buttons, made in the gold or silver lace manufactory, or set upon silk, or made into bullion spangles, or pearl or any other materials made in the gold or silver lace manufactory, or which shall imitate or be meant to imitate such lace, fringe, cord, embroidery, tambour work, or buttons; nor shall any person export any copper, brass, or other metal which shall be silvered or drawn into wire, or flatted into plate, or made into bullion spangles, or pearl or any other materials used in the gold or silver lace manufactory, or in imitation of such lace, fringe, cord, embroidery, tambour work, or buttons, or of any of the materials used in making the same, and which shall hold more or bear a greater proportion than 3 penny-weights of fine silver to the pound avoirdupois of such copper, brass, or other metals.

any metal inferior to silver, whether gilt, silvered, stained, or coloured, or otherwise, which shall be worked up or mixed with gold or silver in any manufacture of lace, fringe, cord, embroidery, tambour work, or buttons.

(A table of tools prohibited to be imported was inserted here; but this prohibition was repealed by the 6 & 7 Vict. cap. 84.)

A List of Goods which may be prohibited by Proclamation or Order in Council.

Arms, ammunition, and gunpowder.

Ashes, pot and pearl.

Military stores and naval stores, and any articles (except copper) which his Majesty shall judge capable of being converted into or made useful in increasing the quantity of military or naval stores.

Provisions, or any sort of victual which may be used as food by man.

And if any goods shall be exported, or be waterborne to be exported, from the U. Kingdom, contrary to any of the prohibitions or restrictions mentioned in such table in respect of such goods, the same shall be forfeited. — § 104.

The sections from 105. to 118., both inclusive, relate to the COASTING TRADE, and are given under that head.

CONSTRUCTION IN GENERAL.

Terms used in Acts. — Whenever the several terms or expressions following shall occur in this act, or in any other act relating to the customs, or to trade and navigation, the same shall be construed respectively in the manner herein-after directed; (that is to say,) the term "ship" shall be construed to mean ship or vessel generally, unless such term shall be used to distinguish a ship from sloops, brigantines, and other classes of vessels; and the term "master" of any ship shall be construed to mean the person having or taking the charge or command of such ship; the term "owners" and the term "owner" of any ship shall be construed alike to mean 1 owner, if there be only 1, and any or all the owners if there be more than 1; the term "mate" of any ship shall be construed to mean the person next in command of such ship to the master thereof; the term "seaman" shall be construed to mean alike seaman, mariner, sailor, or landsman, being one of the crew of any ship; the term "British possession" shall be construed to mean colony, plantation, island, territory, or settlement belonging to his Majesty; the term "his Majesty" shall be construed to mean his Majesty, his heirs, and successors; the term "East India Company" shall be construed to mean the United Company of Merchants of England trading to the East Indies; the term "limits of the East India Company's charter" shall be construed to mean all places and seas eastward of the Cape of Good Hope to the Straits of Magellan; the term "collector and comptroller" shall be construed to mean the collector and comptroller of the customs of the port intended in the sentence: whenever mention is made of any public officer, the officer mentioned shall be deemed to be such officer for the time being; the term "warehouse" shall be construed to mean any place, whether house, shed, yard, timber pond, or other place in which goods entered to be warehoused upon importation may be lodged, kept, and secured without payment of duty, or although prohibited to be used in the U. Kingdom; the term "king's warehouse" shall be construed to mean any place provided by the Crown for lodging goods therein for security of the customs. — § 119.

Malta in Europe. — The island of Malta and its dependencies shall be deemed to be in Europe. — § 120.

GENERAL REGULATIONS.

Weights, Measures, Currency, and Management. — All duties, bounties, and drawbacks of customs shall be paid and received in every part of the U. Kingdom and of the Isle of Man in British currency, and according to Imperial weights and measures; and in all cases where such duties, bounties, and drawbacks are imposed and allowed according to any specific quantity, or any specific value, the same shall be deemed to apply in the same proportion to any greater or less quantity or value; and all such duties, bounties, and drawbacks shall be under the management of the commissioners of the customs. — § 121.

Collector to take Bonds in respect of Goods relating to the Customs. — All bonds relating to the customs required to be given in respect of goods or ships shall be taken by the collector and comptroller for the use of his Majesty; and after the expiration of 3 years from the date thereof, or from the time, if any, limited therein for the performance of the condition thereof, every such bond upon which no prosecution or suit shall have been commenced shall be void, and may be cancelled and destroyed. — § 122.

Mode of ascertaining Strength of Foreign Spirits. — The mode of ascertaining the strengths and quantities of foreign spirits imported into the U. Kingdom should at all times be exactly similar to the mode in practice for ascertaining the strengths and quantities of spirits made within the U. Kingdom; be it therefore enacted, that the same instruments, and the same tables and scales of graduation, and the same rules and methods, as the officers of the excise shall by any law in force for the time being be directed to use, adopt, and employ in trying and ascertaining the strengths and quantities of spirits made within the U. Kingdom, for the purpose of computing and collecting the duties of excise payable thereon, shall be used, adopted, and employed by the officers of the customs in trying and ascertaining the strengths and quantities of spirits imported into the U. Kingdom, for the purpose of computing and collecting the duties of customs payable thereon. — § 123.

Officers of Customs to take Sample of Goods. — It shall be lawful for the officers of the customs to take such samples of any goods as shall be necessary for ascertaining the amount of any duties payable on the same; and all such samples shall be disposed of and accounted for in such manner as the commissioners of his Majesty's customs shall direct. — § 124.

Time of an Importation and of an Exportation defined. — If, upon the first levying or repealing of any duty, or upon the first granting or repealing of any drawback or bounty, or upon the first permitting or prohibiting of any importation or exportation, whether inwards, outwards, or coastwise, in the U. Kingdom or in the Isle of Man, it shall become necessary to determine the precise time at which an importation or exportation of any goods made and completed shall be deemed to have had effect, such

time, in respect of importation, shall be deemed to be the time at which the ship importing such goods had actually come within the limits of the port at which such ship shall in due course be reported, and such goods be discharged; and such time, in respect of exportation, shall be deemed to be the time at which the goods had been shipped on board the ship in which they had been exported; and if such question shall arise upon the arrival or departure of any ship, in respect of any charge or allowance upon such ship, exclusive of any cargo, the time of such arrival shall be deemed to be the time at which the report of such ship shall have been or ought to have been made; and the time of such departure shall be deemed to be the time of the last clearance of such ship with the collector and comptroller for the voyage upon which she had departed. — § 125.

Return of Duty overpaid. — Although any duty of customs shall have been overpaid, or although after any duty of customs shall have been charged and paid, it shall appear or be judicially established that the same had been charged under an erroneous construction of the law, it shall not be lawful to return any such overcharge after the expiration of 3 years from the date of such payment. — § 126.

Tonnage or Burden of Ships declared. — The tonnage or burden of every British ship within the meaning of this act shall be the tonnage set forth in the certificate of registry of such ship, and the tonnage or burden of every other ship shall, for the purposes of this act, be ascertained in the same manner as the tonnage of British ships is ascertained. — § 127.

Officers may refuse Master of British Ship, unless indorsed on Register. — It shall be lawful for the officers of customs at any port under British dominion where there shall be a collector and comptroller of the customs to refuse to admit any person to do any act at such port as master of any British ship, unless his name shall be inserted in or have been indorsed upon the certificate of registry of such ship as being the master thereof, or until his name shall have been so indorsed by such collector and comptroller.— § 128.

Falsifying documents. — If any person shall counterfeit or falsify, or wilfully use when counterfeited or falsified, any entry, warrant, cocket, or transire, or other document for the unlading, lading, entering, reporting, or clearing of any ship or vessel, or for the landing or shipping of any goods, stores, baggage, or article whatever, or shall by any false statement procure any writing or document to be made for any of such purposes, every person so offending shall for every such offence forfeit the sum of 200*l.*: provided always, that this penalty shall not attach to any particular offence for which any other penalty shall be expressly imposed by any law in force for the time being. — § 129.

Authority of an Agent may be required. — Whenever any person shall make any application to any officer of the customs to transact any business on behalf of any other person, it shall be lawful for such officer to require of the person so applying to produce a written authority from the person on whose behalf such application shall be made, and in default of the production of such authority, to refuse to transact such business. — § 130.

Persons falsifying Declaration liable to Penalty. — If any declaration required to be made by this act or by any other act relating to the customs (except declarations to the value of goods) be untrue in any particular, or if any person required by this act or by any other act relating to the customs to answer questions put to him by the officers of the customs, touching certain matters, shall not truly answer such questions, the person making such declaration or answering such questions shall, over and above any other penalty to which he may become subject, forfeit the sum of 100*l.* — § 131.

Seizures. — All goods, and all ships, vessels, and boats, which by this act or any act at any time in force relating to the customs shall be declared to be forfeited, shall and may be seized by any officer of the customs; and such forfeiture of any ship, vessel, or boat shall be deemed to include the guns, tackle, apparel, and furniture of the same; and such forfeiture of any goods shall be deemed to include the proper package in which the same are contained. — § 132.

Restoration of seized Goods, Ships, &c. — In case any goods, ships, vessels, or boats shall be seized as forfeited, or detained as under-valued, by virtue of any act of parliament relating to the customs, it shall be lawful for the commissioners of his Majesty's customs to order the same to be restored in such manner and on such terms and conditions as they shall think fit to direct; and if the proprietor of the same shall accept the terms and conditions prescribed by the said commissioners, he shall not have or maintain any action for recompence or damage on account of such seizure or detention; and the person making such seizure shall not proceed in any manner for condemnation. — § 133.

Remission of Forfeitures, &c. — If any ship shall have become liable to forfeiture on account of any goods laden therein, or unladen therefrom, or if the master of any ship shall have become liable to any penalty on account of any goods laden in such ship or unladen therefrom, and such goods shall be small in quantity or of trifling value, and it shall be made appear to the satisfaction of the commissioners of his Majesty's customs that such goods had been laden or unladen contrary to the intention of the owners of such ship, or without the privity of the master thereof, as the case may be, it shall be lawful for the said commissioners to remit such forfeiture, and also to remit or mitigate such penalty, as they shall see reason to acquit such master of all blame in respect of such offence, or more or less to attribute the commission of such offence to neglect of duty on his part as master of such ship; and every forfeiture and every penalty, or part thereof, so remitted, shall be null and void, and no suit or action shall be brought or maintained by any person whatever on account thereof. — § 134.

Ships not bringing to at Stations, Masters to forfeit. — If any ship coming up or departing out of any port in the U. Kingdom or in the Isle of Man, shall not bring to at the proper stations in such port appointed by the commissioners of his Majesty's customs for the boarding or landing of officers of the customs, the master of such ship shall for every such offence forfeit the sum of 100*l.* — § 135.

Officers may be stationed in Ships in the Limits of any Port. — It shall be lawful for the commissioners of his Majesty's customs, and for the collector and comptroller of any port under their directions, to station officers on board any ship while within the limits of any port in the U. Kingdom or in the Isle of Man; and the master of every ship on board of which any officer is so stationed shall provide every such officer sufficient room under the deck, in some part of the forecastle or steerage, for his bed or hammock, and in case of neglect or refusal so to do shall forfeit the sum of 100*l.* — § 136.

Power to charge Rent in King's Warehouse. — Whenever any goods shall be taken to and secured in any of the king's warehouses in the U. Kingdom or in the Isle of Man, for security of the duties thereon, or to prevent the same from coming into home use, it shall and may be lawful for the commissioners of his Majesty's customs to charge and demand and receive warehouse rent for such goods for all such time as the same shall remain in such warehouse, at the same rate as may be payable for the like goods when warehoused in any warehouse in which such goods may be warehoused without payment of duty: provided always, that it shall be lawful for the Lords Commissioners of his Majesty's Treasury, or the commissioners of his Majesty's customs, by warrant or order under their hands respectively, from time to time to fix the amount of rent which shall be payable for any goods secured in any of the king's warehouses aforesaid. — § 137.

Power to sell Goods not cleared from King's Warehouse. — In case such goods shall not be duly cleared from the king's warehouse within 3 calendar months, (or sooner, if they be of a perishable nature,) it shall be lawful for the commissioners of his Majesty's customs to cause such goods to be publicly sold by auction, for home use or for exportation, as the case may be; and the produce of such sale shall be applied towards the payment of the duties, if sold for home use, and of the warehouse rent and all other charges; and the overplus (if any) shall be paid to the person authorised to receive the same: provided always, that it shall be lawful for the said commissioners to cause any of such goods to be destroyed as cannot be sold for a sum sufficient to pay such duties and charges, if sold for home use, or sufficient to pay such charges, if sold for exportation: provided also, that if such goods shall have been landed by the officers of the customs, and the freight of the same shall not have been paid, the produce of such sale shall be first applied to the payment of such freight. — § 138.

Power for his Majesty to appoint Ports and legal Quays. — It shall be lawful for his Majesty, by his commission out of the Court of Exchequer, from time to time to appoint any port, haven, or creek in the U. Kingdom, or in the Isle of Man, and to set out the limits thereof, and to appoint the proper places within the same to be legal quays for the lading and unlading of goods, and to declare that any place which had been set out as a legal quay by such authority shall be no longer a legal quay, and to appoint any new place within any port to be a legal quay for the lading and unlading of goods: provided always, that all ports, havens, and creeks, and the respective limits thereof, and all legal quays, appointed and set out and existing as such at the commencement of this act under any law till then in force, shall continue to be such ports, havens, creeks, limits, and legal quays respectively as if the same had been appointed and set out under the authority of this act. — § 139.

Averment of Offence. — In any information or other proceeding for any offence against any act made or to be made relating to the customs, the averment that such offence was committed within the limits of any port shall be sufficient, without proof of such limits, unless the contrary be proved. — § 140.

Commissioners may appoint Sufferance Wharfs. — It shall be lawful for the commissioners of his Majesty's customs from time to time, by any order under their hands, to appoint places to be sufferance wharfs, for the lading and unlading of goods by sufferance, to be duly issued by them, or by the proper officers under their directions, in such manner and in such cases as they shall see fit. — § 141.

No Ships engaged in the Carriage of Letters to import or export Goods. — No ship or boat appointed and employed ordinarily for the carriage of letters shall import or export any goods without permission of the commissioners of his Majesty's customs, under the penalty of the forfeiture of 100*l*., to be paid by the master of such ship or boat. — § 142.

No Person deemed an Apprentice until Indenture enrolled with Collector. — No person shall be deemed to be an apprentice for the purposes of an act passed in the 4th year of the reign of his late Majesty, intituled "An Act (4 Geo. 4. c. 25.) for regulating the Number of Apprentices to be taken on board British Merchant Vessels, and for preventing Desertion of Seamen," unless the indenture of such apprentice shall have been enrolled with the collector and comptroller of the port from which any such apprentice shall first go to sea after the date of such indenture, or in default of such enrolment, until the same shall have been enrolled at some port from which the ship in which such apprentice shall afterwards go to sea shall be cleared. — § 143.

Licensed Agents. — It shall not be lawful for any person to act as an agent for transacting any business at the Custom-house in the port of London which shall relate to the entry or clearance of any ship, or of any goods, or of any baggage, unless authorised so to do by licence of the commissioners of his Majesty's customs, who are hereby empowered to require bond to be given by every person to whom such licence shall be granted, with one sufficient surety, in the sum of 1,000*l*., for the faithful and incorrupt conduct of such person and of his clerks acting for him: provided always, that such bond shall not be required of any person who shall be one of the sworn brokers of the city of London; and if any person shall act as such agent, not being so licensed, or if any person shall be in partnership in such agency with any person not so licensed, such person shall, in either case, for every such offence forfeit the sum of 100*l*. — § 144

Treasury may revoke Licence. — It shall be lawful for the said commissioners of his Majesty's treasury, by any order under their hands, to revoke any such licence; and after a copy of such order shall have been delivered to such person or to his clerk, or left at his usual place of abode or business, such licence shall be void. — § 145.

Not to extend to Clerks or Servants of Individuals, nor to Clerks in Long Room. — Nothing herein contained shall extend to prevent the clerk or servant of any person, nor of any persons in co-partnership, from transacting any business at the Custom-house on account of such person or persons, without such licence; provided such clerk or servant shall not transact any such business as clerk, servant, or agent to any other person. — § 146.

Agent may appoint Clerks to act for him only. — It shall be lawful for any such agent or agents in co-partnership to appoint any person without licence to be his or their clerk in transacting such agency: provided always, that no person shall be admitted to be such clerk to more than 1 agent or co-partnership of agents, nor until his name and residence, and the date of his appointment, shall have been indorsed on the licence of every such agent, and signed by him, and witnessed by the signature of the collector and comptroller of the customs, unless such person shall have been appointed with consent of the commissioners of his Majesty's customs before the commencement of this act. — § 147.

Treasury may extend Regulations to other Ports. — It shall be lawful for the said commissioners of his Majesty's treasury, by their warrant, to be published in the *London* or *Dublin Gazette*, to extend the regulations herein-before made relating to agents in the port of London to agents at any other port in Great Britain, or at any port in Ireland. — § 148.

The commissioners of customs, agreeably to the powers given them to that effect by the foregoing statute, 3 & 4 Will. 4. c. 52. § 13., have appointed the undermentioned places, within the several ports of the U. Kingdom, at which vessels coming into or departing out of such ports shall bring to, for the boarding or landing of customs officers. Every master of a vessel failing to comply with the provisions of said act in this respect forfeits 100*l*.

ENGLAND.

Ports.	*Stations for bringing-to.*
LONDON	Gravesend Reach, below the Custom-house.
ABERYSTWITH	On the bar, or a little above the junction of the rivers Rhydol and Ystwith.
Aberdovey	A little to the westward of the town, in the river Dovey.
ALDBOROUGH	Orford haven, the entrance of the rivers Ore and Alde.
ARUNDEL	The piles on the eastern side of the river, between the *revenue watch-house* and the Duke of Norfolk's Quay, in the harbour of Littlehampton.
BARNSTAPLE	Skern and watch-house, Appledore.
BEAUMARIS	Opposite the town, at Fryar's Roads.
Amlwch	Within the harbour.
Conway	In the roadstead opposite the town.
Carnarvon	In the bay off the town, opposite the Bell Tower, and at Abermenai.
Pwllheli	At the entrance of the harbour, by the Gimblet Rock.
Barmouth	In the harbour.
Holyhead	In the harbour.
BERWICK	At the entrance of the harbour, near the pier head.
BIDEFORD	Skern and watch-house, Appledore.
BOSTON	Hob Hole.
BRIDGWATER	Between Bottestall Point, on the coast of the Bristol Channel, and Black Rock, about a mile within the mouth of the river Parrett.
BRIDLINGTON	The bay or harbour.
BRIDPORT	The outer buoy, distant about 300 yards, abreast of the harbour.
BRISTOL	Pill and Kingsroad.
CARDIFF	Penrith Roads, a little to the eastward of the mouth of the river Taff.
CARDIGAN	At Pwllcam, a little inside the bar or harbour's mouth.
CARLISLE	Fisher's Cross.
CHEPSTOW	At the entrance of the river Wye.
CHESTER	Dovpool, 6 miles from Hoylake.
CHICHESTER	Cockbush harbour.
CLAY	Blackney and Clay Harbour.
COLCHESTER	Coln River, off Mersea Stone, Mersea Island.
COWES (EAST)	Roadstead of Cowes, extending from east to west about 2¼ miles.
DARTMOUTH	Between the mouth of the harbour and Sandquay Point.
Salcombe	At the mouth of the harbour and Snapp Point.
DEAL	In the Downs, in open roadstead.
DOVER	The outer harbour.
Folkstone	In the harbour.
EXETER	At the Passage Way, Exmouth.
Teignmouth	At the Point.
FALMOUTH	In the harbour, off Kiln Quay and watch-house.
FAVERSHAM	Between the mouth of Faversham Creek and the Horse Sand in the East Swale.
Milton	At the mouth of Milton Creek in the Swale.
FOWEY	Near the Custom-house, not far from the entrance of the harbour.

Ports.	*Stations for bringing-to.*
GLOUCESTER.	
GRIMSBY -	At the outfall, near the entrance of the harbour.
GOOLE - -	Hull Roads.
GWEEK - -	Durgan Roads, just at the entrance of the river Hel.
HARWICH -	In the harbour, between the Guard and Walton Ferry.
HULL - -	Hull Roads, between the east end of the citadel and the entrance to the Humber dock to the westward.
ILFRACOMBE -	In the harbour.
IPSWICH -	In the harbour, between the Guard and Walton Ferry.
ISLE OF MAN	
Douglas -	In their respective bays.
Derby Haven -	
Peel - -	
Ramsey -	
LANCASTER -	Glasson Dock, on the river Lune
Poulton -	Sea Dyke, entrance of the river Wyre.
Ulverston -	Pile Foundry, near the Isle of Walney.
LEIGH - -	Leigh Slade, or Leigh Swatch, which channel is formed by the spit of a sand called Marsh End, leading from the east end of Canvy Island, and nearly opposite to a windmill, called the Hamlet Mill, situate upon the Cliff, about ½ a mile to the westward of Southend, and about 2 miles from Leigh.
LIVERPOOL -	At the entrance of the respective docks.
LYME - -	The basin within the pier or cobb of Lyme Regis.
LYNN - -	Nottingham Point, intermediate space between Common Strath Quay, where the estuary narrows into a river, about 3 miles below the town, or as near as circumstances permit within the point.
MALDON -	Barrow Hills, opposite Blackwater River, Maldon.
MILFORD -	In the haven, opposite the town of Milford.
MINEHEAD -	The entrance of the harbour.
NEWCASTLE -	Opposite the watch-house, at the entrance of the river Tyne.
Shields -	Low Lights, North Shields.
Blythmouth -	At the entrance of the harbour.
NEWHAVEN -	In the stream, between the piers and the tide surveyor's watch-house.
NEWPORT (Wales)	At the watch-house, 1 mile from the Custom-house.
PADSTOW -	Hawker's Cove, within the harbour.
PENZANCE -	Gwavas Lake.
St. Michael's	St. Michael's Mount Roads.
PLYMOUTH -	Within the line of the breakwater, viz. the Sound, Catwater, and Hamoaze.
POOLE - -	At the entrance of the harbour, between South Deep, opposite Brownsea Castle, and the Essex buoy, opposite the castle stables.
PORTSMOUTH -	Between Blockhouse Point and the north end of her Majesty's dock-yard.
Langstone -	In the roadstead, within 1 mile of the Spit Buoy.
RAMSGATE -	In the harbour.
Margate -	In the harbour.
Sandwich -	At the entrance of the harbour.
ROCHESTER -	Sheerness.
RYE - -	The outer channel, and in Stag's Hole, in the inner channel.
Hastings -	In the open roadstead.
Eastbourne -	In the open roadstead.
SCARBOROUGH -	Entrance of the harbour, opposite the watch-house, at the end of Vincent's Pier.
SHOREHAM -	Near the entrance of the harbour, in the western branch, opposite the customs watch-house and Kingston Wharf.
SOUTHAMPTON -	Itchen buoy, or Burseledon buoy.
SOUTHWOLD -	Opposite the jetty, near the entrance of the harbour.
STOCKTON -	Ninth buoy, or opposite Cleveland Port.
ST. IVES -	In the bay, within ½ mile of St. Ives pier.
Hayle -	The same.
SUNDERLAND -	At the entrance of the harbour, near the watch-house on the South pier.
SWANSEA -	In the harbour.
Neath -	Briton Ferry, near the entrance of Neath River.
TRURO -	Falmouth Harbour.
WELLS -	Between the entrance of the harbour and Wells Quay.
WEYMOUTH -	Weymouth Roads.
WHITBY -	The harbour.
WHITEHAVEN -	In the harbour, between the tongue and bulwark.
Harrington -	In their respective harbours.
Workington -	
Maryport -	
WISBEACH -	At the lighthouses about 3 miles below the station at Sutton Wash.
WOODBRIDGE -	Bawdsey Ferry, the entrance of the river Deben.
YARMOUTH -	Yarmouth Roads, between Nelson's monument and the haven's mouth — on the Brush, a short distance within the haven's mouth, at the S. E. angle of the river.

SCOTLAND.

ABERDEEN -	That part of Aberdeen Bay which falls within a line beginning at the easternmost point of the Girdle Ness, and running north 1½ mile, to a point due east of the centre of the Broad Hill.
Peterhead -	The bay.
Newburgh -	Within the river Ythan, opposite to the village Newburgh.
Stonehaven -	Stonehaven Bay, within 300 yards of the entrance of the harbour.
AYR - - -	South Quay at Ayr.
BANFF - -	The Legal Quays.
BORROWSTOUNESS -	The harbour.
Inverkeithing -	The harbour.
CAMPBELTOWN -	The harbour.
DUMFRIES -	The harbour.
DUNDEE - -	The harbour.
Newburgh and Perth -	Caroline Roads, 1½ mile to the eastward of the harbour of Dundee.
GLASGOW - -	Entrance of the harbour.
GRANGEMOUTH -	Entrance of the harbour.
Alloa -	Alloa roadstead.
Kincardine -	Kincardine roadstead.
GREENOCK - -	From Gravel Point, to the eastward of the town of Greenock, in the county of Renfrew, to Kempock Point, being the western point of Gourock Bay, including therein Cartadyke Bay, Greenock Roads, the anchorage at the tail of the Lank, and Gourock Bay.
Rothsay - -	Rothsay Bay, lying and being within Bogany Point, on the east of the town of Rothsay, in the Isle of Bute, county of Bute, and Ardmaillah Point on the west of the said town.
Obas - - -	Oban Bay, in the county of Argyle, es lies within Fishing-house Point on the eastern side, and Carrick Point on the western side of the said bay.
Tobermory -	The Bay of Tobermory, lying and being within Leidag Point to the south-east, Dormore Point to the north-west, and the Isle of Calve on the east of Tobermory, Isle of Mull, county of Argyle.
Inverary - -	The roadstead of Inverary, lying and being off the town of Inverary, in the county of Argyle, and extending ½ a mile northeast of the quay of the said town.
Lochgilphead -	Lochgilphead Road, at the east end of the Crinan Canal, lying and being within Ardrishaig Point, on the western side of Lochgilphead and Kilmory Point, on the eastern side of the said loch.
INVERNESS -	The harbour
IRVINE - -	The harbour.
KIRKALDY -	Entrance of the harbour.
Aberdour and Burntisland	Burntisland Roads.
Pittenweem -	Kirkaldy Bay.
Dysart -	
Wemyss -	
Methil -	
Leven - -	Largo Bay.
Largo - -	
Elie - -	
Anstruther -	Entrance to their respective harbours.
St. Andrew's	St. Andrew's Bay.
KIRKWALL -	The Bay, or Kirkwall Roads, extending along the beach, in a north-east direction to Thief's Holm, and in a westerly direction to Quanterness Skerry, thence in a southerly direction to the Legal Quays.
Stromness -	The bay called Cairston Roads.
LEITH - -	Between the martello tower and chain pier at Newhaven.
Dunbar -	In the harbour.
Fisherrow -	In the harbour.
LERWICK -	In the bay, opposite the Custom-house.
MONTROSE -	Within the bar, at the entrance of the river South Esk, which is called the Still.
Arbroath -	The harbour.
PORT GLASGOW	Port Glasgow Roads, or roadstead, commencing at the black and white chequered buoy, on the east point of the bank called the Perch, distant from the harbour about 200 yards, and extending in a south-easterly direction by the course of the river Clyde to the old ruins called Newark Castle.
STORNAWAY -	The harbour.
STRANRAER -	The harbour.
Port Patrick -	The harbour.
THURSO - -	Thurso Bay, within Holburn Head to the anchorage ground at Scrabster Roads.
Wick - -	Wick Bay, when abreast or within the headland called the Old Man of Wick.

IRELAND.

BALTIMORE -	At the entrance of the harbours of Castle Townsend, Baltimore, Crook Haven, and Bere Haven.
Castle Townsend -	
Crook Haven -	
Bere Haven -	
BELFAST -	Garmoyle Roads, in Belfast Lough.
(Floating Stn.)	
COLERAINE -	Port Rush Bay, outside the harbour.
CORK (COVE)	Between the Spit buoy and the town of Cove.
West Passage -	Between Ferry Point to the southward and Horse Head to the north-west.
Kinsale - -	Upper Cove, on the eastern side of the harbour.
Youghall - -	Within the entrance of the harbour, between Blackbatch Head to the eastward, and Ferry Point.
DROGHEDA -	North Crook, at the entrance of the Boyne.
Queenborough -	In the river Boyne, opposite Queenborough.
DUBLIN - -	Pigeon-house, between the harbour light-house and the end of the North Wall.
DUNDALK - -	Soldiers' Point.
GALWAY - -	To the eastward, or under the shelter of, Mutton Island.
LIMERICK - -	Tarbert's Roads, to the southward of Tarbert Island, in the county of Kerry.

Ports.	Stations for bringing-to.
Londonderry	Greencastle, situate on the north side of Lough Foyle.
Newry	Warren Point Roads.
Strangford	Ballyhenry Bay or Audley's Town Bay.
Sligo	Oyster Island.
Killibegs	Anchorage of Killibegs.
Ballyshannon	In the river, abreast of Ward Town-house.
Baltimore	Mayne Pool.
Kilrush	Killaia Pool.
Waterford	Passage.
New Ross	
Dungarvan	The harbour.
Westport	The anchorage ground at Annagh Head, in Clew Bay.
Wexford	South Bay, about 10 miles from Wexford.

IMPORTS AND EXPORTS, the articles imported into and exported from a country.

We have explained in another article (BALANCE OF TRADE) the mode in which the value of the imports and exports is officially determined by the Custom-house, and have shown the fallacy of the common notions as to the advantage of the exports exceeding the imports. The scale of prices according to which the official value of the imports and exports is determined having been fixed so far back as 1698, the account is of no use as showing their true value; but it is of material importance as showing the fluctuations in their quantity. We were anxious, had the means existed, to have given accounts of the quantities of the various articles imported and exported at different periods during the last century, that the comparative increase or diminution of the trade in each might have been exhibited in one general view. Unluckily, however, no means exist for completing such an account. The Tables published by Sir Charles Whitworth, Mr. Macpherson, and others, specify only the aggregate official value of the imports from and exports to particular countries, without specifying the articles or their values of which such imports and exports consisted. And on applying at the Custom-house, we found that the fire in 1814 had destroyed the records; so that there were no means of compiling any complete account of the value of the articles imported or exported previously to that period. We have, however, given, in the first of the following tables, as complete a view of the general trade of Great Britain with all parts of the world from 1760 down to 1842, both inclusive, as can be derived from existing materials. And the subsequent tables, and those dispersed through the work, give a view of that trade in detail, that is, in particular articles, and with particular countries.

During the first half of last century, and previously, woollen goods formed the principal article of native produce exported from Great Britain; and next to it were hardware and cutlery, leather manufactures, linen, tin, and lead, copper and brass manufactures, coal, earthenware, provisions, slops, &c. Corn formed a considerable article in the list of exports down to 1770; since which period the balance of the corn trade has been, with a few exceptions, very decidedly on the side of importation. Cotton did not begin to be of any importance as an article of export till after 1770; but since then the extension and improvement of the cotton manufacture has been so astonishingly great, that the exports of cotton stuffs and yarn amount, at this moment, to about *a half* of the entire exports of British produce and manufactures! The export of woollen goods has been comparatively stationary.

The principal articles of import during the last half century have consisted of sugar, tea, corn, timber and naval stores, cotton wool, sheep's wool, woods and drugs for dyeing, wine and spirits, tobacco, silk, tallow, hides and skins, coffee, spices, bullion, &c. Of the colonial and other foreign products imported into England, considerable quantities have always been re-exported.

Trade of Great Britain with Foreign Countries, since 1760.

Years.	Imports. Official Value.	Exports of British and Foreign and Colonial Produce. Official Value.	Years.	Imports. Official Value.	Exports of British and Foreign and Colonial Produce. Official Value.
1760	£10,683,596	£15,781,176	1772	£14,508,716	£17,720,169
1761	10,292,511	16,038,913	1773	12,522,643	16,375,431
1762	9,579,160	14,543,336	1774	14,477,876	17,288,486
1763	12,668,927	15,678,943	1775	14,815,856	16,396,364
1764	11,250,660	17,446,506	1776	14,434,435	14,765,704
1765	11,812,144	15,763,868	1777	12,643,821	13,491,006
1766	12,456,765	15,188,669	1778	11,033,898	12,253,890
1767	13,097,153	15,090,001	1779	11,435,265	13,830,705
1768	13,116,281	16,620,132	1780	11,714,968	13,698,178
1769	13,154,091	15,001,282	1781	12,722,862	11,532,286
1770	13,430,298	15,994,573	1782	10,341,629	13,099,459
1771	14,208,325	19,018,381	1783	13,122,235	14,681,495

Years.	Imports. Official Value.	Exports. — Official Value. British Produce and Manufactures.	Foreign and Colonial Produce.	Total Exports.
1784	£15,272,877	£11,255,057	£3,846,434	£15,101,491
1785	16,379,419	11,081,811	5,035,358	16,117,169
1786	15,786,072	11,830,195	4,470,536	16,300,731
1787	17,804,045	12,053,900	4,815,889	16,869,789
1788	16,027,170	12,724,720	4,747,519	17,472,239
1789	17,821,103	13,779,506	5,561,043	19,340,549
1790	19,130,886	14,931,044	5,199,037	20,130,181
1791	19,669,783	16,810,019	5,921,977	22,731,996
1792	19,659,358	18,336,851	6,568,349	24,905,200
1793	19,255,117	13,892,269	6,496,560	20,388,829
1794	22,876,916	16,725,403	10,021,681	26,748,084
1795	22,736,889	16,588,213	10,785,126	27,123,339
1796	22,187,240	19,102,290	11,416,684	30,518,914
1797	21,013,957	16,903,103	12,013,907	28,917,010

Years.	Imports. Official Value.	Exports. — Official Value. British Produce and Manufactures.	Foreign and Colonial Produce.	Total Exports.	Exports of British Produce and Manufactures. Declared or Real Value.	Excess of Official over Real Value of Exports of British Produce.	Excess of Real over Official Value of Exports of British Produce.
1798	£27,851,889	£19,672,503	£13,919,275	£33,591,778	£33,148,682	- -	£15,476,179
1799	26,537,433	24,064,213	17,907,116	41,971,329	38,944,498	- -	14,856,985
1800	30,540,605	24,304,284	18,847,736	43,152,020	39,471,905	- -	15,166,919

Trade of Great Britain with Foreign Countries — *continued.*

Years.	Imports.	Exports. — Official Value.			Exports of British Produce and Manufactures.	Excess of Official over Real Value of Exports of British Produce.	Excess of Real over Official Value of Exports of British Produce.
	Official Value.	British Produce and Manufactures.	Foreign and Colonial Produce.	Total Exports.	Declared or Real Value.		
	£	£	£	£	£	£	£
1801	- -	24,501,608	- -	- -	39,730,659	- -	15,229,051
1802	- -	25,195,893	- -	- -	45,102,330	- -	19,906,437
1803	25,104,541	20,042,596	8,032,643	28,075,239	36,127,787	- -	16,085,191
1804	26,454,281	22,132,367	8,938,741	31,071,108	37,135,746	- -	15,003,379
1805	27,334,040	22,907,371	7,615,180	30,580,491	37,234,396	- -	14,327,025
1806	25,554,478	23,266,546	7,717,555	32,984,101	39,746,581	- -	14,480,035
1807	25,326,845	22,963,772	7,624,312	30,588,084	36,394,445	- -	13,430,671
1808	25,660,953	24,179,854	5,776,775	29,956,629	36,206,385	- -	12,226,531
1809	30,170,292	32,916,858	12,750,358	45,667,216	46,049,777	- -	13,132,919
1810	37,613,294	33,299,408	9,357,435	42,656,843	47,000,926	- -	13,701,518
1811	25,240,904	21,723,532	6,117,720	27,841,252	30,850,618	- -	9,127,086
1812	24,923,922	28,447,914	9,533,065	37,980,977	39,334,526	- -	10,886,614
1813	*	*	*	*	*	- -	*
1814	32,620,771	32,200,580	19,157,818	51,358,398	43,447,373	- -	11,246,793
1815	31,822,053	41,712,002	15,708,435	57,420,437	49,653,245	- -	7,941,243
1816	26,374,921	34,774,521	13,441,665	48,216,186	40,328,940	- -	5,554,419
1817	29,910,502	39,233,467	10,269,271	49,502,738	40,349,235	- -	1,115,768
1818	33,845,340	41,960,553	10,835,800	52,796,355	45,180,150	- -	3,219,595
1819	29,681,640	32,983,689	9,879,236	42,862,925	34,253,951	- -	1,268,562
1820	31,515,222	37,880,293	10,525,026	48,345,319	35,569,077	2,251,216	
1821	29,769,122	40,194,681	10,602,090	50,796,771	35,823,127	4,371,554	
1822	29,432,376	43,558,488	9,211,928	52,770,416	36,176,897	7,381,591	
1823	34,591,264	43,166,039	8,588,996	51,755,035	34,589,410	8,576,629	
1824	36,036,551	48,024,959	10,188,596	58,213,548	37,600,021	10,424,931	
1825	42,660,954	46,453,022	9,155,305	55,608,327	38,077,330	8,375,692	
1826	36,174,350	40,332,854	10,066,503	50,399,357	30,847,528	9,585,326	
1827	43,489,346	51,279,102	9,806,343	61,085,445	36,394,817	14,884,285	
1828	43,536,187	52,019,728	9,928,655	61,948,383	36,450,379	15,869,349	
1829	42,311,649	55,465,723	10,606,441	66,072,164	35,212,873	20,252,850	
1830	44,315,397	60,499,637	8,535,786	69,028,423	37,691,502	22,801,135	
1831	48,161,661	60,090,125	10,729,943	70,820,066	36,659,694	23,437,429	
1832	43,237,417	64,582,037	11,036,759	75,618,796	36,046,027	28,536,010	
1833	44,529,287	69,633,854	9,820,586	79,454,440	39,305,515	30,328,341	
1834	47,908,931	73,495,536	11,549,913	85,055,449	41,286,594	32,208,942	
1835	47,463,610	77,939,616	12,783,802	90,716,418	46,926,370	31,006,246	
1836	55,753,419	84,983,476	12,384,538	97,367,814	52,940,838	31,942,638	
1837	53,224,874	72,314,207	13,223,381	85,535,538	41,766,305	30,546,002	
1838	59,[illegible]905	92,107,898	12,702,660	104,810,558	49,640,896	42,467,002	
1839	60,546,066	96,947,122	12,779,057	109,726,179	52,701,509	44,245,613	
1840	65,873,411	102,263,512	13,765,618	116,029,130	50,896,556	51,366,956	
1841	62,684,587	101,780,753	14,714,635	116,495,388	51,917,658	50,563,095	
1842	63,589,080	99,911,012	13,577,000	113,488,012	47,012,651	52,898,361	

N.B. — The account of the declared or real value of the exports was first taken in 1798, having been introduced by the Convoy Act of that year.

Decline in the Real Value of the Exports. — The increase in the official, and the decline in the real, value of the exports since 1815, has given rise to a great deal of irrelevant discussion. It has been looked upon as a proof that our commerce is daily becoming less prosperous, whereas, in point of fact, a precisely opposite conclusion should be drawn from it. We have already stated (art. BALANCE OF TRADE) that the rates according to which the official values of the exports are determined were fixed so far back as 1696, so that they have long ceased to be of importance as affording any criterion of their actual value, their only use being to show the fluctuations in the *quantities* exported. To remedy this defect, a plan was formed in 1798 for keeping an account of the real value of the exports as ascertained by the declarations of the exporters. Those who believe that our trade is getting into a bad condition, contend that the great increase in the official value of the exports since 1815 shows that the *quantity* of the articles exported has been proportionally augmented; while the fall in their real value shows that we are selling this larger quantity of produce for a smaller price, — a result which, they affirm, is most injurious. But the circumstance of a manufacturer or merchant selling a large or a small quantity of produce at the same price, affords no criterion by which to judge as to the advantage or disadvantage of the sale; for if, in consequence of improvements in the arts or otherwise, a particular article may now be produced for half the expense that its production cost 10 or 20 years ago, it is obvious that double the quantity of it may be afforded for the same price, without injury to the producers. Now this is the case with some of the most important articles exported from England. Cotton and cotton yarn form a full half or more of our entire exports; and since 1814 there has been an extraordinary fall in the price of these articles, occasioned partly by cotton wool having fallen from about 1*s.* 6*d.* to about 5½*d.* per lb., but more by improvements in the manufacture. To such an extent have these causes operated, that yarn No. 40., which cost, in 1812, 2*s.* 6*d.*, cost, in 1843, 9½*d.*; in 1812 No. 60. cost 3*s.* 6*d.*, in 1843 it cost 1*s.* 0½*d.*; in 1812 No. 80. cost 4*s.* 4*d.*, in 1843 it cost 1*s.* 4*d.*, and so on; and in the weaving department the reduction has been similar. Hence, while the official value of the cotton goods and yarn exported has increased from about 18,000,000*l.* in 1814, to above 68,500,000*l.* in 1842, their real or declared value has only increased from about 20,000,000*l.* in 1814, to 21,675,000*l.* in 1842. This, however, is, if any thing can be, a proof of increasing prosperity: it shows that we can export and sell with a profit (for unless such were the case, does any one suppose the exportation would continue?) more than 3 times the quantity of cotton goods we exported in 1814, for not much more than the same price. In so far, therefore, as an abundant and cheap supply of cottons may be supposed to increase the comforts of society, it is plain they must be about trebled, not in this country only, but in all those countries with which we trade.

Owing to the fall that has taken place in the prime cost, and consequently in the price, of most of the principal articles of import we obtain, at this moment, a much larger quantity of the produce of other countries in exchange for the articles we send abroad, than at any former period. The fall has been particularly sensible in the great articles of cotton and sheep's wool, corn, sugar, indigo, pepper, &c. The imports of all sorts of foreign merchandise have been increasing rapidly since 1815; and it is material to bear in mind, that we had no gold coin in circulation at that epoch, and that besides the greater quantities of other articles, we have imported, in the intervening period, from 35,000,000*l.* to 40,000,000*l.* of gold and silver for currency only. The truth is, therefore, that instead of the decline in the real value of our exports having been in any degree prejudicial, it has been, in all respects, distinctly and completely the reverse. It has insured for our goods a decided superiority in every market, while, as the cost of the goods has fallen in an equal degree, their production continues to be equally advantageous. It appears, too, that a similar fall has been going on in other countries; so that while we send more goods to the foreigner, we get back more of his in return. Instead of being an evidence of decline, increased facilities of production and increased cheapness are the most characteristic and least equivocal marks of commercial prosperity.

Account of the different Articles of Foreign and Colonial Merchandise imported into, exported from, and retained for Consumption in, the United Kingdom, with the Nett Revenue accruing thereon, during the Years 1838, 1839, 1840, and 1841.

Description of Merchandise.	Quantities Imported.				Quantities exported.				Quantities retained for Consumption.				Nett Revenue.			
	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.
													£	£	£	£
Annatto - - - lbs.	357,498	303,489	408,469	417,814	11,667	27,968	27,740	39,054	291,758	224,794	330,490	263,158	142	119	170	134
Arrow root - - —	404,738	382,563	378,202	694,678	28,613	52,860	15,390	15,820	434,574	375,817	361,959	547,948	393	380	441	1,012
Ashes, pearl and pot - cwts.	127,101	112,687	99,295	91,844	5,097	8,861	15,266	13,296	122,390	105,719	86,728	78,034	233	344	154	4
Barilla and alkali - —	72,387	56,697	65,071	42,618	1,010	2,192	1,642	700	77,576	59,560	56,328	46,996	4,803	3,809	2,676	4,977
Bark, for tanning or dyeing not for tanning or dyeing - - lbs.	424,817	105,889	160,909	365,785	124,022	281,451	190,940	298,146	124,324	40,526	58,128	75,406	501	356	602	362
Barks - - - —	370,059	780,164	575,890	432,883	63,879	73,717	114,740	303,065	371,060	498,079	319,126	209,198	771	1,044	764	865
Benzoic acid - - —	951,533	1,359,103	1,240,376	944,376	60,382	21,150	- -	- -	921,164	1,243,968	924,205	1,708,979	1,650	2,221	971	3,193
Brimstone - - - cwts.	893,061	402,988	745,044	125,755	17,070	11,995	1,674	74,401	679,571	710,541	439,091	209,249	17,046	17,856	11,199	6,309
Bristles - - - lbs.	2,363,011	2,458,022	1,889,504	1,735,502	112,342	106,669	49,327	69,612	2,055,331	1,962,079	1,930,850	1,652,858	29,836	28,671	29,121	24,929
Cocoa, viz. —																
British plantation - —	2,147,816	959,477	2,374,281	2,919,112	38,157	49,055	43,236	152,764	1,599,727	1,603,365	2,041,492	1,928,510				
Foreign plantation - —	1,948,593	695,189	1,125,465	2,095,569	601,130	437,850	821,786	318,255	2,060	3,432	186	337				
All sorts - - —	4,096,409	1,654,666	3,499,746	5,014,681	639,287	486,905	865,022	471,019	1,601,787	1,606,800	2,041,678	1,928,847	15,285	15,703	20,944	19,596
Cockroad shells - —	384,842	609,299	692,091	598,172	- -	- -	- -	6,720	421,548	513,157	753,580	566,478				
Chocolate and cocoa paste —	2,314	2,722	2,335	1,653	506	596	453	80	1,805	2,178	2,067	1,523				
Coffee, viz. —																
British plantation - —	17,436,623	15,729,695	20,987,869	17,060,992	93,257	36,399	96,764	359,842	15,495,639	18,041,842	14,443,399	17,532,448				
East India and Mauritius —	8,415,593	20,802,086	36,529,457	20,463,793	246,578	1,258,681	3,510,200	7,319,041	10,263,843	8,667,121	14,143,438	10,833,969				
Foreign plantation - —	14 060,063	4,471,535	12,733,440	5,792,977	10,953,455	11,467,507	9,100,450	6,602,213	8,191	80,982	77,504	4,440				
All sorts - - —	39,932,279	41,003,316	70,250,766	43,317,762	11,293,290	12,762,587	12,707,414	14,274,096	25,765,673	26,789,945	28,664,341	28,370,857	685,082	779,115	921,551	887,747
Cork, unmanufactured - cwts.	51,852	71,046	58,108	64,182	285	408	624	581	57,522	63,829	59,793	57,144	25,119	25,807	24,795	24,215
Cotton wool, from foreign countries, viz. —																
U. States of America - lbs.	451,437,888	311,597,798	487,856,504	358,940,964												
Brazil - - - —	24,464,506	16,971,979	14,779,171	16,671,548												
Turkey, Syria, and Egypt —	5,412,478	5,046,417	6,851,087	8,234,572												
Other foreign countries —	4,759,680	9,178,037	4,421,610	5,545,938												
Total from foreign countries	486,074,551	340,789,231	515,908,372	388,692,822												
Cotton wool, from British possessions, viz. —																
East Indies and Mauritius, the growth of - lbs.	40,229,495	47,170,640	77,010,917	97,368,319												
Foreign —	569	2,299	992	19,841												
British W. Indies, growth of —	228,425	678,125	427,523	289,135												
Foreign —	600,931	570,030	458,634	1,344,062												
Other British possessions —	16,606	186,225	71,099	151,886												
Other foreign possessions —	- -	- -	630,543	226,297												
Total from British possessions	41,776,026	48,607,328	78,579,638	99,299,533												
Total from foreign countries	486,074,551	340,789,231	515,908,372	388,692,822												
Total quantities - -	507,850,577	389,396,559	592,488,010	487,992,355	30,644,469	38,738,258	38,675,229	37,675,585	455,036,755	352,000,277	528,142,743	437,023,631	557,892	416,257	648,937	528,508
Cotton manufactures, viz. —																
Piece goods of India - pieces	270,545	444,143	379,179	173,267	384,966	391,368	299,740	264,462	-	51,510	66,978	68,480				
Manufactures value, £	92,622	134,457	164,565	151,416	53,963	87,029	99,977	84,163	-	89,955	83,460	72,774	6,380	7,145	8,150	8,363
Yarn - - - lbs.	277,113	447,315	424,633	532,204	133,756	357,158	419,920	458,598								
Dyeing stuffs, viz. —																
Cochineal - - —	615,485	1,014,615	1,105,554	1,120,655	334,353	518,125	819,329	873,064	195,715	396,902	325,744	386,314	5,027	215	236	267
Fustic - - - tons	4,891	10,065	9,047	7,638	801	662	1,669	1,964	4,783	8,410	7,407	5,920	953	1,751	1,668	1,315
Gum Arabic - - cwts.	24,191	25,299	18,036	21,960	2,548	6,771	4,859	3,804	16,420	16,096	17,554	18,756	4,931	4,845	5,454	5,917
Senegal - - —	29,274	43,879	13,556	6,154	2,111	1,734	1,100	107	24,888	24,498	23,783	15,360	7,345	7,239	7,333	4,245
Animal and vegetable lbs.	925,946	851,851	981,559	990,686	255,006	159,279	176,249	232,093	200,837	193,066	181,388	189,738	535	534	506	535
															90	73

Indigo	lbs.	7,004,996	5,519,125	7,283,222	7,894,497	5,143,894	4,345,247	4,587,598	4,827,891	3,003,730	2,704,396	2,996,215	2,780,583	38,819	35,271	39,626	37,293
Lac dye	—	1,095,952	1,166,848	1,251,927	1,221,304	400,937	283,356	161,397	273,748	575,089	552,881	644,092	760,531	1,692	1,443	1,797	2,153
Logwood	tons	16,992	23,099	27,051	25,718	4,257	5,250	6,944	4,369	13,798	17,409	18,653	19,880	2,881	3,691	4,033	4,393
Madder	cwts.	97,411	98,896	140,795	105,981	2,374	1,038	964	13	108,921	96,707	134,479	101,196	10,912	9,727	13,939	10,641
Madder roots	—	73,701	80,538	109,415	104,671	168	-	6	-	82,841	80,259	112,714	105,148	2,270	2,075	2,880	2,760
Nicaragua wood	tons	2,182	1,593	2,831	1,467	869	624	358	545	2,572	1,639	2,614	1,899	648	413	681	517
Safflower	cwts.	4,974	3,661	5,352	5,429	4,802	4,502	4,489	6,431	3,813	1,818	927	1,736	189	101	90	125
Shumac	—	208,476	169,696	187,029	184,399	2,500	904	523	2,933	203,949	169,923	186,907	179,190	515	427	481	475
Smalts	lbs.	110,941	124,247	118,638	117,244	25,450	22,651	6,881	17,967	97,932	91,182	115,342	91,824	1,626	1,570	1,975	1,659
Valenia	cwts.	153,530	162,603	163,985	125,657	10	9	-	-	146,707	153,864	159,865	131,594	7,233	7,644	8,260	6,884
Yellow berries	—	5,276	4,620	6,252	5,587	3	20	30	135	3,962	4,512	5,585	4,864	397	453	578	522
Zaffres	lbs.	505,276	426,004	515,848	531,741	-	-	-	-	500,922	412,420	504,510	545,719	224	184	283	256
Elephants' teeth	cwts.	4,883	5,130	5,400	5,712	1,730	692	1,444	1,282	4,677	3,929	4,491	4,549	260	215	274	271
Flax and tow, or codilla of hemp and flax	—	1,626,277	1,223,701	1,253,240	1,346,843	6,630	7,392	2,348	7,822	1,615,905	1,216,811	1,256,322	1,338,213	6,827	5,196	5,511	5,934
Fruits, viz. —																	
Apples, not dried	bushels	2,162	-	-	40,849	65	-	-	-	2,097	-	-	-	2,116			
	value, £	33,396	43,909	33,697	-	-	42	-	-	33,396	43,867	33,627	40,849	-	2,211	1,769	2,160
Almonds	cwts.	21,649	28,261	27,566	11,089	11,229	19,734	21,053	5,641	7,179	9,785	7,935	8,104	7,244	10,098	7,978	9,069
Chesnuts	bushels	19,056	29,814	25,125	14,579	102	88	15	408	18,989	28,527	19,505	21,479	1,538	2,769	2,080	2,340
Currants	cwts.	169,733	206,969	221,119	173,680	22,921	17,282	20,635	23,486	166,421	170,951	164,747	189,907	184,492	189,292	188,678	221,125
Figs	cwts.	17,243	25,515	30,063	23,970	1,233	901	2,585	1,684	15,947	19,905	26,833	28,979	12,014	15,000	20,728	22,872
Lemons & orang. chests or boxes		262 107	328,016	332,163	24,351	1,303	443	402	99	229,846	296,970	301,141	24,252	59,920	64,328	62,815	1,297
Grapes	value, £	22,092	24,219	32,108	376,202	24	117	102	1,704	22,068	28,102	32,006	361,937	1,105	1,445	1,686	77,638
Plums, dried or preserved	cwts.	349	480	402	412	49	2	3	10	318	424	412	374	436	586	637	490
French and prunelloes	—	6,541	8,090	6,311	2,864	553	1,176	533	212	5,159	6,008	6,328	3,781	5,168	6,038	6,586	3,988
Prunes	—	9,690	19,061	18,127	9,213	335	636	279	158	9,812	14,881	15,598	13,413	3,456	5,215	5,776	4,892
Raisins	—	205,466	205,911	224,781	216,741	15,653	10,177	10,087	32,230	155,174	179,335	178,116	240,887	116,350	134,589	138,208	188,703
Small nuts	bushels	157,158	129,046	82,795	152,893	1,666	538	1,187	730	155,053	121,885	84,198	149,848	15,351	12,177	8,628	15,659
Walnuts	—	18,496	32,936	33,084	21,106	153	121	314	171	19,304	32,754	31,755	23,128	1,956	3,392	3,371	2,463
Furs, undressed, viz. —																	
Bear	No.	9,822	9,345	10,140	11,987	5,511	6,062	8,289	9,534	6,034	3,399	1,710	1,579	941	529	293	249
Beaver	—	81,409	68,750	67,630	67,780	91	195	11	6	101,721	75,108	68,567	71,469	1,902	1,455	1,369	1,512
Cat	—	17,131	30,257	21,917	28,024	5,528	7,672	5,703	9,498	14,025	21,471	11,235	19,990	61	90	49	89
Lynx	—	47,332	69,971	40,852	49,225	17,506	24,371	50,506	25,652	16,360	22,568	10,765	24,620	411	568	279	646
Coney	—	96,296	293,308	96,329	186,369	14,124	36,878	18,237	6,042	104,965	255,730	74,644	185,630	52	142	46	100
Ermine	—	86,200	106,911	42,131	41,106	13,221	8,330	12,752	15,120	122,869	96,391	36,907	36,471	1,536	1,205	478	478
Fitch	—	81,975	104,451	93,962	101,788	306	3,619	4,550	2,610	63,753	111,726	57,869	106,849	531	931	534	935
Fox	—	64,047	66,539	67,172	94,437	78,412	51,504	56,257	77,852	10,572	6,375	5,344	6,779	271	169	147	171
Marten	—	211,751	229,167	160,947	217,259	40,430	27,699	32,814	14,334	224,609	217,231	164,393	196,677	4,131	4,148	3,538	4,593
Mink	—	97,025	112,826	121,673	133,123	42,457	52,921	80,073	64,824	54,995	39,961	33,218	64,901	740	596	489	1,035
Musquash	—	504,016	813,101	357,114	339,939	149,416	111,706	64,977	54,840	690,060	598,170	406,322	511,116	347	300	240	270
Nutria	—	1,210,924	214,882	242,773	1,125,212	62,355	119,379	200	29,057	1,405,972	220,719	259,688	901,707	725	156	134	479
Otter	—	23,201	21,603	31,184	24,115	29,996	18,947	28,310	27,639	1,816	533	623	473	135	30	59	51
Racoon	—	204,484	256,044	494,905	511,049	173,613	249,646	317,123	359,653	1,092	320	416	2,112	7	2	4	18
Squirrel	—	3,043,091	2,295,557	2,231,282	1,993,614	35,743	409	22,601	1,479	2,662,105	2,563,699	1,561,790	1,845,610	15,309	14,729	9,332	11,143
Hardwoods, viz. —																	
Boxwood	tons	292	496	1,609	2,405	46	1	9	108	712	647	1,667	1,037	359	527	869	554
Cedar, under 8 in. square	—	1,962	3,144	2,697	1,381	261	114	418	643	2,405	2,538	2,336	1,315	1,257	1,124	1,225	734
Mahogany	—	23,336	25,859	23,115	19,502	1,809	1,522	2,221	1,177	24,609	21,144	20,403	18,103	56,712	52,939	49,286	43,926
Rosewood	—	965	1,738	1,585	2,491	305	226	122	45	1,798	1,458	1,554	1,661	10,795	8,754	9,596	10,478
Hats or bonnets, platting, &c., viz. —																	
Hats or bonnets of bast, cane, chip, or horsehair	No.	16,662	53	530	2,191	3,525	41	-	2,160	13,711	12	32	31	1,145	1	3	3
Chip	lbs.	217	2,105	2,135	1,485	166	15	78	630	517	1,644	1,580	1,458	207	660	648	614
Straw	No.	14,472	19,340	15,097	22,535	9,778	22,043	9,782	7,174	4,522	3,778	8,544	9,666	1,292	1,072	2,832	2,871
Platting of bast, cane, chip, or horsehair	lbs.	992	24	6	73	2,140	-	-	-	107	24	6	73	74	24	6	8
Chip	—	-	1,734	1,654	3,167	-	278	357	92	1,633	1,528	2,626	-	652	629	1,097	1,097
Straw	—	40,110	44,444	27,520	13,700	11,626	14,011	13,177	14,721	34,662	24,340	13,033	7,971	29,052	18,960	11,279	7,103
Straw or grass for platting	cwts.	5,407	3,350	2,030	2,075	37	13	3	140	3,453	3,268	2,039	1,949	15	14	9	9
Hemp, undressed	—	730,376	995,693	684,068	652,165	39,458	34,819	41,349	42,322	733,378	908,735	711,397	621,515	3,172	3,896	3,201	2,804
Hides, unmanned, viz. —																	
Buffalo, bull, cow, ox, or horse	—	348,362	418,391	352,867	551,448	35,492	58,551	53,171	83,178	316,369	356,505	302,789	451,611	41,551	45,393	40,139	59,573
Hides, or pieces of hides, unenumerated	value, £	48	181	172	203	2	-	143	185	46	181	29	18	Repaym. exceeded gross receipts 5l.	36	6	4
Hides, tanned, viz. —																	
Buffalo, bull, cow, ox, or horse	lbs.	165,955	64,999	8,954	110,840	121,142	42,469	51,074	96,033	20,362	16,557	5,822	1,032	248	245	82	15
Calf	—	17	41	-	354	-	-	-	354	17	41	-	-	1	2		
Muscovy or Russian	No.	2,880	5,860	5,580	5,102	-	60	-	72	5,578	5,149	4,664	3,648	1,345	1,288	1,206	956
Do.	lbs.	-	2	-	-	-	-	-	-	2	2	-	-	-			

Foreign and Colonial Merchandise imported, exported, retained, &c. — *continued.*

Description of Merchandise.	Quantities imported.				Quantities exported.				Quantities retained for Consumption.				Nett Revenue.			
	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.
Hides, unenumerated, value, £	219	40	24	32	150	-	23	-	69	40	1	32	£ 21	£ 12	£	£ 10
Horns, horn tips, and pieces, cwts.	26,452	39,785	28,470	40,374	12,630	13,678	11,382	12,171	16,392	25,944	18,711	27,049	58	80	59	82
Jalap - - - lbs.	72,462	56,424	73,553	54,001	10,368	23,612	24,439	30,576	44,047	38,156	44,665	45,259	1,101	954	1,149	1,189
Iron, bar - - - tons	23,007	20,826	18,949	23,761	4,369	4,484	5,661	3,561	19,150	18,417	13,263	17,653	28,594	27,135	20,835	27,769
Isinglass - - - cwts.	1,885	1,904	1,493	1,383	69	20	29	31	1,720	1,644	1,589	1,494	4,038	3,851	3,810	3,607
Lead, pig - - - tons	3,568	3,626	1,600	1,182	3,440	3,736	2,530	947	58	64	-	84	116	13	-	18
Leather gloves - - pairs	1,157,738	1,015,358	1,543,217	1,574,358	41,584	36,350	39,032	21,764	1,130,038	991,623	1,503,862	1,351,285	21,385	18,566	28,301	26,100
Linen, viz. —																
Cambrics and bordered handkerchiefs - pieces	43,690	34,599	31,866	34,525	379	484	674	233	43,275	34,103	31,298	34,257				
Lawns, not French - sq. yds.	4,785	2,722	11,310	5,784	94	1,831	9,455	1,894	2,751	2,807	1,708	4,093				
Damask & damask diaper —	7,716	9,682	10,241	6,986	419	2,208	520	1,061	7,082	7,795	9,265	6,276				
Drillings, ticks, & twilled linens - - - —	-	6,136	4,482	1,858	-	8,436	4,959	1,248	-	-	20	186				
Sail cloth - - - —	24,892	15,763	19,920	21,755	25,836	9,251	24,224	17,234	675	500	1,561	40				
Do. - - - pieces	-	-	-	-	-	-	-	-	577	-	-	573				
Sails - - value, £	637	1,454	1,158	690	60	140	123	117	209	1,314	1,035	195	19,570	14,185	13,712	14,017
Plain linen and diaper sq. yds.	8,038	27,463	61,81[illegible]	10,683	8,079	51,554	61,753	10,673	-	166	57	-				
Do. - - - ells	196,934	292,321	284,160	268,300	111,394	9,139	900	900	-	-	-	-				
Do. - - - pieces	30,083	53,864	38,563	11,972	30,999	55,330	38,563	11,972	-	-	-	-				
Lawns, not French, plain linen, &c., diaper, and manufactures of linen, unenumerated - value, £	13,566	7,280	8,918	7,853	1,530	880	3,052	2,245	17,471	9,110	8,849	8,326				
Linen yarn - - - cwts.	3,181	2,940	1,135	772	-	33	-	-	2,964	3,124	1,133	772	148	158	59	41
Liquorice juice - - —	6,782	8,207	7,067	7,179	367	629	513	590	7,329	6,799	6,905	7,004	27,181	25,235	26,535	27,386
Molasses - - - —	650,289	490,097	457,657	533,434	1,291	105	208	33,089	526,210	533,298	422,653	401,856	236,688	240,081	200,947	195,286
Oil, essence - - - lbs.	840,301	918,804	1,195,874	871,136	135,860	318,572	408,391	360,578	680,594	710,344	807,175	732,720	351	425	459	472
olive - - - galls.	2,009,110	1,793,980	2,213,436	1,193,000	200,763	166,948	150,487	159,149	2,096,146	1,806,178	1,985,902	1,335,788	45,416	37,662	40,280	28,526
cocoa nut - - - cwts.	32,666	30,602	42,428	38,262	5,929	4,015	6,280	14,657	38,669	15,153	37,269	26,582	2,420	971	2,424	1,761
palm - - - —	284,312	343,700	315,504	402,126	8,829	29,800	17,234	58,644	272,991	264,910	314,881	330,770	17,102	16,485	20,533	19,828
train, sperm, & blubber, tuns	26,281	24,199	25,581	23,280	1,192	937	5,069	1,976	26,806	21,438	19,955	21,950	6,605	6,298	16,940	14,055
Opium - - - lbs.	95,852	196,247	77,872	155,609	13,028	10,193	35,848	61,104	30,435	41,632	46,786	39,074	1,557	2,682	2,426	2,037
Provisions, viz. —																
Bacon and hams - - cwts.	6,348	8,149	6,181	5,194	4,673	5,321	5,006	3,473	1,725	1,827	1,706	1,602	2,419	2,558	2,454	2,375
Beef, salted - - - —	15,108	16,227	29,779	42,960	9,531	11,351	19,880	32,306	1,936	2,116	3,990	1,848	1,174	1,266	2,483	1,175
Butter, salted - - - —	256,194	213,304	252,661	277,428	4,640	2,534	4,313	3,834	251,592	213,328	249,145	250,158	251,665	213,078	257,577	254,618
Cheese - - - —	227,877	210,456	226,462	270,219	6,818	8,340	8,620	9,321	217,296	201,391	217,694	246,730	115,907	105,219	117,678	134,622
Eggs - - - No.	83,749,745	95,291,844	96,149,190	91,880,187	3,000	1,800	2,400	-	83,746,743	95,289,564	96,146,790	91,880,187	29,094	33,094	34,375	33,489
Fish, anchovies - - lbs.	167,603	142,760	224,877	140,269	3,580	12,140	10,044	7,505	166,108	135,139	206,236	135,678	1,386	1,126	1,764	1,189
of Newfoundland and British America - cwts.	103,448	85,360	119,342	130,769	6,574	8,015	1,270	9,094	96,874	77,545	118,072	121,675				
cod - - ship loads	69	70	68	72	-	-	-	-	69	70	68	72	886	914	920	968
- - - boxes	-	1	14	2	-	-	-	-	-	1	1½	2				
Pork, salted - - - —	19,138	31,843	29,532	45,319	15,980	31,101	28,238	29,367	189	376	721	1,244	113	220	453	751
Quicksilver - - - lbs.	1,450,280	2,273,696	2,157,918	1,825,180	2,067,992	1,875,509	1,518,411	1,768,307	405,271	340,469	330,070	302,814	1,694	1,420	1,422	1,328
Rags, and other materials for making paper - tons	8,472	9,257	9,253	6,573	491	-	-	9	8,226	9,261	9,200	6,444	2,074	2,518	2,377	1,692
Rhubarb - - - lbs.	118,468	120,065	45,208	95,701	81,627	31,345	55,076	67,877	45,389	34,034	40,975	42,930	2,269	1,715	2,127	2,255
Rice, cleaned, from the E. Indies and British possess. in Africa and America - cwts.	236,479	377,054	443 918	486,719	Foreign cleaned. 203,642	207,726	Foreign cleaned. 237,474	201,268	119,689	201,226	213,330	243,373				
Rice, cleaned, from foreign countries in Europe, Africa, and America - —	1,888	-	-	327,352	Cleaned in U. Kingd. 28,599	37,741	Cleaned in U. Kingd. 51,190	27,895								
Rice, in the husk, from the E. Indies and British possess. in Africa & America, bush.	13,174	338,754	335,959	-									24,606	32,298	24 610	21,962
Rice, in the husk, from foreign countries in Europe, Africa, and America —	205,033	-	-	-	2,470	450	384	2,400	169,374	190,351	145,676	262,795 310				
Sago - - - cwts.	18,697	20,922	51,969	76,511	2,214	802	512	2,621	28,396	19,265	34,832	52,497	1,426	966	1,793	2,772
Saltpetre and cubic nitre - —	298,556	361,343	337,317	416,930	68,389	55,240	57,445	92,622	280,890	314,543	309,204	349,773	7,505	8,277	8,396	9,651
Staves, viz. —																
Cuttawy - - - —	107	1,595	587	259	154	210	274	434	210	914	585	494	516	1,572	918	779

Flax and linseed	bushels	3,304,869	4,151,047	3,558,070	2,907,685	146,926	118,856	264,295	526,429	3,136,695	3,852,359	3,256,257	2,643,286	19,921	24,156	21,150	17,728
Onion	lbs.	44,502	79,824	43,674	131,025	1,555	2,175	120	3,980	40,772	81,943	69,814	97,748	3,057	6,083	4,617	7,694
Rape	bushels	713,171	983,864	653,958	715,533	60,185	7,937	98,136	91,205	700,518	912,107	652,726	631,865	4,418	5,651	4,461	3,817
Tares	—	58,015	137,586	264,959	377,724	437	52	198	177	71,855	125,930	234,251	225,024	4,210	7,703	15,481	14,093
Silk, raw, viz.—																	
From India	lbs.	1,127,253	1,385,932	1,103,914	1,174,109												
Cape of Good Hope	—	1	-	-	3												
China	—	698,248	349,549	247,775	277,093												
Turkey, Syria, & Egypt	—	473,401	731,121	721,738	732,622												
Italy	—	136,005	181,743	198,998	91,751												
France	—	955,725	1,018,901	1,203,156	909,876												
Other countries	—	68,299	79,002	283,455	187,331												
Total of raw silk	—	3,458,959	3,746,249	3,759,016	3,365,785	134,483	92,220	147,059	188,925	3,595,816	3,409,754	3,794,466	3,146,705	15,286	14,479	16,595	13,953
Silk, waste, knubs, &c. viz.—																	
From India	—	24,155	2,012	755	1,199												
China	—	4,[illegible]	10,951														
Italy	—	243,289	436,819	301,836	663,379												
France	—	660,125	568,754	381,824	642,312												
Other countries	—	13,397	23,954	16,311	62,080												
Total of waste, knubs, and husks	—	945,395	1,042,490	700,526	1,368,970	32,281	11,084	60	38,005	952,305	1,027,547	736,649	1,343,815	427	463	339	645
Silk, thrown, viz.—																	
From Italy	—	2,561	755	499	1	-	-	12,660	12,885	3,597							
France	—	235,490	213,991	253,855	218,586												
Other countries	—	27,079	10,522	34,940	12,816												
								Foreign thrown.									
Total of thrown silk	—	265,130	225,268	289,294	231,343	30,788	12,660	12,885	3,597	242,145	228,613	288,147	266,651	5,397	Excess of drawback. 17,400	725	3,343
Silk manufact. of Europe:—																	
Silk or satin, and silk or satin ribbons	—	209,803	224,852	247,789	239,814	13,331	16,230	39,717	21,750	188,217	209,796	207,469	218,005				
Gauze and gauze ribbons	—	12,265	8,690	7,106	7,138	1,116	719	362	663	10,792	8,196	6,677	6,400				
tissue foulards	—	17,557	9,497	2,060	863	-	42	-	-	16,284	10,568	2,212	863				
Crape	—	3,475	3,313	3,942	3,651	628	664	290	808	3,011	2,649	3,588	2,801				
Velvet and velvet ribbons	—	24,592	25,087	25,656	20,958	1,560	3,547	6,279	3,827	22,897	21,287	18,967	17,061				
Ribbons, embossed or figured with velvet	—	368	1,010	370	451	10	182	-	68	958	777	370	435				
Fancy silk, net or tricot	—	4,615	3,584	3,801	3,348	53	357	40	82	4,555	3,229	3,761	3,234				
Silk mixed with metal	—	661	498	317	316	275	133	164	82	352	349	202	103				
Total entered by weight	—	266,934	276,531	291,041	276,539	17,273	21,874	46,852	27,280	247,067	256,851	243,246	248,902	222,559	227,438	225,433	233,950
Plain silk, lace, or net, called tulle	sq.yds.	8,724	1,733	3,516	1,460	1,400	-	1,828	578	7,849	1,733	1,688	881				
Millinery, viz.—																	
Turbans or caps	No.	618	428	1,434	754	280	215	1,064	443	347	245	365	311				
Hats or bonnets	—	527	981	1,305	1,274	137	372	677	638	439	469	654	636				
Dresses	—	274	193	477	230	125	69	293	81	150	125	178	149				
Entered at value	value £	24	25	15	32	-	-	-	-	24	25	15	32				
Manufactures of silk, or of silk and other materials unenumerated	—	119,778	191,050	157,247	168,863	8,226	7,522	14,714	13,806	111,552	123,528	142,533	155,057				
Manufact. of India, viz.—																	
Bandannoes, Romals, and silk handkerchiefs	pieces	512,097	503,182	555,175	378,286	411,638	412,644	424,707	392,127	85,441	112,280	100,838	60,824	16,601	19,[illegible]87	15,195	9,188
Silks and crapes in pieces	—	12,774	17,945	27,369	31,528	14,797	16,335	13,585	34,295	3,819	2,022	1,302	1,349				
Crape shawls, scarfs, and handkerchiefs	No.	10,747	7,933	3,009	11,422	11,957	10,162	6,001	8,280	911	355	463	118				
Skins, viz.—																	
Calf and kid, untanned	cwts.	37,186	38,870	54,245	45,113	111	223	514	2,161	37,148	38,572	47,920	45,358	7,042	7,529	9,819	8,846
Tanned, tawed, or dressed	lbs.	75,394	79,241	78,324	68,438	10,026	13,282	17,128	26,222	62,154	62,749	62,996	45,508	3,112	3,151	3,245	2,385
Deer, undressed	No.	214,803	192,709	411,365	191,035	69,473	71,499	146,437	181,812	192,996	51,059	90,481	100,991	517	233	390	446
Goat	—	512,518	502,157	387,436	649,212	144,552	146,612	92,423	99,[illegible]8	465,341	330,732	322,838	473,031	1,052	794	808	1,122
Kid, in the hair	—	115,107	162,438	141,675	116,842	19,200	-	-	23,487	115,630	162,651	136,241	92,947	20	27	24	20
dressed	—	682,403	531,031	572,267	420,779	-	5,576	9,650	9,336	680,831	528,317	560,771	413,671	3,407	2,655	2,886	2,197
Lamb, undressed	—	1,880,271	2,093,947	1,784,793	1,416,960	5,283	-	1,263	19,514	1,927,705	2,120,473	1,552,528	1,507,732	321	352	271	264
dressed	—	11,753	15,400	7,714	17,663	1,960	690	1,520	325	6,881	14,965	5,878	17,755	35	78	34	98
Seal, undressed	—	441,220	299,279	560,596	313,362	53,869	62,081	14,673	8,187	370,705	218,231	556,568	301,718	931	321	947	571
Sheep	—	322,921	119,337	91,682	611,487	45,963	4,950	4,345	60,689	404,355	126,510	101,548	521,767	1,691	533	449	2,383
Spelter	cwts.	107,487	163,815	101,194	130,192	31,410	52,646	58,747	24,124	77,450	88,593	87,136	73,317	7,790	8,875	9,053	7,705
Spices, viz.—																	
Cassia lignea	lbs.	380,655	435,716	329,310	1,261,648	557,702	656,984	644,520	1,262,164	100,837	106,388	74,050	83,054	2,521	2,651	1,933	2,219

Foreign and Colonial Merchandise imported, exported, retained, &c.— *continued.*

Description of Merchandise.	Quantities imported.				Quantities exported.				Quantities retained for Consumption.				Nett Revenue.			
	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.	1838.	1839.	1840.	1841.
													£	£	£	£
Cinnamon - - - lbs.	401,604	589,867	294,638	418,730	507,529	434,986	464,340	514,479	16,652	16,343	15,461	15,410	417	410	411	411
Cloves - - - —	189,210	367,331	59,710	71,425	195,487	65,704	207,310	26,745	107,772	103,056	85,769	78,333	2,697	2,558	2,219	2,059
Ginger - - - cwts.	40,476	39,582	16,004	10,859	17,055	19,851	11,061	5,449	11,612	8,929	10,082	7,282	6,717	5,003	6,228	4,221
Mace - - - lbs.	26,902	27,007	21,403	18,774	7,228	4,073	17,573	2,802	-	21,153	16,813	16,240	2,552	2,648	2,183	2,114
Nutmegs - - - —	239,080	284,802	113,193	135,198	123,297	107,813	51,244	78,368	-	135,470	118,554	113,147	15,614	16,675	15,040	14,816
Pepper - - - —	3,682,342	9,798,059	5,927,959	15,034,466	3,077,109	8,334,226	5,049,423	6,573,145	-	2,63[illegible],110	2,740,696	2,746,061	65,771	66,016	70,593	72,185
Pimento - - - —	905,888	1,076,925	1,013,600	797,765	807,539	839,173	1,280,682	967,170	-	309,164	339,519	297,183	4,436	3,8[illegible]	4,376	3,901
Spirits, viz.																
Rum - - - galls.	4,912,227	5,477,669	4,312,533	4,065,546	1,134,436	1,155,753	1,326,410	1,099,596	-	2,830,263	2,512,960	2,277,970	1,411,066	1,273,627	1,155,613	1,063,087
Brandy - - - —	2,398,135	2,271,172	3,396,227	2,918,387	1,010,851	1,121,965	1,514,310	1,313,815	-	1,167,756	1,108,578	1,164,506	1,353,614	1,309,100	1,259,527	1,329,085
Geneva - - - —	565,987	668,820	803,312	532,422	466,714	604,563	759,607	472,636	-	18,640	15,992	15,421	20,518	20,881	18,160	17,617
Foreign and colonial of other sorts - - —	264,839	336,448	144,934	173,809	95,100	157,825	136,650	112,083	-	8,758	6,880	6,177	10,024	9,015	7,642	7,580
Foreign and colonial mixed in bond - - —	-	-	-	-	231,316	296,930	230,651	155,958								
Sugar, viz. —																
West India, of British possessions - - cwts.	3,521,434	2,827,931	2,202,833	2,145,500	374,697	Raw.	Raw.	Raw.								
East India - - —	428,854	518,925	482,824	1,239,738	-	-	385,719	229,512	425,473							
of foreign possess. - —	193,697	722,777	-	803,668	-	-	Refined, actual weight.		-							
East India and Mauritius —	601,671	612,586	545,009	716,122	-	-	110,590	235,179	-	-	3,909,665	3,825,599	3,594,838	4,057,628	4,656,892	4,586,936	4,449,033	5,114,390
					Actual weight.				Actual wgt.							
Foreign - - - —	281,788	722,777	805,179	-	283,646	-	-	-	319,095							
Tallow - - - —	1,122,449	1,350,528	1,200,489	1,242,553	12,513	16,192	42,371	33,114	1,160,167	1,148,192	1,151,513	1,241,278	183,669	189,000	186,283	205,839
Tar - - - lasts.	14,431	12,537	14,146	13,991	519	651	648	446	13,900	11,866	13,472	13,384	10,553	9,009	10,718	10,679
Tea - - - lbs.	40,113,714	38,158,009	28,021,882	30,787,796	2,577,877	3,318,912	2,563,384	4,490,363	32,351,593	35,127,287	32,252,628	36,675,667	3,362,035	3,658,803	3,472,864	3,973,668
Terra Japonica - - cwts.	36,743	114,628	69,654	132,350	17,173	17,812	15,959	26,262	39,670	43,225	44,432	52,642	2,115	2,250	2,336	2,726
Timber, viz. —																
Battens & batten ends, great hd.	18,020	20,118	19,449	19,516	93	168	251	394	17,640	19,405	19,500	18,900	161,112	174,819	171,342	154,926
Deals and deal ends - —	72,737	80,647	73,669	73,866	1,306	1,072	1,360	1,680	70,878	77,536	75,098	68,730	622,261	631,839	636,088	574,681
Masts, 6 in. and under 8 in. in diameter - - No.	11,240	17,188	17,102	15,259	303	209	943	830	10,969	15,374	16,775	14,116	3,331	4,781	4,884	4,016
8 in. and under 12 in. in diameter - - —	3,943	5,263	5,932	4,815	121	320	353	287	3,690	4,723	5,657	4,557	2,635	3,304	3,804	2,940
12 in. and upwards - —	4,339	9,308	7,264	7,446	75	50	60	103	4,393	8,018	7,135	7,115	6,494	6,859	7,771	7,063
Oak planks - - load.	3,996	3,558	7,012	2,577	-	-	27	5	3,889	3,189	6,467	2,582	15,552	13,863	26,472	10,240
Staves - - great hd.	78,181	81,020	96,849	92,069	1,876	1,579	991	538	75,461	83,070	94,197	88,715	58,736	54,568	57,514	40,554
Fir, 8 in. sq. and upwards, loads	647,061	623,265	692,498	654,111	545	310	711	753	633,899	629,251	6[illegible],976	640,795	572,595	550,999	635,765	567,840
Oak - - - —	34,890	50,752	39,136	44,372	-	1	12	16	36,155	49,664	36,767	40,836	46,766	75,147	92,071	48,486
Unenumerated - - —	43,413	54,676	65,599	63,687	45	58	95	56	43,523	51,336	63,251	60,112	10,976	12,961	19,905	19,700
Wainscot logs - - —	5,737	2,644	2,247	1,501	-	-	-	38	4,518	4,072	2,558	2,941	12,353	11,062	7,054	7,985
Tin - - - - cwts.	30,722	18,241	9,391	28,435	29,034	22,766	6,594	25,343	72	36	4	148	61	28	3	117
Tobacco, viz. —																
Unmanufactured - lbs.	36,162,024	35,605,253	36,680,887	43,935,151	11,640,493	9,277,518	12,224,594	10,090,171	23,149,786	24,773,905	22,682,857	21,871,438				
Manufactured or cigars - —	1,445,084	1,610,649	1,405,876	1,896,931	652,926	1,204,550	1,093,115	485,383	189,716	196,032	193,612	213,551				
Snuff - - - —	557	11,677	178	16,820	791	708	-	16,663	294	228	172	157	3,561,812	3,495,687	3,588,212	3,550,825
British manufact. & cigars & snuff - —	-	-	-	-	74,512	63,398	78,555	89,703	-	-	-	-				
	-	-	-	-	9,802	12,932	16,259	11,740	-	-	-	-				
Turpentine, common - cwts.	430,685	321,211	319,136	361,622	450	338	10	68	352,222	381,289	381,502	338,907	78,919	82,926	85,194	7,097
Wax, bees', viz. —																
Unbleached - - —	6,982	8,171	8,092	7,131	2,641	2,059	2,267	3,502	6,202	5,003	6,288	4,751	3,921	2,614	3,492	2,478
Bleached - - —	299	896	370	353	16	472	496	274	103	378	69	69		602	70	
Whale fish - - —	13,852	9,524	7,805	6,369	589	514	693	267	13,040	9,476	7,549	6,972	636	477	392	73
Wine, viz. —																
Cape - - galls.	342,372	723,748	460,024	311,190	2,712	3,520	5,467	18,705	538,528	534,184	456,773	441,238	74,037	73,503	64,779	333
French - - —	544,129	508,487	570,193	480,828	131,825	121,525	155,375	131,215	417,281	378,636	341,441	355,740	113,992	104,043	96,756	63,741
Portugal - - —	3,133,725	3,272,206	2,980,383	2,666,121	245,166	299,295	391,581	341,847	2,900,157	2,921,422	2,668,534	2,387,017	797,283	802,602	756,071	101,798
Madeira - - —	264,920	267,041	279,157	215,253	139,113	162,327	143,829	146,283	110,204	118,715	112,355	107,701	30,298	32,630	32,049	688,710
Spanish - - —	3,575,847	4,130,755	4,022,315	3,204,313	663,243	989,776	1,238,878	598,799	2,497,538	2,578,997	2,500,760	2,412,821	685,812	708,152	707,76	31,073
Other sorts, including wine mixed in bond - —	857,491	1,006,817	999,173	834,797	406,368	476,442	501,948	393,970	596,173	468,539	473,459	482,443	144,645	128,768	134,215	695,880 139,477
All sorts of wine - —	8,518,484	9,909,056	9,311,247	7,708,502	1,588,427	2,053,083	2,437,078	1,931,859	6,990,271	7,000,486	6,555,922	6,184,960	1,846,057	1,849,698	1,791,636	1,720,479
Wool, sheep and lambs' - lbs.	52,594,355	57,379,923	49,436,281	56,170,974	1,897,860	695,049	1,014,625	2,554,455	55,819,597	52,959,221	49,710,396	52,862,020	163,615	139,970	132,689	129,852
Woollen manufactures, viz. —																
[illegible]	2,386	2,955	4,085	11,302	2,386	2,955	4,085	11,302								
						[illegible]	12,839	12,467	214,443	150,695	131,416	110,842	32,173	22,714	20,616	17,613
											[illegible]	85,188	1,420	[illegible],698	1,675	2,244

Account of the real or declared Value of the various Articles of the Manufacture and Produce of the United Kingdom, exported to Foreign Countries during each of the Six Years ending with 1842 specifying the Countries to which they were exported, and the Value of those annually shipped fo each; and showing, also, the average Amount of Exports during the said Six Years to each Country and to each of the Five great Divisions of the Globe; and the Average Proportion exported to eacl supposing the whole Exports to be 1,000.

Countries.	1837.	1838.	1839.	1840.	1841	1842.	Average Annual Amount of Exports, 1837–1842.	Average and Proportion exported to each Country, supposing the whole Exports to be 1000.
EUROPE.	£	£	£	£	£	£	£	
Russia	2,046,592	1,663,243	1,776,426	1,602,742	1,607,175	1,885,953	1,763,689	35·772
Sweden	101,121	102,647	121,850	119,425	197,813	199,313	140,362	2·847
Norway	72,413	77,485	81,584	78,016	117,938	134,704	93,690	1·900
Denmark	103,448	181,404	143,732	201,468	191,481	204,704	169,305	3·434
Prussia	131,536	155,223	206,866	219,345	363,821	376,651	242,240	4·913
Germany	4,898,016	4,988,900	5,215,155	5,408,499	5,654,033	6,202,700	5,394,551	109·413
Holland	3,040,029	3,549,429	3,563,792	3,416,190	3,610,877	3,573,362	3,458,947	70·154
Belgium	804,917	1,068,010	881,831	880,286	1,066,040	1,099,490	966,762	19·608
France	1,645,304	2,314,141	2,298,347	2,378,149	2,902,092	3,193,939	2,454,957	49·792
Portugal Proper	1,079,815	1,165,395	1,135,926	1,110,244	1,036,212	917,855	1,079,241	21·889
Azores	56,405	38,385	47,663	44,743	38,280	39,862	44,223	·897
Madeira	46,044	34,947	33,493	33,157	24,608	25,047	32,883	·667
Spain and the Balearic Islands	286,636	243,839	269,231	404,259	413,849	322,614	322,237	6·535
Canary Islands	41,904	47,693	47,710	45,872	49,738	54,554	47,912	·972
Gibraltar	906,155	894,096	1,170,702	1,111,176	1,053,567	937,719	1,012,203	20·529
Italy and the Italian Islands	2,406,066	3,076,231	2,079,010	2,660,338	2,578,697	2,494,197	2,549,090	51·701
Malta	103,680	226,040	125,338	166,545	223,734	289,304	189,107	3·836
Ionian Islands	124,465	96,190	64,010	89,204	119,523	83,600	96,165	1·951
Turkey and Continental Greece (exclusive of the Morea)	1,163,426	1,767,110	1,178,712	1,138,559	1,220,261	1,472,288	1,323,392	26·841
Morea and Greek Islands	15,431	20,887	23,122	25,827	34,684	17,538	22,914	·465
Isles of Guernsey, Jersey, Alderney and Man	330,017	343,854	340,444	357,214	350,407	364,350	347,714	7,052
Total	19,401,320	22,055,149	20,797,904	21,491,245	22,854,540	23,909,344	21,751,584	441·168
ASIA.								
Syria and Palestine	- -	188,440	251,509	223,030	427,093	375,551	244,270	4·954
Arabia	787	167	3,680	2,115	2,952	5,082	2,464	·050
East India Company's Territories, and Ceylon	3,612,975	3,876,196	4,748,607	6,023,192	5,595,000	5,169,888	4,837,643	98·117
China	678,375	1,404,356	851,969	524,198	862,570	969,381	848,475	17·209
Sumatra and Java	313,791	505,362	292,731	349,521	285,514	306,132	342,175	6·940
Philippine Isles	33,808	31,780	43,443	325,463	84,419	47,019	94,322	1·913
Total	4,639,736	5,806,301	6,191,939	7,447,519	7,257,548	6,873,053	6,369,349	129·183
AFRICA.								
Egypt	220,080	242,505	123,859	79,063	238,486	221,003	187,499	3·803
Tripoli, Barbary, and Morocco	54,007	74,013	74,073	63,904	44,126	41,952	58,679	1·190
Western coast of Africa	312,938	413,354	468,370	492,128	410,798	459,685	426,212	8·644
Cape of Good Hope	488,814	623,323	464,130	417,091	384,574	369,076	457,835	9·286
Eastern coast of Africa	- -	10,569	- -	- -	22	- -	1,765	·036
African ports on the Red Sea	- -	196	196	- -	- -	262	109	·002
Ascension Islands	- -	1,075	333	- -	541	1,145	515	·011
Cape de Verd Islands	751	1,392	189	4,547	2,885	1,480	1,876	·038
St. Helena	9,645	13,990	12,668	9,884	7,921	17,550	11,939	·242
Isle of Bourbon	3,795	- -	- -	- -	- -	- -	632	·013
Mauritius	349,488	467,342	211,731	325,812	340,140	244,922	323,239	6·556
Total	1,439,518	1,847,759	1,355,549	1,392,429	1,429,493	1,357,055	1,470,300	29·821
AMERICA.								
British North American colonies	2,141,035	1,999,457	3,047,671	2,847,913	2,947,061	2,333,525	2,551,610	51·752
British West Indies	3,456,745	3,393,441	3,986,598	3,574,970	2,504,001	2,591,425	3,251,197	66·144
Hayti	171,050	290,139	392,763	251,979	169,142	141,896	236,162	4·790
Cuba and other Foreign West Indies	891,713	1,025,392	891,826	863,520	895,441	711,938	879,972	17·645
United States of America	4,695,225	7,585,760	8,639,804	5,263,020	7,098,642	3,528,807	6,171,776	125·177
Mexico	520,200	439,776	660,170	465,330	434,901	374,969	482,558	9·787
Texas	- -	- -	- -	- -	6,767	6,574	2,224	·045
Guatemala	78	- -	627	2,373	21,265	- -	4,057	·082
Columbia	170,451	174,338	267,112	359,743	158,974	231,711	227,055	4·605
Brazil	1,824,082	2,606,604	2,650,713	2,625,853	2,556,554	1,756,805	2,336,769	47·395
States of the Rio de la Plata	696,104	680,345	710,524	614,047	989,362	969,791	776,695	15·753
Chili	625,545	413,647	1,103,073	1,334,873	438,089	950,466	810,948	16·448
Peru	476,374	412,195	634,058	799,991	536,046	684,313	590,663	11·980
Falkland Islands	- -	- -	- -	- -	145	584	88	·001
Total	15,688,602	19,014,094	23,185,339	19,023,612	18,756,391	14,282,604	18,321,774	371·604
AUSTRALIA.								
New South Wales, Van Diemen's Land, and Swan River	921,568	1,336,662	1,679,390	2,004,385	1,269,351	956,164	1,361,253	27·609
New Zealand and South Sea Islands	- -	1,095	23,459	47,240	67,275	42,788	30,309	·615
South Whale Fishery	- -	- -	- -	- -	25	15	7	·000
Total	921,568	1,337,757	1,702,849	2,051,625	1,336,651	998,967	1,391,569	28·224
Recapitulation.								
Europe	19,401,320	22,055,149	20,797,904	21,491,245	22,854,540	23,909,344	21,751,584	441·168
Asia	4,639,736	5,806,301	6,191,939	7,447,519	7,257,548	6,873,053	6,369,349	129·183
Africa	1,439,518	1,847,759	1,355,549	1,392,429	1,429,493	1,357,055	1,470,300	29·821
America	15,668,602	19,014,094	23,185,339	19,023,612	18,756,391	14,282,604	18,321,774	371·604
Australia	921,568	1,337,757	1,702,849	2,051,625	1,336,651	998,967	1,391,569	28,224
Grand Totals	42,070,744	50,061,060	53,233,580	51,406,430	51,634,623	47,421,023	49,304,576	1,000·000

Table exhibiting the different Countries to which Articles of the Produce or Manufacture of the U. Kingdom have been exported during the 6 Years ending with 1842, arranged in the Order of the Magnitude of the Exports to them; and specifying the Average Annual Amount of the Exports to each during the said 6 Years, and the Portion of such Exports destined for each, supposing the whole Exports to be 1000.

Countries.	Average Annual Amount of Exports 1837-42.	Average Annual Proportion exported to each Country, supposing the whole Exports to be 1000.	Countries.	Average Annual Amount of Exports 1837-42.	Average Annual Proportion exported to each Country, supposing the whole Exports to be 1000.
	£			£	
United States of America	6,171,776	125·177	Syria and Palestine	244,270	4·954
Germany	5,394,551	109·413	Prussia	242,240	4·913
E. I. Comp. territories and Ceylon	4,837,643	98·117	Hayti	236,162	4·790
Holland	3,458,947	70 154	Columbia	227,055	4·605
British West Indies	3,251,197	66·144	Malta	189,107	3·836
North American Colonies	2,551,610	51·752	Egypt (ports on Mediterranean)	187,499	3·803
Italy and the Italian Islands	2,549,090	51·701	Denmark	169,305	3·434
France	2,454,957	49·792	Sweden	140,362	2·847
Brazil	2,336,769	47·395	Ionian Islands	96,165	1·951
Russia	1,763,689	35·772	Philippine Islands	94,322	1·913
N. S. Wales, Van Diemen's Land, and Swan River	1,361,253	27·609	Norway	85,690	1·900
Turkey and continental Greece (exclusive of the Morea)	1,323,392	26·841	Tripoli, Barbary, and Morocco	58,679	1·190
Portugal Proper	1,079,241	21·889	Canary Islands	47,912	·972
Gibraltar	1,012,903	20·529	Azores	44,825	·897
Belgium	966,762	19·608	Madeira	32,883	·667
Cuba and other Foreign W. Indies	879,974	17·645	New Zealand & S. Sea Islands	30,309	·616
China	848,475	17,209	Morea and Greek Islands	22,914	·465
Chili	810,948	16·448	St. Helena	11,939	·242
States of the Rio de la Plata	776,696	15·753	Guatemala	4,057	·082
Peru	590,663	11·980	Arabia	2,464	·050
Mexico	482,558	9·787	Texas	2,324	·045
Cape of Good Hope	457,835	9·286	Cape de Verd Islands	1,876	·038
Western coast of Africa	426,212	8·644	Eastern coast of Africa	1,765	·036
Isles of Guernsey, Jersey, Alderney, and Man	347,714	7·052	Isle of Bourbon	632	·013
Sumatra and Java	342,175	6·940	Ascension Island	515	·011
Mauritius	323,239	6·556	African ports on the Red Sea	109	·002
Spain and the Balearic Islands	322,237	6·535	Falkland Islands	89	·001
			South whale fishery	7	·000
			Totals	49,304,576	1000·000

Account showing the Quantities of the principal Articles of British and Irish Produce or Manufacture exported from Ireland in different Years, from 1801 to 1825, to *all* Countries; showing also the aggregate Official Value of such Exports, with the Portion thereof exported to Foreign Countries, and to Great Britain.

Articles exported.		1801.	1805.	1809.	1813.	1817.	1821.	1825.
Corn and meal, viz.: —								
Barley	qrs.	- -	17,223	26,585	194,193	39,1[illegible]	78,228	154,822
Oats	—	149	223,234	528,458	808,329	646,036	1,159,824	1,503,204
Wheat	—	- -	82,815	85,599	201,273	57,280	476,940	283,340
Other grain	—	1	5,502	3,023	5,534	2,011	7,897	25,832
Wheat flour	cwt.	203	22,774	18,987	267,894	54,517	293,055	348,507
Oatmeal, &c.	—	2,524	34,297	90,948	108,547	34,863	66,063	204,617
Cattle and live stock —								
Cows and oxen	No.	31,664	21,941	18,335	49,592	45,322	26,759	63,528
Sheep	—	2,891	10,988	7,596	7,690	29,478	25,354	72,191
Swine	—	1,968	6,383	4,712	14,521	24,418	104,556	65,919
Horses	—	818	4,186	3,451	4,001	2,879	2,523	5,140
Bacon and hams	cwt.	21,161	95,073	167,122	231,606	191,065	366,200	269,574
Beef and pork	barrels	160,840	222,098	262,744	281,503	262,905	219,165	181,276
Butter	cwt.	304,666	294,415	385,953	461,514	397,965	472,944	474,161
Lard	—	2,049	6,363	16,282	20,136	17,181	28,489	35,267
Soap and candles	—	15,557	17,713	30,810	46,615	25,381	18,154	14,797
Flax, undressed	—	1,634	278	6,507	69,191	44,239	68,791	54,898
Spirits, Irish	Imp. gals.	178,607	819,978	60,437	113,716	37,849	326,491	629,522
Cotton manufactures	yards	1,256	8,956	34,998	99,141	549,261	921,971	10,567,458
other descriptions	value	£ 4,824	3,981	31,923	58,074	26,250	6,564	301
Linen manufactures	yards	37,911,602	43,683,533	37,166,399	39,023,087	56,230,575	49,531,139	55,114,515
yarn	lbs.	2,631,132	792,400	1,534,512	2,141,776	1,571,444	1,150,464	391,489
Other articles the produce or manufacture of the U. K.	value	£ 192,259	211,184	302,843	280,999	434,125	334,323	466,590
Agg. official value of prod. and manufacture of U.K. exported from Ireland to *all* parts		£ 3,778,145	4,670,647	4,992,810	6,297,264	6,447,424	7,705,070	9,101,956
Agg. official value of prod. and manufacture of U.K. exported from Ireland to *foreign* ports		£ 426,076	469,569	625,415	1,132,781	877,959	637,818	697,667
Agg. official value of prod. and manufacture of U.K. exported from Ireland to *Great Britain*		£ 3,352,069	4,201,078	4,367,425	5,164,483	5,569,465	7,067,252	8,404,289

The above Table shows the inconsiderable amount of the trade of Ireland with all countries, except Great Britain. In 1825 the trade between the two divisions of the empire was placed on the footing of a coasting trade, and no account has since been kept of the quantity or value of the commodities passing between them, with the exception of corn.

Account of the Value of the various Articles of the Produce and Manufacture of the U. Kingdom exported to Foreign Parts, according to the real or declared Value thereof, in 1840, 1841, and 1842.

Articles.	1840.	1841.	1842.
Great Britain.			
Alum	£ 11,383	£ 15,615	£ 14,593
Apparel, [illegible], and negro clothing	630,080	681,154	632,599
Arms and ammunition	351,961	343,593	383,606
Bacon and hams	73,801	42,536	43,487
Beef and pork, salted	156,961	68,117	41,838
Beer and ale	418,348	357,128	330,629
Books, printed	147,130	141,783	131,806
Brass and copper manufactures	1,444,174	1,522,515	1,810,714
Bread and biscuit	9,318	8,005	4,630
Butter and cheese	205,809	174,072	168,861
Cabinet and upholstery wares	77,878	76,052	75,042

IMPORTS AND EXPORTS.

Account of the Value of the various Articles of Produce, &c. — *continued.*

Articles.	1840.	1841.	1842.
GREAT BRITAIN.	£	£	£
Coals and culm	572,848	671,122	730,279
Cordage	155,747	124,263	71,299
Corn, grain, meal, and flour	52,237	47,435	45,975
Cotton manufactures	17,557,162	16,225,558	13,898,663
yarn	7,101,308	7,266,933	7,771,464
Cows and oxen	7,216	6,682	4,194
Earthenware of all sorts	572,965	600,580	555,267
Fish of all sorts	261,907	197,937	248,301
Glass of all sorts	415,268	420,416	308,064
Haberdashery and millinery	575,694	634,918	603,995
Hardwares and cutlery	1,348,556	1,622,821	1,398,082
Hats, beaver and felt	81,353	73,356	62,906
of all other sorts	61,833	51,791	48,954
Hops	12,433	10,015	17,513
Horses	84,453	148,116	107,223
Iron and steel, wrought and unwrought	2,515,918	2,870,487	2,454,350
Lard	20,177	12,129	10,429
Lead and shot	237,992	242,218	354,590
Leather, wrought and unwrought	316,384	327,761	316,493
Saddlery and harness	95,743	99,485	79,755
Linen manufactures	3,265,998	3,316,151	2,525,549
yarn	676,036	803,017	915,064
Machinery and mill work	592,795	551,260	551,655
Mathematical and optical instruments	36,971	24,237	22,761
Molasses	39,867	96,511	55,464
Mules	2,230	1,910	1,468
Musical instruments	55,124	60,904	61,606
Oil, hempseed, linseed, and rapeseed	102,870	112,202	85,691
train, of Greenland fishery	5,051	2,373	2,714
Painters' colours	206,198	185,706	185,978
Plate, plated ware, jewellery, and watches	204,192	213,940	201,240
Potatoes	8,461	7,068	9,109
Salt	210,041	171,264	195,539
Saltpetre, British refined	19,121	24,216	26,625
Seeds of all sorts	7,969	7,854	8,511
Silk manufactures	792,648	788,594	590,166
Soap and candles	422,121	317,345	289,471
Soda	44,716	56,469	51,472
Spirits	35,683	21,362	11,849
Stationery of all sorts	281,040	273,511	247,137
Sugar, refined	440,674	548,336	440,025
Tin, unwrought	159,331	86,563	200,956
and pewter wares, and tin plates	360,016	390,476	365,604
Tobacco, manufactured, and snuff	23,371	20,652	11,384
Tongues	5,394	4,106	3,286
Umbrellas and parasols	50,246	50,358	52,456
Whalebone	1,980	1,323	2,755
Wool, sheep's	299,534	508,851	456,140
of other sorts	25,788	29,209	13,511
Woollen and worsted yarn	454,957	552,148	637,305
Woollen manufactures	5,326,203	5,746,942	5,183,404
All other articles	1,258,916	1,257,235	1,165,189
Total real or declared value of the produce and manufactures of the U. Kingdom, exported from Great Britain to foreign parts £	50,896,556	51,217,658	47,012,651
IRELAND.			
Total declared value of the produce and manufactures of the U. Kingdom, exported from Ireland to foreign parts £	509,874	416,965	368,372
UNITED KINGDOM.			
Total £	51,406,430	51,634,623	47,381,023

Causes of the Magnitude of British Commerce. — The immediate cause of the rapid increase and vast magnitude of the commerce of Great Britain, is doubtless to be found in the extraordinary improvement, and consequent extension, of our manufactures since 1770. The cotton manufacture may be said to have grown up during the intervening period. It must also be borne in mind, that the effect of an improvement in the production of any article in considerable demand is not confined to that particular article, but extends itself to others. Those who produce it according to the old plan are undersold, unless they adopt the same or similar improvements; and the improved article, by coming into competition with others for which it may be substituted, infuses new energy into their producers, and impels every one to put forth all his powers, that he may either preserve his old or acquire new advantages. The cotton manufacture may be said to be the result of the stupendous inventions and discoveries of Hargreaves, Arkwright, Crompton, and a few others; but we should greatly under-rate the importance of their inventions, if we supposed that their influence was limited to this single department. They imparted a powerful stimulus to every branch of industry. Their success, and that of Watt and Wedgewood, gave that confidence to genius so essential in all great undertakings. After machines had been invented for spinning and weaving cottons, whose fineness emulates the web of the gossamer, and steam-engines had been made "to engrave seals, and to lift a ship like a bauble in the air," every thing seemed possible — *nil arduum visum est.* And the unceasing efforts of new aspirants to wealth and distinction, and the intimate connection of the various arts and sciences, have extended and perpetuated the impulse given by the invention of the spinning-frame and the steam-engine.

The immense accumulation of capital that has taken place since the close of the American war has been at once a cause and a consequence of our increased trade and manufactures. Those who reflect on the advantages which an increase of capital

confers on its possessors can have no difficulty in perceiving how it operates to extend trade. It enables them to buy cheaper, because they buy larger quantities of goods, and pay ready money; and, on the other hand, it gives them a decided superiority in foreign markets, where capital is scarce, and credit an object of primary importance with the native dealers. To the manufacturer, an increase of capital is of equal importance, by giving him the means of constructing his works in the best manner, and of carrying on the business on such a scale as to admit of the most proper distribution of whatever has to be done among different individuals. These effects have been strikingly evinced in the commercial history of Great Britain during the last half century: and thus it is, that capital, originally accumulated by means of trade, gives it, in its turn, nourishment, vigour, and enlarged growth.

The improvement that has taken place in the mode of living during the last half century has been partly the effect, and partly the cause, of the improvement of manufactures, and the extension of commerce. Had we been contented with the same accommodations as our ancestors, exertion and ingenuity would long since have been at an end, and routine have usurped the place of invention. Happily, however, the desires of man vary with the circumstances under which he is placed, extending with every extension of the means of gratifying them, till, in highly civilised countries, they become all but illimitable. This endless craving of the human mind, its inability to rest satisfied with previous acquisitions, combined with the constant increase of population, renders the demand for new inventions and discoveries as intense at one period as at another, and provides for the continued advancement of society. What is a luxury in one age, becomes a necessary in the next. The fact of Queen Elizabeth having worn a pair of silk stockings was reckoned deserving of notice by contemporary historians; while, at present, no gentleman, how humble soever his circumstances, can go to dinner without them. The lower classes are continually pressing upon the middle; and these, again, upon the higher; so that invention is racked, as well to vary the modes of enjoyment, as to increase the amount of wealth. That this competition should be, in all respects, advantageous, is not to be supposed. Emulation in show, though the most powerful incentive to industry, may be carried to excess; and has certainly been ruinous to many individuals, obliged sometimes, perhaps, by their situation, or seduced by example, to incur expenses beyond their means. But the abuse, even when most extended, as it probably is in England, is, after all, confined within comparatively narrow limits; while the beneficial influence resulting from the general diffusion of a taste for improved accommodations adds to the science, industry, wealth, and enjoyments of the whole community.

We are also inclined to think that the increase of taxation, during the late war, contributed to the improvement of manufactures, and the extension of trade. The gradually increasing pressure of the public burdens stimulated the industrious portion of the community to make corresponding efforts to preserve their place in society; and produced a spirit of invention and economy that we should have in vain attempted to excite by any less powerful means. Had taxation been very oppressive, it would not have had this effect; but it was not so high as to produce either dejection or despair, though it was, at the same time, sufficiently heavy to render a considerable increase of exertion and parsimony necessary, to prevent it from encroaching on the fortunes of individuals, or, at all events, from diminishing the rate at which they were previously accumulating. To the excitement afforded by the desire of rising in the world, the fear of falling superadded an additional and powerful stimulus; and the two together produced results that could not have been produced by the unassisted operation of either. We do not think that any evidence has been, or can be, produced to show that the capital of the country would have been materially greater than it is, had the tranquillity of Europe been maintained uninterrupted from 1793 to the present moment.

We do not state these circumstances to extenuate the evils of war, or of oppressive taxation; but merely to show the real influence of taxation on industry, when gradually augmented and kept within reasonable bounds. Under such circumstances, it has the same influence over a nation that an increase of his family, or of his unavoidable expenses, has over a private individual.

But after every fair allowance has been made for the influence of the causes above stated, and of others of a similar description, still it is abundantly certain that a liberal system of government, affording full scope for the expansion and cultivation of every mental and bodily power, and securing all the advantages of superior talent and address to their possessors, is the grand *sine qua non* of commercial and manufacturing prosperity. Where oppression and tyranny prevail, the inhabitants, though surrounded by all the means of civilisation and wealth, are invariably poor and miserable. In respect of soil, climate, and situation, Spain is, perhaps, superior, or, at all events, but little inferior to Great Britain; and yet, what a miserable contrast does the former present, when compared with the latter! The despotism and intolerance of her rulers, and the want of good order and tranquillity, have extinguished every germ of improvement in the Pen-

insula, and sunk the inhabitants to the level of the Turks and Moors. Had a similar political system been established in England, we should have been equally depressed. Our superiority in science, arts, and arms, though promoted by subsidiary means, is, at bottom, the result of *freedom* and *security* — freedom to engage in every employment, and to pursue our own interest in our own way, coupled with an intimate conviction, derived from the nature of our institutions, and their opposition to every thing like arbitrary power, that acquisitions, when made, may be securely enjoyed or disposed of. These form the grand sources of our wealth and power. There have only been two countries — Holland and the United States — which have, in these respects, been placed under nearly the same circumstances as England; and, notwithstanding they inhabit a morass, defended only by artificial mounds from being deluged by the ocean, the Dutch have long been, and still continue to be, the most prosperous and opulent people of the Continent; while the Americans, whose situation is more favourable, are advancing in the career of improvement with a rapidity hitherto unknown. In Great Britain we have been exempted, for a lengthened period, from foreign aggression and intestine commotion; the pernicious influence of the feudal system has long been at an end; the same equal burdens have been laid on all classes; we have enjoyed the advantage of liberal institutions, without any material alloy of popular licentiousness or violence; our intercourse with foreign nations, though subjected to various restraints, has been comparatively free; full scope has been given to the competition of the home producers; the highest offices have been open to deserving individuals; and, on the whole, the natural order of things has been less disturbed amongst us by artificial restraints than in most other countries. But without security, no degree of freedom would have been of material importance. Happily, however, every man has felt satisfied, not only of the temporary, but of the permanent tranquillity of the country, and of the stability of its institutions. The plans and combinations of capitalists have not been affected by misgivings as to what might take place in future. Monied fortunes have not been amassed in preference to others, because they might be more easily sent abroad in periods of confusion and disorder; but all individuals have unhesitatingly engaged, whenever an opportunity offered, in undertakings of which a remote posterity was alone to reap the benefit. No one can look at the immense sums expended upon the permanent improvement of the land, on docks, warehouses, canals, &c., or reflect for a moment on the settlements of property in the funds, and the extent of our system of life insurance, without being deeply impressed with the vast importance of that confidence which the public have placed in the security of property and the good faith of government. Had this confidence been imperfect, industry and invention would have been paralysed; and much of that capital which feeds and clothes the industrious classes would never have existed. The preservation of this security entire, both *in fact and in opinion*, is essential to the public welfare. If it be anywise impaired, the colossal fabric of our prosperity will crumble into dust; and the commerce of London, Liverpool, and Glasgow, like that of Tyre, Carthage, and Palmyra, will, at no very remote period, be famous only in history. — (From the *Treatise on Commerce*, contributed by the author of this work to the Society for the Diffusion of Useful Knowledge.)

Supposed Danger to our Trade from foreign Competition. — A great many statements have been circulated of late years respecting the rapid progress of manufactures in foreign countries, and many sinister auguries have at the same time been indulged in as to the decay of the manufactures and trade of this country. But though all branches of industry, and especially those dependent on foreign supply and demand, are necessarily exposed to vicissitudes which it is impossible to estimate *a priori*, or even to foresee; still we think there are no good grounds on which to anticipate that we are at all likely, within any reasonable period, to be outstripped in the career of industry by others. We have, it is true, something to fear from the spread of combinations and agitation at home; but, supposing domestic security and tranquillity to be preserved, we have little to fear from foreign competition. The previous tables show that our exports to France, Germany, and Italy, the only countries, or the channels to the only countries, that are at all likely to become our competitors, have, of late years, been rapidly increasing. Indeed, our exports to France in 1842 were twice as great as they had been in 1837; and were it not for the extraordinary fluctuations in the quantity and value of the currency of the U. States, — fluctuations which every now and then overwhelm every part of the Union with bankruptcy, and entail heavy losses on those foreigners who have the misfortune to supply her markets with goods, — we have no doubt that our exports to America would have increased in nearly the same ratio they have done to France. Much, no doubt, has been said about the progress of the cotton manufacture in the U. States; but, in point of fact, they are unable to export any description of cotton stuffs, except those coarse fabrics the value of which chiefly consists of that of the raw material. It is, indeed, an absurdity to suppose that a country like the U. States, where profits and wages are both high, should be able to come into anything like suc-

cessful competition with a country like England, in the production of any description of articles requiring either a good deal of skill or of labour in their manufacture.

Although, however, we attach no weight to the statements that have been so long and so perseveringly circulated as to the decay of trade, we are not, certainly, of the number of those who think that no change should be made in the commercial policy of the country, or that it may not be very materially improved. Restrictive regulations and oppressive duties, though greatly diminished of late years, and especially by the tariff of 1842, still continue to exert a powerful and mischievous influence over many departments of industry; and are, indeed (supposing tranquillity to be preserved), the only thing from which it is at all reasonable to apprehend any serious injury. It is in all respects of the utmost importance that every practicable effort should be made for their modification and reduction. They not only diminish exportation, by diminishing the power to import or bring back equivalents, but inflict a grievous injury on the consumer, without producing any corresponding advantage to the producer or the revenue, to which, indeed they are decidedly hostile. Perhaps, however, their worst effect consists in the handle and pretence which they afford for all sorts of misrepresentation and abuse. This has been strikingly evinced in the more recent discussions as to the Corn Laws. All parties — manufacturers and agriculturists — seem generally to entertain the most erroneous notions as to the influence of these statutes. The truth is, that, in ordinary years, it is now (thanks to the spread of agricultural improvement) all but imperceptible. During the 14 years' ending with 1842, the average price of wheat in Great Britain was 59*s.* 4*d.* a quarter; and we are bold to say, that not a tittle of evidence has been or can be produced, to show that this price would have been reduced 4*s.* a quarter had the ports been all the while open to unconditional importation from abroad under a fixed duty of only 5*s.* a quarter. Hence, were our manufactures really declining, or in a perilous state, which happily they are not, it is idle to suppose that this decline or danger could be obviated by the repeal of the Corn Laws. The influence of the latter is now little felt, except in unfavourable years, when the home crops are deficient; but then, certainly, it is extremely injurious. This arises not only from the restrictions which they lay on importation at the time, but also from the discouragement which they give to warehousing in ordinary years, and, consequently, forcing the required supply to be suddenly introduced, to the great derangement of the ordinary channels of trade and of the currency. Such a state of things should not be allowed to exist; and seeing that the agriculturists have really very little to fear from the opening of the ports, sound policy would suggest that foreign corn should be admitted at all times for home consumption, under a reasonable constant duty (5*s.* or 6*s.* on wheat, and other grain in proportion), such as the justice and exigencies of the case may seem to require. The exclusion of foreign sugar, and the regulations as to the timber trade, though the latter have been much modified, are productive of nothing but mischief, and have not, in fact, a single redeeming quality about them: they add very materially to the price of a most important necessary of life, and of our houses, ships, and machinery, and deprive the Treasury of at least 1,500,000*l.* a year of revenue. But were the corn laws and those relating to sugar and timber placed on a proper footing, and some of the more oppressive duties in our tariff, as those on tea, silks and gloves, brandy and hollands, adequately reduced, the foreign competition to which we might be exposed would be productive of nothing but advantage. Such competition is, in reality, the vivifying principle of industry, *curis acuens mortalia corda.* It gives a new stimulus to the inventive powers, at the same time that it supplies new products and new modes of enjoyment to reward the labour of the industrious. It must ever be borne in mind, that the amount of the exports from a country always depends upon, and is, in fact, measured by, the amount of its imports; and while the magnitude of the latter continues to increase, and we freely open our ports to the products of all countries and climates, we may be sure that our exports will equally increase, and be found in every market.

IMPRESSMENT, the forcible taking away of seamen from their ordinary employment, and compelling them to serve, against their will, in her Majesty's ships.

1. *Regulations as to Impressment.* — This practice is not expressly sanctioned by any act of parliament; but it is so indirectly by the numerous statutes that have been passed, granting exemptions from it. According to Mansfield, it is "a power founded upon immemorial usage," and is understood to make a part of the common law. All *sea-faring* men are liable to impressment, unless specially protected by custom or statute. Seamen executing particular services for government, not unfrequently get protections from the Admiralty, Navy Board, &c. Some are exempted by *local* custom; and *ferrymen* are every where privileged from impressment. The statutory exemptions are numerous.

1. *Every ship in the coal trade* has the following p[rotection] tected, viz. 2 able seamen (such as the master shall ..... for every ship of 100 tons; and 1 for every 50 tons for every ship of 100 tons and upwards; and any officer who presumes to impress any of the above, shall forfeit, to the master or owner of such vessel, 10*l.* for every man so impressed; and such officer shall be incapable of holding any place, office, or employment in any of his Majesty's ships of war. — 6 & 7 *Will.* 3. c. 18. sect. 19.) *

2. *No parish apprentice* shall be compelled or permitted to

* In order that these men shall be thus protected, it is necessary for the master *to name them, before they are impressed:* this is to be done by going before the mayor or other chief magistrate of the place, who is to give the master a certificate, in which is contained the names of the particular men whom he thus nominates; and this certificate will be their protection.

enter into his Majesty's sea service till he arrives at the age of 18 years. — (2 & 3 *Anne*, c. 6. sect. 4.)

3. Persons *voluntarily* binding themselves apprentices to sea service, shall not be impressed for 3 years from the date of their indentures. But no person above 18 years of age shall have any exemption or protection from his Majesty's service, if they have been at sea before they became apprentices. — (2 & 3 *Anne*, c. 6. sect. 15.; 4 *Anne*, c. 19. sect. 17.; and 13 *Geo.* 2. c. 17. sect. 2.)

4. *Apprentices.* — The act 5 & 6 Will. 4. c. 19. enacts some new regulations with respect to the number of apprentices that ships must have on board according to their tonnage; and the act 4 Geo. 4. c. 25. grants protection to such apprentices till they have attained the age of 21 years.

5. *Persons employed in the Fisheries.* — The act 50 Geo. 3. c. 108. grants the following exemptions from impressment, viz.: —

1st, *Masters of fishing vessels* or boats, who, either themselves or their owners, have, or within 6 months before applying for a protection shall have had, 1 apprentice or more under 16 years of age, bound for 5 years, and employed in the business of fishing.

2dly, All such *apprentices*, not exceeding *eight* to every master or owner of any fishing vessel of 50 tons or upwards; not exceeding *seven* to every vessel or boat of 35 tons and under 50; not exceeding *six* to every vessel of 30 tons and under 35 tons; and not exceeding *four* to every vessel or boat under 30 tons burden during the time of their apprenticeship, and till the age of 20 years; they continuing, for the time, in the business of fishing only.

3dly. *One mariner*, besides the master and apprentices, to every fishing vessel of 10 tons or upwards, employed on the sea-coast, during his continuance in such service.

4thly, *Any landsman* above the age of 18, entering and employed on board such vessel for 2 years from his first going to sea; and to the end of the voyage then engaged in, if he so long continue in such service.

An affidavit sworn before a justice of the peace, containing the tonnage of such fishing vessel or boat, the port or place to which she belongs, the name and description of the master, the age of every apprentice, the term for which he is bound, and the date of his indenture, and the name, age, and description of every such mariner and landsman respectively, and the time of such landsman's first going to sea, is to be transmitted to the Admiralty; who, upon finding the facts correctly stated, grant a separate protection to every individual. In case, however, "*of an actual invasion of these kingdoms or imminent danger thereof*," such protected persons may be impressed; but except upon such an emergency, any officer or officers impressing such protected persons shall respectively forfeit 20*l.* to the party impressed, if not an apprentice, or to his master if he be an apprentice. — Sects. 2, 3, 4.

6. *General Exemptions.* — All persons 55 years of age and upwards, and under 18 years. Every person being a foreigner, who shall serve in any merchant ship, or other trading vessel, or privateer, belonging to a subject of the crown of Great Britain; and all persons, of what age soever, who shall use the sea; shall be protected for 2 years, to be computed from the time of their first using it. — (13 *Geo.* 2. c. 17.)

7. *Harpooners*, line managers, or boat steerers, engaged in the southern whale fishery, are also protected. — (26 *Geo.* 3. c. 50.)

8. *Mariners employed in the herring fishery* are exempted while actually employed. — (48 *Geo.* 3. c. 110.)

5. *Policy of Impressment.* — This practice, so subversive of every principle of justice, is vindicated on the alleged ground of its being absolutely necessary to the manning of the fleet. But this position, notwithstanding the confidence with which it has been taken up, is not quite so tenable as has been supposed. The difficulties experienced in procuring sailors for the fleet at the breaking out of a war, are not natural but artificial, and might be got rid of by a very simple arrangement. During peace, not more than a fourth or a fifth part of the seamen are retained in his Majesty's service that are commonly required during war; and if peace continue for a few years, the total number of sailors in the king's and the merchant service is limited to that which is merely adequate to supply the reduced demand of the former and the ordinary demand of the latter. When, therefore, war is declared, and 30,000 or 40,000 additional seaman are wanted for the fleet, they cannot be obtained, unless by withdrawing them from the merchant service, which has not more than its proper complement of hands. But to do this by offering the seamen higher wages would be next to impossible; and would, supposing it were practicable, impose such a sacrifice upon the public as could hardly be borne. And hence, it is said, the necessity of impressment; a practice which every one admits can be justified on no other ground than that of its being absolutely essential to the public safety.

It is plain, however, that a necessity of this sort may be easily obviated. All, in fact, that is necessary for this purpose, is merely to keep such a number of sailors in his Majesty's service during peace as may suffice, with the ordinary proportion of landsmen and boys, to man the fleet at the breaking out of a war. Were this done, there would not be a shadow of a pretence for resorting to impressment; and the practice, with the cruelty and injustice inseparable from it, might be entirely abolished.

But it is said that, though desirable in many respects, the *expense* of such a plan will always prevent it from being adopted. It admits, however, of demonstration, that instead of being dearer, this plan would be actually cheaper than that which is now followed. Not more than 1,000,000*l.* or 1,200,000*l.* a year would be required to be added to the navy estimates, and that would not be a real, but merely a nominal advance. The violence and injustice to which the practice of impressment exposes sailors, operates at all times to raise their wages, by creating a disinclination on the part of many young men to enter the sea service; and this disinclination is vastly increased during war, when wages *usually rise to four or five times their previous amount*, imposing a burden on the commerce of the country, exclusive of other equally mischievous consequences, many times greater than the tax that would be required to keep up the peace establishment of the navy to its proper level. It is really, therefore, a vulgar error to suppose that impressment has the recommendation of cheapness in its favour: and, though it had, no reasonable man would contend that that is the only, or even the principal, circumstance to be attended to. In point of fact, however, it is as costly as it is oppressive and unjust. — (The reader is referred for a fuller discussion of this interesting question, to the note on *Impressment* in the edition of the *Wealth of Nations*, by the author of this work.

INDEMNITY, is where one person secures another from responsibility against any particular event; thus, a policy of insurance is a contract of indemnity against any particular loss. Where one person also becomes bail for another, a bond of indemnity is frequently executed; and where a bond or bill of exchange has been lost or mislaid, the acceptor or obligee would not act prudently in paying it, without being secured by a bond of indemnity.

INDIAN RUBBER. See CAOUTCHOUC.

INDIGO (Fr. *Indigo*; Ger. *Indigo*; Sans. *Nila*; Arab. *Neel*; Malay, *Taroom*), the drug which yields the beautiful blue dye known by that name. It is obtained by the maceration in water of certain tropical plants; but the indigo of commerce is almost entirely obtained from leguminous plants of the genus *Indigofera*; that cultivated in India being the *Indigofera tinctoria*; and that in America the *Indigofera anil.* The Indian plant has pinnate leaves and a slender ligneous stem; and when successfully cultivated, rises to the height of 3, 5, and even 6 feet.

It appears pretty certain that the culture of the indigo plant, and the preparation of the drug, have been practised in India from a very remote epoch. It has been questioned, indeed, whether the *indicum* mentioned by Pliny (*Hist. Nat.* lib. xxxv. c. 6.) was indigo, but, as it would seem, without any good reason. Pliny states that it was brought from India; that when diluted it produced an admirable mixture of blue and purple colours (*in diluendo misturam purpuræ cæruleique mirabilem reddit*); and he gives tests by which the genuine drug might be discriminated with sufficient precision. It is true that Pliny is egregiously mistaken as to the mode in which the drug was pro-

duced; but there are many examples in modern as well as ancient times, to prove that the possession of an article brought from a distance implies no accurate knowledge of its nature, or of the processes followed in its manufacture. Beckmann (*Hist. of Inventions*, vol. iv. art. *Indigo*) and Dr. Bancroft (*Permanent Colours*, vol. i. pp. 241—252.) have each investigated this subject with great learning and sagacity; and agree in the conclusion that the *indicum* of Pliny was real indigo, and not, as has been supposed, a drug prepared from the *isatis* or woad. At all events, there can be no question that indigo was imported into modern Europe, by way of Alexandria, previously to the discovery of the route to India by the Cape of Good Hope. When first introduced, it was customary to mix a little of it with woad to heighten and improve the colour of the latter; but, by degrees, the quantity of indigo was increased; and woad was, at last, entirely superseded. It is worth while, however, to remark, that indigo did not make its way into general use without encountering much opposition. The *growers of woad* prevailed on several governments to prohibit the use of indigo! In Germany, an Imperial edict was published in 1654, prohibiting the use of indigo, or "*devil's dye*," and directing great care to be taken to prevent its clandestine importation, "because," says the edict, "the trade in woad is lessened, dyed articles injured, and money carried out of the country!" The magistrates of Nuremberg went further, and compelled the dyers of that city to take an oath once a year not to use indigo; which practice was continued down to a late period. In 1598, upon an urgent representation of the states of Languedoc, at the solicitation of the woad growers, the use of indigo was prohibited in that province; and it was not till 1737, that the dyers of France were left at liberty to dye with such articles, and in such a way, as they pleased. — (*Beckmann*, vol. iv. p. 142.) Let not those who may happen to throw their eyes over this paragraph, smile at the ignorance of our ancestors — *Mutato nomine, de te fabula narratur.* How much opposition is made at this moment to the importation of many important articles, for no better reasons than were alleged in the sixteenth century, against the importation of indigo!

Indigo is at present produced in Bengal, and the other provinces subject to the presidency of that name, from the 20th to the 30th degree of north latitude; in the province of Tinnevelly, under the Madras government; in Java; in Luconia, the principal of the Philippine Islands; and in Guatemala, and the Caraccas, in Central America. Bengal is, however, the great mart for indigo; and the quantity produced in the other places is comparatively inconsiderable.

Raynal was of opinion that the culture of indigo had been introduced into America by the Spaniards; but this is undoubtedly an error. Several species of *indigofera* belong to the New World; and the Spaniards used it as a substitute for ink, very soon after the conquest. — (*Humboldt, Essai Politique sur la Nouvelle Espagne*, tom. iii. p. 54. 2d ed.)

For the first 20 years after the English became masters of Bengal, the culture and manufacture of indigo, now of such importance, was unknown as a branch of British industry; and the exports were but trifling. The European markets were, at this period, principally supplied from America. In 1783, however, the attention of the English began to be directed to this business; and though the processes pursued by them be nearly the same with those followed by the natives, their greater skill, intelligence, and capital give them immense advantages. In their hands, the growth and preparation of indigo has become the most important employment, at least in a commercial point of view, carried on in the country. The indigo made by the natives supplies the internal demand; but a portion of that which is raised by them, with all that is raised by Europeans, is exported.

In the Delta of the Ganges, where the best and largest quantity of indigo is produced, the plant lasts only for a single season, being destroyed by the periodical inundation; but in the dry central and western provinces, one or two *rattoon* crops are obtained: and owing to this circumstance, the latter are enabled to furnish a large supply of reed to the former.

During the 9 years which preceded the opening of the trade with India, in 1814, the annual average produce of indigo in Bengal, for exportation, was nearly 5,600,000 lbs. But since the ports were opened, the indigo produced for exportation has increased fully a *third*; the exports during the 16 years ending with 1829-30, being above 7,400,000 lbs. a year. The following statement shows the rate of this increase, taking the average produce of each 4 years: —

	Lbs.		Lbs.		Lbs.		Lbs.
1814 to 1817	7,040,000	1818 to 1821	6,000,000	1822 to 1825	8,000,000	1826 to 1829	9,000,00

and it has continued about the same since, as is evident from the following

Statement of the Quantity and Value of the Indigo shipped from Calcutta in 1830-31, 1840-41, and 1841-42.

	1830—31.		1840—41.		1841—42.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Great Britain - - Fy. mds.	85,741	85,74,100	84,205	1,55,31,074	84,813½	1,66,35,889
France - - - —	23,151	23,15,100	20,960½	40,86,263	26,691	52,94,251
North America - - - —	5,899	5,89,900	4,822½	9,45,368	3,713½	7,36,563
Arabian and Persian Gulphs - - - —	10,939	10,93,900	5,053½	9,64,414	5,863½	11,72,774
Bombay - - - - —	550	55,000	637	1,27,499	122	24,383
Sweden - - - - —	245	24,500				
Bremen - - - - —	-	-	206½	41,256	299½	59,868
Elsewhere - - - —	33	3,300	78½	15,775	139½	27,920
Total mds.	1,26,556	1,26,56,600	1,15,963½	2,27,11,602	1,21,841½	2,39,51,248
Being in lbs.	9,444,241½		8,601,557½		9,077,516½	
— tons	cwt. lbs. 4,216 3 65½		cwt. lbs. 3,839 19 69½		cwt. lbs. 4,052 9 27½	
Quantity shipped for Great Britain only - - - tons	2,856 8 86½		2,805 5 38½		2,825 10 68½	

It deserves to be remarked, that since the opening of the trade, Indian capitalists have betaken themselves to the manufacture of indigo on the European method, and that at present a considerable part of the whole annual produce is prepared by them.

The culture of indigo is very precarious, not only in so far as respects the growth of the plant from year to year, but also as regards the quantity and quality of the drug which the same amount of plant will afford even in the same season. Thus the produce of 1825-26 was 41,000 chests, while the produce of the following year was but 25,000 chests; the produce of 1827-28 was about 42,000 chests, and that of 1828-29 only 26,500 chests! The price of indigo in India increased, for a while, in a far greater ratio than the quantity. In 1813-14, the real value of that exported from Calcutta was 1,461,000*l.*; but in 1827-28, although the quantity had increased but 20 per cent., the value rose to 2,920,000*l.*, or was about doubled. There was no corresponding rise in the price in Europe, but, on the contrary, a decline; and the circumstance is to be accounted for by the restraints that were then placed on the investment of capital in the production of colonial articles suited to the European market, the consequent difficulty of making remittances from India, and an unnatural flow of capital to the only great article of Indian produce and export that was supposed capable of bearing its application.

The consumption of indigo has varied but little in this country during the last 10 years, having been, at an average of that period, about 2,500,000 lbs. a year. This stationary demand, notwithstanding the fall in the price of the drug and the increase of population, is principally to be ascribed to the decreasing use of blue cloth, in the dyeing of which it is principally made use of. Its consumption in France is about as great as in Britain. Besides the exports to Great Britain, France, and the United States, a good deal of Bengal indigo is exported to the ports on the Persian Gulph, whence it finds its way to southern Russia. It is singular that it is not used by the Chinese, with whom blue is a favourite colour.

The indigo of Bengal is divided into two classes, called, in commercial language, *Bengal* and *Oude*; the first being the produce of the southern provinces of Bengal and Bahar, and the last that of their northern provinces and of Benares. The first is, in point of quality, much superior to the other. This arose at one time, in a considerable degree, from the practice which prevailed in the northern provinces, of the European planter purchasing the wet fecula from the Ryot or native manufacturer, and completing the processes of curing and drying the drug. This is at present in a great measure discontinued; and the Oude indigo has, in consequence, considerably improved in quality. Its inferiority is probably more the result of soil and climate, than of any difference in the skill with which the manufacture is conducted.

In 1839-40, the export of indigo from the port of Madras amounted to 1,333,808 lbs. Besides the exports from Madras, a small quantity is also exported from the French settlement of Pondicherry; of which, however, we have no detailed statement. In 1837, the export of indigo from Manilla amounted to about 250,000 lbs. avoirdupois; but it has not been nearly so great since; and we doubt whether the whole export from Guatemala and Central America exceeds at present 600,000 or 700,000 lbs. The export from Batavia in 1841 amounted to 913,693 lbs., and the production is rapidly increasing. According to the statement now given, the annual exports of Asiatic indigo are as follows: — Bengal, 9,000,000 lbs.; Madras, 1,334,000 lbs.; Manilla, 250,000 lbs.; Batavia, 950,000 lbs.; in all about 12,440,000 lbs.

According to M. Humboldt, the exportation of indigo from Guatemala, in 1825, amounted to 1,800,000 lbs. Indigo is also produced in some of the West India islands, but not in large quantities.

Good indigo is known by its lightness or small specific gravity, indicating the absence of earthy impurities; by the mass not readily parting with its colouring matter when tested by drawing a streak with it over a white surface; but above all, by the purity of the colour itself. The first quality, estimated by this last test, is called, in commercial language, *fine blue*; then follow *ordinary blue, fine purple, purple and violet, ordinary purple and violet, dull blue, inferior purple and violet, strong copper*, and *ordinary copper*. These distinctions refer to the Bengal indigo only, the Oude being distinguished only into *fine* and *ordinary*. The indigo of Madras, which is superior to that of Manilla, is about equal to ordinary Bengal indigo. The indigo of Java is superior to these.

We are indebted to Mr. Cook, than whom there can be no higher authority on such matters, for the following Table, which gives a very comprehensive view of the state of the crops of indigo in Bengal, and the imports, consumption, and prices of Bengal indigo, since 1811-12: —

Crops in Bengal.		Year.	Total Import from India into Great Britain	Total Deliveries for Export and Home Con.	Stock in Great Britain 31st of Dec.	Average Prices in London.									
							Fine Bengal. per lb.			Ord. Bengal. per lb.			Low Oude. per lb.		
Years.	*Maunds. Chests.*		*Chests.*	*Chests.*	*Chests.*	*Yrs.*	*s.*	*d.*	*s. d.*	*s.*	*d.*	*s. d.*	*s.*	*d.*	*s. d.*
1811-1812	70,000 = 19,500	1812	17,200	14,600	29,500	1812	8	0 to 10	6	4	0 to 5	3	3	0 to 3	6
1812-1813	78,000 = 22,000	1813	14,300	19,300	24,500	1813	10	0 — 14	0	6	3 — 8	3	4	6 — 6	0
1813-1814	74,500 = 21,300	1814	24,200	23,800	24,900	1814	10	0 — 14	6	6	6 — 9	0	4	0 — 5	6
1814-1815	102,500 = 27,000	1815	28,900	23,400	30,400	1815	8	0 — 11	0	5	0 — 7	0	3	0 — 4	6
1815-1816	115,000 = 29,000	1816	15,500	20,200	25,700	1816	6	6 — 10	0	3	9 — 5	6	2	8 — 3	3
1816-1817	87,000 = 23,500	1817	13,500	15,700	23,500	1817	7	6 — 10	0	5	6 — 7	6	4	0 — 6	0
1817-1818	72,800 = 19,000	1818	16,600	16,100	24,000	1818	8	0 — 9	6	6	6 — 8	0	5	0 — 6	0
1818-1819	68,000 = 17,000	1819	11,500	15,800	19,700	1819	7	6 — 9	0	5	0 — 6	0	3	3 — 4	3
1819-1820	72,000 = 19,000	1820	16,500	21,600	14,500	1820	7	0 — 9	0	5	6 — 6	3	3	3 — 4	6
1820-1821	107,000 = 25,000	1821	13,000	17,300	9,800	1821	7	6 — 9	6	5	6 — 7	0	4	0 — 5	9
1821-1822	72,400 = 19,500	1822	13,500	15,100	8,200	1822	11	0 — 12	6	8	6 — 10	3	4	9 — 6	0
1822-1823	90,000 = 24,000	1823	21,700	16,800	13,100	1823	9	6 — 11	0	5	9 — 8	6	3	6 — 4	6
1823-1824	113,000 = 28,000	1824	16,300	17,200	12,200	1824	12	0 — 13	6	8	0 — 10	6	5	0 — 6	3
1824-1825	79,000 = 22,000	1825	25,300	21,100	16,400	1825	13	0 — 15	0	8	6 — 10	6	4	3 — 5	9
1825-1826	144,000 = 41,000	1826	27,800	21,900	22,300	1826	8	0 — 9	6	4	6 — 7	0	2	3 — 3	9
1826-1827	90,000 = 25,000	1827	19,000	18,500	22,800	1827	11	6 — 13	6	7	0 — 9	6	3	3 — 4	6
1827-1828	149,000 = 42,000	1828	35,820	27,500	31,100	1828	8	0 — 10	0	5	3 — 7	3	2	6 — 2	9
1828-1829	98,000 = 26,000	1829	23,200	23,100	31,200	1829	7	6 — 8	6	3	9 — 6	6	2	6 — 3	6
1829-1830	141,000 = 40,000	1830	32,120	25,700	37,600	1830	6	6 — 7	6	3	3 — 4	6	2	0 — 2	6
1830-1831	116,000 = 33,600	1831	23,330	24,980	35,970	1831	6	0 — 6	6	3	0 — 4	3	2	0 — 2	6
1831-1832	122,000 = 35,000	1832	25,470	28,920	32,520	1832	5	6 — 6	3	3	3 — 4	6	2	3 — 2	9
1832-1833	122,000 = 35,000	1833	25,000	23,000	35,000	1833	7	0 — 7	9	5	0 — 6	0	3	0 — 4	0
1833-1834	93,000 = 26,800	1834	16,1[illegible]	22,700	29,400	1834	7	0 — 7	9	5	3 — 6	0	3	3 — 4	3
1834-1835	106,000 = 30,000	1835	16,370	24,300	21,500	1835	6	6 — 7	3	4	6 — 5	3	2	11 — 3	9
1835-1836	110,000 = 31,000	1836	25,600	24,340	22,800	1836	7	6 — 8	3	5	0 — 6	0	3	3 — 4	0
1836-1837	110,000 = 31,000	1837	25,000	21,700	26,100	1837	8	0 — 8	6	5	6 — 6	9	3	6 — 4	6
1837-1838	112,500 = 32,000	1838	24,800	29,600	21,500	1838	9	0 — 9	5	6	3 — 7	6	4	0 — 5	0
1838-1839	89,500 = 24,700	1839	18,800	24,400	15,900	1839	8	9 — 9	3	5	9 — 7	0	3	6 — 4	6
1839-1840	119,900 = 32,100	1840	28,800	27,200	17,800	1840	8	6 — 9	0	5	0 — 6	3	2	6 — 3	6
1840-1841	121,700 = 33,600	1841	28,600	28,300	17,300	1841	6	9 — 7	6	3	3 — 4	6	2	2 — 2	9
1841-1842	162,000 = 44,700	1842	34,400	30,100	22,100	1842	7	9 — 8	6	5	0 — 6	3	3	6 — 4	3

Of 7,894,497 lbs. of indigo imported into Great Britain in 1841, 7,456,617 lbs. were from India, 104,190 lbs. from the British West Indies, 178,727 lbs. from Guatemala, 68,304 lbs. from Colombia, &c. Of the total quantity imported, 2,780,583 lbs. were retained for consumption.

Indigo of British possessions, not deemed their produce unless imported from thence. — (7 *Geo.* 4. c. 48.)

For further information as to indigo, see *Colebrooke's Husbandry of Bengal*, p. 154.; *Milburn's Orient. Com.*; *Wilkinson's Commerce of Bengal*; *Wilson's Review of do.*; evidence of Gillian Maclaine, Esq., East India Committee, 1830-31, &c.

The fixed capital required in the manufacture of indigo consists of a few vats of common masonry for steeping the plant, and precipitating the colouring matter; a boiling and drying house; and a dwelling house for the planter. These, for a factory of 10 pair of vats, capable of producing, at an average, 12,500 lbs. of indigo, worth on the spot about 2,500*l.*, will not cost above 1,500*l.* sterling. The buildings and machinery necessary to produce an equal value in sugar and rum, would probably cost about 4,000*l.* This fact, therefore, without any reference to municipal regulations, affords a ready answer to the question which has been frequently put, why the British planters in India have seldom engaged in the manufacture of sugar.

INK (Du. *Ink, Inkt*; Fr. *Encre*; Ger. *Dinte*; It. *Inchiostro*; Lat. *Atramentum*; Rus. *Tschernilo*; Sp. *Tinta*; Sw. *Blak*.)

"Every liquor or pigment used for writing or printing is distinguished by the name of ink. Common practice knows only black and red. Of black ink there are three principal kinds: 1. Indian ink; 2. Printers' ink; and 3. Writing ink. The Indian ink is used in China for writing with a brush, and for painting upon the soft flexible paper of Chinese manufacture. It is ascertained, as well from experiment as from information, that the cakes of this ink are made of lampblack and size, or animal glue, with the addition of perfumes or other substances not essential to its quality as an ink. The fine soot from the flame of a lamp or candle received by holding a plate over it, mixed with clean size from shreds of parchment or glove-leather not dyed, will make an ink equal to that imported. Good printers' ink is a black paint, smooth, and uniform in its composition, of a firm black colour, and possesses a singular aptitude to adhere to paper thoroughly impregnated with moisture.

"Common ink for writing is made by adding an infusion or decoction of the nut-gall to sulphate of iron, dissolved in water. A very fine black precipitate is thrown down, the speedy subsidence of which is prevented by the addition of a proper quantity of gum Arabic. Lampblack is the common material to give the black colour, of which 2½ ounces are sufficient for 16 ounces of the varnish. Vermilion is a good red. They are ground together on a stone with a muller, in the same manner as oil paints. Among the amusing experiments of the art of chemistry, the exhibition of sympathetic inks holds a distinguished place. With these the writing is invisible, until some reagent gives it opacity. These inks have been proposed as the instruments of secret correspondence. But they are of little use in this respect, because the properties change by a few days' remaining on the paper; most of them have more or less of a tinge when thoroughly dry; and none of them resist the test of heating the paper till it begins to be scorched."—(*Nicholson's Dictionary of Chemistry*.)

INKLE, a sort of broad linen tape, principally manufactured at Manchester and some other towns in Lancashire.

INSOLVENCY AND BANKRUPTCY. Insolvency is a term in mercantile law applied to designate the condition of all persons unable to pay their debts according to the ordinary usage of trade. A bankrupt is an insolvent; but persons may be in a state of insolvency without having committed any of the specific acts which bring them under the denomination of bankrupts.

We have, under the article BANKRUPTCY, explained the most important differences in the law as to insolvency and bankruptcy; and have also briefly stated in that article, and in the article CREDIT, some of the alterations which seem to be imperatively required to make these laws more in harmony, than they are at present, with the principles of justice, and more conducive to the interests of commerce and the public advantage. In the present article, therefore, we shall confine ourselves to a summary statement of the proceedings under the existing laws.

Under the bankrupt laws, the creditors have a compulsory authority to avail themselves of the entire possessions of their debtor; under the insolvent laws, the debtor himself may make a voluntary surrender of his property for the benefit of his creditors, or his creditors may, on his incarceration, secure his property. From this diversity in the initiative process results the greatest diversity in the ultimate operation of the bankrupt and insolvent acts. The proceedings under a commission of bankruptcy being instituted by the creditors, they lose all future power over the property and person of the debtor after he has obtained his certificate, except in some particular cases; but the proceedings under the Insolvent Act having been commenced, either by himself, as is generally the case, or by the creditors when the insolvent is in custody and enabled to take advantage of the insolvent laws, the insolvent's future property is liable at all times, his person alone being freed. There are exceptions even to the freedom of the insolvent's person from engagements contracted before his application for relief under the law. The modern law as applied to bankruptcy and insolvency has created no little confusion, and the distinction between the two systems seems objectionable, and should be the subject of legislation.

Until the passing of the act 5 & 6 Vict. c. 116, no one could claim the benefit of the laws passed for relief of insolvent debtors, unless he were at the time in gaol under execution. But by this act, where the debts of a party do not exceed 300*l.*, he may make a surrender of all his property, and claim protection against arrest; and this, whether he be a trader or not.

If a party owe a sum not exceeding 300*l.*, he may, on giving notice to one fourth in number and value of his creditors in the London Gazette, and in a local newspaper,

petition the Court of Bankruptcy if he have resided 12 months in the London district, or the country commissioner in whose district he may have resided 12 months, for his protection against arrest. The petition must set forth all his debts and credits and property, and any proposal he may have to make for payment; and a protection may be given to his person and property until the party shall appear in court to be finally protected against any process against his person and goods. On the presentation of the petition the property vests in the official assignee of the court, the commisioner in rotation appoints a certain day to examine the party on oath, and if satisfied with the allegations of the petitioner, may make a final order for his protection; provided the debts were not contracted by fraud or breach of trust, or in any action for the breach of the revenue laws, or other causes mentioned in the act. The commissioner may postpone the examination and renew the protection, may order an allowance for the support of the party until the final order, and may punish him for false statements. On the final order, all the estate, present and future, vests in 2 assignees, one of whom is to be chosen by the creditors, the other being the official assignee. The judges and commissioners were empowered to make rules to carry the act into execution, and rules have accordingly been published containing full directions to any party seeking the benefit of the act.

We will now refer to the proceedings under the act for relief of insolvent debtors who are unable to claim the benefit of the act spoken of.

1. *Proceedings under the existing Insolvent Act.*—A special tribunal, called the "Court for Relief of Insolvent Debtors," exists for the purpose of receiving the surrender of property and effects for the benefit of the creditors of insolvents. It consists of a chief and two other commissioners, appointed by the Crown, and is a court of record, with powers similar to those of the superior courts at Westminster, but it cannot award costs, unless in particular cases. The court sits in Portugal-street, or elsewhere as the court may think fit: no fees are taken, except those established by the court. The commissioners also severally make circuits 3 times a year; and attend at the towns and places appointed for insolvents in the country to appear: their judicial powers in the provincial towns are the same as those exercised in the metropolis.

The first step is the insolvent's petition. Any person detained within the walls of any prison upon any process, may, within 14 days after the arrest, petition for discharge. The petition must state the particulars of the first arrest and cause of detainer, and the amount of debts: the prisoner must give notice of his intention to the gaoler, and state that he is willing to vest all his property in the assignee of the court, and pray to be discharged from all demands.

Under this act, any creditor may get the property of a party in custody vested in the provisional assignee by petition, although the prisoner may not himself have applied.

At the time of the petition either by the prisoner or creditor, the court may order all the prisoner's property (except wearing apparel, &c. to the value of 20*l.*) to be vested in the provisional assignee, until his final discharge; and the court may, before the final hearing, discharge the prisoner on bail. Until discharge, the court may order an allowance for the prisoner for his support out of his estate.

The filing of a petition is an act of bankruptcy if issued within 2 months, and the bankruptcy shall divest the property from the provisional assignee; but a bankruptcy is not to prevent the court proceeding under this act so as to get his future property, if the prisoner should under the bankruptcy obtain his certificate.

The voluntary preference of a creditor, by conveyance of money, goods, bills, or other property, after the imprisonment of the petitioner, or before his imprisonment being in insolvent circumstances, is void, provided it were not 3 months before the imprisonment or with a view to petition. No warrant of attorney or execution to be enforced against property after imprisonment.

2. *The Assignees.* — Any time after the filing of the petition, the court appoints assignees from among the creditors, to whom, on their acceptance of the appointment, an assigment is made of the effects of the prisoner. In case of any real estate, the same, within the space of 6 months, must be sold by public auction, in such manner and place as the major part in value of the creditors approve; but when any part of the property is so circumstanced that the immediate sale of it would be prejudicial to the interests of the prisoner, the court may direct the management of such property till it can be properly sold; and if the debts can be paid by mortgage in lieu of sale, the court may give directions for that purpose, and a dividend is to be declared as soon as may be.

Goods in possession and disposal of the insolvent, whereof he is *reputed* owner, are deemed his property; but this does not affect the assignment of any ship or vessel, duly registered according to the 6 Geo. 4. c. 110.

An account upon oath before an officer of the court, or justice of peace, must be made up by the assignees within every 3 months at the furthest; and in case of a balance in hand, a dividend must be forthwith made, of which dividend 30 days' previous notice must be given; and every creditor is allowed to share in the dividend, unless objected to by the prisoner, assignees, or other creditors, in which case the court decides.

The assignees may execute powers which the insolvent might have executed, as the granting of leases, taking lives, transferring public stock or annuities; but they cannot nominate to a vacant ecclesiastical benefice.

The assignees, with the consent of one commissioner, and the major part of the creditors in value may compound for any debt due to the prisoner; or may submit differences connected with the estate of the insolvent to arbitration.

Dividends payble to creditors, unclaimed for 12 months, are to be paid into court to the credit of the estate of the insolvent: in default of payment of the dividends by the assignees, their goods may be distrained; or, if no distress, they may be imprisoned.

The assignees, in case the insolvent is a beneficed clergyman or curate, are not entitled to the income of the benefice or curacy: but they may obtain a sequestration of the profits for the benefit of creditors

[illegible] offices, a portion of such pay, pension, or emoluments to be set aside towards the liquidation of the debts of the insolvent.

The court may inquire into the conduct of the assignees, on the complaint of the insolvent or any of his creditors; and, in case of malversation, award costs against them.

Assignees who wilfully employ or retain any part of the proceeds of the insolvent's estate, may be charged with interest, at a rate not exceeding 20*l.* per cent. per annum.

3. *Discharge of the Insolvent.* — After the vesting order, the prisoner is within 14 days to prepare

schedule of all his estate, effects, and debts, with great particularity, and of his past expenditure, and deposit all his books and papers; the court then appoints a time for hearing, and notice of the vesting order is given to all creditors whose debts amount to 5*l*. At the time of the hearing the schedule is examined, and the commissioners examine the prisoner on oath; and any creditor, having given 3 days' notice of intention to do so, may oppose or examine the prisoner: the hearing may be adjourned; affidavits may be made against his discharge in certain cases; the schedules and accounts may be referred for an investigation to an examiner, who may examine on oath; and the expenses may be paid out of insolvent's estate; the prisoner may be at once discharged from custody, or where no cause to the contrary, in not less than 6 months from the filing the petition; but in case of improper dealing with his creditors, or other misdeeds mentioned in the act, he may be detained 3 or 2 years, or the discharge may be conditional on the prisoner performing some engagement. If creditors improperly oppose, the court may make them pay the prisoner's costs. The adjudication is final, unless improperly obtained. Before the prisoner's discharge, he must execute a warrant of attorney to enable creditors to take any future property, and the act contains provisions for enforcing the warrant of attorney at the discretion of the court; so that all his future property may be made available; or if the insolvent become entitled to property not seizable under an execution, the assignees may obtain the assistance of the court to realise it.

The discharge extends to sums payable by annuity; the annuitants being admitted as creditors to the estate of the insolvent, at a fair valuation of their interest.

But the discharge does not extend to any debts due to the Crown, nor for any offence against the revenue laws; nor at suit of any sheriff or other public officer, upon any bail-bond entered into for any person prosecuted for such offence; unless the Treasury certify consent to the discharge.

Insolvents under writ of *capias* or extent, must apply to the Barons of the Exchequer to be discharged.

When the prisoner is not discharged, the court may, on application for that purpose, order the creditor at whose suit he is detained to pay any sum not exceeding 4*s*. weekly; and in default of payment, the prisoner to be liberated.

4. *Future Liabilities of the Insolvent.*— No person, after judgment entered up, is liable to imprisonment for any debt comprised in the schedule, unless the insolvent had entered into any covenant before the insolvency to pay any sum not then capable of valuation.

An insolvent, after his discharge, may, on the application of an assignee to the court, be again examined touching the effects set forth in the schedule; and if he refuse to appear or answer questions, he may be recommitted.

No uncertificated bankrupt, nor any person having had the benefit of the Insolvent Act, can have it a second time within *five years*, unless 3-4ths in number and value of the creditors consent thereto, or unless it appear to the court that the insolvent, since his bankruptcy or discharge, has done his utmost to pay all just demands; and that the debts subsequently incurred have been unavoidable, from inability otherwise to acquire subsistence for himself and family.

Married women are entitled to the benefit of the insolvent act, and may petition the court on executing a special assignment.

The act 1st & 2nd Victoria, prohibits any proceedings under what is called the Lord's Act, 32 G. 2. c. 28.

Statement of the Number of Petitions filed in the Court for Relief of Insolvent Debtors, and of Adjudications made by that Court, during each of the Seven Years ending with 1840.

Years.	Petitions filed.			Adjudications made.			
	From the Prisons in London, Middlesex, and Surrey.	From the other Prisons in England and Wales.	Total.	By the Court in London.	By Justices.	By Commissioners on Circuit.	Total.
1834	2,145	2,942	5,087	1,653	127	2,495	4,275
1835	1,919	2,705	4,624	1,613	49	2,228	3,890
1836	1,942	2,780	4,722	1,682	1	2,528	4,211
1837	2,127	3,078	5,205	1,645	1	2,601	4,247
1838	1,961	2,865	4,826	1,561	- -	2,561	4,122
1839	1,645	2,031	3,676	1,397	- -	1,686	3,083
1840	1,779	2,888	4,667	1,425	2	2,484	3,911

Our next object will be to present a brief exposition of the BANKRUPT LAWS.

BANKRUPTCY. — Blackstone defines a bankrupt — "A trader who secretes himself, or does certain other acts tending to defraud his creditors." But an intention to defraud is not now held to be essential to constitute a bankrupt; who may be either simply an insolvent, or a person who is guilty of certain acts tending to defraud his creditors.

There are, as already observed, some important distinctions between the bankrupt and insolvent laws, not only in their application to different descriptions of individuals, but also in the powers they exercise over the estates of persons subsequently to their being brought under their adjudication. The benefits of the Insolvent Act extend without distinction to every class of persons actually in prison for debt, and in cases before noticed of a debtor not owing 300*l*. to persons not in custody, whereas the benefits of the Bankrupt Act extend to traders only. But persons relieved under a commission of bankruptcy for the first time are for ever discharged from all debts provable against them, that is to say, from all debts capable of being valued, (though repeated instances have occurred where settlements have been made, or covenants entered into, from the effect of which a bankrupt is not discharged,) and their property from any future liability; whereas, if relieved under the Insolvent Act, their persons only are protected from arrest, while any property they may subsequently acquire continues liable to their creditors till the whole amount of their debts be paid in full. It follows that the Insolvent Act affords, more immediately, personal relief only; while the Bankrupt Act discharges both person and property at once, and even returns the bankrupt a certain allowance out of the produce of his assets, proportioned to good behaviour, and the amount of his dividend.

Having already treated of insolvency, we now proceed to describe the proceedings under a commission of bankruptcy, as regulated by the act 6 Geo. 4. c. 16., 1 & 2

W. 4. c. 56., 2 & 3 W. 4. c. 114., 5 & 6 W. 4. c. 29., 6 & 7 W. 4. c. 27., 1 & 2 Vict. c. 110., 2 & 3 Vict. c. 29., and 5 & 6 Vict. c. 122.; which are the last general acts on the subject, and by which former statutes have been consolidated, and several important improvements introduced; leaving, however, untouched, many radical defects inherent in this branch of the law. The chief points to be considered, are — 1. The persons who may become bankrupt: 2. Acts constituting bankruptcy; 3. Proceedings of petitioning creditor; 4 Courts of Bankruptcy; 5. Debts proveable under the commission; 6. Official assignees; 7. Assignees chosen by creditors; 8. Property under bankruptcy; 9. Examination and liabilities of bankrupt; 10. Payment of a dividend; 11. Certificate and allowance to bankrupt.

1. *Who may become Bankrupt.* — Generally all persons in trade, capable of making binding contracts, whether natural-born subjects, aliens, or denizens, are within the jurisdiction of the bankrupt laws; but the statute expressly includes builders, bankers, brokers, packers, carpenters, scriveners, ship insurers, warehousemen, wharfingers, shipwrights, victuallers; keeper of inns, taverns, hotels, and coffee-houses, dyers, printers, bleachers, fullers, calenderers, cattle or sheep salesmen, factors, agents, livery stable keepers, coach proprietors, carriers, shipowners, auctioneers, apothecaries, market gardeners, cowkeepers, brickmakers, alum makers, lime burners, millers, and all persons who use the trade of merchandise by bargaining, bartering, commission, consignment, and otherwise, and also all persons who seek their living by buying and selling, letting for hire, or by the manufacturing of goods and commodities. Persons who cannot become bankrupt, are graziers, farmers, workmen for hire, labourers, receivers general of taxes, and subscribers to any commercial or trading company established by charter or act of parliament.

A clergyman, unless a trader, cannot be made a bankrupt; nor an attorney, in the common course of his profession; nor an infant, nor a lunatic, nor a married woman, except in those cases where she may be sued and taken in execution for her debts. — (8 *T. R.* 545.)

A single act of buying or selling is not sufficient to make a trader; as a schoolmaster selling books to his scholars only, or a keeper of hounds buying dead horses and selling the skin and bones. — (6 *Moore*, 56.) But the quantity of dealing is immaterial, where an intention to deal generally may be inferred. — (1 *Rose*, 84.) A buyer or seller of land, or any interest in land, is not a trader within the act; and on this principle it has been decided, that a brickmaker selling bricks made in his own field, or the owner of a mine selling minerals from his own quarry, is not liable, because such business is carried on only as a mode of enjoying the profits of a real estate. — (2 *Wils.* 169.)

Traders having privilege of parliament, are subject to the bankrupt laws, and may be proceeded against as other traders; but such persons cannot be arrested or imprisoned, except in cases made felony by the statute.

2. *Acts constituting Bankruptcy.* — In general, any act which is intended to delay or defraud creditors, is an act of bankruptcy; such as a trader concealing himself from his creditors, leaving the country, causing himself to be arrested or his goods taken in execution, or making any fraudulent conveyance, gift, or delivery of his property. A trader keeping house commits an act of bankruptcy, if he give a general order to be denied. So is closing the door, and not admitting persons till ascertained who they are from window, though no actual denial. — (1 *Bar. & Cres.* 54.) But it is no act of bankruptcy if the denial be on Sunday, or at an unseasonable hour of the night, or to prevent interruption at dinner time.

Traders held in prison for any really subsisting debt for the period of 21 days, or who, being arrested, make their escape out of prison or custody, commit acts of bankruptcy. A penalty due to the Crown is a sufficient debt, and the time is computed from the first arrest, where the party lies in prison immediately, and the day of arrest is included, and the whole of the last day.

Filing a petition, in order to take the benefit of the Insolvent Act, is an act of bankruptcy, and a fiat may be issued any time before the petition is heard by the Insolvent Court, or within 2 calendar months.

A trader may make a declaration of his insolvency, signed and attested by an attorney or solicitor, and afterwards to be filed in the Bankrupt Office; and the secretary signing a memorandum thereof, is authority for advertising it in the *Gazette*. Upon this act of bankruptcy no commission can issue, if not within 2 calendar months after such advertisement, and unless such advertisement be within 8 days after filing declaration; and no docket can be struck till 4 days after advertisement, if the commission is to be executed in London, and 8 if in the country. Such declaration of insolvency being concerted between bankrupt and creditor, does not invalidate the commission. A party may subject himself to the bankrupt laws, by refusing to pay, compound, or give security for a debt when summoned, as will be afterwards noticed.

The execution by a trader of any conveyance by deed, of all his estate and effects for the benefit of all his creditors, is not an act of bankruptcy, unless a commission be sued out within 6 months after, provided the deed be attested by an attorney or solicitor, and executed within 15 days after, and notice thereof within 2 months be given in the *Gazette*, and 2 daily newspapers; or, if the trader reside more than 50 miles from London, notice may be given in the *Gazette*, and nearest country newspaper.

3. *Proceedings of Petitioning Creditors.* — A person being a trader, and having committed an act of bankruptcy, the next step in the proceeding is to petition the Lord Chancellor to issue his fiat. No fiat is issued, unless the petitioning creditor's debt, if 1 person or 1 firm, amounts to 50*l.*, two creditors 70*l.*, and 3 or more creditors 100*l.*, and any person who has a security from a bankrupt for a sum not actually due, may, nevertheless, petition for a fiat. The petitioning creditor must make an affidavit before a Master in Chancery, of the truth of his debt, and give bond, if required by the Lord Chancellor, to prove his debt, the trading, and act of bankruptcy.

If a trader have committed no act of bankruptcy, a creditor may summon him before a commissioner in the manner pointed out by the act of 5 & 6 Victoria, cap 122., and compel him to admit the debt and pay or give security to defend an action, or in case of refusal the creditor may treat him as a bankrupt, and make this refusal a ground for a fiat; or if the trader sign an admission of the debt, and shall not within 14 days pay or give security, the same proceeding may be taken; or if a party disobey any order of any court of law or equity in bankruptcy or lunacy for payment of money, the refusal may be made the ground for a fiat. If the debt prove insufficient to support a fiat, the Lord Chancellor, upon the application of another creditor who has proved a sufficient debt, contracted posterior to that of the petitioning creditor, may order the bankruptcy to be proceeded in.

The petitioning creditor proceeds at his own cost until the choice of assignees, when his expenses are paid out of the first money received under the bankruptcy.

Creditors entitled to sue out a fiat against all the partners in a firm, may elect to petition only against 1 or more of such partners; and the commission may be superseded as to 1 or more partners, without affecting its validity as to the other partners.

Creditors who have sued out a fiat compounding with the bankrupt, or receiving more in the pound than other creditors, forfeit the whole of their debt, and whatever gratuity they received, for the benefit of the other creditors, and the Lord Chancellor may either order the commission to be proceeded in or superseded.

4. *Courts of Bankruptcy.*— The courts of bankruptcy now consist of a Court of Review in London, consisting of one judge only, who combines the duties of a vice chancellor in equity and a judge in bankruptcy. The Court of Review controls all the proceedings of minor courts, and adjudicates on all matters of bankruptcy. There is a court in London consisting of 5 commissioners, where the practical business of bankruptcy is performed; these commissioners conduct all the judicial business, and control all the operations of the bankruptcy from the time of the opening the fiat to the winding up of the estate. Their district embraces London and the eastern and southern parts of England. There are 7 other commissioners having courts at Birmingham, Liverpool, Manchester, Leeds, Bristol, Exeter, and Newcastle upon Tyne, and these districts comprehend within the jurisdiction of the commissioners the greater part of the northern and western parts of England. The commissioners have official assignees and registrars attached to each district court.

Let us now proceed with the powers and duties of the commissioners.

Commissioners are empowered to summon persons, examine them on oath, and call for any deeds or documents, necessary to establish the trading and act of bankruptcy; and upon full proof thereof, to adjudge the debtor a bankrupt. Notice of such adjudication must be given in the *Gazette*, and 3 public meetings appointed for the bankrupt to surrender; the last of which meetings to be the 42d day after. A bankrupt refusing to attend at the appointed time may be apprehended; and on refusing to answer any question touching his business or property, may be committed to prison.

By warrant of the commissioners, persons may break open any house, premises, door, chest, or trunk of any bankrupt, and seize on his body or property; and if the bankrupt be in prison or custody, they may seize any property (necessary wearing apparel excepted) in the possession of such bankrupt, or any other person. Authorised by a justice's warrant, premises may be searched not belonging to the bankrupt, on suspicion of property being concealed there; and persons suspected to have any of the bankrupt's property in their possession, refusing to obey the summons of commissioners, or refusing to answer interrogatories, or to surrender documents, without lawful excuse, may be imprisoned. The wife of the bankrupt may be examined, or, on refusal, committed, and the person against whom a fiat is issued on proof of probable cause, for believing that he is about to leave England, may be arrested.

Persons summoned are entitled to their expenses; and those attending, whether summoned or not, to assist the commissioners in their inquiries, are protected from arrest on any civil suit.

5. *Debts proveable under Commission.*— At the 3 meetings appointed by the commissioners, and at every other meeting appointed by them for proof of debts, every creditor may prove his debt by affidavit or by his own oath; incorporated bodies by an agent authorised for the purpose; and one partner may prove on behalf of the firm. Persons living at a distance may prove by affidavit before a Master in Chancery, or if resident abroad, before a magistrate where residing, attested by a public notary, or British minister or consul.

Clerks and servants, to whom the bankrupt is indebted for wages, are entitled to be paid 3 months' wages, and not exceeding 30*l.*, and for the residue they may prove under the commission.

Indentures of apprenticeship are discharged by bankruptcy; but in case a premium has been received, the commissioners may direct a portion of it to be repaid for the use of the apprentice, proportioned to the term of apprenticeship unexpired.

Debts upon bill, bond, note, or other negotiable security, or where credit has been given upon valuable consideration, though not due at the time the act of bankruptcy was committed, are proveable under the commission. Sureties, persons liable for the debts of, or bail for the bankrupt, may prove after having paid such debts, if they have contracted the liability without notice of any act of bankruptcy. Obligee in bottomry or respondentia bonds, and assured in policy of insurance, are admitted to claim; and after loss, to prove as if the loss or contingency had happened before commission had issued against the obligor or insurer. Annuity creditors may prove for the value of their annuities, regard being had to the original cost of such annuities. Persons having securities may have them valued, and prove for the difference. Plaintiffs in any action, having obtained judgment against the bankrupt, may prove for their costs.

When there are mutual debts between the bankrupt and a creditor, they may be set off against each other, and the balance, if in favour of the creditor, is provable against the bankrupt's estate.

Interest may be proved on all bills of exchange and promissory notes over-due at the time of issuing commission, up to the date of the commission.

Proving a debt under the commission bars the right to proceed against the bankrupt by action; and in case the bankrupt be in prison at the suit of a creditor, he cannot prove his debt without first discharging the bankrupt from confinement: but the creditor is not liable for the costs of the action so relinquished by him.

No debt barred by the statute of limitations is proveable under the commission.

6. *Official Assignees.*— An important alteration introduced by Lord Brougham's act, particularly to commercial men, is the appointment of official assignees. They are 12 in number, merchants and traders, resident in the metropolis or vicinity, and there are 4 in each country district except at Exeter, where there are only 3, and at Newcastle upon Tyne 1, and are selected by the Lord Chancellor. They are to act with the assignees chosen by the creditors. All the real and personal estates of the bankrupt, all the monies, stock in the public funds, securities and proceeds of sale, are transferred and vested in the official assignee, subject to the rules, orders, and direction of the Lord Chancellor, or a member of the Court of Bankruptcy. The official assignee gives security for the trust reposed in him; and is required to deposit all monies, securities, &c. in the Bank of England.

The official assignee is neither remunerated by a percentage nor a fixed salary, but a sum is paid to him for his trouble, at the discretion of the commissioners, and proportioned to the estates of the bankrupt and the duties discharged.

7. *Appointment of Assignees by Creditors.*— The official assignee is empowered to act as the sole assignee of the bankrupt's estates and effects until others are chosen by creditors, which must be at the 2d meetings. Every creditor to the amount of 10*l.* who has proved his debt, is eligible to vote; persons may be authorised by letters of attorney to vote, and the choice is made by the major part in value of the creditors: but the commissioners may reject any person they deem unfit; upon which a new choice must be made.

When only 1 or more partners of a firm are bankrupt, a creditor to the whole firm is entitled to vote, and to assent to or dissent from the certificate; but such creditor, unless a petitioning creditor, cannot receive any dividend out of the separate estate, until all the other creditors are paid in full.

Assignees may, with consent of creditors declared at any meeting duly summoned, compound or submit disputes to arbitration, and such reference be made a rule of the Court of Bankruptcy, or they may, with such consent of the creditors, commence suits in equity; but if 1-3d in value of creditors do not attend such meeting, the same powers are granted to assignees, with the consent, in writing, of commissioners.

Assignees to keep a book of account, where shall be entered a statement of all receipts and payments relating to bankrupt's estate, and which may be inspected by any creditor who has proved, and 14 days before any dividend shall be declared, the official assignee shall furnish a debtor and creditor account to the creditor's assignee. Commissioners may summon assignees, with their books and papers, before them; and if they refuse to attend, may cause them to be committed till they obey the summons, and the official assignees may be removed at any time by the Lord Chancellor.

An assignee retaining or employing the money of the bankrupt, to the amount of 100*l.* or upwards, for his own advantage, may be charged 20*l.* per cent. interest.

The court is authorised, at the sitting for the last examination, or whenever after it shall think fit, to audit the assignee's accounts, of which audit 21 days' notice must be given in the *Gazette;* which accounts must be delivered on oath, and the commissioners may examine the assignee touching the truth thereof.

8. *Property under Bankruptcy.* — The official assignee is vested with all the real and personal estate of the bankrupt, and with all such property as may be devised to him, or come into his possession, till the time he obtain his certificate. The commissioners may sell any real property of which the bankrupt is seised, or any estate tail in possession, reversion, or remainder; and the sale is good against the bankrupt, the issue of his body, and against all persons claiming under him after he became bankrupt, or whom he can cut off from any future interest. All property which the bankrupt has in right of his wife passes to the assignee, except such as is settled for her own sole benefit. Any property pledged, or securities deposited, may be redeemed for the benefit of the creditors.

If a bankrupt, being at the time insolvent, convey his land or goods to his children or others (except upon their marriage, or for a valuable consideration), or deliver securities, or transfer debts into other names, such transactions are void, but this does not extend to a *bonâ fide* sale or conveyance: a purchaser is there protected in a transaction with the bankrupt, if he have no notice of an act of bankruptcy.

A landlord after or out of bankruptcy cannot distrain for more than *one year's rent;* but he may prove under the commission for the residue.

The assignee may accept any lease to which the bankrupt is entitled, and his acceptance exonerates the bankrupt from any future liability for rent; or if the assignee decline the lease, and the bankrupt, within 14 days after, deliver the lease to the lessor, he is not liable for rent.

In general, all power which the bankrupt might lawfully execute in the sale and disposition of his property for the benefit of himself, may be executed by the assignee for the benefit of creditors, and the assignees are entitled to all or nearly all the benefits which the bankrupt could have; even a contract to employ a party has been held to pass to his assignees.

The circumstance of a commission appearing in the *Gazette*, and a fair presumption that the person to be affected thereby may have seen the same, is deemed sufficient legal notice of an act of bankruptcy having been committed.

9. *Examination and Liabilities of Bankrupt.* — A bankrupt having, after an act of bankruptcy or in contemplation of bankruptcy, obtained goods on credit on false pretences, is guilty of a misdemeanor, and a bankrupt not surrendering to the commissioners before 3 o'clock upon the 42d day after notice, or not making discovery of his estate and effects, not delivering up goods, books, papers, &c., or removing or embezzling to the value of 10*l.*, is guilty of *felony*, and liable to a discretionary punishment from imprisonment to transportation for life. The period for surrendering may be enlarged by the Lord Chancellor; and the commissioners, or assignees with approval of commissioners, may grant an allowance for support of the bankrupt and his family till he has passed his last examination. During his attendance on commissioners, the bankrupt is protected from arrest.

The bankrupt is required to deliver up his books of account to the assignees upon oath, and to attend them on reasonable notice; he may inspect his accounts, assisted by other persons, in presence of assignees. After certificate is allowed, he is required to attend assignees, in settling accounts, at 5*s.* per day; and may be committed for non-attendance.

A penalty of 100*l.* is imposed on persons concealing bankrupt's effects, and double the value of the property so concealed; and an allowance of 5*l.* per cent. to persons discovering such concealment, with such further reward as the major part of the creditors may think fit to grant.

The bankrupt, or any other person, wilfully swearing falsely, is liable to the penalties of perjury.

If the bankrupt shall not, if in the U. Kingdom at the time of adjudication, within 21 days after advertisement in the *Gazette*, or within 3 months after advertisement if in any other part of Europe at the date of the adjudication, or if elsewhere at this date, within 12 months after advertisement, dispute the fiat, the gazette to be conclusive.

At any meeting of creditors, after the last examination, the bankrupt or his friends may *tender a composition;* which, if accepted by 9-10ths in number and value of the creditors, at 2 separate meetings, the Lord Chancellor may supersede the commission. In deciding on such offer, creditors under 20*l.* are not entitled to vote; but their debts are computed in value. Persons residing out of England may vote by letter of attorney, properly attested; and the bankrupt may be required to make oath that no unfair means have been employed to obtain the assent of any creditor to such arrangement.

10. *Payment of a Dividend.* — The court, acting in the prosecution of any fiat, may declare a dividend at any time after the time for the last examination of the bankrupt, but 21 days' notice of the meeting to declare it must be regularly advertised; at which meeting, creditors who have not proved may prove their debts; and at such meeting commissioners may order the nett produce of bankrupt's estate to be shared among the creditors that have proved, in proportion to their debts; but no dividend to be declared unless the accounts of the assignees have been first audited and delivered in as before described.

If the estate is not wholly divided upon a first dividend, a second meeting must be called, not later than 18 months from the date of commission; and the dividend declared at such second meeting to be final, unless some suit at law be pending, or some part of bankrupt's property afterwards accrue to the assignees; in which case it must be shared among the creditors within 2 months after it is converted into money; but this may be controlled by the court.

Assignees having unclaimed dividends to the amount of 20*l.*, who do not within 3 calendar months from the expiration of a year from the order of payment of such dividends, either pay them to the creditors entitled thereto, or cause a certificate thereof to be filed in the Bankrupt Office, with the names, &c. of the parties to whom due, shall be charged with legal interest from the time the certificate ought to have been filed, and such further sum, not exceeding 20*l.* per cent. per annum, as the commissioners think fit. The Lord Chancellor may order the investment of unclaimed dividends in the funds; and the unclaimed dividends now are resorted to for the payment of salaries and expenses of the court. Any creditor claiming dividends due to him may obtain them upon application; but unless the dividend be considerable, the expense of the application is too great to render the attempt to obtain it prudent.

No action can be brought against assignees for any dividend; the remedy being by petition to the Lord Chancellor.

11. *Certificate and Allowance to Bankrupt.* — The bankrupt who has surrendered, and conformed in all things to the provisions of the bankrupt laws, is discharged by the certificate from all debts and demands proveable under the commission; but this does not discharge his partner, or one jointly bound, or in joint contract with him, nor does it debar a debt due to the Crown.

The creditors now do not sign the bankrupt's certificate; the mode of obtaining it is for the bankrupt

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ruptcy, may either allow, or refuse, or suspend the allowance of the certificate. The allowance is to be of no force, if the court under hand and seal don ot certify to the Court of Review that the bankrupt has conformed to the law, and made a full discovery of his estate and effects, and that there appears no reason to doubt the truth of such discovey, and unless the bankrupt swear that the certificate was obtained fairly, and unless the allowance be confirmed by the Court of Review.

A bankrupt, after obtaining his certificate, cannot be arrested for any debt proveable under the com-

mission; nor is he liable to satisfy any debt from which he is discharged, upon any promise, contract, or agreement, unless made in writing.

In case a person has been bankrupt before, or compounded with his creditors, or taken benefit of Insolvent Act, unless the estate produced 15*s.* in the pound, the certificate only protects the person of bankrupt from arrest; and any future property he acquires may be seized by assignees for benefit of creditors.

If the produce of bankrupt's estate does not amount to 10*s.* in the pound, he is only allowed out of the assets, so much as assignees think fit, not exceeding 3 per cent., or 300*l.* in the whole; if it produce 10*s.*, 5 per cent., not exceeding 400*l.*; if 12*s.* 6*d.* is paid in the pound, 7½ per cent., not exceeding 500*l.*; if 15*s.* in the pound and upwards, 10 per cent., and not exceeding 600*l.* One partner may receive his allowance, if entitled, from the joint and his separate estate, though the others are not entitled.

A bankrupt is not entitled to certificate or allowance, if he has lost by gaming or wagering, in 1 day, 20*l.*, or within 1 year next preceding his bankruptcy, 200*l.*; or 200*l.* by stock-jobbing in the same period; or, in contemplation of bankruptcy, has destroyed or falsified his books, or concealed his property; or, if any person having proved a false debt under the commission, such bankrupt being privy thereto, or afterwards knowing the same, has not disclosed it to his assignees within 1 month after such knowledge.

Lastly, upon request by the bankrupt, the official assignee is required to declare to him how he has disposed of his property, and account to him for the surplus, if any: but before any surplus can be admitted, interest must be paid, first, on all debts proved that carry interest, at the rate payable thereon; and next, upon all other debts at the rate of 4*l.* per cent., to be calculated from the date of the commission.

Account of the Number and Description of Persons who became Bankrupt, in England and Wales, between the 1st of November, 1841, and the 1st of November, 1842.

Apothecaries, 3.
Army agent, 1.
Auctioneers, 4.
Bakers, 7.
Bankers, 18.
Bill brokers, 4.
Blacksmiths, 3.
Bookbinders, 2.
Booksellers, 15.
Boot and shoe makers, 12.
Brass founder, 1.
Brewers, 24.
Brick makers, 7.
Brush makers, 2.
Builders, 47.
Butchers, 5.
Canvas manufacturer, 1.
Carpenters, &c. 35.
Carpet dealers, 4.
Carriers, 4.
Carver 1.
Cattle dealers, 8.
Chain manufacturer, 1.
Cheesemongers, 4.
Chemists and druggists, 28.
China and glass dealers, 2.
Cider merchant, 1.
Clothiers, 13.
Coach makers, 9.
Coach proprietors, 5.
Coach tire smith, 1.
Coal merchants and dealers, 24.
Commission agents, 32.
Confectioners, 3.
Coopers, 4.
Copper merchant, 1.
Corn merchants, 28.
Cotton dealers and manufacturers, 36.
Curriers, 8.
Dairymen, 6.
Dealers, 21.
Drapers, 47.
Drysalters, 2.
Dyers, 5.
Earthenware manufacturers, 5.
Engineers, 14.
Engravers, 3.
Farmers, 11.
Feather merchant, 1.
Fishmongers and salesmen, 6.
Flax spinners, 2.
Flour dealers, 3.
Furriers, 2.
Gas manufacturer, 1.
Glass merchants, 6.
Glazier, 1.
Glove maker, 1.
Grocers, 67.
Gun maker, 1.
Hardwaremen, 17.
Hatters, 13.
Hop Merchant, 1.
Horse dealers, 5.
Hosiers, 7.
India rubber manufacturer, 1.
Innkeepers, 46.
Iron and steel merchants, 5.
Ironfounders, 12.
Ironmongers, 18.
Jewellers, 4.
Lace dealers, 9.
Leather sellers, 5.
Lime merchants, 4.
Linen drapers, 34.
Livery stable keepers, 4.
Lodging-house keepers, 3.
Maltsters, 17.
Mercers, 8.
Merchants, 96.
Millers, 26.
Milliners, 5.
Money scriveners, 15.
Musical instrument makers, 3.
Oil cloth manufacturer, 1.
Oilmen, 4.
Oil merchants, 4.
Optician, 1.
Painters and glaziers, &c. 10.
Paper manufacturers, 7.
Paper stainer, 1.
Pawnbrokers, 3.
Picture dealers, 6.
Printers, 9.
Road contractor, 1.
Rope makers, 4.
Saddlers, 6.
Sail makers, 2.
Salt merchants, 3.
Schoolmistress, 1.
Ship brokers, 8.
Ship owners, 8.
Shipwrights, 11.
Silk manufacturers and dealers, 14.
Slaters, 3.
Soap boilers, 2.
Solicitor, 1.
Stationers, 10.
Stock brokers, 2.
Stone masons, 5.
Stone merchants, 2.
Sugar manufacturer, 1.
Surgeons, 8.
Tailors, 23.
Tallow chandlers, 5.
Tanners, 2.
Timber merchants, 19.
Tobacco manufacturers, 2
Toy manufacturers, 2.
Upholsterers, 18.
Victuallers, 41.
Vinegar manufacturer, 1.
Warehousemen, 11.
Watchmakers, 4.
Wharfingers, 3.
Wheelwrights, 2.
Wine and spirit merchants, 47.
Wire Workers, 2.
Woollen manufacturers and dealers, 50.
Wool merchants, 11.
Various 21.

Total bankrupts in England and Wales, 1375.

INSURANCE, a contract of indemnity, by which one party engages, for a stipulated sum, to insure another against a risk to which he is exposed. The party who takes upon him the risk, is called the *Insurer*, *Assurer*, or *Underwriter*; and the party protected by the insurance is called the *Insured*, or *Assured*; the sum paid is called the *Premium*; and the instrument containing the contract is called the *Policy*.

I. Insurance (General Principles of).
II. Insurance (Marine).
III. Insurance (Fire).
IV. Insurance (Life).

I. Insurance (General Principles of).

It is the duty of government to assist, by every means in its power, the efforts of individuals to protect their property. Losses do not always arise from accidental circumstances, but are frequently occasioned by the crimes and misconduct of individuals; and there are no means so effectual for their prevention, when they arise from this source, as the establishment of a vigilant system of police, and of such an administration of the law as may be calculated to afford those who are injured a ready and cheap method of obtaining every practicable redress; and, as far as possible, of insuring the punishment of culprits. But, in despite of all that may be done by government, and of the utmost vigilance on the part of individuals, property must always be exposed to a variety of casualties from fire, shipwreck, and other unforeseen disasters. And hence the importance of inquiring how such unavoidable losses, when they do occur, may be rendered least injurious.

The loss of a ship, or the conflagration of a cotton mill, is a calamity that would press heavily even on the richest individual. But were it distributed among several individuals, each would feel it proportionally less; and provided the number of those among

whom it was distributed were very considerable, it would hardly occasion any sensible inconvenience to any one in particular. Hence the advantage of combining to lessen the injury arising from the accidental destruction of property: and it is the diffusion of the risk of loss over a wide surface, and its valuation, that forms the employment of those engaged in insurance.

Though it be impossible to trace the circumstances which occasion those events that are, on that account, termed accidental, they are, notwithstanding, found to obey certain laws. The number of births, marriages, and deaths; the proportions of male to female, and of legitimate to illegitimate births; the ships cast away; the houses burned; and a vast variety of other apparently accidental events; are yet, when our experience embraces a sufficiently wide field, found to be nearly equal in equal periods of time: and it is easy, from observations made upon them, to estimate the sum which an individual should pay, either to guarantee his property from risk, or to secure a certain sum for his heirs at his death.

It must, however, be carefully observed, that no confidence can be placed in such estimates, unless they are deduced from a very wide induction. Suppose, for example, it happens that during the present year one house is accidentally burned, in a town containing 1,000 houses; this would afford very little ground for presuming that the *average* probability of fire in that town was 1 to 1,000. For it might be found that not a single house had been burned during the previous 10 years, or that 10 were burned during each of these years. But supposing it were ascertained, that, at an average of 10 years, 1 house had been annually burned, the presumption that 1 to 1,000 was the real ratio of the probability of fire would be very much strengthened; and if it were found to obtain for 20 or 30 years together, it might be held, for all practical purposes at least, as indicating the precise degree of probability.

Besides its being necessary, in order to obtain the true measure of the probability of any event, that the series of events, of which it is one, should be observed for a rather lengthened period, it is necessary also that the events should be numerous, or of pretty frequent occurrence. Suppose it were found, by observing the births and deaths of 1,000,000 individuals taken indiscriminately from among the whole population, that the mean duration of human life was 40 years; we should have but very slender grounds for concluding that this ratio would hold in the case of the next 10, 20, or 50 individuals that are born. Such a number is so small as hardly to admit of the operation of what is called the *law of average*. When a large number of lives is taken, those that exceed the medium term are balanced by those that fall short of it; but when the number is small, there is comparatively little room for the principle of compensation, and the result cannot, therefore, be depended upon.

It is found, by the experience of all countries in which censuses of the population have been taken with considerable accuracy, that the number of male children born is to that of female children in the proportion nearly of 22 to 21. But unless the observations be made on a very large scale, this result will not be obtained. If we look at particular families, they sometimes consist wholly of boys, and sometimes wholly of girls; and it is not possible that the boys can be to the girls of a single family in the ratio of 22 to 21. But when, instead of confining our observations to particular families, or even parishes, we extend them so as to embrace a population of 500,000, these discrepancies disappear, and we find that there is invariably a small excess in the number of males born over the females.

The false inferences that have been drawn from the doctrine of chances, have uniformly, almost, proceeded from generalising too rapidly, or from deducing a rate of probability from such a number of instances as do not give a fair average. But when the instances on which we found our conclusions are sufficiently numerous, it is seen that the most anomalous events, such as suicides, deaths by accidents, the number of letters put into the post-office without any address, &c., form pretty regular series, and consequently admit of being estimated *à priori*.

The business of insurance is founded upon the principles thus briefly stated. Suppose it has been remarked that of *forty* ships, of the ordinary degree of sea-worthiness, employed in a given trade, 1 is annually cast away, the probability of loss will plainly be equal to *one fortieth*. And if an individual wish to insure a ship, or the cargo on board a ship, engaged in this trade, he ought to pay a *premium* equal to the 1-40th part of the sum he insures, exclusive of such an additional sum as may be required to indemnify the insurer for his trouble, and to leave him a fair profit. If the premium exceed this sum, the insurer is overpaid; and if it fall below it, he is underpaid.

Insurances are effected sometimes by societies, and sometimes by individuals, the risk being in either case diffused amongst a number of persons. Companies formed for carrying on the business have generally a large subscribed capital, or such a number of proprietors as enables them to raise, without difficulty, whatever sums may at any time be required to make good losses. Societies of this sort do not limit their risks to small

ships; they, therefore, do not often refuse to insure a large sum upon a ship, a house, a life, &c. The magnitude of their capitals affords them the means of easily defraying a heavy loss; and their premiums being proportioned to their risks, their profit is, at an average, independent of such contingencies.

Individuals, it is plain, could not act in this way, unless they were possessed of very large capitals; and besides, the taking of large risks would render the business so hazardous, that few would be disposed to engage in it. Instead, therefore, of insuring a large sum, as 20,000*l.*, upon a single ship, a private underwriter or insurer may not, probably, in ordinary cases, take a greater risk than 200*l.* or 500*l.*; so that, though his engagements may, when added together, amount to 20,000*l.*, they will be diffused over from 40 to 100 ships; and supposing 1 or 2 ships to be lost, the loss would not impair his capital, and would only lessen his profits. Hence it is, that while one transaction only may be required in getting a ship insured by a company, 10 or 20 separate transactions may be required in getting the same thing done at Lloyd's, or by private individuals. When conducted in a cautious manner, the business of insurance is as safe a line of speculation as any in which individuals can engage.

To establish a policy of insurance on a fair foundation, or in such a way that the premiums paid by the insured shall exactly balance the risks incurred by the insurers, and the various necessary expenses to which they are put, including, of course, their profit, it is necessary, as previously remarked, that the experience of the risks should be pretty extensive. It is not, however, at all necessary, that either party should inquire into the circumstances that lead to those events that are most commonly made the subject of insurance. Such a research would, indeed, be entirely fruitless: we are, and must necessarily continue to be, wholly ignorant of the causes of their occurrence.

It appears, from the accounts given by Mr. Scoresby, in his valuable work on the Arctic Regions, that of 586 ships which sailed from the various ports of Great Britain for the northern whale fishery, during the 4 years ending with 1817, 8 were lost — (vol. ii. p. 131.), — being at the rate of about 1 ship out of every 73 of those employed. Now, supposing this to be about the average loss, it follows that the premium required to insure against it should be 1*l.* 7*s.* 4*d.* per cent., exclusive, as already observed, of the expenses and profits of the insurer. Both the insurer and the insured would gain by entering into a transaction founded on this fair principle. When the operations of the insurer are extensive, and his risks spread over a considerable number of ships, his profit does not depend upon chance, but is as steady, and may be as fairly calculated upon, as that of a manufacturer or a merchant; while, on the other hand, the individuals who have insured their property have exempted it from any chance of loss, and placed it, as it were, in a state of absolute security.

It is easy, from the brief statement now made, to perceive the immense advantage resulting to navigation and commerce from the practice of marine insurance. Without the aid that it affords, comparatively few individuals would be found disposed to expose their property to the risk of long and hazardous voyages; but by its means insecurity is changed for security, and the capital of the merchant, whose ships are dispersed over every sea, and exposed to all the perils of the ocean, is as secure as that of the agriculturist. He can combine his measures and arrange his plans as if they could no longer be affected by accident. The chances of shipwreck, or of loss by unforseen occurrences, enter not into his calculations. He has purchased an exemption from the effects of such casualties; and applies himself to the prosecution of his business with that confidence and energy which nothing but a feeling of security can inspire. "Les chances de la navigation entravaient le commerce. Le système des assurances a paru; il a consulté les saisons; il a porté ses regards sur la mer; il a interrogé ce terrible élément; il en a jugé l'inconstance; il en a pressenti les orages: il a épié la politique: il a reconnu les ports et les côtes des deux mondes; il a tout soumis à des calculs savans, à des théories approximatives; et il a dit au commerçant habile, au navigateur intrépide: certes, il y a des désastres sur lesquels l'humanité ne peut que gémir; mais quant à votre fortune, allez, franchissez les mers, déployez votre activité et votre industrie; je me charge de vos risques. Alors, Messieurs, s'il est permis de le dire, les quatre parties du monde se sont rapprochées. — (*Code de Commerce, Exposé des Motifs*, liv. ii.)

Besides insuring against the perils of the sea, and losses arising from accidents caused by the operation of natural causes, it is common to insure against enemies, pirates, thieves, and even the fraud, or, as it is technically termed, *barratry*, of the master. The risk arising from these sources of casualty being extremely fluctuating and various, it is not easy to estimate it with any considerable degree of accuracy; and nothing more than a rough average can, in most cases, be looked for. In time of war, the fluctuations in the rates of insurance are particularly great: and the intelligence that an enemy's squadron, or even a single privateer, is cruising in the course which the ships bound to or returning from any given port usually follow, causes an instantaneous rise in the premium. The appointment of convoys for the protection of trade during war, necessarily tends, by

lessening the chances of capture, to lessen the premium on insurance. Still however the risk in such periods is, in most cases, very considerable; and as it is liable to change very suddenly, great caution is required on the part of the underwriters.

Provision may also be made, by means of insurance, against loss by fire; and almost all the casualties to which property on land is subject.

But, notwithstanding what has now been stated, it must be admitted, that the advantages derived from the practice of insuring against losses by sea and land are not altogether unmixed with evil. The security which it affords tends to relax that vigilant attention to the protection of property which the fear of its loss is sure otherwise to excite. This, however, is not its worst effect. The records of our courts, and the experience of all who are largely engaged in the business of insurance, too clearly prove that ships have been repeatedly sunk, and houses burned, in order to defraud the insurers. In despite, however, of the temptation to inattention and fraud which is thus afforded, there can be no doubt that, on the whole, the practice is, in a public as well as private point of view, decidedly beneficial. The frauds that are occasionally committed raise, in some degree, the rate of insurance. Still it is exceedingly moderate; and it is most probable, that the precautions adopted by the insurance offices for the prevention of fire, especially in great towns, where it is most destructive, outweigh the chances of increased conflagration arising from the greater tendency to carelessness and crime.

The business of life insurance has been carried to a far greater extent in Great Britain than in any other country, and has been productive of the most beneficial effects. Life insurances are of various kinds. Individuals without any very near connections, and possessing only a limited fortune, are sometimes desirous, or are sometimes, from the necessity of their situation, obliged, annually to encroach on their capitals. But should the life of such persons be extended beyond the ordinary term of existence, they might be totally unprovided for in old age; and to secure themselves against this contingency they pay to an insurance company the whole or a part of their capital, on condition of its guaranteeing them, as long as they live, a certain annuity, proportioned partly, of course, to the amount of the sum paid, and partly to their age when they buy the annuity.

But though sometimes serviceable to individuals, it may be questioned whether insurances of this sort are, in a public point of view, really advantageous. So far as their influence extends, its obvious tendency is to weaken the principle of accumulation; to stimulate individuals to consume their capitals during their own life, without thinking or caring about the interest of their successors. Were such a practice to become general it would be productive of the most extensively ruinous consequences. The interest which most men take in the welfare of their families and friends affords, indeed, a pretty strong security against its becoming injuriously prevalent. There can, however, be little doubt that this selfish practice may be strengthened by adventitious means; such, for example, as the opening of government loans in the shape of life annuities, or in the still more objectionable form of tontines. But when no extrinsic stimulus of this sort is given to it, there do not seem to be any very good grounds for thinking that the sale of annuities by private individuals or associations can materially weaken the principle of accumulation.

Luckily, however, the species of insurance now referred to is but inconsiderable compared with that which has accumulation for its object. All professional persons, or those living on salaries or wages, such as lawyers, physicians, military and naval officers, clerks in public or private offices, &c., whose incomes must, of course, terminate with their lives, and a host of others, who are either not possessed of capital, or cannot dispose of their capital at pleasure, must naturally be desirous of providing, so far as they may be able, for the comfortable subsistence of their families in the event of their death. Take, for example, a physician or lawyer, without fortune, but making, perhaps, 1,000*l.* or 2,000*l.* a year by his business; and suppose that he marries and has a family: if this individual attain to the average duration of human life, he may accumulate such a fortune as will provide for the adequate support of his family at his death. But who can presume to say that such will be the case? — that he will not be one of the many exceptions to the general rule? — And suppose that he were hurried into an untimely grave, his family would necessarily be destitute. Now, it is against such calamitous contingencies that life insurance is intended chiefly to provide. An individual possessed of an income terminating at his death, agrees to pay a certain sum annually to an insurance office; and this office binds itself to pay to his family, at his death, a sum equivalent, under deduction of the expenses of management and the profits of the insurers to what these annual contributions, accumulated at compound interest, would amount to, supposing the insured to reach the common and average term of human life. Though he were to die the day after the insurance has been effected, his family would be as amply provided for as it is likely they would be by his accumulations were his life of the ordinary duration. In all cases, indeed, in which those insured die before attaining to an average age, their gain is obvious. But even in those cases in which their live

are prolonged beyond the ordinary term, they are not losers — they then merely pay for a security which they must otherwise have been without. During the whole period, from the time when they effect their insurances, down to the time when they arrive at the mean duration of human life, they are protected against the risk of dying without leaving their families sufficiently provided for; and the sum which they pay after having passed this mean term is nothing more than a fair compensation for the security they previously enjoyed. Of those who insure houses against fire, a very small proportion only have occasion to claim an indemnity for losses actually sustained; but the possession of a security against loss in the event of accident, is a sufficient motive to induce every prudent individual to insure his property. The case of life insurance is in no respect different. When established on a proper footing, the extra sums which those pay whose lives exceed the estimated duration is but the value of the previous security.

In order so to adjust the terms of an insurance that the party insuring may neither pay too much nor too little, it is necessary that the probability of his life failing in each subsequent year should be determined with as much accuracy as possible.

To ascertain this probability, various observations have been made in different countries and periods, showing, out of a given number of persons born in a particular country or place, how many complete each subsequent year and how many die in it, till the whole be extinct. The result of such observations, when collected and arranged in a tabular form, are called Tables of Mortality; being entitled, of course, to more or less confidence, according to the number and species of lives observed; the period when, and the care with which, the observations were made, &c. But, supposing these Tables to be formed with sufficient accuracy, the expectation of life at any age, or its mean duration after such age, may be readily learned from them; and hence, also, the value of an annuity, or an assurance on a life of any age. Thus, in the Table of Mortality for Carlisle, framed by Mr. Milne, of the Sun Life Office, and which is believed to represent the average law of mortality in England with very considerable accuracy, out of 10,000 persons, born together, 4,000 complete their 56th year; and it further appears, that the number of such persons who die in their 66th year is 124; so that the probability that a life now 56 years of age will terminate in the 10th year hence is $\frac{124}{4,000}$. But reckoning interest at 4 per cent., it appears (Table II. Interest and Annuities), that the present value of 100*l.* to be received 10 years hence is 67·556*l.*; consequently, if its receipt be made to depend upon the probability that a life now 56 years of age will fail in the 66th year, its present value will be reduced by that contingency to $\frac{124 \times 67{\cdot}566l.}{4,000} = 2{\cdot}094l.$, or 2*l.* 1*s.* 10½*d.* The present value of 100*l.* receivable upon the life of a party now 56 years of age terminating in the 57th or any subsequent year of his life, up to its extreme limit (which, according to the Carlisle Table, is the 105th year), being calculated in this way, the sum of the whole will be the present value of 100*l.* receivable whenever the life may fail, that is, of 100*l.* insured upon it, supposing no additions were made to it for the profits and expenses of the insurers.

More compendious processes are resorted to for calculating Tables of insurances at all ages; but the above statement sufficiently illustrates the principle on which they all depend. In practice, a life insurance is seldom made by the payment of a single sum when it is effected, but almost always by the payment of an *annual premium* during its continuance, the first being paid down at the commencement of the insurance.* If the Table of Mortality adopted by the insurers fairly represent the law of mortality prevailing among the insured, it follows that when a party insured does not attain to the average age according to the Table, the insurers will either lose by him, or realise less than their ordinary profit; and when, on the other hand, the life of an insured party is prolonged beyond the tabular average, the profits of the insurers are proportionally increased. But if their business be so extensive as to enable the law of average fully to apply, what they lose by premature death will be balanced by the payments received from those whose lives are prolonged beyond the mean duration of life for the ages at which they were respectively insured; so that the profits of the society will be wholly independent of chance.

The relief from anxiety afforded by life insurance very frequently contributes to prolong the life of the insured, at the same time that it materially augments the comfort and well-being of those dependent on him. It has, also, an obvious tendency to strengthen habits of accumulation. An individual who has insured a sum on his life, would forfeit all the advantages of the insurance, were he not to continue regularly to make his annual payments. It is not, therefore, optional with him to save a sum from his ordinary expenditure adequate for this purpose. He is compelled, under a heavy penalty, to do so; and having thus been led to contract a habit of saving to a certain extent, it is most probable that the habit will acquire additional strength, and that he will either insure an additional sum, or privately accumulate.

* For the method of calculating these annual premiums, see *post*, Interest and Annuities.

The practice of marine insurance, no doubt from the extraordinary hazard to which property at sea is exposed, seems to have long preceded insurances against fire and upon lives. We are ignorant of the precise period when it began to be introduced; but it appears most probable that it dates from the end of the fourteenth or the beginning of the fifteenth century. It has, however, been contended by Loccenius (*De Jure Maritimo*, lib. ii. c. 1.), Puffendorff (*Droit de la Nature et des Gens*, lib. v. c. 9.), and others, that the practice of marine insurance is of much higher antiquity, and that traces of it may be found in the history of the Punic wars. Livy mentions, that during the second of these contests, the contractors employed by the Romans to transport ammunition and provisions to Spain, stipulated that government should indemnify them against such losses as might be occasioned by the enemy, or by tempests, in the course of the voyage. — (*Impetratum fuit, ut quæ navibus imponerentur ad exercitum Hispaniensem deferenda, ab hostium tempestatisque vi, publico periculo essent.* — Hist. lib. xxiii. c. 49.) Malynes (*Lex Mercatoria*, 3d ed. p. 105.), founding on a passage in Suetonius ascribes the first introduction of insurance to the emperor Claudius, who, in a period of scarcity at Rome, to encourage the importation of corn, took upon himself all the loss or damage it might sustain in the voyage thither by storms and tempests. — (*Negotiatoribus certa lucra proposuit, suscepto in se damno, si cui quid per tempestates accidisset, et naves mercaturæ causâ, fabricantibus, magna commoda constituit.* — c. 18.) It is curious to observe that this stipulation gave occasion to the commission of acts of fraud, similar to those so frequent in modern times. Shipwrecks were pretended to have happened, that never took place; old shattered vessels, freighted with articles of little value, were purposely sunk, and the crew saved in boats: large sums being then demanded as a recompence for the loss. Some years after, the fraud was discovered, and some of the contractors were prosecuted and punished. — (Lib. xxv. c. 3.) But none of these passages, nor a similar one in Cicero's letters — (*Ad Fam.* lib. ii. c. 17.), warrant the inferences that Loccenius, Malynes, and others have attempted to draw from them. Insurance is a contract between two parties; one of whom, on receiving a certain premium (*pretium periculi*), agrees to take upon himself the risk of any loss that may happen to the property of the other. In ancient no less than in modern times, every one must have been desirous to be exonerated from the chance of loss arising from the exposure of property to the perils of the sea. But though, in the cases referred to, the carriers were exempted from this chance, they were not exempted by a contract *propter aversionem periculi*, or by an insurance; but by their employers taking the risk upon themselves. And it is abundantly obvious that the object of the latter in doing this was not to profit, like an insurer, by dealing in risks, but to induce individuals the more readily to undertake the performance of an urgent public duty.

But with the exception of the instances now mentioned, nothing bearing the remotest resemblance to an insurance is to be met with till a comparatively recent period. If we might rely on a passage in one of the Flemish chroniclers, quoted by the learned M. Pardessus — (see his excellent work, *Collection des Loix Maritimes*, tome i. p. 356.), we should be warranted in concluding that insurances had been effected at Bruges so early as the end of the thirteenth century: for the chronicler states that, in 1311, the Earl of Flanders consented, on a requisition from the inhabitants, to establish a chamber of insurance at Bruges. M. Pardessus is not, however, inclined to think that this statement should be regarded as decisive. It is evident, from the manner in which the subject is mentioned, that the chronicler was not a contemporary; and no trace can be found, either in the archives of Bruges, or in any authentic publication, of any thing like the circumstance alluded to. The earliest extant Flemish law as to insurance is dated in 1537; and none of the early maritime codes of the North so much as alludes to this interesting subject.

Beckmann seems to have thought that the practice of insurance originated in Italy in the latter part of the fifteenth or the early part of the sixteenth century. — (*Hist. of Invent.* vol. i. art. *Insurance.*) But the learned Spanish antiquary, Don Antonio de Capmany, has given, in his very valuable publication on the History and Commerce of Barcelona (*Memorias Historicas sobre la Marina, &c. de Barcelona*, tomo ii. p. 383.), an ordinance relative to insurance, issued by the magistrates of that city in 1435; whereas the earliest Italian law on the subject is nearly a century later, being dated in 1523. It is, however, exceedingly unlikely, had insurance been as early practised in Italy as in Catalonia, that the former should have been so much behind the latter in subjecting it to any fixed rules; and it is still more unlikely that the practice should have escaped, as is the case, all mention by any previous Italian writer. We, therefore, agree entirely in Capmany's opinion, that, until some authentic evidence to the contrary be produced, Barcelona should be regarded as the birthplace of this most useful and beautiful application of the doctrine of chances. — (Tom. i. p. 237.)

A knowledge of the principles and practice of insurance was early brought into England. According to Malynes — (*Lex Mercat.* p. 105.), it was first practised amongst

us by the Lombards, who were established in London from a very remote epoch. It is probable it was introduced some time about the beginning of the sixteenth century; for it is mentioned in the statute 43 Eliz. c. 12., in which its utility is very clearly set forth, that it had been an *immemorial usage* among merchants, both English and foreign, when they made any great adventure, to procure insurance to be made on the ships or goods adventured. From this it may reasonably be supposed that insurance had been in use in England for at least a century previous. It appears from the same statute, that it had originally been usual to refer all disputes that arose with respect to insurances to the decision of "grave and discreet" merchants appointed by the Lord Mayor. But abuses having grown out of this practice, the statute authorised the Lord Chancellor to appoint a commission for the trial of insurance cases; and in the reign of Charles II. the powers of the commissioners were enlarged. But this court soon after fell into disuse; and, what is singular, no trace can now be discovered of any of its proceedings. — (*Marshall on Insurance*, Prelim. Disc. p. 26.)

Few questions as to insurance seem to have come before the courts at Westminster till after the middle of last century. The decisions of Lord Mansfield may, indeed, be said to have fixed, and in a considerable degree formed, the law upon this subject. His judgments were not bottomed on narrow views, or on the municipal regulations of England; but on those great principles of public justice and convenience which had been sanctioned and approved by universal experience. His deep and extensive information was acquired by consulting the most intelligent merchants, and the works of distinguished foreign jurists; and by carefully studying the famous French ordinance of 1681, the most admirably digested body of maritime law of which any country has ever had to boast. Hence the comprehensiveness and excellence of his Lordship's decisions, and the respect they have justly commanded in all countries.* In his hands the law of insurance became, in a far greater degree than any other department of English law, a branch of that national or public law, of which Cicero has beautifully said, "*Non erit alia lex Romæ, alia Athenis, alia nunc, alia posthac, sed et omnes gentes et omni tempore una lex et sempiterna, et immortalis continebit, unusque erit communis quasi magister et imperator omnium Deus.*" — (*Fragm.* lib. iii. *de Republicâ.*)

Insurance against fire and upon lives is of much later origin than insurance against the perils of the sea. The former, however, has been known and carried on amongst us, to some extent at least, for nearly a century and a half. The Amicable Society, for insurance upon lives, was established by charter of Queen Anne, in 1706; the Royal Exchange and London Assurance Companies began to make insurances upon lives in the reign of George I.; and the Equitable Society was established in 1762. But the advantages of life insurance, and the principles on which the business should be conducted, were then very ill understood; and the practice can hardly be said to have obtained any firm footing amongst us, till the Equitable Society, by adopting the judicious suggestions of Dr. Price, began its career of prosperity about 1775. Notwithstanding the example of England, life insurance has made comparatively little progress on the Continent. It was, indeed, expressly forbidden by the French ordinance of 1681 (liv. iii. tit. 6. art. 10.) by the regulations as to insurance issued at Amsterdam in 1612 (art. 24.); and it is doubtful whether the practice be not inconsistent with the 334th art. of the *Code de Commerce*, though it be now extensively carried on in France. But we are inclined to think that the want of security, more than any positive regulations, has been the principal cause of the little progress of life insurance on the Continent. Of whatever disadvantages our large public debt may be productive, it is not to be doubted that the facilities it has afforded for making investments, and the punctuality with which the national engagements have been fulfilled, have been the principal causes of the extraordinary extent to which the business of life and even fire insurance has been carried in this country.

II. Insurance (Marine).

There are few persons who are not acquainted, in some degree, with fire and life insurances. The security which they afford to individuals and families is a luxury which nobody, in tolerably comfortable circumstances, is willing to be without. Hence the great increase, in our days, of companies professing to afford this security; and hence the knowledge, on the part of the public generally, of the nature and principles of the engagements into which these companies enter. But marine insurance is a subject which is of immediate interest only to merchants and ship owners; unless, indeed, we should refer to that small portion of the community, who have occasion to transport themselves beyond seas with capital and effects for purposes of colonisation, or to fill some official situation. Hence the comparative indifference, on the part of the public, as to this subject. The general principles, however, of all insurance are the same; and in treating of marine insurance, it will be necessary to notice little beyond such topics as are peculiar to that branch of the business.

Individual Insurers or Underwriters. — The first circumstance that cannot fail to strike the general inquirer into the practice of marine insurance in this country, is that, while all fire and life insurances are made at the risk of companies, which include within themselves the desirable requisites of security, wealth, and numbers, a large proportion of marine insurances is made at the risk of individuals.

Prohibition of Companies. — Till 1824, all firms and companies, with the exception of the 2 chartered

* See Emerigon's famous *Traité des Assurances*, tome ii. p. 67.

companies, the Royal Exchange and London, were prohibited by law from taking marine insurances. Towards the latter end of that year, the prohibition was removed, and the business of marine insurance was placed on the same legal footing as other descriptions of business. While the restriction lasted, the 2 chartered companies did so little business, that marine insurance might, in fact, be said to be wholly in the hands of individuals. These companies were so much higher in their premiums, and so much more exclusive in the risks they were willing to undertake, than their individual competitors, that even those merchants and ship owners, who would cheerfully have paid some trifling consideration to obtain the greater security of a company, were obliged to resort to individuals. And it was only when the repeal of this absurd restriction was proposed, that the companies showed, by defending it, that they set any value upon their privilege. The underwriters at Lloyd's joined them in this opposition; and pamphlets were written and speeches made, to demonstrate how much merchants and ship owners would suffer, were the law to allow them the free use of their discretion in insuring their property; and how much more conducive to their interests it was, that they should be forced up to Lloyd's, to pay premiums to individuals rather than companies. But these pamphlets and speeches are forgotten; and we should be sorry to wound the feelings of their authors, or to trespass on the patience of our readers, by referring to them more particularly.

Formation of Companies. — There are at present 7 marine insurance companies in London; viz., the two old chartered companies, the *Royal Exchange* and *London*; two established immediately upon the passing of the act of the year 1824, the *Alliance* and the *Indemnity Mutual*; the *Marine*, established in 1836; and the *General Maritime* and *Neptune*, established in 1839. These companies number among their proprietors or shareholders some of the most eminent merchants and ship owners of the city of London, who have united for the double purpose of providing a more perfect security for their property, and of ascertaining whether the insurance business might not be made to yield a fair return to the capital employed in it.

It may be computed that these 7 companies draw to themselves more than half the marine insurance business effected in London; and as several similar companies have also been formed since 1824 in different parts of the kingdom, it may be inferred, when due allowance is made for the difficulties to be combated in breaking through established modes and habits of doing business, that the tendency in the public is practically to confirm what antecedent investigation would suggest, — that companies, while they must necessarily hold out better security, and greater liberality and punctuality in the settlement of claims, are capable of transacting a given amount of business with a saving both of labour and expense.

Mode of conducting Business. — We shall now give an account of the existing arrangements for conducting the business of marine insurance, as well by individuals as the companies in London.

Lloyd's. — The individual underwriters meet in a subscription room at Lloyd's. The joint affairs of the subscribers to these rooms are managed by a committee chosen by the subscribers. Agents (who are commonly styled Lloyd's agents) are appointed in all the principal ports of the world, who forward, regularly, to Lloyd's, accounts of the departures from and arrivals at their ports, as well as of losses and other casualties; and, in general, all such information as may be supposed of importance towards guiding the judgments of the underwriters. These accounts are regularly filed, and are accessible to all the subscribers. The principal arrivals and losses are, besides, posted in 2 books, placed in 2 conspicuous parts of the room; and also in another book, which is placed in an adjoining room, for the use of the public at large.

The rooms are open from 10 o'clock in the morning till 5 o'clock in the afternoon, but the most considerable part of the business is transacted between 1 and 4. Those merchants and ship owners who manage their own insurance business, procure blank policies at the government office, or of their stationers, which they fill up so as to meet the particular object in view, and submit them to those underwriters with whom they are connected; by whom they are subscribed or rejected. Each policy is handed about in this way until the amount required is complete. The form of the policy and of a subscription is subjoined to this article.

The premium is not paid to the underwriter in ready money, but is passed to account. Nor does the underwriter debit the account of the person to whom he subscribes a policy with the whole amount of the premium, but with the premium less 5 per cent. Whenever losses occur which more than absorb the premiums on any one account, the underwriter is called upon to pay the balance. But should the underwriter's account be what is called good, that is, should the premiums exceed the claims, he sends round, during the spring and summer, to collect from his various debtors either the balance of his last year's account, or money on account, according to his judgment; but, upon what he receives, he makes an allowance of 12 per cent. An underwriter, if prudent, therefore, before he consents to receive, will not only look to the goodness of his account, but to the probability of its continuing so.

Insurance Brokers. — Many merchants and shipowners do not transact their own insurance business. They give their orders for insurance to others, who undertake it for them, and are responsible for its proper management. These latter persons are called insurance brokers; and some of them manage the business of a number of principals. To them, likewise, are transmitted the orders for insurance from the outports and manufacturing towns. They charge the whole premium to their principals, and their profit consists in 5 per cent. upon the premium, 12 per cent. upon the money that they pay to the underwriters, and ½ per cent. that they deduct from all the claims which they recover from the underwriters. It is proper to remark, that this is the established or regular profit; but competition has occasioned numerous deviations from it by the brokers, many of whom consent to divide this profit with the principals who employ them. The insurance brokers are not unfrequently underwriters also; and as some insurances are considered far more lucrative than others to underwriters, and as the brokers have particular facilities, in some respects, of judging of the goodness of their own risks, so likewise have they an inducement to play into one another's hands, and they do so accordingly. — (See BROKERS.)

It will at once be seen, that the trouble of effecting insurances at Lloyd's is considerable; that a good deal of time must be consumed; and that merchants and ship owners, therefore, have great inducement to consign their insurance business to brokers. But where the business is transacted with a company, this

is insured; the premium being agreed upon, the name which the party signs, and he is thus effectually insured. The companies procure the stamp and write out the policy, which is ready for delivery in 4 or 5 days. The companies, like the underwriters, charge the premium less 5 per cent. In other respects they vary. They allow 12 per cent. upon the profitable balance of each year's premiums with credit till March or June; or 10 per cent. for prompt payment.

Payment of Losses. — Losses are paid at all the offices promptly, and without deduction. A month's credit is allowed to the underwriters: and another month, and sometimes 2 months, are given to the broker, to collect from the underwriters, and pay over to his principals.

Clubs. — Beside the individual underwriters and companies above noticed, there are clubs or associations formed by ship owners, who agree each entering his ships for a certain amount, to divide among themselves one another's losses. These clubs are institutions of long standing; but, since the alteration of the law in 1824, appear to be on the decline. Their formation originated in a twofold reason: 1st, that the underwriters charged premiums more than commensurate with the risk; and, 2dly, that they did not afford adequate protection. To avoid the first of these two evils, instead of paying a fixed premium,

issues a policy for each ship, which policy is subscribed by him as attorney for all the members, the premium inserted in the policy being understood to be nominal. These clubs are open to the leading objections that apply to individual underwriters; for the members are not collectively, but only individually, liable to those of their number who happen to sustain a loss; and the delay of settlement is such, that more than 12 months have been known to elapse before the payment of a loss has been obtained from all the members.

Rate of Premium. — But little need be said upon the circumstances that influence the rate of premium demanded by the insurers. It must be self-evident that premiums will vary according to the seasons, the quality of the vessel, the known character of the captain, the nature of the commodity, and the state of our political relations. All these, of course, are matters upon which each individual must exercise his own discretion, partly from general experience, and partly from particular information; exaggeration of risk, and consequent exorbitancy of premium for any length of time, being out of the question, where so many individual underwriters, in addition to the companies, are in competition with one another, and where the merchants have the means at hand of effecting their insurances abroad. We have already taken notice of the intelligence of which Lloyd's is the focus. In addition to this, there is a subscription register book for shipping maintained by the principal merchants, ship owners, and underwriters. This book professes to give an account of the tonnage, build, age, repairs, and quality of almost all the vessels that frequent our ports; and, although exceedingly defective in many respects, is a material assistance to the insurers, who have no means of ascertaining by their own observation the particulars of 1 in 100 of the ships they are called upon to insure.

Contract of Insurance.

Having thus given a general outline of the mode of transacting business between the insurers and insured, and the means used to enable both parties to come, as near as possible, to a due estimate of the risk to be insured against, our next step will be to explain the nature of the contract, and the bearing of its more important clauses.

It is unnecessary to state that the object of those who are engaged in commerce, or in moving articles of merchandise from one part of the world to another, is to *buy* at such a price that, after paying all the expenses of transport, the *sale* price may leave them a surplus in the shape of profit. If there were no such contrivance as insurance, merchants would be obliged to calculate upon the probability of the occasional loss of their property, and to regulate their transactions accordingly; but it must be obvious that enterprise, under such circumstances, would be very much crippled. Now, insurance, in as far as it approaches perfection in guaranteeing the merchant against all loss, except that of the market, substitutes a fixed charge for uncertain and contingent loss, and enables him to confine his attention exclusively to price and quality, and to charges of transport; in which latter, of course, the premium of insurance is included. As, however, in practice, insurance is by no means a perfect protection, either to the merchant or ship owner, against all loss that may occur *in transitu*, there is, even after insurance, some contingencies remaining to be taken into consideration: and we do not know that we can do better, by way of explaining the contract of insurance, than state, as briefly and succinctly as possible, what are the losses against which the merchant and ship owner are not protected by an insurance effected in this country.

1. *Acts of our own Government.* — All losses arising from the acts of our own government. Thus, if an embargo were laid on vessels about to sail for a particular quarter, and the merchant obliged to unload his goods; or if his goods were condemned to be destroyed in quarantine; or purposely destroyed at sea by some of our cruisers; no part of his loss would be made good by the insurer. The insurer in this country, although liable for the acts of foreign powers, is not liable for such acts directed against the property of their own subjects. Thus, if French property, insured in this country, were confiscated by the French government, the owner would have no remedy against his insurer.

2. *Breaches of the Revenue Laws.* — All losses arising from a breach of the revenue laws. It may be observed, that if the owner of the ship, by his act, expose the goods of the merchant to loss, the merchant so injured, although he cannot recover from his insurers, may claim from him. It may also be observed, that if the captain of the vessel, by his act, to which neither the owner of the ship nor the merchant is a party, expose the ship and cargo to loss, the insurers, in such case, are bound to make good the loss; the insurers being liable for all damage arising from illegal acts of the captain and crew, supposing the owner of the ship not to be accessory. The illegal acts of the captain and crew, contrary to the instructions and without the consent of the owners, are termed "barratry" in the policy. — (See Barratry.)

3. *Breaches of the Law of Nations.* — All losses arising from a breach of the law of nations. Thus, if any port is declared by a foreign power to be in a state of blockade, and such blockade is acknowledged by our government; and if a ship, in defiance of that notification, attempt to break the blockade, and is taken in the attempt; the insurer is not liable to the loss. It will often happen, when a port is under blockade, that the profit is so great upon goods introduced in defiance of the blockade, as to tempt adventurers to break it, and to enable them to afford a very high premium to insure against the risk. But as policies for such an object are not acknowledged in our courts of law, when effected, they are understood to be *policies of honour*. The same kind of policy is adopted by the underwriters, to protect foreign merchants who prefer insuring in this country against British capture.

4. *Consequences of Deviation.* — All losses subsequent to any deviation from the terms of the policy. Thus, if a merchant, in a policy on produce from the West Indies to London, warrant the ship to sail on or before the 1st of August, and the ship sail after that day and be lost, the insurer is exonerated. Or, if a merchant insure from London to Lisbon, and the ship call at Havre and is afterwards lost, the insurer is not liable. It will be understood, of course, that the owner of the ship is liable to the merchant for any breach of contract on his part, as well as that the insurer is liable for the barratry of the master; a deviation on the part of the master, not intended for the benefit of the owner, and contrary to his instructions, being considered barratry. Should the owner of the goods neglect to describe accurately the voyage for which he wishes to be insured, the loss would be a consequence of his own negligence.

There is a doctrine connected with barratry which it will here be proper to notice. A captain, owner or part owner of the ship in which he sails, cannot commit an act of barratry. In other words, the insurers are not, in such a case, liable for an act of his which would otherwise be barratrous. The equity of this doctrine, as far as regards the interests of the captain himself, cannot be called in question; but it is difficult to understand why the merchant who ships goods on board such a captain's vessel should not be permitted to insure, among other risks, against the captain's illegal acts. We have heard that a clause has occasionally been introduced into policies to protect merchants against captain-owners, and we do not suppose that our courts of law would refuse to enforce such a clause. Indeed, we cannot discover any reason why every party, saving the captain, should not have the power of insuring against the [illegible]. We believe, that among the life offices which protect themselves in favour of [illegible] of such a distinction must strike every body.

5. *Unseaworthiness.* — All losses arising from unseaworthiness. Unseaworthiness may be caused in various ways, such as want of repair, want of stores, want of provisions, want of nautical instruments, insufficiency of hands to navigate the vessel, or incompetency of the master. It might be supposed, at first sight, that insurance affords a much less perfect security than it really does, seeing on how many pleas it is possible for the insurer to dispute his liability; but when it is considered that the proof of unseaworthiness is thrown upon the defendant, and that the leaning of the courts is almost always in favour of [illegible] it will be easy to suppose that no respectable insurers would ever plead unseaworthiness,

unless they could make out a case of more than ordinary strength and clearness. The degree of uneasiness felt by merchants and ship owners at their liability to be involved in loss by cases of unseaworthiness, may be guessed from the fact that although the Indemnity Assurance Company at one time precluded themselves from pleading unseaworthiness by a special clause in their policy, not only did they obtain no additional premium in consequence thereof, but they did not even obtain a preference over other companies and individuals at the same premium. At least, this fact must either be admitted as a proof of the absence of uneasiness on this head, or of that inveteracy of habit which seems to lead the great bulk of mankind always, if possible, to continue undeviatingly in those courses to which they are accustomed, even where the benefits to be derived from a deviation are undeniable.

6. *Protraction of the Voyage.* — All loss arising from unusual protraction of the voyage. Thus, if a ship meet with an accident in the Baltic, and the repairs detain the vessel till the close of the season, when the passage home is rendered impracticable by the ice till the opening of the ensuing season, no payment is made to the merchant, in mitigation of his loss from interest of money, loss of market (if the market fall), or deterioration in the quality of his goods (unless arising from actual sea damage); nor to the ship owner, in mitigation of his loss from the extra wages and maintenance of his crew. In most foreign countries the ship owner is remunerated by the insurers for the wages and maintenance of his crew while his ship is detained in consequence of any loss for the making good of which they are liable.

7. *Liability for doing Damage to other Vessels.*—All loss to which the ship owner is liable when his vessel does damage to others. According to our laws, the owner of every ship not in charge of a pilot, that does damage, by negligence of the master and crew, to any description of craft or vessel, is liable to make good the same to the extent of the value of his own ship and freight: for beyond this he is not liable. The common policy in use among the underwriters at Lloyd's and the companies does not protect the ship owner from this loss. But the clubs or associations before mentioned almost universally take this risk. Indeed, this is one of the purposes which gave rise to their formation. But even they limit their liability to the amount of the policy; so that if a ship insured with them were to run down another, and to sink herself in the concussion, the owner would only receive the value of his own vessel from the club, and still be liable to the owner of the other vessel. The Indemnity and Marine Companies, by a clause in their policies, make themselves liable for 3-4ths of the loss which the owner of the vessel insured with them may sustain from damage done by his vessel to those of others. If such a case as the one just supposed should occur under their policy, the insured would receive the value of his own vessel and 3-4ths of the loss to be made good by him to the owner of the other vessel. The policies of these Companies approach in this respect the nearest of any to perfect protection to the ship owner. But the loss from running down other vessels, although serious, nay sometimes ruinous, seldom occurs; and many ship owners trust so confidently that it will never fall upon them, that they are as well satisfied to be without as with this protection.

8. *Average Clause.* — The next description of loss of which we shall treat, against which the insured are not protected, is described in the following clause of the policy: — "Corn, fish, salt, seed, flour, and fruit, are warranted free from average, unless general, or the ship be stranded; sugar, tobaco, hemp, flax, hides, and skins are warranted free from average under 5 per cent., unless general, or the ship be stranded; and all other goods, also the ship and freight, are warranted free from average under 3 per cent., unless general, or the ship be stranded."

The language employed in this clause, being technical, requires explanation, to render it intelligible to the general reader. Average is a name applied to certain descriptions of loss, to which the merchant and ship owner are liable. There are two kinds of average, general and particular.

General Average comprehends all loss arising out of a voluntary sacrifice of a part of either vessel or cargo, made by the captain for the benefit of the whole. Thus, if a captain throw part of his cargo overboard, cut from an anchor and cable, or cut away his masts; the loss so sustained, being voluntarily submitted to for the benefit of the whole, is distributed over the value of the whole ship and cargo, and is called "general average."

Particular Average comprehends all loss occasioned to ship, freight, and cargo, which is not of so serious a nature as to debar them from reaching their port of destination, and when the damage to the ship is not so extensive as to render her unworthy of repair. Losses where the goods are saved, but in such a state as to be unfit to forward to their port of destination, and where the ship is rendered unfit to repair, are called "partial or salvage loss." The leading distinction, between particular average and salvage loss is, that, in the first, the property insured remains the property of the assured — the damage sustained, or part thereof, as the case may be, and as will be hereafter explained, being made good by the insurer; and in the second, the property insured is abandoned to the insurer, and the value insured claimed from him, he retaining the property so abandoned, or its value.

Particular Average on Goods. — A few cases illustrative of the method of stating a claim for particular average will best explain the nature of this description of loss, and will at the same time show the reader what the practical distinction is between particular average and salvage loss.

The property insured we shall suppose to be *a ton of hemp*, the cost of which at Petersburg is 30*l*., for which sum it is insured from Petersburg to London, and that the duty, freight, and charges to which the merchant is subject on landing at London are 10*l*. We shall likewise suppose that the hemp, on its arrival, is so damaged as not to be worth more than half what it would have fetched had it been sound. The insurer would then be called upon to make good to the insured 15*l*., or 50 per cent. upon the sum insured. But it does not follow that this payment of 15*l*. would indemnify the merchant, or that it would not more than indemnify him, for the loss sustained.

	£ s.	£ s.
If the hemp upon arrival in this country would have fetched in a sound state -	50 0	
Less duty, freight, and charges -	10 0	
		40 0
But in its damaged state is only worth -	25 0	
Less duty, freight, and charges -	10 0	
		15 0
The merchant's loss by the damage is -		£25 0

Whereas he only receives from the insurer 15*l*. Upon the principle of a salvage loss he would also receive 15*l*.

	£ s.	£ s.
If the hemp would have fetched in a sound state - - - - -	20 0	
Less duty, freight, and charges -	10 0	
		10 0
But in its damaged state is only w -	10 0	
Less duty, freight, and char -	10 0	
The merchant's loss by the damage is -		£10 0

Whereas he receives from the insurer 15*l*. Upon the principle of a salvage loss he would receive 30*l*.

	£ s.	£ s.
If the hemp would have fetched in a sound state - - -	50 0	
Less duty, freight, and charges -	10 0	
		20 0
But in its damaged state is only worth -	15 0	
Less duty, freight, and charges -	10 0	
		5 0
The merchant's loss by the damage is -		£15 0

And he receives from the insurer 15*l*. Upon the principle of a salvage loss he would receive 25*l*.

It will be observed that the merchant's loss by the damage of his goods varies with the state of the market. It may also be observed, that in general the merchant will not receive from the insurer the whole amount of the loss that he sustains. Whenever his market is a profitable one (and that it must usually be so will be obvious to every body), whenever, indeed, his market is not a decidedly losing one, his policy does not afford him a complete protection.

The argument in favour of this mode of settling claims for particular average — and it should be observed that the subject has been discussed, and the principle acknowledged in the courts of law — is, that the insurer's liability is to be guided by the amount upon which he has received a premium or consideration; that he is not to be affected by the rise or fall of markets; but that the *gross* market price of the *sound*, and the *gross* market price of the *damaged* goods, are to be the test by which the rate of damage upon the amount insured is to be adjusted; the insurer being liable, besides, for all the extra charges arising out of the damage.

In the first case stated, the merchant's loss by damage is 25*l.* upon 40*l.*, or 62½ per cent.; in the second, 10*l.* upon 10*l.* or 100 per cent.; in the third, 15*l.* upon 20*l.* or 75 per cent. If the duty, freight, and charges were diminished in proportion to the diminished value of the goods, the loss in each case would be 50 per cent. upon the nett price, as it is 50 per cent. upon the gross price. As far as the duty is concerned, government, upon many articles, reduces it in proportion to the diminution in the value of the goods; and if the freight were reduced in a similar manner, the merchant would always be indemnified for his loss by the insurer. But the practice with regard to freight in this country admits of no such arrangement; freight being paid according to the quantity delivered.

To make the principle upon which claims for particular average are adjusted, and its bearing, still clearer, we shall illustrate it by a few more cases. Suppose two packages to be insured at cost price — a cask of rice and a cask of sugar — each weighing 10 cwt.; the cost of each at the port of shipment 10*l.*, the freight of each 10*s.* per cwt. at the port of delivery, both articles free from duty, and to arrive at a market where no more than the cost price is realised; assuming that both packages are damaged 50 per cent. — the rice by loss of quality, the sugar by loss of weight — the statement will be as follows: —

	£ s.	£ s.
10 cwt. of rice, had it arrived sound, would have produced	15 0	
Less freight on 10 cwt. at 10*s.* per cwt.	5 0	
		10 0
But being damaged, did only produce	7 10	
Less freight on 10 cwt. at 10*s.* per cwt.	5 0	
		2 10
Merchant's loss		£7 10

	£ s.	£ s.
10 cwt. of sugar, if sound, would have produced	15 0	
Less freight on 10 cwt. at 10*s.* per cwt.	5 0	
		10 0
The barrel, being damaged, did only weigh 5 cwt., and produce	7 10	
Less freight on 5 cwt. at 10*s.* per cwt.	2 10	
		5 0
Merchant's loss		£5 0

In each case the merchant is entitled to recover from his insurer 5*l.*, or 50 per cent., upon 10*l.*, the sum insured, which, although an indemnity to him for his loss on the sugar, is far from being so for his loss upon the rice. If the merchant would contrive so to shape his contract with the ship owner for freight, as to reduce the freight in proportion to the depreciation in the value of the damaged commodity, he would be completely protected. The ship owner might on his side protect himself by insurance from loss by reduction of quality, as he now does from loss by reduction of quantity. But we have already more than once adverted to the difficulty of breaking in upon established practices. The merchants go on from year to year complaining of the losses to which they are subjected from this awkward contrivance, while no steps are taken to improve it. To show that the principle is equitable as between the merchant and his insurer, we subjoin one more statement, where the damage is taken at 100 per cent.

	£ s.	£ s.
10 cwt. of rice, if sound, would have produced	15 0	
Less freight on 10 cwt. at 10*s.* per cwt.	5 0	
		10 0
Being totally spoiled, did produce nothing. The merchant being still liable for the freight		5 0
Making his loss		£15 0

He receives 10*l.* only from the insurer.

	£ s.	£ s.
10 cwt. of sugar, if sound, would have produced	15 0	
Less freight on 10 cwt. at 10*s.* per cwt.	5 0	
		10 0
The barrel being washed out produces nothing. The merchant, however, not being liable to pay freight		
His loss is only		£10 0

Which he recovers from the insurer.

It will be observed, that in each case the insurer pays 10*l.*, or the full sum upon which he receives the premium.

When whole cargoes, or parcels of goods of considerable value, are insured, the clause in the policy which protects the insurer from particular average under a certain percentage is often partially set aside. Thus, if a cargo of 500 hogsheads of sugar, valued at 10,000*l.* were damaged to the extent of 460*l.*, the merchant, supposing the protecting clause to remain in force, would recover nothing from the insurer, the loss not amounting to 5 per cent. The additional written clause, by which it is the practice to modify the printed clause, is as follows: — "Particular average, payable upon each 10 hhds. sugar, 10 casks and 50 bags coffee, and 10 bags cotton, following numbers, and upon each package of manufactured goods, chest of indigo, bag of wool or silk, the same as if separately insured." Such clauses may be, and are, introduced *ad libitum* by mutual consent of insurer and insured, the premium or consideration being arranged accordingly.

The protecting clause is considered, on the other hand, by the insurers, exceedingly unsatisfactory in some respects; and they, as occasion requires, insist upon additional protection. Thus, saltpetre, hides, cocoa, and tin plates, are generally warranted free from particular average, unless the ship be stranded; and upon tobacco, it is customary for the insurers to make themselves liable only to such part of the particular average as exceeds 5 per cent., throwing 5 per cent. upon the merchant.

Particular Average on Freight. — The clause, as far as it affects "freight," calls for no particular comment. Particular average upon freight can only arise, according to prevailing practice, from loss of weight; and whenever the loss of weight amounts to 3 per cent. or upwards, the ship owner is entitled to recover from his insurer. The ship owner, upon the arrival of the ship at its port of destination, is entitled to hold the goods as security until the freight is paid. If the owner of the goods should prove insolvent, and the goods should be entirely spoiled by sea damage during the voyage, and the ship owner thus lose his freight, he has no claim upon the insurer; because, although his collateral security is destroyed by a peril of the sea, his right to receive freight remains unimpaired, and it is against the loss or impairing of this right that the insurer protects him.

Particular Average on Ships. — Particular average upon ships is a subject somewhat more beset with difficulties. There is scarcely a ship that makes a voyage of any length, that does not sustain some damage. The clause in the policy warranting the ship free from particular average under 3 per cent., unless stranded, protects the insurer from the constant recurrence of petty claims; but in addition to this, it is the practice to class the damage that a ship sustains in the prosecution of her voyage under two heads: ordinary damage, or wear and tear; and extraordinary damage, or particular average. The splitting of sails, the breaking of anchors and cables, the upsetting of windlasses, are losses that come under the first head. The carrying away of masts and bulwarks, damage to the copper sheathing and hull from striking on rocks, come under the second.

When a ship sustains damage, if she be on her first voyage, the whole expense of the repairs is made good by the insurers. But if she be not on her first voyage, it is the established custom that the insurer pays no more than 2-3ds of the repairs, the owner of the vessel having, as it is thought, an equivalent for the 1-3d which falls upon him, in the substitution of new work for old. Where the nature of the damage is such as to require that the copper should be stripped off the ship's bottom, the insurer pays the difference between the price of the old and the new copper on the weight of the old copper stripped

; the excess in weight of the new over the old copper is paid for by the ship owner; and the labour stripping and replacing the copper is paid for on the principle already mentioned. In any general ...e of this kind, it must be obvious that the ship owner will sometimes gain and sometimes lose by an accident. As soon as the ship owner, or his captain, learns that his vessel has met with an accident, or as soon after as possible, he summons regular surveyors to examine his vessel and report all defects, discriminating between those defects that have arisen from perils of the sea, and those from wear and tear. The first only are made good by the insurer, together with all charges, such as surveyors' fees, dock dues, &c., caused by the necessity of undergoing repair. It has been already observed, that when a ship is obliged, in the progress of her voyage, to put into port for the purpose of repair, although the owner of the ship be subjected to great expense for the wages and maintenance of his crew during the detention, he can recover no part of this expense from the insurer; the doctrine being, that the owner of the ship is bound to navigate his vessel, and that the insurer does not undertake to guarantee that the voyage shall be completed within any specific time. Such is the doctrine, at least, in this country, and the practice is founded upon it; but in all other countries the doctrine and practice are the reverse. For in them allowance is made to the ship owner for the wages and maintenance of the crew during the whole period that the ship is under repair. Where a vessel sustains damage and undergoes repair in the progress of her voyage, and is subsequently lost, the insurer is liable both for the particular average and a total loss. Or the owner of the ship may, if he please, insure the amount expended in repair; and then, in the event of subsequent loss, the insurer is liable for the total loss only; but in the event of subsequent safe arrival, the average is augmented by the charge of insurance.

The operation of the clause warranting the ship free from average under 3 per cent., unless general, or the ship be stranded, may now be clearly seen. If a ship be insured and valued at 10,000*l.*, and the repairs of the vessel do not, after all the deductions above referred to, amount to 3 per cent., there is no claim upon the insurer, unless the vessel shall have been stranded.—(See AVERAGE.)

Stranding.—The term stranded is not well chosen, admitting of more than one construction; and the clause of which it forms a part is imperfectly conceived. And in settlements of accounts, when differences arise, the parties who discuss them are more apt to strive for that interpretation of terms and clauses which is favourable to their interests, than for that which is best adapted for general purposes. It is commonly understood that merely striking the ground and coming off is not a stranding; it being necessary, in order to fall within that term, that the ship should remain on the ground or rock, as it may happen, and that efforts should be made to float her. Striking on an anchor and leaking dangerously is not a stranding. We shall only adduce two illustrations, for the purpose of showing how ill adapted this clause is as a means to an end. Corn and other such articles are warranted free from particular average, unless the ship be stranded, because the insurers, considering these articles to be peculiarly susceptible of damage, will not consent to take that risk, except on some extraordinary occasion. A ship, laden with corn, makes a very stormy passage from the Baltic to London, and damages the whole of her cargo. Upon arrival off our coast she is stranded, but got off without straining or sustaining any damage. The insurer is held to be liable for the damage to the corn, under the clause of the policy. On another occasion, after a very favourable passage to our coast, a ship strikes upon a shoal, but is not stranded, sustaining, however, so much damage that she arrives at London with 6 feet water in her hold, and her cargo almost wholly spoiled. The insurer is held not to be liable under the clause of the policy.

General Average.—The insurer is bound to make good all general average without exception, however trifling the account. General average is treated as though altogether unconnected with particular average; and damage to the goods not amounting to 3 per cent. is not payable by the insurer, although there may be also a general average, and the general and particular average together may amount to more than 3 or 5 per cent. General average is a charge which must be paid by the merchant and ship owner, even if uninsured; although, when insured, he transfers, as it were, in virtue of his insurance, the charge from himself to his insurer. All the elements that can by possibility enter into general average may be classed under four heads:—1. Sacrifice of part of the ship and stores; 2. Sacrifice of part of the cargo and freight; 3. Remuneration of services required for general preservation; 4. Expense of raising money to replace what has been sacrificed, and to remunerate services.

1. When any part of the ship is sacrificed for the general benefit, the owner is entitled to receive (deducting, of course, his share of contribution) the amount of his outlay in the replacing of such sacrifice; allowance being made, on the principle stated above, where old works and materials are replaced with new. The deduction of 1-3d, however, does not invariably apply. For instance, 1-6th only is taken off the price of an iron cable that is slipped from for the general benefit, because iron cables are calculated to last for a great number of years; and no reduction is ever made from the price of anchors. The charge of replacing the loss may amount to considerably more than the value lost, computing the value at the place where the ship was originally fitted. Thus, the cost of replacing an anchor and cable slipped from in the Downs, is frequently double the value of the anchor and cable at London. But whatever the charge may be, such charge forms the basis of settlement.

2. Sacrifice of the cargo and freight takes place in jettison, or where part of the cargo is flung overboard to lighten the vessel. Upon arrival in port, after such jettison, the owner of the goods jettisoned is entitled to receive (deducting his share of contribution) what the goods would have produced nett to him, supposing them to have arrived sound; and the owner of the ship is entitled to receive (deducting his share of contribution) the freight to which he would have been entitled upon the safe delivery of the goods.

3. Remuneration of services and other charges. When a ship loses her anchors and cables, very large sums are frequently awarded to boatmen who venture off to her with new ones at the imminent hazard of their lives. A ship disabled at sea is towed into port by another, and remuneration for such service is awarded according to the value saved, the detention occasioned, and the loss sustained. The ship rendering the service may be laden with fish or fruit, that may be totally spoiled by the detention, or may be in ballast. A ship captured by the enemy may be re-captured by a man of war or armed merchant vessel; here, again, salvage is awarded according to the circumstances of the case. All these charges are general average; that is to say, must be distributed over ship, freight, and cargo. When a ship, with her cargo, is driven on shore, the expense of attempting to get her off is general average. If she cannot be got off without discharging, the expense of discharging is general average; but the expense of getting the ship off after the cargo has been taken out falls exclusively upon the ship. The warehousing of the cargo, and other expenses incurred for its preservation, are charges exclusively upon the cargo. The expense of reloading is borne by the freight. When a ship puts into port in distress, the pilotage inwards is general average; the pilotage outwards is a charge upon the freight. This distribution of charges has settled into a tolerably well established practice; and upon this principle claims are settled at the offices, and at Lloyd's.

4. The money required to meet the above charges is sometimes attainable without expense. If the accident happen near home, and the ship owner be respectable, he advances the money and recovers from the various parties concerned so soon as the accounts can be made up: or if the accident happen in a foreign port, where the owner of the ship is well known, the captain's bill upon him will sometimes be received in payment of the charges incurred. But where such facilities do not exist, the captain is empowered to pledge his ship, freight, and cargo, as security to any one he may prevail upon to supply the necessary funds. This pledge is termed a bottomry bond. By it the captain admits the receipt of the money; consents to the payment of a premium (which varies with the distance of the port of destination, the risk of the voyage, the respectability of the owner, and the necessities of the captain); and assigns the ship, freight, and cargo, as security for the repayment of the money advanced and the stipulated

[redacted] may stand in need of towards the prosecution of the voyage, whether by commission, by bottomry premium, or by loan on the hull of the ship, is obliged to those parties for whose interest the money is required. Thus, if a ship, having sprung a leak, puts into port in distress, and is obliged to unload to repair; supposing the particular average upon the ship to amount to 500*l.*; the general average, consisting of assistance into port and expense of unloading, 200*l.*; particular charges on freight, consisting of expense of relanding and pilotage outwards, 100*l.*; and particular charges on cargo, consisting of warehouse rent and repair of packages, 200*l.*; and the expense of raising money should be 20 per cent.; — these sums would be severally increased by this addition, and would be raised to 600*l.*, 240*l.*, 120*l.*, and 240*l.* — (See BOTTOMRY.)

It still remains to be inquired in what proportion the general average is to be paid by the different owners of the cargo, and the owner of ship and freight. Almost all general averages are adjusted at the ship's port of destination, and the values of the ship and cargo are taken at what they would produce in their actual state upon arrival, and the freight according to what is actually receivable, less the wages of the captain and crew; the general average being distributed in proportion to these values. Should the cargo be altogether worthless, it cannot be made to contribute; and should the wages of the crew exceed the freight, then the freight is not liable to contribute. In case of jettison, the party whose property has been sacrificed for the general benefit receives indemnity on the same principle; the value to which he is entitled being what his property would have produced *nett*, supposing it to have been sold on the arrival of the vessel — the same value serving for the basis of his proportion of contribution. Some few cases occur where the general average is adjusted at the port of departure. Thus, if a ship, outward bound to the British colonies, cut from an anchor and cable in the Downs, or incur other general average on our own coast, the insurances being principally effected in this country, it is the custom to adjust it on the spot, by which means both delay and expense are avoided. On these occasions, the values at the port of shipment are taken as the basis of contribution. A total loss, subsequently to a general average, does not exonerate the insurer from his prior liability; and although it is customary with the ship owner, or his agent, specifically to insure the money expended in average, for the purpose of protecting the insurer against any greater liability than 100 per cent., he is not absolutely obliged to do so. When the average funds are raised by bottomry, the party advancing them takes the ship, freight, and cargo, as security, and charges a premium to cover the risk of the ship's non-arrival at her port of destination. And thus, on such an occasion, a subsequent total loss relieves the insurer from all liability to average.

The laws and customs by which averages are adjusted vary in different countries; but the insurer in this country is only liable for the averages adjusted according to our laws. The merchant, however, whose goods arrive at a foreign port, is obliged to submit to the laws of that port. He may thus be a considerable loser; paying general average according to one law, and receiving from his insurer according to another. And he never can be a gainer, because, before he is entitled to recover from his insurer, he must prove that he has paid to the owner of the ship. This is one of the many inconveniences to which mercantile men are exposed, which cannot be removed without, what it may be hoped will gradually take place, an assimilation of the commercial laws of different countries.

Proof of Loss. — The policy of insurance is the instrument under which the merchant and ship owner claim indemnification for all losses that are not specially excepted. The proof that the loss has been sustained must also be exhibited; such as the title to the vessel and cargo, and the evidence of the captain and crew to establish the circumstances out of which the claim arises. If A. were to insure his vessel for the space of 12 months, and at the expiration of 6 months were to sell his ship to B.: A.'s interest in the vessel having ceased, so also does his insurer's liability; and B., if he wish to be protected, must make a new insurance. Proof of ownership, therefore, is an essential preliminary to the recovery of a claim. In general practice, no difficulty arises from this, because the fact of ownership is sufficiently notorious. The bill of lading is, in most cases, satisfactory proof that the cargo was on board, as well as of the amount of freight.

Valued and open Policies. — If an insurance for 2,000*l.* be effected upon 100 hhds. of sugar, valued at 20*l.* per hhd., the bill of lading, showing that the vessel had 100 hhds. on board, establishes the interest at 2,000*l.*, and the policy is termed a valued policy. But if an insurance for 2,000*l.* be effected on 100 hhds. of sugar, and nothing be expressed as to value, the bill of lading only establishes that 100 hhds. are on board, without establishing the amount of interest. The production of the invoice, showing the cost of the goods, is necessary to that end, the policy being termed an open one.

Return of Premium for short Interest. — In a valued policy, when the whole of the property insured does not appear to have been shipped, the difference between the quantity insured and the quantity shipped is termed short interest. Thus, if 2,000*l.* be insured upon 100 hhds. of sugar, valued at 20*l.* per hhd., and 80 hhds. only be shipped; as the insurer's liability does not extend beyond 1,600*l.*, so he is obliged to return the premium upon 400*l.* to which no risk attaches. This return of premium is called a return for short interest.

For Over-Insurance. — In an open policy, where the value shipped is not equal to the value insured, the difference is termed over-insurance. If a merchant, A., make an insurance for 5,000*l.* upon goods, without specifying any value, from Calcutta to London, the premium being 60*s.* and the stamp duty 5*s.* per cent., the amount of interest that attaches to the policy is so fixed, that he is neither to gain nor lose by the transaction in the event of the vessel's loss, supposing his insurance to be sufficient. To entitle him to recover a profit, the profit to be insured must be stipulated in the policy. The expense of insurance upon 100*l.* being 3*l.* 5*s.*, it is clear that every 100*l.* insurance covers 96*l.* 15*s.* original cost; that is to say, protects the merchant from loss to that extent in case of the loss of the vessel. If, then, we assume the invoice of the goods shipped to be 40,000 rupees, or, at the exchange of 2*s.* per rupee, 4,000*l.*, the interest attaching to the policy is ascertained as follows: — If 96*l.* 15*s.* cost is insured by 100*l.* insurance, what will 4,000*l.* cost be insured by? Answer, 4,135*l.* Under such circumstances, although a policy exists for 5000*l.*, the insured is not able to prove interest for more than 4,135*l.*; and consequently, the insured being entitled to recover no more than that sum in case of loss, the insurer is called upon to make a return of premium for over-insurance upon 865*l.*

Although we have treated separately of returns for short interest and over-insurance, we should observe that these terms in practice are used indiscriminately; and, indeed, we cannot say that we perceive much advantage in making the distinction, or preserving the distinctive appellations.

It sometimes happens that the property expected in a vessel is not all insured at one time or in one policy. But this makes no difference in the principle of settlement according to our law: although, according to the laws of most other countries, the policies take precedence of one another according to their dates, the whole short interest falling upon the policy or policies last effected. The foreign law, in this instance, appears to us the more equitable and reasonable of the two; and that our reason for thinking so may be intelligible, and thus gain assent or meet with refutation, we shall state a case of short interest upon a number of policies, such as not unfrequently appears. A merchant, A., orders his correspondent at Calcutta to ship for his account a quantity of sugar, not exceeding 1,000 tons, at a price not exceeding 20*l.* per ton. In due time he receives a letter from his correspondent acknowledging the receipt of his order, and expressing confident hopes of being able to purchase the quantity, or the greater part of it, at the limits prescribed, and promising to advise as he proceeds. A., on receipt of this letter, say on the 1st of January, makes a provisional insurance for 5,000*l.* upon sugar valued at 20*l.* per ton. Continuing without further advices, and fearing lest his correspondent's letter should have miscarried, and that he might have property afloat uninsured, on the 1st of February, 1st of March, and 1st of April, he effects similar

[illegible] his correspondent [illegible] from his [illegible] 500 [illegible] might have [illegible] agrees in the middle of February, of the shipmates' 500 [illegible] each, [illegible] claims will totally [illegible] in the river Hooghly, the insurers upon the two first policies [illegible] 1000*l.* for a total loss. And it appears to us a defective arrangement, by which a party, who is at one time exposed to a total loss, should at another be compelled to return half his premium. It is true that the merchant may, if he please, insert in his policies a clause by which the policies shall be made to succeed one another; but we should say that the law, in insurance cases, as in the disposal of the property of deceased persons, ought to be the best general disposition, leaving to individuals the right of modification according to particular circumstances.

Return for Double Insurance. — Besides returns for short interest and over-insurance, there are returns for double insurance. They are, in fact, to all intents and purposes, the same thing. Double insurance exists where the party, through forgetfulness, makes an insurance upon his property twice over; or where the shippers and consignees of goods, when uncertain of one another's intentions, effect each an insurance upon them; or where the captain of a vessel in foreign parts, fearing lest his advices should not reach his owner, effects an insurance upon it, and the owner at the same time, acting with equal caution, effects one also. The observations already made upon returns for short interest, and upon the difference between our laws and those of other countries, apply with equal force here.

We have now gone over all the principal topics connected with marine assurance. Those who peruse this article with ordinary attention will, we hope, gain a tolerably clear insight into the principles and practice of the business. But a perfectly familiar acquaintance with it can only be acquired by those who are daily conversant with its details.

Duty on Policies of Marine Insurance. — Amount and Expediency of such Duty. — All policies of marine insurance must be on stamped paper, the duties on which are as follows: —

For every 100*l.* insured on a voyage in the coasting trade of the kingdom, where the premium does not exceed 20*s.* per cent., 1*s.* 3*d.*

Where the premium does exceed 20*s.* per cent., 2*s.* 6*d.*

For every 100*l.* insured to or from any colonial or foreign port, where the premium does not exceed 15*s.* per cent., 1*s.* 3*d.*

Where the premium does exceed 15*s.* per cent., but does not exceed 30*s.* per cent., 2*s.* 6*d.*

Where the premium exceeds 30*s.* per cent., 5*s.*

For every 100*l.* insured for a period of time not exceeding 3 months, 2*s.* 6*d.*; exceeding 3 months (no ship can be insured on one stamp for a longer period than 12 months), 5*s.*

This duty was reduced in the year 1833. It is now about two thirds of what it was before. The reduction, so far as it goes, must of course be beneficial. But the tax is altogether wrong in principle, and ought to be repealed altogether. Its obvious tendency is to discourage the coasting trade, by imposing a duty on goods carried by sea, from which those carried by land and canals are exempted; and we believe it will be found that this unjust preference costs more to the public in the greater carriage of goods sent, through its means, by the more expensive channel of inland conveyance, than all that portion of the duty which affects coasting vessels produces to the revenue. But the other portion of the tax, or that which affects vessels engaged in the foreign or colonial trade, is still more objectionable. It is immaterial to a merchant sending a ship to sea, whether he insure her in London, Amsterdam, or Hamburg; and as policies executed in the last two cities are either wholly exempted from duties, or subject to such only as are merely nominal, the effect of the duty is to transfer to the Continent a considerable part of the business of marine insurance, that would otherwise be transacted in London. It is plain, therefore, that this duty operates to drive a valuable branch of business from amongst us; and even though it had no such effect, still it is sufficiently clear that a tax on providence, or on the endeavour to guarantee the safety of property at sea, is not one that ought to exist in any country, and least of all in so commercial a country as England. Where the latitude given is so great, doubts will arise whether one stamp be adequate to cover a long voyage. And when difficulties are made to the settlement of a loss on such grounds they are very prejudicial to the interests of the assured, and by no means creditable to the character of the underwriter.

If the revenue (amounting in 1842 to only 212,916*l.*) derived from these stamps cannot be spared, a very small addition to the import duties would more than cover its amount, save the expense of collection, and relieve the mercantile public from the annoyance and loss above alluded to.*

Form of a Policy of Insurance executed at Lloyd's.

S. G.

£800.

In the Name of God, Amen. Charles Brown and Co., as well in their own names as for and in the name and names of all and every other person or persons to whom the same doth, may, or shall appertain, in part or in all, doth make assurance, and cause themselves and them and every of them, to be insured, lost or not lost, at and from Petersburg to any port or ports in the United Kingdom, upon any kind of goods and merchandises, and also upon the body, tackle, apparel, ordnance, munition, artillery, boat, and other furniture, of and in the good ship or vessel called the Swift, whereof is master, under God, for this present voyage, Bright, or whoever else shall go for master in the said ship, or by whatsoever other name or names the said ship, or the master thereof, is or shall be named or called; beginning the adventure upon the said goods and merchandises from the loading thereof on board the said ship

upon the said ship, &c.

Stamp £2.

and so shall continue and endure during her abode there, upon the said ship, &c. And further, until the said ship, with all her ordnance, tackle, apparel, &c. and goods and merchandises whatsoever, shall be arrived at her final port of discharge (as above), upon the said ship, &c., until she hath moored at anchor twenty-four hours in good safety; and upon the goods and merchandises, until the same be there discharged and safely landed. And it shall be lawful for the said ship, &c. in this voyage, to proceed and sail to, and touch and stay at any ports or places whatsoever, without prejudice to this insurance. The said ship, &c. goods and merchandises, &c. for so much as concerns the assured, by agreement between the assured and assurers in this policy, are and shall be valued at eight hundred pounds, being on the captain's one fourth share of said ship, said one fourth share valued at that sum. Touching the adventures and perils which we the assurers are contented to bear, and do take upon us in this voyage: they are of the seas, men-of-war, fire, enemies, pirates, rovers, thieves, jettisons, letters of mart and countermart, surprisals, takings at sea, arrests, restraints, and detainments of all kings, princes and people, of what nation, condition, or quality soever, barratry of the master and mariners, and of all other perils, losses, and misfortunes, that have or shall come to the hurt, detriment, or damage of the said goods and merchandises and ship, &c. or any part thereof; offences against the revenue of the United Kingdom of Great Britain or Ireland excepted. And, in case of any loss or misfor-

* This very valuable article (on Marine Insurance) has been, as the reader will easily perceive, furnished by a gentleman thoroughly conversant with the principles and details of the business.

tune, it shall be lawful for the assured, their factors, servants, and assignees, to sue, labour, and travel for, in, and about the defence, safeguard, and recovery of the said goods and merchandises and ship, &c. or any part thereof, without prejudice to this insurance; to the charges whereof we the assurers will contribute, each one according to the rate and quantity of his sum herein assured. And it is agreed by us the insurers, that this writing, or policy of insurance, shall be of as much force and effect as the surest writing or policy of assurance heretofore made in Lombard Street, or in the Royal Exchange, or elsewhere in London. And so we the assurers are contented, and do hereby promise and bind ourselves, each one for his own part, our heirs, executors, and goods to the assured, their executors, administrators, and assigns, for the true performance of the premises, confessing ourselves paid the consideration due unto us for this assurance by the assured, at and after the rate of five guineas per cent., to return one pound per cent. if the voyage end on the east coast of England.

In Witness whereof, we, the assurers, have subscribed our names and sums assured in London.

N. B. — Corn, fish, salt, fruit, flour, and seeds, are warranted free from average, unless general, or the ship be stranded. — Sugar, tobacco, hemp, flax, hides, and skins are warranted free from average under five pounds per cent.; and all other goods, also the ship and freight, are warranted free from average under three pounds per cent., unless general, or the ship be stranded.

£500. Joseph White, Five hundred pounds. 1st of Sept. 1843.
£300. Thomas Black by George Green, Three hundred pounds. 1st of Sept. 1843.

Policy by the Indemnity Mutual Marine Assurance Company. Established 1824.

£5,000.

Whereas William Grey hath represented to us whose hands and seals are hereunto subscribed and affixed, and who are two of the directors of the Indemnity Mutual Marine Assurance Company, that he is interested in, or duly authorised as owner, agent, or otherwise, to make the assurance hereinafter mentioned and described, with the Indemnity Mutual Marine Assurance Company and hath covenanted or otherwise obliged himself to pay forthwith for the use of the said Company, at the office of the said Company, the sum of sixty-two pounds ten shillings as a premium or consideration, at and after the rate of twenty-five shillings per cent. for such assurance. Now this Policy of Assurance witnesseth, that in consideration of the premises and of the said sum of sixty-two pounds ten shillings, We do, for ourselves and each of us, covenant and agree with the said William Grey, his executors, administrators, and assigns, that the capital stock and funds of the said Company, shall, according to the provisions of the deed of settlement of the said Company, and the resolutions entered into at two extraordinary general courts of the said Company held on the twenty-ninth day of August, and the twentieth day of September, one thousand eight hundred and twenty-seven, be subject and liable to pay and make good, and shall be applied to pay and make good all such losses and damages herein-after expressed as may happen to the subject matter of this policy, and may attach to this policy in respect of the sum of five thousand pounds hereby assured, which assurance is hereby declared to be upon

Stamp £6. 5s.

1/ 250. 250 hhds. of sugar valued at 20*l.* each, average payable upon each 10 hhds. following landing numbers, the same as if separately insured, laden or to be laden on board the ship or vessel called the Nelly, whereof Turner is at present master, or whoever shall go for master of the said ship or vessel, lost or not lost at and from Grenada to London, including the risk of craft to and from the vessel, warranted to sail on or before the 1st of August, 1842. And We do covenant and agree, that the assurance aforesaid shall commence upon the said ship, at and from Grenada, and until she hath moored at anchor twenty-four hours in good safety; and upon the freight and goods or merchandise on board thereof, from the loading of the said goods or merchandise on board the said ship or vessel at London, and until the said goods or merchandise be discharged and safely landed at . And that it shall be lawful for the said ship or vessel to proceed and sail to, and touch, and stay at any ports or places whatsoever, in the course of her said voyage, for all necessary purposes, without prejudice to this assurance. And touching the adventures and perils which the capital stock and funds of the said Company are made liable unto, or are intended to be made liable unto, by this assurance, they are, of the seas, men-of-war, fire, enemies, pirates, rovers, thieves, jettisons, letters of mart and countermart, surprisals, takings at sea, arrests, restraints, and detainments of all kings, princes, and people, of what nation, condition, or quality soever; barratry of the master and mariners, and of all other perils, losses, and misfortunes, that have or shall come to the hurt, detriment, or damage of the aforesaid subject matter of this assurance, or any part thereof. And in case of any loss or misfortune, it shall be lawful to the assured, their factors, servants, and assigns, to sue, labour, and travel for, in, and about the defence, safeguard, and recovery of the aforesaid subject matter of this assurance, or any part thereof, without prejudice to this assurance, the charges whereof the capital stock and funds of the said Company shall bear in proportion to the sum hereby assured. And it is declared and agreed, that corn, fish, salt, fruit, flour and seed, shall be and are warranted free from average unless general, or the ship be stranded; and that sugar, tobacco, hemp, flax, hides, and skins, shall be and are warranted free from average under five pounds per centum; that all other goods, also the ship and freight, shall be and are warranted free from average under three pounds per centum, unless general, or the ship be stranded. Provided Nevertheless, that the capital stock and funds of the said Company shall alone be liable, according to the provisions of the deed of settlement, and the resolutions above-mentioned, to answer and make good all claims and demands whatsoever, under or by virtue of this policy; and that no proprietor of the said Company, his other heirs, executors or administrators, shall be in anywise subject or liable to any claims or demands, nor be in anywise charged by reason of this policy beyond the amount of his or her share or shares in the capital stock of the said Company, it being one of the original or fundamental principles of the said Company, that the responsibility of the individual proprietors shall, in all cases, be limited to their respective shares in the said capital stock.

In Witness whereof, We have hereunto set our hands and seals in London, the tenth day of January, 1843.

Sealed and delivered in the presence of E. F.

A. B. (L. S.)
C. D. (L. S.)

III. Insurance (Fire).

Insurance against fire is a contract of indemnity, by which the insurer, in consideration of a certain premium received by him, either in a gross sum or by annual payments, undertakes to indemnify the insured against all loss or damage he may sustain in his houses or other buildings, stock, goods, and merchandise, by fire, during a specified period.

Insurances against fire are hardly ever made by individuals, but almost always by joint stock companies, of which there are several in all the considerable towns throughout the empire. Of these, the *Sun*, *Phœnix*, &c. insure at their own risk and for their own profit: but there are others, which are called mutual insurance offices, such as the Norwich Union, County, Westminster, &c., in which every person insured becomes a member or proprietor, and participates in the profit or loss of the concern.

The conditions on which the different offices insure are contained in their *proposals*, which are printed on the back of every policy; and it is in most instances expressly conditioned, that they undertake to pay the loss, not exceeding the sum insured, "*according to the exact tenor of their printed proposals.*"

Nothing can be recovered from the insurers, in the event of loss, unless the party insuring had an interest or property in the thing insured at the time when the insurance was effected, and when the loss happened. It often occurs that no one office will insure to the full amount required by an individual who has a large property; and in such a case the party, to cover his whole interest, is obliged to insure at *different offices*. But, in order to prevent the frauds that might be practised by insuring the full value in various offices, there is, in the proposals issued by all the companies, an article which declares, that persons insuring must give notice of any other insurance made elsewhere upon the same houses or goods, that the same may be specified and allowed by indorsement on the policy, in order that each office may bear its rateable proportion of any loss that may happen: and unless such notice be given of each insurance to the office where another insurance is made on the same effects, the insurance made without such notice will be void.

Any trustee, mortgagee, reversioner, factor, or agent, has sufficient interest in the goods under his custody, to effect a policy of insurance, provided the nature of such interest be distinctly specified at the time of executing such policy.

Most of the offices stipulate in their proposals against making good any loss occasioned by "invasion," "foreign enemy," "civil commotion," &c.; and under this condition the Sun Fire Office was exonerated from the loss occasioned by the disgraceful proceedings of the mob in 1780.

One of the principal conditions in the proposals has reference to the proof of loss. The Sun Fire Office — (see *post*), and most other offices, make it a condition, that the individual claiming shall "procure a certificate, under the hands of the minister and churchwardens, and some other respectable inhabitants of the parish or place, not concerned or interested in such loss, importing that they are well acquainted with the character and circumstances of the person or persons insured or claiming; and do know, or verily believe, that he, she, or they, really, and by misfortune, without any fraud or evil practice, have sustained by such fire the loss or damage, as his, her, or their loss, to the value therein mentioned." This condition has given rise to a great deal of discussion in the courts; but it has been finally decided, that the procuring of the certificate is *a condition precedent to the payment of any loss, and that its being wrongfully refused will not excuse the want of it.*

The risk commences in general from the signing of the policy, unless there be some other time specified. Policies of insurance may be annual, or for a term of years at an annual premium; and it is usual for the office, by way of indulgence, to allow *fifteen* days after each year for the payment of the premium for the next year in succession; and provided the premium be paid within that time, the insured is considered as within the protection of the office.

A policy of insurance is not in its nature assignable, nor can it be transferred without the *express consent* of the office. When, however, any person dies, his interest remains in his executors or administrators respectively, who succeed or become entitled to the property, provided such representatives respectively procure their right to be indorsed on the policy.

(For further details, see *Marshall on Insurance*, book iv.; *Park on Insurance*, c. 23.)

Insurances are generally divided into *common*, *hazardous*, and *doubly hazardous*. The distinguishing characteristics of these may be learned from the subjoined proposals of the Sun Fire Office. The charge for insuring property of the first description is now usually 1*s.* 6*d.* per cent., the second 2*s.* 6*d.*, and the third 4*s.* 6*d.* These charges are exclusive of the duty payable to government, of 1*s.* on the policy, and 3*s.* per cent. on the sum in the policy.

We subjoin a copy of a policy of insurance on a house valued at 1,000*l.*, and furniture, plate, books, &c. in the same, valued also at 1,000*l.*, executed by the Sun Fire Office, and of the proposals indorsed on the same. The latter correspond in most particulars with those issued by the other offices.

Sun Fire Assurance Office.

Received, for the Insurance of the property undermentioned, from Michs. 1842 to Michs. 1843.

	£	s.	d.
Policy - -	0	0	0
Annual Premium	1	0	3
Odd Time -	0	0	0

SUN FIRE OFFICE.

	£	s.	d.
Annual Duty -	1	8	6
Odd Time -	0	0	0
Total present payment	£2	8	9

No. ——

Whereas A. B. Esq. of No. —— —— Street, has paid the sum stated in the margin of this policy to the Society of the Sun Fire Office in London, and has agreed to pay, or cause to be paid to them, at their said office, the sum of one pound and three pence on the 29th of September yearly, during the continuance of this policy, for insurance from loss, or damage by fire, on his own household goods, wearing apparel, printed books, and plate in his now dwelling-house only, situate as aforesaid, brick, seven hundred and forty pounds; musical instruments therein only, forty pounds; pictures and prints therein only, sixty pounds; china and glass therein only, one hundred and ten pounds.

Now, know ye, That from the date of these presents, and so long as the said assured shall duly pay, or cause to be paid, the said sum at the times and place aforesaid; and the trustees or acting members of the said Society for the time being, shall agree to accept the same; the stock and fund of the said Society shall be subject and liable to pay to the said assured, his executors, administrators, and assigns, all such damage and loss which the said assured shall suffer by fire, not exceeding upon each head or insurance, the sum or sums above-mentioned, amounting in the whole to no more than nine hundred and fifty pounds, according to the exact tenor of their printed proposals, endorsed on this policy, and of an act of parliament of the 55th of George the Third, for charging a duty on persons whose property shall be insured against loss by fire. In Witness whereof, we (three of the trustees or acting members for the said Society) have hereunto set our hands and seals, the 1st day of November, 1842.

Signed and sealed (being stamped according to act of parliament) in the presence of G. H.

A. B.
C. D.
E. F

N. B. — The interest in this policy may be transferred by indorsement, made and entered at the office if the trustees or acting members approve thereof, but not otherwise.

(INDORSEMENT ON THE POLICY.)

SUN FIRE OFFICE.

This office insures against loss or damage by fire, in Great Britain and Ireland, and also in foreign countries, all descriptions of buildings, including mills and manufactories, and goods, wares, and merchandise, in the same; ships in harbour, or in dock; craft on navigable rivers and canals, and the goods laden on the same; wagons travelling the roads, and their contents; and farming stock of all descriptions, upon the following terms and conditions: —

Common Insurances.

1. Buildings covered with slates, tiles, or metals, and built on all sides with brick or stone, or separated by party-walls of brick or stone, and wherein no hazardous trade or manufacture is carried on, or hazardous goods deposited.

2. Goods in buildings as above described, such as household goods, plate, jewels in private use, apparel, and printed books; liquors in private use, merchandise, stock and utensils in trade, not hazardous.

At 1*s.* 6*d.* per cent. per annum, with certain exceptions.

Hazardous Insurances.

1. Buildings of timber or plaster, or not wholly separated by partition-walls of brick or stone, or not covered with slates, tiles, or metals, and thatched barns and out-houses having no chimney, nor adjoining to any building having a chimney; and buildings falling under the description of common insurance, but in which hazardous goods are deposited or some hazardous trade or manufacture is carried on.

2. Ships and craft, with their contents (lime barges, with their contents, alone excepted).

At 2*s.* 6*d.* per cent. per annum, with certain exceptions.

Doubly Hazardous Insurances.

1. Buildings. — All thatched buildings having chimneys, or communicating with, or adjoining to, buildings having one, although no hazardous trade shall be carried on, nor hazardous goods deposited therein: and all hazardous buildings, in which hazardous goods are deposited, or hazardous trades carried on.

2. Goods. — All hazardous goods deposited in hazardous buildings, and in thatched buildings having no chimney, nor adjoining to any building having a chimney.

At 4*s.* 6*d.* per cent. per annum, with certain exceptions.

Agricultural produce, farming stock, and implements and utensils of husbandry, on any farm may be insured, without the average clause, at 2*s.* per cent. exempt from duty, provided it be insured to a fair average value. This office will not be subject to loss by explosion of any kind, nor for loss on goods or utensils damaged or destroyed whilst undergoing any process in which the application of fire-heat is necessary, nor will the office be liable for loss on hay, corn, seeds, or other property, occasioned by its own natural heating, but the loss on any property in consequence, (except that which, by its own natural heating, has been the cause of the fire,) will be made good; as well as losses from lightning, where the buildings, or other effects insured, have been actually set on fire thereby.

Insurances may also be made by special agreement on the following risks, and on others of a similar description, not mentioned under the 2d and 3d heads of insurance, viz. on mills of all kinds, and the stock and utensils in them; also on buildings, containing kiln, steam-engine, stove, or oven, used in the process of any manufacture, and the stock therein; sugar refiners, sea biscuit bakers, distillers, varnish makers, chemists' laboratories, theatres, coach painters, colour manufacturers, varnishers, musical instrument makers, refiners of saltpetre, spermaceti, wax, and oil, barge and boat builders, carpenters, cabinet makers, coach makers, coopers, cork burners, floor-cloth painters, japanners, lampblack makers, letter-press printers, machine makers, melters of tallow and of rough fat, candle makers, cart-grease makers, oilmen, soap-boilers, rope and sail makers, ship chandlers, hemp and flax dressers, oil leather dressers, medals, curiosities, pictures, prints, drawings, statuary work, spinners of cotton, flax, lint, and wool, throughout all the operations attending the manufacturing of these materials, from the raw state into thread for the weaver, and such other risks as, by reason of the nature of the trade, the narrowness of the situation, or other dangerous circumstances, may increase the hazard thereof: all which special hazards must be inserted in the policy, to render the same valid and in force.

N. B. — Gunpowder, and buildings in which it is made, cannot be insured on any terms; neither does this office insure writings of any kind, books of accounts, ready money, bonds, bills, or any other securities for money.

N. B. — By an act of the 55th of Geo. 3. a duty of 3*s.* per annum is to be levied on every 100*l.* of property insured against fire; but by an act of the 3d & 4th Will. 4. agricultural produce, farming stock, and implements and utensils of husbandry, are exempt from duty.

N. B. — Persons may insure for more years than one, and in such cases there will be a discount allowed of 5 per cent. per annum, compound interest, on the premium and duty for every year except the first.

N. B. — Rent may be insured by special agreement for a term not exceeding 1 year, the amount being specified in the policy. Persons insured in this office are not liable for any calls to make good losses.

CONDITIONS.

Art. I. — Any person desirous of effecting insurances upon buildings or goods must furnish the office, or its agents, with a particular description thereof, and of the process of manufacture carried on therein; and if there be any omission or misrepresentation in describing the building or goods, or process of manufacture, whereby the same may be charged at a different rate of premium than they otherwise would be, this office will not be responsible in case of any loss or damage. And if any alteration be made in the state of the buildings or goods, or process of manufacture, after such insurance shall have been effected, then the insured shall give due notice thereof, in writing, to the office or its agents, or in default of such notice, such insurance shall become void, and no benefit be derived therefrom.

Art. II. — All policies shall be signed and sealed by three or more trustees or acting members; and no receipts are to be taken for any premiums of insurance, but such as are printed and issued from the office, and witnessed by one of its clerks or agents.

Art. III. — Houses, buildings, and goods in trust, and merchandise on commission (except as aforesaid), may be insured, provided the same are declared in the policy to be in trust or on commission, but not otherwise.

Art. IV. — On bespeaking policies, all persons shall pay the premium to the next quarter day, and from thence for one year more at least, or shall make a deposit for the same, and shall, as long as the managers agree to accept the same, make all future payments annually at the said office, within fifteen days after the day limited by their respective policies, upon forfeiture of the benefit thereof.

Art. V. — Any number of houses and out-houses, and household goods, printed books, wearing apparel, plate, prints, jewels and trinkets in private use, stock in trade, goods in trust, or on commission, may be insured in one policy.

Art. VI. — Persons insured by this office shall receive no benefit from their policies, if the same houses, or goods, &c. are insured in any other office, unless such insurance, and the amount thereof, be first specified and allowed by indorsement on the policy, in which case this office will pay its rateable proportion on any loss or damage.

Art. VII. — When any person dies, the policy and interest therein shall continue to the heir, executor, or administrator, respectively, to whom the right of the property insured shall belong, provided, before any new payment be made, such heir, executor, or administrator do procure his or her right to be indorsed on the policy at the said office, or the premium to be paid in the name of the said heir, executor, or administrator.

Art. VIII. — Persons changing their habitations or warehouses may preserve the benefit of their policies, if the nature and circumstance of such policy shall not be altered; but such insurance will be of no force till such removal or alteration is allowed at the office, by indorsement on the policy.

Art. IX. — No loss or damage will be paid on fire happening by any invasion, foreign enemy, civil commotion, or any military or usurped power whatever.

Art. X. — Persons insured sustaining any loss or damage by fire are forthwith to give notice thereof at the office; and, as soon as possible afterwards, deliver in as particular an account of their loss or damage as the nature of the case will admit of, and make proof of the same by their oath or affirmation, according to the form practised in the said office, and by their books of accounts, or such other proper vouchers as shall be reasonably required, and procure a certificate under the hands of the minister or churchwardens, and of two or three respectable inhabitants of the parish or place, not concerned or interested in such loss, importing that they are well acquainted with the character and circumstances of the person or persons insured or claiming; and do know, or verily believe, that he, she, or they, really, and by misfortune, without any fraud or evil practice, have sustained by such fire the loss or damage, as his, her, or their loss, to the value therein mentioned. And, till the affidavit and certificate of such the insured's loss shall be made and produced, the loss money shall not be payable. And, if there appear any fraud or false swearing, or that the fire shall have happened by the procurement, or wilful act, means, or contrivance of the insured or claimants, he, she, or they shall be excluded from all benefit from their policies. And in case any difference shall arise between the office and the insured, touching any loss or damage, such difference shall be submitted to the judgment and determination of arbitrators indifferently chosen, whose award in writing shall be conclusive and binding on all parties.

N. B. — In every case of loss the Company reserves the right of re-instatement in preference to the payment of claims, if it should judge the former course to be more expedient; but when any loss is settled and adjusted, the insured will receive immediate payment for the same, without any deduction or discount; and will not be liable to any covenants or calls for contribution to make good losses.

Insurance of Mills, Factories, &c. — The principal insurance offices agreed, in 1842, upon certain rates for the insurance of cotton, woollen, flax, and other mills and factories. We subjoin a table of the rates for cotton mills; but the others are too voluminous, and embrace too many particulars to be given in this place. The rates for woollen mills may, however, be considered as varying from 5*s.* to 7*s.* 6*d.* per cent.; and those for flax mills are not materially different.

Scale of Premiums for Cotton Mills.

Description of Mills.	Fire-proof.	Not Fire-proof.		
		Class 1.	Class 2.	Class 3.
	A separate Sum on each Floor, or subject to average.	Not spinning lower than 80's.	Not spinning lower than 36's.	Spinning lower than 36's.
Cotton Mills conforming to the following Description, viz.				
1. Built of brick or stone, and covered with slate, tile, or metal				
2. In one tenure only				
3. Heated by steam				
4. The boiler and fire-place being outside the mill				
5. Lighted by gas				
6. No internal communication by hoists, spouts, well-holes, or otherwise through the floors				
7. Working single time only				
8. All the processes previous to carding being performed in a building having an incombustible roof, which, whether detached from the mill or adjoining to it, shall not have any direct communication therewith, other than by an external fire-proof passage, of not less than 10 ft. in length, with a wrought iron door at each end thereof, and by openings for the shaft and steam pipes (not exceeding 5 in. each in diameter). If detached, not having any opening in the wall of the blowing-house opposite to that of the mill, except the doorway before mentioned; and if adjoining, not having any windows in the mill overlooking the same, or any windows in the blowing house walls so as to endanger the mill	10*s.* 6*d.*	12*s.*	14*s.*	16*s.*
9. Not spinning waste, other than that produced by the occupier of the mill				
10. Not containing more than 6 floors in height, including basement and attics				
* In fire-proof mills, the floors occupied for any process previous to spinning, or otherwise subject to extra charge, will be rated as mills of ordinary construction.				
Mills not conforming to the above Description will be charged in addition to the above, viz.				
As to No. 2. If in occupation of two tenants		3*s.*	4*s.*	5*s.*
As to No. 3. If heated otherwise than by steam		special	special	special
As to No. 4. If the boiler or fire place is within the mill		2*s.*	2*s.*	2*s.*
As to No. 5. If lighted otherwise than by gas		2*s.*	3*s.*	4*s.*
As to No. 6. If having therein any hoist, well-hole, spout, or other communication through the floors of the mill		2*s.*	2*s.*	2*s.*
As to No. 7. If working more than single time		2*s.*	4*s.*	4*s.*
As to No. 8. If any of the processes previous to carding be performed				
In a fire proof building adjoining to the mill, and communicating with it by a stone staircase, having wrought-iron doors only, set in stone or metal, and by aperture for shaft and steam-pipe as aforesaid		2*s.*	4*s.*	6*s.*
In a fire-proof building adjoining to the mill, and communicating by wrought-iron doors as above, and by apertures for shaft and steam-pipe as aforesaid		3*s.*	6*s.*	7*s.*
In a fire-proof room within the mill, communicating by wrought-iron doors, and apertures for shaft and steam-pipe as aforesaid		3*s.*	6*s.*	7*s.*
Not according to one or other of the above descriptions		5*s.*	7*s.*	9*s.*
As to No. 9. If spinning bought flyings or strippings		1*s.*	2*s.*	2*s.*
If spinning other bought waste		special	special	special
As to No. 10. If containing more than 6 floors in height, including basement and attics		1*s.*	2*s.*	2*s.*

N. B. — In fire proof mills with a sum issued on each floor, the extra charge for height will only apply to the stories above six.

Blowing-houses, &c. — Buildings in which any process preparatory to carding is carried on, to be charged the maximum rate according to the number of hanks to the pound to be spun from the cotton prepared in them.

Mills are denominated fire-proof in the construction of which no timber is used, except in the roof. If any part of the mill has a wooden flooring, that story is to be charged at the rate of mill of ordinary construction.

Cotton mills having more than two tenants, or otherwise not included in the above several classifications, will be considered special.

The above rates are to be applied to all existing insurances as they become due, as well as to new orders.

And as it is the intention of the company not to exceed the sum of £ upon any one mill and its contents, collectively, the agent will be careful not to exceed that sum, whether by one or more policies, without special authority.

To carry these regulations into effect with existing insurances, it will be expedient that, instead of renewing old policies, the agent should give timely notice that existing policies are not to be renewed, and that the 15 days' grace do not attach thereto, and he should send up instructions for new ones, in conformity herewith; receiving from the assured a proper deposit, to protect him in the mean time.

Power-loom factories. — Detached, brick-built and tiled or slated, heated by steam, in single tenure, 7*s.* 6*d.* per cent. per annum.

If adjoining to, but not communicating with, a cotton mill, it will be subject to three quarters of the rate of the adjoining mill.

If communicating with a cotton mill, it will be subject to the same rate as the mill.

Amount of Property insured. Duty. — Insurance against fire, though practised in France, Holland, and some other countries, is not general any where except in Great Britain. It has been known amongst us for a century and a half, and is now very widely extended. It appears from the official accounts, that the *gross* duty received on policies of insurance against fire in the United Kingdom, in 1842, amounted to 986,420*l.*, which, taking the duty, including hazardous insurances, at 3*s.* 6*d.* per cent., shows that the property insured was valued at the immense sum of 563,668,571*l.* But notwithstanding the magnitude of this sum, it is still true that most buildings are not insured up to their full value; even in towns, many are not insured at all; and in the country it is far from being customary to insure farm buildings or barn-yards. It is difficult to imagine that this can be owing to any thing other than the exorbitance of the duty. On common risks the duty is no less than 200 per cent. upon the premium; or, in other words, if a person pay to an insurance office 15*s.* for insuring 1,000*l.* worth of property, he must at the same time pay a duty of 30*s.* to government! On hazardous and doubly hazardous risks, the duty varies from about 120 to 75 and 80 per cent. upon the premium. Such a duty is in the last degree oppressive and impolitic. There cannot, in fact, be the slightest doubt that, were it reduced, as it ought to be, to *one third* its present amount, the business of insurance would be very much extended; and as it could not be extended without an increase of security and without lessening the injurious consequences arising from the casualties to which property is exposed, the reduction of the duty would be productive of the best consequences in a public point of view; while the increase of business would prevent the revenue from being materially diminished.

During the session of 1833, the duty on the insurance of farming stock was repealed. But the relief thence arising is immaterial; and the repeal is, besides, highly objectionable in point of principle, inasmuch as there is no ground whatever for exempting farming stock from duty in preference to any other description of stock. A duty on insurance is not, in itself, objectionable. We do not wish to see it repealed, but to have it effectually reduced. Were it fixed at 1*s.* per cent., it would hardly be felt as a burden; while the revenue would suffer little or nothing from the measure.

Amount of Duty on Fire Insurances paid by the different London Offices, during each of the Nine Years ending with 1842.

Offices.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	£	£	£	£	£	£	£	£	£
Alliance	21,034	22,602	24,146	23,797	25,084	25,512	26,311	26,751	25,981
Atlas	21,398	22,098	23,466	24,003	24,095	25,121	25,687	26,023	26,774
Benevolent (*discon.*)	-	-	-	-	-	52	52	11*	
British (*discon.*)	16,428	17,473	17,940	17,446	18,249	18,348	18,477	18,276	18,147
Church of England	-	-	-	-	-	-	274†	1,088	1,410
County	40,471	42,817	44,047	44,501	46,269	45,099	45,481	46,160	48,465
English and Scotch	-	-	-	-	-	-	638	927	1,267
Farmers	-	-	-	-	-	-	1,528‡	4,975	6,561
Globe	27,555	28,366	29,525	29,210	31,957	33,320	32,246	33,305	32,497
Guardian	32,114	32,475	32,934	32,620	32,640	34,916	33,252	33,524	32,751
Hand-in-Hand	10,950	11,166	11,178	10,617	10,991	10,993	11,018	11,063	11,282
Imperial	27,020	27,579	27,483	27,708	28,200	28,221	31,202	33,398	33,630
Independent and West Middlesex (*discon.*)	-	-	27	809	1,782	2,071	1,236§		
Licensed Victuallers	-	-	1,528	3,239	4,561	5,209	6,061	6,584	7,291
London	9,490	10,173	11,158	11,420	13,819	15,258	14,485	14,595	15,132
Phœnix	72,821	75,157	107,997	121,851	125,248	130,149	133,338	132,029	129,649
Protector (*discon.*)	56,676	54,306	12,435‖						
Protestant Dissenters	-	-	-	-	2,141	3,839	5,594	6,630	7,536
Royal Exchange	55,266	57,973	61,197	161,653	65,160	68,875	70,153	71,121	71,891
Sun	127,870	129,114	141,335	145,251	151,660	158,688	162,109	163,812	165,683
Union	16,370	17,334	17,508	18,047	17,726	18,211	19 354	19,825	20,930
Westminster	15,531	16,512	17,070	16,936	17,489	18,662	18,659	20,280	20,770
Total	550,594	562,503	580,974	588,908	617,071	640,504	657,313	669,977	677,640

* 1 Quarter. † 2 Quarters. ‡ 3 Quarters. § 2 Quarters. ‖ 1 Quarter.

Amount of Duty on Fire Insurances paid by the following Country Offices, during each of the Five Years ending with 1842.

Offices.	1838.	1839.	1840.	1841.	1842.
	£	£	£	£	£
English offices.					
Bath Sun (*discon.*)	1,138*				
Birmingham	7,893	8,278	8,649	9,245	9,684
Birmingham District	2,687	3,151	3,685	4,400	4,925
Bristol (*discon.*)	3,422	3,407	622†		
Bristol (Union)	2,613	2,749	3,131	3,151	3,273
Coventry and Warwick (*discon.*)	429	93‡			
Essex Economic	2,990	3,097	3,157	3,180	3,228
Essex and Suffolk	6,656	5,698	5,784	5,855	5,889
Hants, Sussex, and Dorset	2,514	2,614	2,418	2,337	2,344
Kent	11,348	11,413	11,638	11,752	11,782
Leeds and Yorkshire	10,861	11,659	12,298	12,289	12,590
Leicestershire	1,412	1,490	1,587	1,652	1,685
Liverpool	5,655	6,270	7,016	7,471	8,021
Manchester	19,737	20,467	20,881	20,753	20,330
Newcastle and North of England (*discon.*)	7,566§				
Newcastle-upon-Tyne	5,605	5,886	5,984	6,126	6,206
New Norwich Equitable	1,503	1,512	1,700	1,824	1,919
Norwich Union	65,407	66,873	67,664	67,938	68,642
Nottinghamshire and Derbyshire	1,921	2,280	2,505	2,665	2,601
Reading (*discon.*)	219	227	234	169‖	
Salop	3,013	3,059	3,130	3,298	3,298
Sheffield	2,568	2,600	2,775	2,783	2,857
Shropshire and North Wales	1,087	1,354	1,484	1,649	1,642
Suffolk (East and West) united	11,324	11,296	11,526	11,520	11,499
West of England	30,802	32,422	33,745	35,384	37,450
Yorkshire	10,191	11,334	14,255	12,929	13,385
York and London (*discon.*)	13,349	11,585	11,796	10,671	6,405
Scotch offices.					
Scottish Union	20,178	20,502	20,553	21,578	19,732
North British	7,862	8,185	8,210	9,343	10,615
Caledonian	5,743	6,185	6,522	6,867	7,037
Insurance Company of Scotland	5,712	5,858	5,851	5,799	5,996
Hercules	5,786	5,823	5,915	6,658	5,662
Friendly	3,905	4,089	3,757	5,045	4,747
Glasgow (*discon.*)	-	1,522	1,838	2,635	
West of Scotland, now Metellus (*discon*)	3,881				
Perfarshire and Perthshire	1,585	1,829	1,847	1,911	1,941
County and City of Perth	701	784	698	734	750
Aberdeen	2,572	2,745	3,106	3,486	3,737
North of Scotland	1,516	1,786	1,943	2,079	2,203
National	-	-	-	845§	2,350
Irish offices					
Hibernian (*discon.*)	1,322				
National	4,911	5,135	5,456	5,419	5,420
Patriotic	2,781	2,975	3,043	3,262	3,568
Total	294,875	298,210	304,401	314,478	313,200

* 3 Quarters. † 1 Quarter. ‡ 1 Quarter. § 2 Quarters. ‖ 3 Quarters. ¶ 2 Quarters.

The Hope, Eagle, Albion, Beacon, British Commercial, Palladium, Surrey Sussex and Southwark, Brighton, Old Bath, Gloucestershire, Canterbury, Berks, Gloucester and Provincial, Hertford, Cambridge and Country, Salamander, Protector, North and South Shields, Newcastle and North of England, Bath Sun, Bristol, Bristol Crown, Metellus, Hibernian, Coventry and Warwickshire, Independent and West Middlesex, Glasgow, York and London, English and Scotch Law, and the British, (in all 40 offices, chiefly those lately established) have discontinued their fire insurance business.

IV. Insurance (Life).

That part of the business of life insurance which consists of granting annuities upon lives, is treated of under Interest and Annuities; so that we have only to treat, in this place, of the insurance of sums payable at the death of the insurers or their nominees.

Suppose an individual of a given age wishes to insure 100*l.* payable at his death, the single premium, or the series of annual premiums, he ought to pay an office for such insurance, must plainly depend on the expectation of life of such individual, and on the rate of interest or nett profit which the insurers may make by investing the premiums.

With respect to the first of these conditions, or the *expectation of life*, it is usual in estimating it to have recourse to Tables framed from the mortality observed to take place in particular cities or districts, as in Northampton, Carlisle, &c. — (See Interest and Annuities.) But though the actual decrement and expectation of life among an average population, at every year of their lives, were accurately

determined, it is doubted whether it would form a fair basis for an insurance-office to proceed upon. The general opinion seems to be, that insured lives are decidedly above the average; for insurance offices invariably profess to act on the principle of rejecting bad lives or of making them pay a proportional increase of premium; and it may, besides, it is said, be fairly presumed that persons insuring their lives are of a superior class, and are not, generally speaking, engaged in those manual and laborious occupations that are esteemed most injurious to health. But, on the other hand, the friends of parties whose lives are supposed to be bad, and the parties themselves, are most anxious they should be insured. It is also far from being an uncommon practice, for certain individuals to prevail on persons whom they happen to know, or believe to be bad lives, to insure; and then to get a legal assignment of the policy in their favour, on their giving the "men of straw" a bonus for their share in the fraud. At all events, there can be no question that large numbers of such lives are perpetually offered for insurance; and every individual conversant with the business knows that, in despite of all precautions, policies are very frequently effected upon them. Mr. Milne, on whose judgment every reliance may be placed, states distinctly that "all the caution and selection which the offices in general can exercise, is necessary to keep the lives insured up to the average goodness of the bulk of the population."—(*Ency. Brit.* new ed. art. *Annuities*.) Since the competition among the different offices became so very keen as it has been of late years, there are but few lives so bad that they will not be taken by one office or another; and we doubt, were the results of their experience made public, whether it would be found that there is much foundation for the opinion as to the superiority of insured lives.

With respect to the second condition in valuing an insurance, or the rate at which the interest of money may be estimated, it is impossible to arrive at any thing like accurate conclusions. At an average, perhaps, transactions in life insurance may extend over a period of 30 years from the time when they are entered into; and in such a lengthened term the greatest changes may take place in the rate of profit and the rate of interest. Mr. Finlaison, of the National Debt Office, appears to think that 4½ per cent. may be taken as the true average rate in this country; and that 4½ is a rate at which no loss need be apprehended. — (*Parl. Paper* No. 284. Sess. 1829.) But this is not a point on which (as Mr. Finlaison seems to suppose) previous experience can be safely depended upon in forming engagements for the future; and were this the proper place for entering upon such discussions, we think we could assign pretty solid grounds for concluding that no institution, intended to last for the next half century, would be warranted in reckoning upon realising more than 3 per cent. upon its investments. We should look upon this as the *maximum*, and of course could expect nothing but ruin to fall upon any institution founded upon the hypothesis of realising 4½ per cent. of interest. At the same time, we would not be understood as laying any undue stress upon this opinion; and are ready to admit that there must always be more of conjecture than of certainty in such conclusions.

Security being the principal object to be aimed at by every insurance office established on sound principles, they would not act wisely, if they did not calculate their premiums considerably higher than may appear necessary to those who look only at what has taken place during the last 30 or 40 years. Societies contracting prospective engagements that may extend for half a century or more, are exposed to innumerable unforeseen contingencies; and they would be highly censurable, and altogether unworthy of the public confidence, were they so to conduct their affairs, that they might be liable to serious embarrassments from fluctuations in the rate of interest, or an increase of sickness, or any other cause. The success that has hitherto attended the Equitable, and some of the long-established offices, must not be taken as any criterion of what may befall them and others during the next 100 years. Mr. Morgan, the late able actuary of the Equitable, in his account of the rise and progress of that institution, published in 1828, has satisfactorily shown that its peculiar prosperity has been in a very great degree owing to circumstances which cannot possibly occur again. The premium, for example, charged by the Society, so late as 1771, for insuring 100*l.* on the life of a person aged 30, was *4l.* 1*s.* 5½*d.*, whereas it is now only *2l.* 13*s.* *4d.*; and there was a corresponding difference in the premiums for the other ages. — (p. 36.) But the excessive magnitude of the premiums was not the only extraordinary source of profit enjoyed by this Society in the earlier part of its career. We learn from the same unquestionable authority, that *half the insurances made during the first twenty-five years of the Society's existence were abandoned by the insurers*, in many cases, after the premiums upon them had been paid for a considerable number of years, *without any valuable consideration being given for them by the Society!* — p. 38.) So copious a source of profit was alone adequate to enrich any society; but such things rarely occur now, — people are become too familiar with life insurance, and sales of policies are of too frequent occurrence, to allow any office to realise any thing considerable in this way. Now, we ask, can any one who takes these facts into view, and couples them with the frugal and cautious management which has hitherto always distinguished the Equitable Society, be surprised at its success? and can any thing be more absurd than to appeal to its experience in casting the horoscope of the societies that have sprung into existence within the last few years? But, independently of these considerations, there are other circumstances sufficient to account for the great success of some of the old offices. Since the close of the American war, a very decided diminution has taken place in the rate of mortality; the public tranquillity has neither been disturbed by foreign invasion nor intestine commotion; we have not been once visited by any epidemic disorder; and the investments in the funds, during the war made at from 50 to 60, may now be realised at from 80 to 90. We do not presume to say that circumstances may not be even more advantageous for the insurance offices during the next half century; but we should not, certainly, think very highly of the prudence of those who proceeded to insure on such an assumption. Security, we take leave again to repeat, is, in life insurance, the paramount consideration. It is, we believe, admitted on all hands, that the premiums were at one time too high; but we doubt whether the tendency at present be not to sink them too low. A great relaxation has taken place, even in the most respectable offices, as to the selection of lives. And the advertisements daily appearing in the newspapers, and the practices known to be resorted to in different quarters to procure business, ought to make every prudent individual consider well what he is about before he decides upon the office with which he is to insure. Attractive statements, unless where they emanate from individuals of unquestionable character and science, ought not to go for much. Life insurance is one of the most deceptive of businesses; and offices may for a long time have all the appearance of prosperity, which are, notwithstanding, established on a very insecure foundation. If a man insure a house or a ship with a society, or an individual, of whose credit he gets doubtful, he will forthwith insure somewhere else. But life insurance is quite a different affair. The bargain is one that is not to be finally concluded for, perhaps, 50 years; and any inability on the part of an establishment in extensive business to make good its engagements, would be productive of a degree of misery not easy to be imagined.

Life insurance companies are divided into three classes. The first class consists of joint stock companies, who undertake to pay *fixed* sums upon the death of the individuals insuring with them; the profits made by such companies being wholly divided among the proprietors. Of this class are the Royal Exchange, Globe, &c. The second class are also joint stock companies, with proprietary bodies; but instead of undertaking, like the former, to pay certain specified sums upon the death of the insured, they allow the latter to participate to a certain extent, along with the proprietors, in the profits made by the business. The mode in which this sort of *mixed* companies allot the profits granted to the insured is not the same in all; and in some, the principle on which the allotment is made is not disclosed. The Rock, Sun, Alliance, Guardian, Atlas, &c. belong to this mixed class. The third species of company is that which is formed on the basis of mutual insurance. In this sort of company there is no proprietary body distinct from the insured; the latter share among themselves the whole profits of the concern, after

deducting the expenses of management. The Equitable Society, the Amicable, the Norwich Life, &c. belong to this class.

The advantage to a person insuring in any one office as compared with another, must plainly depend on a comparison between the premiums demanded, the conditions of the policy, and, above all, the security which it holds out. It may appear, on a superficial view, as if the mutual insurance companies would be in all respects the most eligible to deal with, inasmuch as they have no proprietors to draw away any share of the profits from the insured. It is doubtful, however, whether this advantage be not more than balanced by disadvantages incident to such establishments. Every one being a partner in the concern, has not only his own life insured, but is part insurer of the lives of all the other members; and may, in this capacity, should the affairs of the society get into disorder, incur some very serious responsibilities. The management, too, of such societies, is very apt to get into the hands of a junto; and to be conducted without the greater number of those interested knowing any thing of the matter. There is, also, considerable difficulty, in constituting such societies, in distinguishing clearly between the rights of old and new members; for supposing a society to be prosperous, it is but reasonable that those who have belonged to it while it has accumulated a large fund, should object to new entrants participating in this advantage. But the affairs of a society conducted in this way, or making distinctions in the rights of the members during a long series of years, could hardly fail of becoming at last exceedingly complicated: nor is it, indeed, at all improbable that the conflicting claims of the parties in some of the societies of this sort now in existence, may ultimately have to be adjusted in the courts of law, or by an act of the legislature.

Supposing the premiums demanded by the societies which retain the whole profits to themselves, to be fairly proportioned to the values insured, we should be inclined to think that they are, on the whole, the most advisable to insure in. The subscribed capital of such associations as the Royal Exchange, Sun, Globe, Scottish Union, &c. and the wealth of the partners (which is all liable, except in the case of the chartered companies, to the claims of the insured), afford unquestionable security. Individuals dealing with them know exactly what they are about. They know the precise premiums they will have to pay, and the exact amount of the sums that will be paid to their assignees in the event of their death. They incur no responsibility of any kind whatever. For, unless some very unprecedented and unlooked-for change should take place in the condition of the country, they may reckon with certainty on the terms of the policy being fulfilled to the letter.

But, as already observed, every thing depends, in matters of this sort, on a comparison of the premium with the advantages to be realised. And where the premiums are believed, either through carelessness, or intentionally, in order to provide for the safety of the establishment, to be a little too high, it may be more expedient, perhaps, to deal with a mixed company. The subscribed capital and fortunes of the proprietary body afford a guarantee on which the public may depend in dealing with any *respectable* company of this sort; while by receiving a share of the profits, the insured gain by the flourishing condition of the association, and it is of less consequence to them though the premiums should be too high.

It should, however, be borne in mind, that an individual insuring with a mixed company, on condition of his getting a proportion of the profits, becomes a *partner of such company*; and being so, incurs responsibilities. In dealing with such associations as the Alliance, the Rock, and a few others, this responsibility can hardly be said to amount to any thing. But there are companies of this class in the field, and holding out very tempting baits to the unwary, those insured in which may find, at some future period, that this responsibility is by no means a light matter.

A highly respectable company of this mixed class, with a large subscribed capital, — the Guardian, — inserts in all its policies the following condition, viz.—"That the responsibility of the individual members shall, in all cases, be limited to their respective shares." It may be doubted whether this condition be good in law; but if it be, it materially affects the security afforded by the company, which otherwise would justly claim a place in the very first class of offices. As no one attempts to secure himself against a contingency which he is satisfied cannot happen, the existence of a condition of this sort implies a doubt, on the part of the proprietary body, of the perfect solidity of the establishment. Such a doubt may be, and we believe really is, very ill-founded; but the public will, most likely, be inclined to think that the proprietors ought to know better than any one else. The Albion Fire and Life Insurance Company also inserts in its policies a condition to the same effect.

The allotment of profit to the insured made by the mixed companies, is sometimes effected by a diminution of the premiums, and sometimes by increasing the sum in the policy; and individuals should, in dealing with such societies, select, other things being equal, the association with which to insure, according as they wish to insure a larger sum, or to get the premiums reduced.

We subjoin, from Mr. Babbage's work on *Life Assurance**, the following statement of the terms of the various mixed companies, as to the division of profits with the insured. They are, for the most part, exceedingly vague. We also subjoin an account of the conditions, in respect of profits, under which new entrants are admitted into the Equitable.

Alliance. — At the periods of participation of the Company in the profits of its concerns, every policy for the whole term of life, which shall have paid 5 entire annual premiums, shall, if the allowance be made in reduction of annual premium, be entitled to such reduction from the original charge as shall then, and from time to time, be declared; but if the allowance be in addition to the amount assured, that addition shall also be continually declared from time to time.

Persons assuring their own lives have the option of declaring, at the time of effecting the assurance, whether they will participate in the profits by an addition to their policy, or by a reduction of premium.

Atlas. — Persons assuring for the whole term of life for 100*l.* and upwards, in Great Britain and Ireland respectively, will be entitled, at the end of every 7th year, to participate in the surplus premiums, to be then ascertained by actual valuation.

Asylum. — The directors have power to divide such portion of the profits quinquennially as may not imprudently check the growth of the funds intended for the benefit of the assured.

Crown. — Two thirds of such profits as shall periodically be declared divisible, will be apportioned amongst assurers for the whole term of life, and may be applied to the reduction of the future annual premiums, or to the increase of the sum assured, as may be desired.

Economic. — At present 3-4ths of the savings and profits divided amongst the assured entitled to participate therein, by additions to their policies, proportioned to their respective contributions, and in order to afford them the immediate benefit of such additions, interest thereon applied annually in reduction of their premiums.

Equitable. — That in case any prospective addition shall hereafter be ordered to be made to the claims upon policies of assurance in this Society, such order shall not take effect with respect to any policy granted after the 31st of December, 1816, until the assurances existing in the Society prior in number and date to such policy, and if of the same date, prior in the number thereof, shall be reduced to 5,000; but as soon as such reduction shall have been ascertained, in manner hereinafter mentioned, the said policy shall be within the effect and operation of the order for such addition, as to the payments made thereon subsequent to such ascertained reduction; so that if such order should be made to take effect generally from the 1st of January, 1820, for the space of 10 years then next following, a policy effected in the year 1817 shall not be within the operation of such order, until the assurances existing prior to the number and date of the policy, as aforesaid, shall have been reduced to 5,000; but such policy shall be within the operation thereof from the time when the reduction shall have been ascertained, in manner hereinafter mentioned, as to the payments made thereon subsequent to such ascertained reduction. And the like as to other cases. And this by-law shall be considered as a part of every such order, and shall be virtually incorporated therein, although the same may not be thereby expressly referred to.

That in case any retrospective addition shall hereafter be ordered to be made to claims upon policies of assurance in this Society, such order shall not take effect with respect to any policy granted after the 31st of December, 1816, until the assurances existing in the Society prior in number and date, and if of the same date, prior in the number thereof, shall be reduced to 5,000; but when the said reduction shall have been ascertained in manner hereinafter mentioned, such policy shall be within the effect and operation, and entitled to the benefit of such order, with respect to every payment made thereon subsequent to such ascertained reduction; so that if such order shall be made to take effect generally as to payments made before the 1st of January, 1830, a policy effected in the year

* This work of Mr. Babbage contains a good deal of useful information, intermixed, however, with not a few errors and mis-statements. It was most ably reviewed in the 90th Number of the *Edinburgh Review*.

1817 shall not be within the effect and operation thereof, unless the life assured shall exist, and the payments continue to be made, until the assurances existing in the Society prior to the number and date of the policy, as aforesaid, shall be reduced to 5,000; but as soon as such reduction shall have been ascertained, in manner hereinafter mentioned, such policy shall be within the effect and operation of such order for the several payments made thereon as aforesaid. And the like as to other cases. And this by-law shall be considered as a part of every such order, and be virtually incorporated therein, although the same may not be thereby expressly referred to.

That an inquiry be made on the 1st of April in every year, in order to ascertain the number of assurances made and existing in the Society; and when it shall have been ascertained by such inquiry that the assurances existing prior to the 1st of January, 1817, were, on the 31st of December immediately preceding such inquiry, reduced below the number of 5,000, the actuary do report the same to the court of directors, who shall communicate such report to the quarterly general court, to be holden in the June following; and that as many of such policies as had been made subsequent to the 31st of December, 1816, and which were existing in the Society on the 31st of December immediately preceding such inquiry, be added, according to the priority in their dates and numbers, and if of the same date, according to the priority in their numbers, to those above mentioned, as shall be sufficient to complete the number to 5,000; and that the persons holding the policies so added shall be considered thenceforward as entitled to such additions as shall be thereafter made in respect of all the payments made subsequent to such ascertained reduction, and, under the same restrictions, to the same privileges of attending at the general courts, and of being eligible to the office of director.

That after the vacant numbers in the assurances existing in the Society on the 1st of January, 1817, shall have been filled up agreeably to the foregoing order, the actuary, on the 1st of April in every succeeding year, do ascertain the vacancies which have taken place in the preceding year in the policies constituting the 5,000 mentioned in the 5th resolution, and report the same to the court of directors, who shall communicate such report to the quarterly general court in the month of June following; and that as many policies shall be added, according to the priority of their dates and numbers, and if of the same date, according to the priority in their numbers, as shall be sufficient to complete the number to 5,000; and that the persons holding those policies shall thenceforward be considered as entitled to such additions as shall be thereafter made in respect of all payments made subsequent to the 31st of the preceding December, and, under the same restrictions, to the same privileges of attending the general courts, and being eligible to the office of director.

Provided that nothing hereby ordered shall be construed to authorise an addition to the sum assured by any policy, upon which policy the number of payments required in that respect by the present by-laws of the Society shall not have been made.

N. B. — Those by-laws require that 6 annual payments at the least shall have been made before any addition to a claim can take place; and when such payments shall have been made, the party will be qualified to be received, in like manner, into the number of persons entitled to additions as aforesaid.

European. — The profits derived by this Company are distributed amongst the several persons connected with the establishment, according to the contingency or certainty of their contract.

Life insurers derive an immediate benefit by the reduction of the premiums generally taken, with the prospect of a liberal addition to their policies, or a further reduction of the premium, in 10 years.

Guardian. — Persons assured for the whole term of life will be entitled at the end of every 7 years to participate in the profits of the Company, after a deduction of 3 per annum, for the guaranty of the capital, as the directors may think reasonable; the extent of which is, however, limited by the deed of settlement.

The share of the profits to be so allowed to the insured may either be added to the amount of their respective policies, or the value thereof be applied in reduction of the premiums hereafter to be payable on such policies, provided such option be declared in writing within 3 calendar months next after the dividend shall have been declared; but if such option be not declared, such share of profits will be added to the amount of policies.

Hope. — Every person effecting a policy of assurance at this office, is entitled to a participation in the profits equally with the proprietors of the Company, after a moderate deduction for the guaranty and the expenses of management.

Imperial. — Upon every policy effected for the whole term of life, the assured will participate in the profits of the Company, by having periodical additions made to the sums insured to the amount of 2-3d parts of such clear gains and profits.

Law Life. — At stated periods, the surplus of the fund arising from the premiums of assurance, and their accumulation beyond what may be thought necessary to answer the expected claims upon the Society, will be ascertained; and as large a portion of the savings as may be deemed consistent with the security of the institution, will be divided between the proprietors and the assured in the following manner: — 1-5th will be transferred to the proprietors' guaranty fund; and reversionary sums, equivalent to the remaining 4-5ths, will be added to the policies of those who shall have been 5 years assured for the whole term of life.

London Life Association. — The distinguishing principle of this Society is, that the benefits resulting from its transactions shall be enjoyed by the members during life, so as to render life assurance as easy to the assured, as a due regard to security will admit.

Medical and Clerical. — Persons assured for the whole term of life will be entitled to share with the original proprietors the general profits of the business, in proportion to the amount of their respective assurances.

Norwich Union. — The whole of the surplus premiums is added at stated periods to the policies of the members, in proportion to the sums they have respectively contributed.

Palladium. — A general investigation of the affairs of the Society is to take place every 7th year, when 4-5ths of the declared profit of the life department will be appropriated by way of bonus or addition, to be placed to the credit of the policies then in force for the whole term of life, upon the most equitable principles of division.

Rock. — That the said bonus shall be short of the actual surplus profits at the time of making the same, by the sum of 5,000*l.* at least.

That the bonus so declared shall be divided into 3 equal parts.

That one of the said parts shall be added to and consolidated with the subscription capital stock. (This is the proprietors' fund.)

That the remaining 2-3ds be allotted to the policies in the manner described in the deed.

That the sum to which any person assured by the Company may become entitled under any such distribution, shall be paid by the Company without interest, at the time when the sum assured by the policy shall become payable, and not before.

Union. — Those who assure with this Company will participate with the proprietors in the profits of the establishment, which will be added every 7 years to the respective policies.

United Empire. — Persons effecting assurances for the whole continuance of life will, at the end of the first 5 years, and of every subsequent 5 years, be entitled to participate in whatever nett surplus profits it may be declared by the directors expedient to divide.

Two-fifths of the aforesaid profits will be divided amongst the said assured, in proportion to the premiums they may respectively have paid, and will, at their option, be either added to the amount of their policies, or applied in reduction of their future premiums.

University. — As it is intended that the capital advanced shall be repaid to the shareholder, with a bonus of 100*l.* per cent., 1-10th of the profits, when ascertained by a valuation of all existing risks, will every 5 years be applied to form a fund for that purpose.

The remaining 9-10ths of the profits to be divided between the assured and the shareholder, in the proportion of 8 parts to the former and 1 to the latter.

The profit or bonus to the assured to be given either by a diminution of the rate of premium, or by an increase of the amount of policy, at the option of the party.

Westminster. — By a regulation taking effect from the 9th of May, 1832, this Society makes a positive addition of 10 per cent. every 10th year to all sums insured on single lives, for the whole term of life, by policies issued after that date.

In order to hinder the growth of gambling transactions upon life insurance, it was judiciously enacted, by stat. 14 Geo. 3. c. 48., that

No insurance shall be made by any person or persons, bodies politic or corporate, on the life or lives of any person or persons, or any other event or events whatsoever, wherein the person or persons, for whose use or benefit, or on whose account, such policy or policies shall be made, *shall have no interest*, or by way of gaining or wagering; and that every insurance made contrary to the true intent and meaning of this act, shall be null and void to all intents and purposes whatsoever. — Sect. 1.

It shall not be lawful to make any policy or policies on the life or lives of any person or persons, or other event or events, *without inserting in such policy or policies, the name or names of the person or persons interested therein, or for whose use, benefit, or on whose account, such policy is so made or underwrote.* — Sect. 2.

In all cases where the insured has an interest in such life or lives, event or events, no greater sum shall be recovered or received from the insurer or insurers, than the amount or value of the interest of the insured in such life or lives, or other event or events. — Sect. 3.

A creditor has an insurable interest in the life of his debtor; but it was decided, in a case which arose out of a policy on the life of the late Mr. Pitt, that if, after the death of a debtor whose life is insured by a creditor, and before any action is brought on the policy, the debt be paid, no action will lie.

All insurance offices either insert in their policies or refer in them to a declaration signed by the insured, setting forth his age, or the age of the party upon whom he is making an insurance; whether he has or has not had the small-pox, gout, &c.; "that he is not afflicted with any disorder that tends to the shortening of life;" that this declaration is to be the basis of the contract between him and the society; and that, if there be any untrue averment in it, all the monies paid to the society upon account of the insurance shall be forfeited to them. — (See Form, *post*.)

The condition as to the party not being afflicted with any disorder that tends to the shortening of life is vague, and has given rise to a good deal of discussion. But it is now settled that this condition is sufficiently complied with, if the insured be in a reasonably good state of health; and although he may be afflicted with some disease, yet if it can be shown that this disease does not tend to shorten life, and was not, in fact, the cause of the party's death, the insurer will not be exonerated: "Such a warranty," said Lord Mansfield, "can never mean, that a man has not in him the seeds of some disorder. We are all born with the seeds of mortality in us. The only question is, whether the insured was in a *reasonably*

good state of health, and such a life as ought to be insured on common terms." — (See *Marshall on Insurance*, book iii.; *Park on Insurance*, c. 22.)

Policies of life insurance must be on stamped paper, the duty being as follows: — viz.
When the sum in the policy does not exceed 50*l.* the duty is 2*s.* 6*d.* When it does not exceed 100*l.* the duty is 5*s.*

Where it shall amount to				
500*l.*	and not to	1,000*l.*	-	2*l.*
—	—	1,000*l.*	—	3,000*l.* - 3*l.*
—	—	3,000*l.*	—	5,000*l.* - 4*l.*
—	—	5,000*l.*	and upwards.	- 5*l.*

We subjoin a statement of the terms and conditions on which the Sun Life Assurance and Equitable Societies transact business, and a copy of one of the policies of the former upon the life of a person aged 30, insuring his own life for 1,000*l.* The conditions of most of the other societies are similar, and may be learned by any one, on applying either at the head offices in town, or at their agents' in the country. The premiums demanded by the principal offices are exhibited in the Table, page 730.

Sun Life.—An assurance for a term of years, or for the whole continuance of life, is a contract on the part of the office to continue the assurance during that term, on the payment of a certain annual premium, but the assured may drop it, whenever the end is answered for which the assurance was made.

The person whose life is proposed for assurance, is required to appear either before the managers at the office in London, or before an agent in the country; in default of which the non-appearance fine must be paid when the assurance is effected; which, when the term is 1 year, is 10*s.* for every 100*l.* assured. When the term exceeds 1 year, but does not exceed 7 years, it is 15*s.* for every 100*l.* And when the term exceeds 7 years, the fine is 1 per cent.

Reference to be made to 2 persons of repute, to ascertain the identity of the person appearing.

Any premium remaining unpaid more than 15 days after the time stipulated in the policy, such policy becomes void; but the defaulter producing satisfactory proof to the managers, of the health of the person on whose life the assurance was made, and paying the said premium within 3 calendar months, together with the additional sum of 10*s.* upon every 100*l.* assured by such policy, then such policy is revived, and continues in force.

Conditions of Assurance made by Persons on their own Lives.

The assurance to be void, if the person whose life is assured shall depart beyond the limits of Europe; shall die upon the seas except (not being a seafaring person by occupation) in passing during peace from any part of Europe to any other part of Europe; or shall enter into or engage in any military or naval service whatsoever, without the previous consent of the Society; or shall not be, at the time the assurance is made, in good health; or shall die by suicide, duelling, or the hands of justice, so far as respects such person, but shall remain in force so far as any other person or persons shall then have a *bona fide* interest therein, acquired three months previously to such decease by assignment or legal or equitable lien, upon due proof of the extent of such interest being made to the satisfaction of the managers; and if any person assured upon his own life, and who shall have been so for at least five years, shall die by his own hands, and not *felo de se*, the managers shall be at liberty, if they shall think proper, to pay for the benefit of his family, any sum not exceeding what the society would have paid for the purchase of his interest in the policy if it had been surrendered to the society the day previous to his decease, provided the interest in such assurance shall then be in the assured, or in any trustee or trustees for him, or for his wife, or children.

N. B. — The above conditions apply equally to all policies of the society now in force.

Conditions of Assurance made by Persons on the Lives of others.

The party on whose behalf the assurance is made, must be interested in the life of the other to the full amount assured thereon.

The assurance to be void, if the person whose life is assured shall depart beyond the limits of Europe; shall die upon the seas except (not being a seafaring person by occupation) in passing during peace from any part of Europe to any other part of Europe, or shall enter into or engage in any military or naval service whatsoever, without the previous consent of the Society; or shall not be, at the time the assurance is made, in good health.

All claims are paid within 3 months after certificates (according to the required forms) of the death and burial of the deceased are approved by the managers.

No assurance can take place until the first payment is made.

Form of a Proposal for Assurance.

Name, and rank or profession, of the life to be assured.
Present residence.
Place of birth.
Date of birth.
Age next birthday.
Sum.
Term.
Name and addition. } Of the usual medical attendant of the life proposed. Of a non-medical referee.
Have any of his near relations died of consumption of the lungs, or other pulmonary disease?
Has he ever had gout or asthma, or any fit or fits?
Has he ever been afflicted with rupture?
Has he ever exhibited any symptom of consumption of the lungs?
Is he afflicted with any disorder tending to shorten life?
Has he had the small-pox or the cow-pox?
Whether the person whose life is proposed to be assured, intends to appear at the office?
In whose name or behalf the policy is desired?
Has he had the measles?
Has he had the hooping-cough?
Date of proposal.
Annual notices to be sent to

Form of Declaration to be made and signed by or on behalf of a Person making an Assurance on his or her own Life.

I
born in the parish of
in the county of
on the day of
and now residing at
in the county of
being desirous of assuring with the Sun Life Assurance Society, the sum of £ on my own life,
Do hereby declare, that my age does not exceed years; that I have had the * that I have had the gout, asthma, rupture, nor any fit or fits, and that I am not afflicted with any disorder which tends to the shortening of life; and this declaration is to be the basis of the contract between me and the Society; and if any untrue averment is contained in this declaration, in setting forth my age, state of health, profession, occupation, or circumstances, then all monies which shall have been paid to the said Society, upon account of the assurance made in consequence thereof shall be forfeited. Dated the day of 18 .

Form of Declaration to be made and signed by or on behalf of a Person who proposes to make an Assurance on the Life of another.

I
now resident at
in the county of being
desirous of assuring with the Sun Life Assurance Society, the sum of £ for the term of
on the life of born in the parish of
in the county of on the
day of in the year
and now resident at in the county of
Do declare, that I have an interest in the life of the said to the full amount of the said sum of £ ; that to the best of my knowledge and belief the age of the said does not exceed years; that he has had the * that he had the gout, asthma, rupture nor any fit or fits, and that he is not afflicted with any disorder tending to shorten life; and this declaration is to be the basis of the contract between me and the said Society; and if there be any untrue averment therein, all monies which shall have been paid to the Society upon account of the assurance made in consequence thereof, shall be forfeited. Dated the day of 18 .

* Insert small-pox or cow-pox, as the case may require.

Policy by the Sun Life Assurance Society for 1,000*l.*, *on the Life of A. B., aged Thirty, insuring his own Life.*

No. ——

SUN LIFE ASSURANCE SOCIETY.

THIS POLICY OF ASSURANCE WITNESSETH, that, whereas A. B. Esq. of —— Square, London, being desirous of making an assurance upon his own life for the whole duration thereof, and having subscribed, or caused to be subscribed, and delivered into this office, a declaration setting forth his ordinary and present state of health, wherein it is declared that the age of the said A. B. did not then exceed 30 years; and having paid to the managers for the Sun Life Assurance Society, at their office in Cornhill, in the city of London, the sum of twenty-four pounds eleven shillings and eight-pence sterling, as a consideration for the assurance of the sum hereunder-mentioned for *one year*, from the twentieth day of January, 1843.

NOW KNOW ALL MEN BY THESE PRESENTS, that in case the said assured shall happen to die at any time within the term of *one year*, as above set forth, the stock and funds of this Society shall be subject and liable to pay and make good to the executors, administrators, or assigns of the said assured, within three months after the demise of the said assured shall have been duly certified to the managers aforesaid, at their said office, the sum of one thousand pounds sterling, of lawful money of Great Britain.

It is hereby agreed, that this policy may continue in force from *year* to *year*, until the expiration of the term first above-mentioned, provided that the said assured shall duly pay, or cause to be paid, to the managers, at their said office, on or before the nineteenth day of October next ensuing, the sum of twenty-four pounds eleven shillings and eight-pence sterling, and the like sum annually, on or before the day aforesaid; which annual payments shall be accepted, at every such period, as a full consideration for such assurance.

And it is hereby further agreed, that the assurance by this policy shall be extended during peace, to the risk of the above-named A. B. Esq. dying upon the sea in passing between any one part of Europe to any other part of Europe.

PROVIDED NEVERTHELESS, that should the said assured depart beyond the limits of Europe, die upon the seas (except as above stated), or engage in any military or naval service whatsoever, within the term for which this policy is granted; or should the assurance have been obtained through any misrepresentation of the age, state of health, or description of the said assured; or should the said assured die by duelling, suicide, or the hands of justice; then this policy, and every thing appertaining thereto, shall cease, be void, and of none effect, so far as respects the said assured, but in case the said assured die by suicide, duelling, or the hands of justice, this policy shall remain in force so far as any other person or persons shall then have a *bona fide* interest therein, acquired three months previously to such decease by assignment, or by legal or equitable lien, upon due proof of the extent of such interest being made to the satisfaction of the managers. And if the said assured shall have been so for at least five years, and shall die by his own hands, and not *felo de se*, the managers shall be at liberty, if they shall think proper, to pay for the benefit of his family, any sum not exceeding what the society would have paid for the purchase of his interest in the policy if it had been surrendered to the society the day previous to his decease, provided such interest shall then be in the assured, or in any trustee or trustees for him.

IN WITNESS WHEREOF, we, three of the managers for the said Society, have hereunto set our hands and seals, this twentieth day of January, 1843.

Signed, sealed, and delivered, being first duly stamped. J. K.

C. D. (L. S.)
E. F. (L. S.)
G. H. (L. S.)

The following are the premiums demanded by the Sun Life Assurance Society, for insurances on joint lives and survivorships.

Joint Lives. — A Table of Annual Premiums payable during the joint Continuance of Two Lives, for assuring One Hundred Pounds, to be paid as soon as either of the Two shall drop.

Age next Birthday.	Age next Birthday.	Annual Premium.	Age next Birthday.	Age next Birthday.	Annual Premium.	Age next Birthday.	Age next Birthday.	Annual Premium.
		£ s. d.			£ s. d.			£ s. d.
10	10	2 7 5	20	35	3 17 3	35	45	5 7 5
	15	2 11 0		40	4 6 1		50	6 1 11
	20	2 14 6		45	4 16 1		55	7 6 5
	25	2 19 4		50	5 11 7		60	9 0 6
	30	3 5 3		55	6 16 8	40	40	5 5 8
	35	3 11 11		60	8 11 1		45	5 13 10
	40	4 1 1	25	25	3 9 6		50	6 7 9
	45	4 11 5		30	3 14 10		55	7 11 8
	50	5 7 2		35	4 0 11		60	9 5 5
	55	6 12 5		40	4 9 6	45	45	6 1 0
	60	8 6 11		45	4 19 3		50	6 13 11
15	15	2 14 5		50	5 14 7		55	7 16 11
	20	2 17 9		55	6 19 7		60	9 9 8
	25	3 2 5		60	8 13 11	50	50	7 5 6
	30	3 8 3	30	30	3 19 10		55	8 7 4
	35	3 14 9		35	4 5 6		60	9 18 11
	40	4 3 10		40	4 13 10	55	55	9 8 2
	45	4 14 0		45	5 3 2		60	10 18 11
	50	5 9 8		50	5 18 3	60	60	12 8 10
	55	6 14 11		55	7 3 1			
	60	8 9 6		60	8 17 5			
20	20	3 0 11	35	35	4 10 9			
	25	3 5 4		40	4 18 6			
	30	3 10 11						

Survivorship. — A Table of Annual Premiums payable during the joint Continuance of Two Lives, for assuring One Hundred Pounds, to be paid at the Decease of One Person, A., provided another, B. be then living.

Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.	Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.	Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.
		£ s. d.			£ s. d.			£ s. d.
10	10	1 3 9	30	10	2 2 5	50	10	4 7 2
	20	1 4 7		20	2 2 1		20	4 7 0
	30	1 2 10		30	1 19 11		30	4 3 3
	40	1 1 6		40	1 18 6		40	4 1 7
	50	1 0 0		50	1 15 0		50	3 12 9
	60	0 18 5		60	1 12 2		60	3 1 6
	70	0 16 11		70	1 9 10		70	2 11 4
	80	0 15 7		80	1 7 4		80	2 3 2
20	10	1 9 11	40	10	2 19 7	60	10	7 8 6
	20	1 10 6		20	2 19 6		20	7 8 5
	30	1 8 10		30	2 15 4		30	7 5 3
	40	1 6 7		40	2 12 10		40	7 4 11
	50	1 4 7		50	2 6 2		50	6 17 5
	60	1 2 8		60	2 0 6		60	6 4 5
	70	1 0 9		70	1 16 3		70	5 8 8
	80	0 19 3		80	1 13 6		80	4 14 4

From the specimens of premiums in the two preceding Tables, the reader will easily judge of the proportional premiums for any combination of two ages not inserted in them.

Instead of a gross sum payable at the decease of A. provided B. be then living, a reversionary annuity on the remainder of the life of B. after the decease of A. may be incured by the payment of an annual premium during the joint continuance of the two lives; which annual premium may be learnt by application at the office.

Table of Premiums.

The following tabular statement shows the premiums demanded by the principal Life Insurance Societies for insuring 100*l.* at every different age from 15 to 60, for the whole term of life.

Age.	Alliance and Sun.			Amicable.			Asylum.			British Commercial.			Crown.			Economic.			Equitable.			Eagle. Male.			Eagle. Female.			European.			Guardian.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
15	1	12	8	1	15	6	1	7	9	1	10	0	1	15	9	1	10	8	1	18	7	1	18	9	-	-	-	1	13	7	1	16	2
16	1	13	6	1	16	6	1	8	6	1	11	0	1	16	7	1	11	5	1	19	5	1	19	7	-	-	-	1	14	5	1	17	2
17	1	14	3	1	17	6	1	9	3	1	12	0	1	17	5	1	12	3	2	0	8	2	0	5	-	-	-	1	15	4	1	18	2
18	1	15	1	1	18	6	1	10	1	1	13	0	1	18	3	1	13	0	2	1	8	2	1	4	-	-	-	1	16	2	1	19	2
19	1	16	0	1	19	6	1	10	11	1	14	0	1	19	1	1	13	10	2	2	8	2	2	3	-	-	-	1	17	1	2	0	1
20	1	16	11	2	0	6	1	11	9	1	15	0	1	19	11	1	14	7	2	3	7	2	3	2	1	12	7	1	18	1	2	1	0
21	1	17	11	2	1	6	1	12	7	1	16	0	2	0	10	1	15	5	2	4	6	2	4	2	1	13	5	1	19	0	2	1	10
22	1	18	11	2	2	6	1	13	5	1	17	0	2	1	9	1	16	3	2	5	4	2	5	3	1	14	4	1	19	11	2	2	8
23	2	0	1	2	3	6	1	14	5	1	18	0	2	2	9	1	17	2	2	6	3	2	6	4	1	15	4	2	0	10	2	3	6
24	2	1	5	2	4	6	1	15	5	1	19	0	2	3	9	1	18	1	2	7	2	2	7	5	1	16	5	2	1	10	2	4	5
25	2	2	6	2	5	6	1	16	5	2	0	0	2	4	10	1	19	0	2	8	1	2	8	7	1	17	6	2	2	9	2	5	4
26	2	3	9	2	6	6	1	17	6	2	1	0	2	5	10	2	0	0	2	9	0	2	9	9	1	18	8	2	3	0	2	6	4
27	2	5	2	2	7	6	1	18	6	2	2	0	2	6	11	2	1	0	2	10	1	2	11	1	1	19	9	2	4	10	2	7	4
28	2	6	7	2	8	6	1	19	8	2	3	0	2	8	1	2	2	0	2	11	1	2	12	3	2	0	9	2	5	10	2	8	4
29	2	7	11	2	9	6	2	0	10	2	4	0	2	9	2	2	3	1	2	12	3	2	13	7	2	1	8	2	6	11	2	9	6
30	2	9	2	2	10	6	2	2	0	2	5	0	2	10	4	2	4	3	2	13	5	2	15	0	2	2	6	2	8	1	2	10	7
31	2	10	6	2	11	6	2	3	3	2	6	0	2	11	6	2	5	5	2	14	7	2	16	6	2	3	3	2	9	3	2	11	10
32	2	11	10	2	12	6	2	4	6	2	7	0	2	12	9	2	6	8	2	15	9	2	18	0	2	4	3	2	10	6	2	13	0
33	2	12	5	2	14	0	2	5	10	2	8	0	2	14	0	2	8	0	2	17	1	2	19	9	2	5	4	2	11	10	2	14	4
34	2	14	11	2	15	6	2	7	3	2	9	0	2	15	4	2	9	5	2	18	5	3	1	6	2	6	4	2	13	2	2	15	8
35	2	16	8	2	17	0	2	8	9	2	11	0	2	16	9	2	10	11	2	19	10	3	3	4	2	7	6	2	14	7	2	17	0
36	2	18	5	2	18	6	2	10	3	2	13	0	2	18	2	2	12	6	3	1	4	3	5	5	2	8	7	2	16	0	2	18	6
37	3	0	4	3	0	0	2	11	10	2	15	0	2	19	10	2	14	3	3	3	10	3	7	7	2	9	10	2	17	6	3	1	0
38	3	2	3	3	1	6	2	13	6	2	16	0	3	1	2	2	15	11	3	5	6	3	9	10	2	11	0	2	19	1	3	3	1
39	3	4	5	3	3	0	2	15	3	2	18	0	3	3	2	2	17	9	3	7	2	3	12	4	2	13	2	3	0	9	3	5	3
40	3	6	6	3	5	0	2	17	1	3	0	0	3	4	7	2	19	9	3	7	11	3	15	0	2	15	0	3	2	6	3	7	0
41	3	8	7	3	7	6	2	19	0	3	2	0	3	6	5	3	1	10	3	9	9	3	17	9	2	10	11	3	4	3	3	8	9
42	3	10	9	3	10	0	3	1	0	3	4	0	3	8	4	3	3	4	3	11	8	4	1	8	2	12	9	3	6	5	3	10	8
43	3	12	11	3	12	6	3	3	2	3	6	0	3	10	6	3	5	6	3	13	8	4	4	4	2	14	7	3	8	8	3	12	8
44	3	15	3	3	15	6	3	5	4	3	8	0	3	12	8	3	7	9	3	15	9	4	7	11	2	16	5	3	10	5	3	14	8
45	3	17	8	3	18	6	3	7	9	3	10	0	3	15	0	3	11	9	3	17	11	4	11	8	2	18	4	3	12	7	3	17	3
46	4	0	5	4	1	6	3	10	3	3	12	0	3	17	6	3	14	7	4	0	2	4	15	9	2	17	6	3	15	0	3	19	8
47	4	3	3	4	5	0	3	12	11	3	14	0	4	0	1	3	17	8	4	2	7	5	0	0	2	19	1	3	17	6	4	1	4
48	4	6	0	4	8	6	3	15	9	3	17	0	4	3	11	4	1	11	4	5	1	5	4	6	3	0	8	4	0	0	4	4	4
49	4	10	2	4	12	6	3	18	9	3	19	6	4	5	10	4	4	4	4	7	10	5	9	6	3	2	4	4	2	8	4	5	1
50	4	14	2	4	16	6	4	2	0	4	6	0	4	8	11	4	8	0	4	10	8	5	14	7	3	4	4	4	5	6	4	8	0
51	4	18	9	5	0	0	4	5	5	4	10	0	4	12	1	4	11	11	4	13	6	6	0	3	3	6	3	4	8	6	4	11	0
52	5	3	5	5	4	6	4	9	2	4	13	2	4	15	4	4	16	1	4	16	5	6	6	4	3	8	4	4	11	7	4	14	2
53	5	5	8	5	5	6	4	13	2	4	15	6	4	18	6	5	0	6	4	19	7	6	12	9	3	10	5	4	15	0	4	17	5
54	5	14	1	5	13	0	4	17	7	5	1	0	5	1	11	5	5	3	5	2	10	6	19	9	3	13	0	4	18	7	5	0	11
55	5	19	11	5	18	0	5	2	3	5	5	0	5	5	7	5	10	3	5	6	4	7	7	2	3	15	8	5	2	6	5	4	8
56	6	6	4	6	3	0	5	7	4	5	9	6	5	9	6	5	15	7	5	10	1	7	15	1	3	18	6	5	6	8	5	8	7
57	6	13	2	6	8	6	5	12	9	5	13	2	5	13	6	6	1	3	5	14	0	8	5	6	4	1	7	5	11	2	5	12	10
58	7	0	5	7	0	0	5	18	5	5	18	0	6	0	7	6	7	9	6	2	8	8	12	7	4	5	0	5	15	8	6	1	4
59	7	7	8	7	7	6	6	4	2	6	2	4	6	6	2	6	13	9	6	7	8	9	13	0	4	12	4	6	0	8	6	7	2
60	7	14	11	7	6	6	6	10	9	6	7	2	6	7	2	7	0	7	6	7	4	9	13	0	4	12	4	6	5	8	6	7	2

Age.	London, Birchin Lane.			London, Life for Members.			Norwich.			Pelican.			Promoter.			United Empire.			University.			West of England.			Scottish Widows' Fund.			Scottish Union.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
15	-	-	-	-	-	-	1	14	9	1	11	11	1	7	11	1	14	10	1	16	8	1	14	9	1	16	8	1	12	5
16	-	-	-	-	-	-	1	15	9	1	12	9	1	8	8	1	15	9	1	17	9	1	15	9	1	17	6	1	13	6
17	-	-	-	-	-	-	1	16	9	1	13	6	1	9	5	1	16	9	1	18	8	1	16	8	1	18	6	1	13	6
18	-	-	-	-	-	-	1	17	8	1	14	4	1	10	1	1	17	8	1	19	7	1	17	6	1	19	7	1	14	7
19	-	-	-	-	-	-	1	18	6	1	15	3	1	10	11	1	18	7	2	0	7	1	18	6	2	0	7	1	15	8
20	-	-	-	-	-	-	1	19	6	1	16	1	1	11	8	1	19	6	2	1	5	1	19	3	2	1	6	1	16	9
21	2	1	5	2	4	6	2	0	5	1	16	10	1	12	6	2	0	5	2	2	4	2	0	0	2	2	5	1	17	9
22	2	2	0	2	5	6	2	1	3	1	17	7	1	13	5	2	1	3	2	3	1	2	0	10	2	3	3	1	18	10
23	2	2	7	2	6	6	2	2	0	1	18	4	1	14	4	2	2	1	2	4	0	2	1	8	2	4	1	1	19	10
24	2	3	1	2	7	0	2	2	9	1	19	2	1	15	5	2	3	0	2	4	9	2	2	6	2	4	11	2	0	10
25	2	3	8	2	8	0	2	2	8	2	0	1	1	16	4	2	3	11	2	5	3	2	3	0	2	5	0	2	2	10
26	2	4	3	2	9	0	2	3	7	2	1	0	1	17	3	2	4	11	2	5	9	2	3	6	2	5	10	2	3	10
27	2	5	0	2	10	0	2	4	6	2	2	7	1	18	2	2	5	11	2	6	7	2	4	0	2	6	9	2	4	10
28	2	5	11	2	11	0	2	5	5	2	3	11	1	19	11	2	7	0	2	7	7	2	4	11	2	7	6	2	5	11
29	2	6	10	2	12	6	2	7	4	2	5	2	2	1	1	2	8	1	2	9	3	2	5	0	2	8	2	2	6	11
30	2	7	10	2	13	6	2	8	3	2	6	4	2	2	2	2	9	2	2	10	9	2	5	8	2	7	0	2	8	0	2	11	1	2	7	5
31	2	8	10	2	14	6	2	9	2	2	7	7	2	3	3	2	10	4	2	11	11	2	9	0	2	8	8	2	8	5
32	2	9	11	2	15	6	2	10	1	2	8	10	2	4	5	2	11	6	2	13	0	2	10	3	2	9	5	2	9	9
33	2	11	1	2	17	0	2	11	0	2	9	5	2	5	8	2	12	9	2	14	3	2	11	3	2	11	3	2	11	1
34	2	12	4	2	18	0	2	12	0	2	11	3	2	6	7	2	14	1	2	15	6	2	12	9	2	12	9	2	12	5
35	2	13	8	3	0	0	2	13	0	2	12	10	2	8	1	2	15	6	2	16	11	2	13	6	2	13	10	2	13	10
36	2	15	1	3	1	6	2	13	11	2	14	2	2	9	11	2	16	11	2	18	4	2	14	7	2	15	2	2	15	4
37	2	16	8	3	3	0	2	15	0	2	15	10	2	11	5	2	18	4	2	19	9	2	15	8	2	16	7	2	16	11
38	2	18	1	3	4	6	2	16	10	2	16	9	2	13	6	2	19	11	3	1	4	2	16	6	2	18	0	2	18	6
39	2	19	11	3	6	0	2	18	0	2	18	8	2	15	2	3	1	6	3	3	11	2	18	4	2	19	5	3	0	2
40	3	1	8	3	8	0	2	19	8	2	21	8	2	17	0	3	3	2	3	4	7	3	1	8	2	21	3	3	1	11
41	3	3	6	3	10	0	3	3	6	2	2	2	2	18	10	3	4	10	3	6	4	3	3	10	3	3	5	3	3	9
42	3	5	0	3	12	0	3	5	7	2	5	0	2	20	3	3	6	8	3	8	1	3	4	6	3	5	9	3	5	6
43	3	7	6	3	14	0	3	7	9	2	7	10	2	22	6	3	8	8	3	10	0	3	5	5	3	7	2	3	7	3
44	3	10	0	3	16	0	3	9	9	2	9	8	2	24	6	3	10	8	3	12	0	3	6	4	3	9	1	3	9	8
45	3	12	6	3	18	0	3	11	8	2	11	6	2	26	9	3	12	10	3	14	1	3	7	3	3	11	0	3	11	10
46	3	15	3	4	0	0	3	13	8	2	14	4	2	29	3	3	15	3	3	16	2	3	8	3	3	13	0	3	14	1
47	3	18	2	4	2	6	3	16	8	2	17	3	2	32	0	3	18	1	3	18	4	3	9	2	3	15	0	3	16	4
48	4	1	5	4	5	0	3	19	8	2	20	3	2	35	0	4	1	4	4	0	7	3	11	2	3	16	9	4	0	9
49	4	4	10	4	8	0	4	2	9	2	23	4	2	37	3	4	3	6	4	3	8	3	13	1	3	18	0	4	3	9	4	19	0
50	4	8	5	4	11	0	4	6	0	2	26	2	2	40	3	4	6	6	4	7	6	3	15	1	3	20	3	4	5	6	4	4	5
51	4	12	8	4	14	0	4	9	8	2	16	7	2	4	7	4	9	9	4	10	9	3	17	1	3	22	9	4	8	4	4	8	1
52	4	16	1	4	17	0	4	13	3	2	19	1	2	7	4	4	13	0	4	14	0	3	19	1	3	25	3	4	11	8	4	14	2
53	4	19	8	5	0	6	4	17	0	2	22	0	2	10	1	4	16	5	4	17	8	4	2	9	3	28	0	4	14	9	4	17	5
54	5	3	4	5	3	6	4	21	0	2	25	0	2	13	0	4	19	10	5	0	6	4	5	9	3	31	0	4	17	9	5	0	11
55	5	8	4	5	9	6	5	5	3	2	28	1	2	16	2	5	3	4	5	4	6	4	8	9	3	34	0	5	0	8	5	4	0
56	5	13	8	5	14	0	5	9	6	2	31	3	2	19	4	5	8	6	5	8	4	4	11	9	3	37	3	5	3	7	5	7	11
57	6	1	5	6	5	6	5	13	6	2	34	6	2	22	8	5	13	8	5	12	6	4	15	0	3	40	9	5	7	11	5	10	9
58	6	9	11	6	14	0	5	17	6	2	37	9	2	26	4	5	18	6	5	17	4	4	18	8	3	44	6	5	12	2	6	1	9
59	6	18	10	6	19	0	6	2	6	2	42	0	2	30	7	6	4	6	6	2	8	5	2	5	3	49	0	5	18	1	6	7	10
60	7	0	2	7	0	0	6	7	3	2	47	3	2	35	0	6	12	10	6	7	0	5	7	4	3	54	0	6	5	4	6	14	3

Equitable Assurance Society. — The following is the

*Declaration required to be made and signed in the Office, by or on the Behalf of a Person * who proposes to make an Assurance on his or her own Life.*

I

being desirous of becoming a member of the Society for Equitable Assurances on Lives and Survivorships, and intending to make assurance in the Sum of

upon and for the continuance of my own life, and having perused and considered that * clause of the deed of settlement of the said Society which requires a declaration in writing of the age, state of health, and other circumstances attending the person whose life shall be proposed to be assured, do hereby declare and set forth, That my age does not exceed ; that I have had the small-pox ; and have had the gout; and that I am not afflicted with any disorder which tends to the shortening of life; and I do hereby agree that this declaration be the basis of the contract between the said Society and me, and that if any untrue averment is contained in this declaration, all monies which shall have been paid to the Society upon account of the assurance made in consequence thereof, shall be forfeited. Dated the day of in the year of our Lord .

* *The Clause which is referred to in the Declaration.*

That every person desirous of making assurance with the Society, shall sign or execute a declaration in writing (in the presence of one credible witness, who shall attest the same), setting forth the age, state of health, profession, occupation, and other circumstances attending the person or persons whose life or lives shall be proposed to be assured; which declaration shall be the basis of the contract between the said Society and the person desiring to make assurance with them; in which declaration if any artful, false, or fraudulent representation shall be used, and the same shall at any time thereafter be discovered, from thenceforth the sums which shall have been paid to the Society on account of any assurance so fraudulently obtained, shall be forfeited to the use of the Society; and all claims to be made on that behalf shall cease, determine, and be void, to all intents and purposes whatsoever.

Form of a Proposal to be presented to a Weekly Court of Directors.

Name and profession of the life to be assured.
Place and date of birth.
Place of residence.
Age. Sum. Term.
By whom made.
To give reference to two † persons of good repute, (one, if possible, of the medical profession,) to ascertain the present and general state of health of the life to be assured.
If had the small-pox. If vaccinated.
If afflicted with the gout. If ever ruptured.

† Parties who do not appear before the Court of Directors are required to give a reference to 3 persons for an account of the present and general state of their health.

A Table of Annual Premiums payable during the Continuance of Two Joint Lives for assuring One Hundred Pounds, to be paid when either of the Lives shall drop.

Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.
10	10	2 17 1	15	35	4 3 1	20	67	9 13 9	30	60	7 15 0	45	45	6 7 4
	15	3 1 1		40	4 10 4	25	25	4 0 10		67	9 18 1		50	6 17 9
	20	3 5 7		45	4 19 5		30	4 5 0	35	35	4 19 0		55	7 11 0
	25	3 9 3		50	5 11 3		35	4 10 3		50	5 5 6		60	8 9 6
	30	3 13 9		55	6 6 1		40	4 17 4		45	5 18 10		67	10 11 1
	35	3 19 6		60	7 6 0		45	5 6 2		50	6 5 0	50	50	7 7 8
	40	4 6 10		67	9 9 5		50	5 17 10		55	6 19 2		55	8 0 3
	45	4 15 11	20	20	3 13 11		55	6 12 6		60	7 18 6		60	8 18 2
	50	5 7 10		25	3 17 5		60	7 12 5		67	10 1 2		67	10 18 10
	55	6 2 8		30	4 1 9		67	9 15 9	40	40	5 11 9	55	55	8 12 2
	60	7 2 9		35	4 7 3	30	30	4 8 11		45	5 19 9		60	9 9 0
	67	9 6 3		40	4 14 6		35	4 14 1		50	6 10 8		67	11 8 5
15	15	3 5 0		45	5 3 6		40	5 0 11		55	7 4 5	60	60	10 4 9
	20	3 9 6		50	5 15 4		45	5 9 6		60	8 3 4		67	12 2 1
	25	3 13 1		55	6 10 2		50	6 1 0		67	10 5 6	67	67	13 15 8
	30	3 17 6		60	7 10 2		55	6 15 5						

An addition of 22 per cent., *computed upon the premium*, is charged upon military persons; and an addition of *eleven per cent.* on officers on half-pay, officers in the militia, fencibles, and the like levies; also on persons not having had the small-pox, or having had the gout.

Persons preferring the payment of a gross sum or single premium upon an assurance for any certain term, are chargeable in a due proportion to the annual premium for such term.

Every person making any assurance with the Society, pays 5*s.* in the name of entrance money; and if the sum assured exceeds 100*l.*, the entrance money is charged after the rate of 5*s.* for every 100*l.* But if the person upon whose life an assurance is proposed, does not appear before the directors, the entrance money is charged after the rate of 1*l.* for every 100*l.*

The following are the premiums demanded by the Equitable Society for insuring 100*l.*, or an equivalent annuity on the contingency of one life's surviving the other: —

Ages.		Premium.	Annuity equivalent to 100*l.* to be paid from the Death of the Life assured, during the Remainder of the other Life.
Life to be assured.	Life against which the Assurance is to be made.	£ s. d.	£ s. d.
0	10	1 8 6	5 14 6
	20	1 9 1	6 14 10
	30	1 8 3	7 14 11
	40	1 7 8	9 5 6
	50	1 6 11	11 13 0
	60	1 6 0	15 13 5
	70	1 4 11	23 13 0
	80	1 3 4	40 10 8
20	10	1 16 6	5 6 11
	20	1 17 0	6 4 1
	30	1 15 9	7 0 6
	40	1 14 8	8 4 11
	50	1 13 6	10 1 9
	60	1 12 1	13 0 7
	70	1 10 6	18 12 8
	80	1 8 3	30 9 6
30	10	2 5 5	5 5 8
	20	2 6 0	6 2 9
	30	2 4 6	6 19 6
	40	2 2 9	8 3 8
	50	2 0 11	10 0 6
	60	1 18 10	13 0 0
	70	1 16 7	18 12 10
	80	1 13 9	30 9 3
40	10	2 19 2	5 3 6
	20	2 19 10	5 19 9
	30	2 18 2	6 16 8
	40	2 15 11	8 1 0

Ages.		Premium.	Annuity equivalent to 100*l.* to be paid from the Death of the Life assured, during the Remainder of the other Life.
Life to be assured.	Life against which the Assurance is to be made.	£ s. d.	£ s. d.
40	50	2 12 10	9 16 6
	60	2 9 4	12 14 3
	70	2 5 11	18 5 6
	80	2 1 10	29 19 10
50	10	4 0 11	5 1 4
	20	4 1 10	5 16 2
	30	4 0 1	6 12 2
	40	3 17 10	7 16 9
	50	3 13 10	9 12 8
	60	3 7 7	12 6 8
	70	3 1 6	17 11 5
	80	2 15 0	28 12 6
60	10	5 16 9	4 19 3
	20	5 18 1	5 12 10
	30	5 16 3	6 7 7
	40	5 14 0	7 10 10
	50	5 10 7	9 8 0
	60	5 2 4	12 5 6
	70	4 9 10	17 5 8
	80	3 17 11	27 19 10
70	10	8 1 0	4 17 8
	20	8 2 9	5 10 5
	30	8 0 10	6 4 0
	40	7 18 7	7 5 5
	50	7 15 6	8 0 6
	60	7 8 8	12 0 3
	70	6 10 8	17 1 8
	80	5 8 9	27 5 11

It is stated by Mr. Morgan, in his Account of the Equitable Society already referred to, that the number of insurances in that institution for terms of years does not much exceed the *one hundredth part* of those for the whole period of life; and that the business of the office at present is almost wholly confined to the assurance of persons on *their own lives* — those on the lives of *others*, whether for terms or for continuance, being, in consequence of the commission money allowed to agents and attorneys, engrossed by the new offices. — (*Account of the Equitable Society*, p. 58.)

INTEREST AND ANNUITIES. Interest is the sum paid by the borrower of a sum of money, or of any sort of valuable produce, to the lender, for its use.

The rate of interest, supposing the security for and facility of re-possessing the principal, or sum lent, to be equal, must obviously depend on what may be made by the employment of capital in industrious undertakings, or on the rate of profit. Where profits are high, as in the United States, interest is also high; and where they are comparatively low, as in Holland and England, interest is proportionally low. In fact, the rate of interest is nothing more than the *nett* profit on capital: whatever returns are obtained by the borrower, beyond the interest he has agreed to pay, really accrue to him on account of risk, trouble, or skill, or of advantages of situation and connection.

But besides fluctuations in the rate of interest caused by the varying productiveness of industry, the rate of interest on each particular loan must, of course, vary according to the supposed solvency of the borrowers, or the degree of risk supposed to be incurred by the lender, of either not recovering payment at all, or not recovering it at the stipulated term. No person of sound mind would lend on the personal security of an individual of doubtful character and solvency, and on mortgage over a valuable estate, at the same rate of interest. Wherever there is risk, it must be compensated to the lender by a higher premium or interest.

And yet, obvious as this principle may appear, all governments have interfered with the adjustment of the terms of loans: some to prohibit interest altogether, and others to fix certain rates which it should be deemed legal to charge, and illegal to exceed. The prejudice against taking interest seems to have principally originated in a mistaken view of some enactments of the Mosaical law — (see *Michaelis on the Laws of Moses*, vol. ii. pp. 327—353. Eng. ed.), and a statement of Aristotle, to the effect that, as money did not produce money, no return could be equitably claimed by the lender! But whatever may have been the origin of this prejudice, it was formerly universal in Christendom; and is still supported by law in all Mohammedan countries. The famous reformer, Calvin, was one of the first who saw and exposed the absurdity of such notions — (see an extract from one of his epistles *in Principles of Political Economy*, by the author of this work, 3d ed. p. 520.); and the abuses caused by the prohibition, and the growing conviction of its impolicy, soon after led to its relaxation. In 1554, a statute was passed authorising lenders to charge 10 per cent. interest. In 1624, the legal rate was reduced to 8 per cent.; and in the reign of Queen Anne it was further reduced to 5 per cent., at which it still continues. It is enacted, by the statute (12 Ann. c. 16.) making this reduction, that "all persons who shall receive, by means of any corrupt bargain, loan, exchange, chevizance, or interest of any wares, merchandise, or other thing whatever, or by any deceitful way or means, or by any covin, engine, or deceitful conveyance for the forbearing or giving day of payment, for one whole year for their money or other thing, above the sum of 5*l.* for 100*l.* for a year, shall forfeit for every such offence, the *treble* value of the monies, or other things, so lent, bargained," &c.

It is needless to waste the reader's time by entering into any lengthened argume to show the inexpediency and mischievous effect of such interferences. This has been d over and over again. It is plainly in no respect more desirable to limit the rate of interest, than it would be to limit the rate of insurance, or the prices of commodities. And though it were desirable, it cannot be accomplished. The real effect of all legislative enactments having such an object in view, is to increase, not diminish, the rate of interest. When the rate fixed by law is less than the market or customary rate, lenders and borrowers are obliged to resort to circuitous devices to evade the law; and as these devices are always attended with more or less trouble and risk, the rate of interest is proportionally enhanced. During the late war it was not uncommon for a person to be paying 10 or 12 per cent. for a loan, which, had there been no usury laws, he might have got for 6 or 7 per cent. Neither was it by any means uncommon, when the rate fixed by law was more than the market rate, for borrowers to be obliged to pay more than they really stipulated for. It is singular that an enactment which contradicted the most obvious principles, and had been repeatedly condemned by committees of the legislature, should have been allowed to preserve a place in the statute book, for so long a period; but at length it was substantially repealed by the act 2 & 3 Victoria, c. 37., which exempts bills of exchange not having more than 12 months to run, and contracts for loans of money above 10*l.*, from its operation.

Distinction of Simple and Compound Interest. — When a loan is made, it is usual to stipulate that the interest upon it should be regularly paid at the end of every year, half year, &c. A loan of this sort is said to be at simple interest. It is of the essence of such loan, that no part of the interest accruing upon it should be added to the principal to form a new principal; and though payment of the interest were not made when it becomes due, the lender would not be entitled to charge interest upon such unpaid interest. Thus, suppose 100*l.* were lent at simple interest at 5 per cent., payable at the end of each year;

the lender would, at the end of 3 or 4 years, supposing him to have received no previous payments, be entitled to 15*l.* or 20*l.*, and no more.

Sometimes, however, money or capital is invested so that the interest is not paid at the periods when it becomes due, but is progressively added to the principal; so that at every term a new principal is formed, consisting of the original principal, and the successive accumulations of interest upon interest. Money invested in this way is said to be placed at *compound interest*.

It appears not unreasonable, that when a borrower does not pay the interest he has contracted for, at the period when it is due, he should pay interest upon such interest. This, however, is not allowed by the law of England; nor is it allowed to make a loan at compound interest. But this rule is often evaded, by taking a new obligation for the principal with the interest included, when the latter becomes due. Investments at compound interest are also very frequent. Thus, if an individual buy into the funds, and regularly buy fresh stock with the dividends, the capital will increase at compound interest; and so in any similar case.

Calculation of Interest. — Interest is estimated at so much per cent. per annum, or by dividing the principal into 100 equal parts, and specifying how many of these parts are paid yearly for its use. Thus, 5 per cent., or 5 parts out of 100, means that 5*l.* are paid for the use of 100*l.* for a year, 10*l.* for the use of 200*l.*, and 2*l.* 10*s.* for the use of 50*l.* for the same period, and so on.

Suppose, now, that it is required to find the interest of 210*l.* 13*s.* for 3¼ years at 4 per cent. simple interest. In this case we must first divide the principal, 210*l.* 13*s.* into 100 parts, 4 of which will be the interest for 1 year; and this being multiplied by 3¼ will give the interest for 3¼ years. But instead of first dividing by 100, and then multiplying by 4, the result will be the same, and the process more expeditious, if we first multiply by 4, and then divide by 100. Thus, —

	£	s.	d.	
		8	6½	1 year's interest.
			3½	
6,24	25	5	6½	3 years' interest.
12	4	4	3	¼ a year's interest.
6,24				
4	£29	9	9½	3¼ years' interest.
96				

It is almost superfluous to observe, that the same result would have been obtained by multiplying the product of the principal and rate by the number of years, and then dividing by 100.

Hence, to find the interest of any sum at any rate per cent. for a year, multiply the sum by the rate per cent., and divide the product by 100.

To find the interest of any sum for a number of years, multiply its interest for one year by the number of years; or, without calculating its interest for one year, multiply the principal by the rate per cent. and that product by the number of years, and divide the last product by 100.

When the interest of any sum is required for a number of days, they must be treated as fractional parts of a year; that is, we must multiply the interest of a year by them, and divide by 365.

Suppose that it is required to find the interest of 210*l.* for 4 years 7 months and 25 days, at 4½ per cent. —

Principal -	£210	Interest for 4 years	= £37·8000
Rate per cent. -	4½	6 months = ½ of 1 year	= 4·7250
	840	1 month = ⅛ of 6 months	= ·7875
	105	25 days	= ·6472
Interest for 1 year	£9·45 × 4 = £37·80 do. for 4 years.		£43·9597 = £43 19*s.* 2½*d.*

The interest for 25 days is $\frac{9{\cdot}45 \times 25}{365} = {\cdot}6472$; that is, it is equal to the interest for a year multiplied by the fraction $\frac{25}{365}$.

Division by 100 is performed by cutting off two figures to the right.

Many attempts have been made to contrive more expeditious processes than the above for calculating interest. The following is the best: —

Suppose it were required to find the interest upon 172*l.* for 107 days at 5 per cent.

This forms what is called in arithmetical books a double rule of three question, and would be stated as follows: —

£ Days. £ £ Days.
100 × 365 : 5 :: 172 × 107 : 2*l.* 10*s.* 4½*d.*, the interest required.

Hence, to find the interest of any sum for any number of days at any rate per cent., multiply the sum by the number of days, and the product by the rate, and divide by 36,500 (365 × 100); the quotient is the interest required.

When the rate is 5 per cent., or 1-20th of the principal, all that is r
the sum multiplied by the days by 7,300 (365, the days in a year, multiplied by 20).

Five per cent. interest being found by this extremely simple process, it is usual in practice to calculate other per cent. interest by deducting 1-5th; 3 per cent. by deducting 2-5ths; 2½ per cent. by dividing by 2; 2 per cent. by taking the half of 4, and so on.

In calculating interest upon accounts current, it is requisite to state the number of days between each receipt, or payment, and the date (commonly the 31st of December) to which the account current is made up. Thus, 172*l.* paid on the 15th of September, bearing interest to the 31st of December, 107 days. The amount of such interest may, then, be calculated as now explained, or by the aid of Tables. The reader will find, in the article BOOKKEEPING (p. 155.) an example of interest on an account current computed as above, without referring to Tables.

The 30th of June is, after the 31st of December, the most usual date to which accounts current are made up, and interest calculated. In West India houses, the 30th of April is the common date, because at that season the old crop of produce is generally sold off, and the new begins to arrive.

It is of great importance, in calculating interest on accounts current, to be able readily to find the number of days from any day in any one month to any day in any other month. This may be done with the utmost ease by means of the annexed Table. (See next page.)

By this Table may be readily ascertained the number of days from any given day in the year to another. For instance, from the 1st of January to the 14th of August (first and last days included), there are 226 days. To find the number, look down the column headed January, to Number 14, and then look along in a parallel line to the column headed August, you find 226, the number required.

To find the number of days between any other two given days, when they are both after the 1st of January, the number opposite the 1st day must, of course, be deducted from that opposite to the second. Thus, to find the number of days between the 13th of March and the 19th of August, deduct from 231, the number in the Table opposite to 19 and under August, 72, the number opposite to 13 and under March, and the remainder, 159, is the number required, last day included.

In leap years, *one* must be added to the number after the 28th of February.

For the mode of calculating discount, or of finding the present values of sums due at some future date, at simple interest, see DISCOUNT.

In counting-houses, Interest Tables are very frequently made use of. Such publications have, in consequence, become very numerous. Most of them have some peculiar recommendation; and are selected according to the object in view.

When interest, instead of being simple, is compound, the first year's or term's interest must be found,

and being added to the original principal, makes the principal upon which interest is to be calculated for the second year or term; and the second year's or term's interest being added to this last principal, makes that upon which interest is to be calculated for the third year or term; and so on for any number of years.

But when the number of years is considerable, this process becomes exceedingly cumbersome and tedious, and to facilitate it Tables have been constructed, which are subjoined to this article.

The first of these tables (No. I.) represents the amount of 1*l.* accumulating at compound interest, at 3, 3½, 4, 4½, and 5 per cent. every year, from 1 year to 70 years, in pounds and decimals of a pound. Now, suppose that we wish to know how much 500*l.* will amount to in 7 years at 4 per cent. In the column marked 4 per cent. and opposite to 7 years, we find 1·315,932*l.*, which shows that 1*l.* will, if invested at 4 per cent. compound interest amount to 1·315,932 in 7 years; and consequently, 500*l.* will, in the same time, and at the same rate, amount to 500 × 1·315,932*l.* or 657·966*l.*; that is 657*l.* 19*s.* 4*d.*

For the same purpose of facilitating calculation, the present value of 1*l.* due any number of years hence, not exceeding 70, at 3, 3½, 4, 4½, and 5 per cent. compound interest, is given in the subjoined Table, No. II. The use of this Table is precisely similar to the one below. Let it, for example, be required to find the present worth of 500*l.* due 7 years hence, reckoning compound interest at 4 per cent. Opposite to 7 years, and under 4 per cent., we find ·75291,781*l.*, the present worth of 1*l.* due at the end of 7 years; and multiplying this sum by 500*l.*, the product, being 379·9589*l.*, or 379*l.* 19*s.* 2*d.*, is the answer required.

Table for ascertaining the Number of Days from any one Day in the Year to any other Day.

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	32	60	91	121	152	182	213	244	274	305	335	17	48	76	107	137	168	198	229	260	290	321	351
2	33	61	92	122	153	183	214	245	275	306	336	18	49	77	108	138	169	199	230	261	291	322	352
3	34	62	93	123	154	184	215	246	276	307	337	19	50	78	109	139	170	200	231	262	292	323	353
4	35	63	94	124	155	185	216	247	277	308	338	20	51	79	110	140	171	201	232	263	293	324	354
5	36	64	95	125	156	186	217	248	278	309	339	21	52	80	111	141	172	202	233	264	294	325	355
6	37	65	96	126	157	187	218	249	279	310	340	22	53	81	112	142	173	203	234	265	295	326	356
7	38	66	97	127	158	188	219	250	280	311	341	23	54	82	113	143	174	204	235	266	296	327	357
8	39	67	98	128	159	189	220	251	281	312	342	24	55	83	114	144	175	205	236	267	297	328	358
9	40	68	99	129	160	190	221	252	282	313	343	25	56	84	115	145	176	206	237	268	298	329	359
10	41	69	100	130	161	191	222	253	283	314	344	26	57	85	116	146	177	207	238	269	299	330	360
11	42	70	101	131	162	192	223	254	284	315	345	27	58	86	117	147	178	208	239	270	300	331	361
12	43	71	102	132	163	193	224	255	285	316	346	28	59	87	118	148	179	209	240	271	301	332	362
13	44	72	103	133	164	194	225	256	286	317	347	29		88	119	149	180	210	241	272	302	333	363
14	45	73	104	134	165	195	226	257	287	318	348	30		89	120	150	181	211	242	273	303	334	364
15	46	74	105	135	166	196	227	258	288	319	349	31		90		151		212	243		304		365
16	47	75	106	136	167	197	228	259	289	320	350												

Annuities.

1. *Annuities certain.* — When a sum of money is to be paid yearly for a certain number of years, it is called an annuity. The annuities usually met with are either for a given number of years, which are called *annuities certain*; or they are to be paid so long as one or more individuals shall live, and are thence called *contingent annuities.*

By the amount of an annuity at any given time, is meant the sum to which it will then amount, supposing it to have been regularly improved at compound interest during the intervening period.

The present value of an annuity for any given period, is the sum of the present values of all the payments of that annuity.

Numbers III. and IV. of the subjoined Tables represent the amount and present value of an annuity of 1*l.* reckoning compound interest at 2½, 3, 3½, 4, 4½, 5, and 6 per cent. from 1 year to 70. They, as well as Nos. I. and II., are taken from "Tables of Interest, Discount, and Annuities, by John Smart, Gent. 4to. London, 1726." They are carried to 8 decimal places, and enjoy the highest character, both here and on the Continent, for accuracy and completeness. The original work is now become very scarce.

The uses of these Tables are numerous; and they are easily applied. Suppose, for example, it were required to tell the amount of an annuity of 50*l.* a year for 17 years at 4 per cent. compound interest.

Opposite to 17 (Table III.) in the column of years, and under 4 per cent., is 23·69751,239, being the amount of an annuity of 1*l.* for the given time at the given rate per cent.; and this multiplied by 50 gives 1184 8756196, or 1,184*l.* 17*s.* 6*d.*, the amount required.

Suppose, now, that it is required what sum one must pay down to receive an annuity of 50*l.* to continue for 17 years, compound interest at 4 per cent.?

Opposite to 17 years (Table IV.) and under 4 per cent. is 12·16566,886, the present value of an annuity of 1*l.* for the given time and at the given rate per cent.; and this multiplied by 50 gives 608·283443, or 608*l.* 5*s.* 8*d.*, the present value required.

When it is required to find the *time* which must elapse, in order that a given sum improved at a specified rate of compound interest may increase to some other given sum, divide the latter sum by the former, and look for the quotient, or the number nearest to it, in Table No. I. under the given rate per cent., and the years opposite to it are the answer. — Thus,

In what time will 523*l.* amount to 1,087*l.* 5*s.* 7*d.* at 5 per cent. compound interest?

Divide 1087·2794, &c. by 523, and the quotient will be 2·0789, &c., which under 5 per cent. in Table I. is opposite to 15 years, the time required.

If it had been required to find the time in which a given annuity, improved at a certain rate of compound interest, would have increased to some given sum, the question would have been answered by dividing, as above, the given sum by the annuity; and looking for the quotient (not in Table No. I., but) in Table No. III., under the given rate per cent., it would be found on a line with the time required. Thus,

A. owes 1,000*l.* and resolves to appropriate 10*l.* a year of his income to its discharge: in what time will the debt be extinguished, reckoning compound interest at 4 per cent.?

1,000 divided by 10 gives 100, the number in Table No. III. under 4 per cent., and nearest to this quotient is 99·8265, &c. opposite to 41 years, the required time. Had the rate of interest been 5 per cent., the debt would have been discharged in somewhat less than 37 years. This example is given by Dr. Price (*Annuities*, 6th ed. vol. ii. p. 289.); and on this principle the whole fabric of the sinking fund was constructed. Of the abstract truth of the principle there cannot, indeed, be a doubt. But every thing depends on the increasing sums annually produced being immediately invested on the same terms; and this, when the sum is large, and the period long, is altogether impracticable.

Let it next be required to find an annuity which, being increased at a given rate of compound interest during a given time, will amount to a specified sum: in this case we divide the specified sum by the amount of 1*l.* for the time and rate given, as found in Table III., and the quotient is the answer. — Thus,

What annuity will amount to 1,087*l.* 5*s.* 7*d.* in 15 years at 5 per cent. compound interest?

Opposite to 15 years in Table III., and under 5 per cent., is 21·5785, &c., the amount of 1*l.* for the given time and rate; and dividing 1087·2794, &c. by this sum, the quotient 50·387, &c., or 50*l.* 7*s.* 9*d.*, is the annuity required.

Deferred Annuities are those which do not commence till after a certain number of years; and *reversionary annuities*, such as depend upon the occurrence of some uncertain event, as the death of an individual, &c.

The present value of a deferred annuity is found by deducting, from the value of an annuity for the whole period, the value of an annuity to the term at which the reversionary annuity is to commence. — Thus,

What is the present value of an annuity of 50*l.* to continue for 25 years, commencing at 7 years from the present time, interest at 4 per cent.?

According to Table No. IV., the value of an annuity of 1*l.* for 25 years at 4 per cent. is 15·62207,995, and that of 1*l.* for 7 years is 6·00205,467, which being deducted from the other, leaves 9·62002,528, which multiplied by 50 gives 481*l.*, the answer required.

Supposing the annuity, instead of being for 25 years, had been a perpetuity, it would have been worth 1,250*l.*, from which deducting 300*l.* 2*s.*, the value of an annuity for 7 years at 4 per cent., there remains 949*l.* 18*s.*, the value of the reversion.

For a selection of problems that may be solved by Tables of annuities certain, see *Smart's Tables*, pp. 92—100.

2. *Life Annuities.* — After what has been stated in the article on INSURANCE (GENERAL PRINCIPLES OF), respecting Tables of mortality, it will be easy to see how the value of a life annuity is calculated. Supposing — to revert to the example given before (p. 710.) — that it were required to find the present value of 1*l.*, the receipt of which is dependent on the contingency of a person, now 56 years of age, being alive 10 years hence, taking the Carlisle Table of mortality, and interest at 4 per cent.: Now, according to that Table, of 10,000 persons born together, 4,000 attain to 56, and 2,894 to 66 years of age. The probability that a person, now 56 years, will be alive 10 years hence, is, consequently, $\frac{2,894}{4,000}$; and the present value of 1*l.*, to be received certain 10 years hence being 0·675564*l.*, it follows, that if its receipt be made to depend on a life 56 years of age, attaining to 66, its value will be reduced by that contingency to $\frac{2,894 \times 0{\cdot}675564l.}{4,000} = 0{\cdot}48877l.$, or 9*s.* 9¼*d.* If, then, we had to find the present value of an annuity of 1*l.* secured on the life of a person now 56, we should calculate in this way the present value of each of the 48 payments, which, according to the Carlisle Table, he might receive, and their sum would, of course, be the present value of the annuity.

This statement is enough to show the principle on which all calculations of annuities depend; and this also was, in fact, the method according to which they were calculated, till Mr. Simpson and M. Euler invented a shorter and easier process, deriving from the value of an annuity at any age, that of an annuity at the next younger age. There is a considerable discrepancy in the sums at which different authors, and different insurance offices, estimate the present value of life annuities payable to persons of the same age. This does not arise from any difference in the mode of calculating the annuities, but from differences in the Tables of mortality employed. These can only be accurate when they are deduced from multiplied and careful observations made, during a long series of years, on a large body of persons; or when the average numbers of the whole population, and of the deaths at every age, for a lengthened period, have been determined with the necessary care. It is to be regretted, that governments, who alone have the means of ascertaining the rate of mortality by observations made on a sufficiently large scale, have been singularly inattentive to their duty in this respect. And until a very few years since, when Mr. Finlaison was employed to calculate Tables of the value of annuities from the ages of the nominees in public tontines, and of individuals on whose lives government had granted annuities, all that had been done in this country to lay a solid foundation on which to construct the vast fabric of life insurance had been the work of a few private persons, who had, of course, but a limited number of observations to work upon.

The celebrated mathematician, Dr. Halley, was the first who calculated a Table of mortality, which he deduced from observations made at Breslaw, in Silesia. In 1724, M. De Moivre published the first edition of his tract on *Annuities on Lives*. In order to facilitate the calculation of their values, M. De Moivre assumed the annual decrements of life to be equal; that is, he supposed that out of 86 (the utmost limit of life on his hypothesis) persons born together, one would die every year till the whole were extinct. This assumption agreed pretty well with the true values, between 30 and 70

years of age, as given in Dr. Halley's Table; but was very remote from the truth in the earlier and later periods. Mr. Thomas Simpson, in his work on *Annuities and Reversions*, originally published in 1742, gave a Table of mortality deduced from the London bills, and Tables founded upon it of the values of annuities. But at the period when this Table was calculated, the mortality in London was so much higher than in the rest of the country, that the values of the annuities given in it were far too small for general use. In 1746, M. Deparcieux published, in his *Essai sur les Probabilités de la Durée de la Vie Humaine* — a work distinguished by its perspicuity and neatness — Tables of mortality deduced from observations made on the mortuary registers of several religious houses, and on lists of the nominees in several tontines. In this work, separate Tables were first constructed for males and females, and the greater longevity of the latter rendered apparent. M. Deparcieux's Tables were a very great acquisition to the science; and are decidedly superior to some that are still extensively used. Dr. Price's famous work on *Annuities*, the first edition of which was published in 1770, contributed powerfully to direct the public attention to inquiries of this sort; and was, in this respect, of very great utility. Of the more recent works, the best are those of Mr. Baily and Mr. Milne, which, indeed, are both excellent. The latter, besides all that was previously known as to the history, theory, or practice of the science, contains much new and valuable matter; and to it we beg to refer such of our readers as wish to enter fully into the subject.

The Table on which Dr. Price laid the greatest stress, was calculated from the burial registers kept in the parish of All Saints in Northampton, containing little more than half the population of the town. There can be no doubt, however, as well from original defects in the construction of the Table, as from the improvement that has since taken place in the healthiness of the public, that the mortality represented in the Northampton Table is, and has long been, decidedly above the average rate of mortality in England. Mr. Morgan, indeed, the late learned actuary of the Equitable Society, contended that this is not the case, and that the Society's experience shows that the Northampton Table is still remarkably accurate. But the facts Mr. Morgan disclosed in his *View of the Rise and Progress of the Equitable Society* (p. 42.), published in 1828, are quite at variance with this opinion: for he there states, that the deaths of persons insured in the Equitable Society, from 50 to 60 years of age, during the 12 years previously to 1828, were 339; whereas, according to the Northampton Table, they should have been 545! And Mr. Milne has endeavoured to show (Art. *Annuities*, new ed. of *Ency. Brit.*) that the discrepancy is really much greater.

The only other Table used to any extent in England for the calculation of life annuities, is that framed by Mr. Milne from observations made by Dr. Heysham on the rate of mortality at Carlisle. It gives a decidedly lower rate of mortality than the Northampton Table; and there are good grounds for thinking that the mortality which it represents is not very different from the actual rate throughout most parts of England; though it cannot be supposed that a Table founded on so narrow a basis should give a perfectly fair view of the average mortality of the entire kingdom.

In life insurance, the first annual premium is always paid at the commencement of the assurance, and the others at the termination of each year so long as the party assured survives. Hence, at the beginning of the assurance, the whole of the annual premiums payable for it exceed the value of an equal annuity on the life by one year's purchase. And, therefore, when the value of an assurance in present money is given, to find the equivalent annual premium during the life, the whole present value must be divided by the number of years' purchase an annuity on the life is worth, increased by 1. Thus, for an assurance of 100*l.* on a life 40 years of age, an office, calculating by the Carlisle Table of mortality, and at 4 per cent. interest, requires 53·446*l.* in present money. Now, according to that Table and rate of interest, an annuity on a life just 40 years of age is worth 15·074 years' purchase, so that the equivalent annual premium is $\frac{53{\cdot}446l.}{15{\cdot}074 + 1} = 3{\cdot}325l.$, or 3*l.* 6*s.* 8*d.* The annual premium may, however, be derived directly from the value of an annuity on the life, without first calculating the total present value of the assurance. — (See Mr. Milne's *Treatise on Annuities*, or the art. *Annuities* in the new edition of the *Ency. Britannica.*)

In order to exhibit the foundations on which Tables of life annuities and insurance have been founded in this and other countries, we have given, in No. V. of the following Tables, the rate of mortality that has been observed to take place among 1,000 children born together, or the numbers alive at the end of each year, till the whole become extinct, in England, France, Sweden, &c., according to the most celebrated authorities.* The rate of mortality at Carlisle, represented in this Table, is less than that observed any

* The greater part of this Table was originally published by Dr. Hutton in his *Mathematical Dictionary*, art. *Life Annuities*. Mr. Baily inserted it with additions in his work on *Annuities*; and it was published, with the column for Carlisle added, in the *Report of the Committee of the House of Common on Friendly Societies*.

where else: the rates which approach nearest to it are those deduced from [redacted] already referred to, of M. Deparcieux, and those of M. Kersseboom, on the nominees of life annuities in Holland.

In order to calculate from this Table the chance which a person of any given age has of attaining to any higher age, we have only to divide the number of persons alive at such higher age, given in that column of the Table selected to decide the question, by the number of persons alive at the given age, and the fraction resulting is the chance.

We have added, by way of supplement to this Table, Mr. Finlaison's Table (No. VI.) of the rate of mortality among 1,000 children born together, according to the decrement of life observed to take place among the nominees in government tontines and life annuities in this country, distinguishing males from females. The rate of mortality which this Table exhibits is decidedly less than that given in the Carlisle Table; but the lives in the latter are the average of the population, while those in the former are all picked. The nominees in tontines are uniformly chosen among the healthiest individuals; and none but those who consider their lives as good ever buy an annuity. Still, however, the Table is very curious; and it sets the superiority of female life in a very striking point of view.

Tables VII. and VIII. give the *expectation of life*, according to the mortality observed at Northampton and Carlisle; the former by Dr. Price, and the latter by Mr. Milne.

The next Table, No. IX., extracted from the *Second Report of the Committee of the House of Commons on Friendly Societies*, gives a comparative view of the results of some of the most celebrated Tables of mortality, in relation to the rate of mortality, the expectation of life, the value of an annuity, &c. The coincidence between the results deduced from M. Deparcieux's Table, and that for Carlisle, is very striking. And to render the information on these subjects laid before the reader as complete as the nature of this work will admit, we have given Tables (Nos. X.—XV.) of the value of an annuity of 1*l.* on a single life, at every age, and at 3, 4, 5, 6, 7, and 8 per cent., according to the Northampton and Carlisle Tables; we have also given Tables of the value of an annuity of 1*l.* on 2 equal lives, and 2 lives differing by 5 years, at 3, 4, 5, and 6 per cent., according to the same Tables. It is but seldom, therefore, that our readers will require to resort to any other work for the means of solving the questions that usually occur in practice with regard to annuities; and there are not many works in which they will find so good a collection of Tables. — We subjoin one or two examples of the mode of using the Tables of life annuities.

Suppose it were required, what ought a person, aged 45, to give, to secure an annuity of 50*l.* a year for life, interest at 4 per cent., according to the Carlisle Table?

In Table No. XI., under 4 per cent., and opposite 45, is 14·104, the value of an annuity of 1*l.*, which being multiplied by 50, gives 705·2, or 705*l.* 4*s.*, the value required. According to the Northampton Table, the annuity would only have been worth 614*l.* 3*s.*

The value of an annuity on 2 lives of the same age, or on 2 lives differing by 5 years, may be found in precisely the same way.

Some questions in *reversionary* life annuities admit of an equally easy solution. Thus, suppose it is required to find the present value of A.'s interest in an estate worth 100*l.* a year, falling to him at the death of B., aged 40, interest 4 per cent. according to the Carlisle Table?

The value of the perpetuity of 100*l.* a year, interest 4 per cent., is 2,500*l.*; and the value of an annuity of 100*l.* on a person aged 40, interest at 4 per cent., is 1,507*l.* 8*s.*, which deducted from 2,500*l.* leaves 992*l.* 12*s.*, the present value required.

A person, aged 30, wishes to purchase an annuity of 50*l.* for his wife, aged 25, provided she survive him; what ought he to pay for it, interest at 4 per cent. according to the Carlisle Table?

The value of an annuity of 1*l.* on a life aged 30 is 16·852*l.*; from which subtracting the value of an annuity of 1*l.* on 2 joint lives of 25 and 30, 14·339, the difference, 2·513 × 50 = 125·650, or 125*l.* 13*s.*, the sum required.

For the solution of the more complex cases of survivorship, which do not often occur in practice, recourse may be had to the directions in Mr. Milne's *Treatise on Annuities*, and other works of that description. To attempt explaining them here would lead us into details quite inconsistent with the objects of this work.

TABLES OF INTEREST AND ANNUITIES.

Table showing the AMOUNT of £1 improved at Compound Interest, at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent., at the End of every Year, from 1 to 70.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	1·02500,000	1·03000,000	1·03500,000	1·04000,000	1·04500,000	1·05000,000	1·06000,000
2	1·05062,500	1·06090,000	1·07122,500	1·08160,000	1·09202,500	1·10250,000	1·12360,000
3	1·07689,062	1·09272,700	1·10871,787	1·12486,400	1·14116,612	1·15762,500	1·19101,600
4	1·10381,289	1·12550,881	1·14752,300	1·16985,856	1·19251,860	1·21550,625	1·26247,696
5	1·13140,821	1·15927,407	1·18768,631	1·21665,290	1·24618,194	1·27628,156	1·33822,558
6	1·15969,342	1·19405,230	1·22925,533	1·26531,902	1·30226,012	1·34009,564	1·41851,911
7	1·18868,575	1·22987,387	1·27227,926	1·31593,178	1·36086,183	1·40710,042	1·50363,026
8	1·21840,290	1·26677,008	1·31680,904	1·36856,905	1·42210,061	1·47745,544	1·59384,807
9	1·24886,297	1·30477,318	1·36289,735	1·42331,181	1·48609,514	1·55132,822	1·68947,896
10	1·28008,454	1·34391,638	1·41059,876	1·48024,428	1·55296,942	1·62889,463	1·79084,770
11	1·31208,666	1·38423,387	1·45996,972	1·53945,406	1·62285,305	1·71033,936	1·89829,856
12	1·34488,882	1·42576,089	1·51106,866	1·60103,222	1·69588,143	1·79585,633	2·01219,647
13	1·37851,104	1·46853,371	1·56395,606	1·66507,351	1·77219,610	1·88564,914	2·13292,826
14	1·41297,382	1·51258,972	1·61869,452	1·73167,645	1·85194,492	1·97993,160	2·26090,396
15	1·44829,817	1·55796,742	1·67534,883	1·80094,351	1·93528,244	2·07892,818	2·39655,819
16	1·48450,562	1·60470,644	1·73398,604	1·87298,125	2·02237,015	2·18287,459	2·54035,168
17	1·52161,826	1·65284,763	1·79467,555	1·94790,050	2·11337,681	2·29201,832	2·69277,279
18	1·55965,872	1·70243,306	1·85748,920	2·02581,652	2·20847,877	2·40661,923	2·85433,915
19	1·59865,019	1·75350,605	1·92250,132	2·10684,918	2·30786,031	2·52695,020	3·02559,950
20	1·63861,644	1·80611,123	1·98978,886	2·19112,314	2·41171,402	2·65329,771	3·20713,547
21	1·67958,185	1·86029,457	2·05943,147	2·27876,807	2·52024,116	2·78596,259	3·39956,360
22	1·72157,140	1·91610,341	2·13151,158	2·36991,879	2·63365,201	2·92526,072	3·60353,742
23	1·76461,068	1·97358,651	2·20611,448	2·46471,555	2·75216,635	3·07152,376	3·81974,966
24	1·80872,595	2·03279,411	2·28332,849	2·56330,417	2·87601,383	3·22509,994	4·04893,464
25	1·85394,410	2·09377,793	2·36324,498	2·66583,633	3·00543,446	3·38635,494	4·29187,072
26	1·90029,270	2·15659,127	2·44595,856	2·77246,979	3·14067,901	3·55567,269	4·54938,296
27	1·94780,002	2·22128,901	2·53166,711	2·88336,858	3·28200,956	3·73345,632	4·82234,594
28	1·99649,502	2·28792,768	2·62017,696	2·99870,332	3·42969,999	3·92012,914	5·11168,670
29	2·04640,739	2·35656,551	2·71187,798	3·11865,145	3·58403,649	4·11613,560	5·41838,790
30	2·09756,758	2·42726,247	2·80679,370	3·24339,751	3·74531,813	4·32194,238	5·74348,117
31	2·15000,677	2·50000,035	2·90503,148	3·37313,341	3·91385,745	4·53803,949	6·08810,064
32	2·20375,694	2·57508,276	3·00670,759	3·50805,875	4·08998,104	4·76494,147	6·45338,668
33	2 25885,086	2·65233,524	3·11194,235	3·64838,110	4·27403,018	5·00318,854	6·84058,988
34	2 315 2,213	2·73190,530	3·22086,033	3·79431,634	4·46636,154	5·25334,797	7·25102,528
35	2·37320,519	2·81386,245	3·33359,045	3·94608,899	4·66734,781	5·51601,537	7·68608,679
36	2·43253,532	2·89827,833	3·45026,611	4·10393,255	4 87737,846	5·79181,614	8·14725,200
37	2·49334,870	2·98522,668	3·57102,543	4·26808,986	5·09686,049	6·08140,694	8·63608,712
38	2·55568,242	3·07478,348	3·69601,132	4·43881,345	5·32621,921	6·38547,729	9·15425,235
39	2·61957,448	3·16702,698	3·82537,171	4·61636,599	5·56589,908	6·70475,115	9·70350,749
40	2·68506,384	3·26203,779	3·95925,972	4·80102,063	5·81636,454	7·03998,871	10·28571,794
41	2·75219,043	3·35989,893	4·09783,381	4·99306,145	6·07810,094	7·39198,815	10 90286,101
42	2 82099,520	3·46069,589	4·24125,799	5·19278,391	6·35161,548	7·76158,755	11·55703,267
43	2·89152,008	3·56451,677	4·38970,202	5·40049,527	6·63743,818	8·14966,693	12·25045,463
44	2·96382,808	3·67145,227	4·54334,160	5·61651,508	6·93612,290	8·15715,028	12·98548,191
45	3·03790,328	3·78159,584	4·70235,855	5·84117,568	7·24824,843	8·88500,779	13·76461,083
46	3·11385,086	3·89504,372	4·86694,110	6·07482,271	7·57441,961	9·43425,818	14·59048,748
47	3·19169,713	4·01189,503	5·03728,404	6·31781,562	7·91526,849	9·90697,109	15·46591,673
48	3·27148,956	4·13225,188	5·21358,898	6·57052,824	8·27145,557	10·40126,965	16·39387,173
49	3·35327,680	4·25621,944	5·39606,459	6·83334,937	8·64367,107	10·92133,313	17·37750,403
50	3·43710,872	4·38390,602	5·58492,686	7·10668,335	9·03263,627	10·46739,978	18·42015,427
51	3·52303,644	4·51542,320	5·78039,930	7·39095,068	9·43910,490	12·04076,977	19·52536,353
52	3·61111,235	4·65088,590	5·98271,327	7·68658,871	9·86386,463	12·64280,826	20·69688,534
53	3·70139,016	4·79041,247	6·19210,824	7·99405,226	10·30773,853	13·27494,868	21·93869,846
54	3·79392,491	4·93412,485	6·40883,203	8·31381,435	10·77158,677	13·93869,611	23·25502,037
55	3·88877,303	5·08214,859	6·63314,114	8·64636,692	11·25630,817	14·63563,092	24·65032,159
56	3·98599,236	5·23461,305	6·86530,108	8·99222,160	11·76284,204	15·36741,246	26·12934,089
57	4·08564,217	5·39165,144	7·10558,662	9·35191,046	12·29216,993	16·13578,308	27 69710,134
58	4·18778,322	5·55340,098	7·35428,215	9·72598,688	12·84531,758	16·94257,224	29·35892,742
59	4·29247,780	5·72000,301	7·61168,203	10·11502,636	13·42335,687	17·78970,085	31·12046,307
60	4·39978,975	5·89160,310	7·87809,090	10·51962,741	14·02740,793	18·67918,589	32·98769,085
61	4·50978,419	6·06835,120	8·15382,408	10·94041,251	14·65864,129	19·61314,519	34·96695,230
62	4·62252,910	6·25040,173	8·43920,793	11·37802,901	15·31828,014	20·59380,245	37·06496,944
63	4·73809,233	6·43791,379	8·73458,020	11·83315,017	16·00760,275	21·62349,257	39·28886,761
64	4·85654,464	6·63105,120	9·04029,051	12·30647,617	16·72794,487	22·70466,720	41·64619,967
65	4·97795,826	6·82998,273	9·35670,068	12·79873,522	17·48070,239	23·83990,056	44·14497,165
66	5·10240,721	7·03488,222	9·68418,520	13·31068,463	18·26733,400	25·03189,559	46·79366,994
67	5·22996,739	7·24592,868	10·02313,168	13·84311,201	19·08936,403	26·28349,036	49·60129,014
68	5·36071,658	7·46330,654	10·37394,129	14·39683,649	19·94838,541	27·59766,488	52·57736,755
69	5·49473,449	7·68720,574	10·73702,924	14·97270,995	20·84606,276	28·97754,813	55·73900,960
70	5·63210,286	7·91782,191	11·11282,526	15·57161,835	21·78413,558	30·42642,553	59·07593,018

II. Table showing the PRESENT VALUE of £1 receivable at the End of any given Year, from 1 to 70 reckoning Compound Interest at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	0·97560,976	0·97087,379	0·96618,357	0·96153,846	0·95693,780	0·95238,095	0·94339,623
2	·95181,440	·94259,591	·93351,070	·92455,621	·91572,995	·90702,948	·88999,644
3	·92859,941	·91514,166	·90194,270	·88899,636	·87629,660	·86383,760	·83961,928
4	·90595,064	·88848,705	·87144,223	·85480,419	·83856,134	·82270,247	·79209,366
5	·88385,429	·86260,878	·84197,317	·82192,711	·80245,105	·78352,616	·74725,817
6	·86229,687	·83748,426	·81350,064	·79031,453	·76789,574	·74621,540	·70496,054
7	·84126,524	·81309,151	·78599,096	·75991,781	·73482,846	·71068,133	·66505,711
8	·82074,657	·78940,923	·75941,156	·73069,020	·70318,513	·67683,936	·62741,237
9	·80072,836	·76641,673	·73373,097	·70258,674	·67290,443	·64460,892	·59189,846
10	·78119,840	·74409,391	·70891,881	·67556,417	·64392,768	·61391,325	·55839,478
11	·76214,478	·72242,126	·68494,571	·64958,093	·61619,874	·58467,929	·52678,753
12	·74355,589	·70137,988	·66178,330	·62459,705	·58966,386	·55683,742	·49696,936
13	·72542,038	·68095,134	·63940,415	·60057,409	·56427,164	·53032,135	·46883,902
14	·70772,720	·66111,781	·61778,179	·57747,508	·53997,286	·50506,795	·44230,096
15	·69046,556	·64186,195	·59689,062	·55526,450	·51672,044	·48101,710	·41726,506
16	·67362,493	·62316,694	·57670,591	·53390,818	·49446,932	·45811,152	·39364,628
17	·65719,506	·60501,645	·55720,378	·51337,325	·47317,639	·43629,669	·37136,442
18	·64116,594	·58739,461	·53836,114	·49362,812	·45280,037	·41552,065	·35034,379
19	·62552,772	·57028,603	·52015,569	·47464,242	·43330,179	·39573,396	·33051,301
20	·61027,094	·55367,575	·50256,588	·45638,695	·41464,286	·37688,948	·31180,473
21	·59538,629	·53754,928	·48557,090	·43883,360	·39678,743	·35894,236	·29415,540
22	·58086,467	·52189,250	·46915,063	·42195,539	·37970,089	·34184,987	·27750,510
23	·56669,724	·50669,175	·45328,563	·40572,633	·36335,013	·32557,131	·26179,726
24	·55287,535	·49193,374	·43795,713	·39012,147	·34770,347	·31006,791	·24[illegible]855
25	·53939,059	·47760,556	·42314,699	·37511,680	·33273,000	·29530,277	·23[illegible]863
26	·52623,472	·46369,473	·40883,767	·36068,923	·31840,248	·28124,073	·21981,003
27	·51339,973	·45018,906	·39501,224	·34681,657	·30469,137	·26784,832	·20736,795
28	·50087,778	·43707,675	·38165,434	·33347,747	·29157,069	·25509,364	·19563,014
29	·48866,125	·42434,636	·36874,815	·32065,141	·27901,502	·24294,632	·18455,674
30	·47674,269	·41198,676	·35627,841	·30831,867	·26700,001	·23137,745	·17411,013
31	·46511,481	·39998,714	·34423,035	·29646,026	·25550,241	·22035,947	·16425,484
32	·45377,055	·38833,703	·33258,971	·28505,794	·24449,991	·20986,617	·15495,740
33	·44270,298	·37702,625	·32134,271	·27409,417	·23397,121	·19987,254	·14618,622
34	·43190,534	·36604,490	·31047,605	·26355,209	·22389,589	·19035,480	·13791,153
35	·42137,107	·35538,340	·29997,686	·25341,547	·21425,444	·18129,029	·13010,522
36	·41109,372	·34503,243	·28983,272	·24366,872	·20502,817	·17265,741	·12274,077
37	·40106,705	·33498,294	·28003,161	·23429,685	·19619,921	·16443,563	·11579,318
38	·39128,492	·32522,615	·27056,194	·22528,543	·18775,044	·15660,536	·10923,885
39	·38174,139	·31575,355	·26141,250	·21662,061	·17966,549	·14914,797	·10305,552
40	·37243,062	·30655,684	·25257,247	·20828,904	·17192,870	·14204,568	·09722,219
41	·36334,695	·29762,800	·24403,137	·20027,792	·16452,507	·13528,160	·09171,905
42	·35448,483	·28895,922	·23577,910	·19257,493	·15744,026	·12883,962	·08652,740
43	·34583,886	·28054,294	·22780,590	·18516,820	·15066,054	·12270,440	·08162,962
44	·33740,376	·27237,178	·22010,231	·17804,635	·14417,276	·11686,133	·07700,908
45	·32917,440	·26443,862	·21265,924	·17119,841	·13796,437	·11129,651	·07265,007
46	·32114,576	·25673,652	·20546,787	·16461,386	·13202,332	·10599,668	·06853,781
47	·31331,294	·24925,877	·19851,968	·15828,256	·12633,810	·10094,921	·06465,831
48	·30567,116	·24199,880	·19180,645	·15219,476	·12089,771	·09614,211	·06099,840
49	·29821,576	·23495,029	·18532,024	·14634,112	·11569,158	·09156,391	·05754,566
50	·29094,221	·22810,708	·17905,337	·14071,262	·11070,965	·08720,373	·05428,836
51	·28384,606	·22146,318	·17299,843	·13530,059	·10594,225	·08305,117	·05121,544
52	·27692,298	·21501,280	·16714,824	·13009,672	·10138,014	·07909,635	·04831,645
53	·27016,876	·20875,029	·16149,589	·12509,300	·09701,449	·07532,986	·04558,156
54	·26357,928	·20267,019	·15603,467	·12028,173	·09283,683	·07174,272	·04300,147
55	·25715,052	·19676,717	·15075,814	·11565,551	·08883,907	·06832,640	·04056,742
56	·25087,855	·19103,609	·14566,004	·11120,722	·08501,347	·06507,276	·03827,115
57	·24475,957	·18547,193	·14073,433	·10693,002	·08135,260	·06197,406	·03610,486
58	·23878,982	·18006,984	·13597,520	·10281,733	·07784,938	·05902,291	·03406,119
59	·23296,568	·17482,508	·13137,701	·09886,282	·07449,701	·05621,230	·03213,320
60	·22728,359	·16973,309	·12693,431	·09506,040	·07128,901	·05353,552	·03031,434
61	·22174,009	·16478,941	·12264,184	·09140,423	·06821,915	·05098,621	·02859,843
62	·21633,179	·15998,972	·11849,453	·08788,868	·06528,148	·04855,830	·02697,965
63	·21105,541	·15532,982	·11448,747	·08450,835	·06247,032	·04624,600	·02545,250
64	·20590,771	·15080,565	·11061,591	·08125,803	·05978,021	·04404,381	·02401,179
65	·20088,557	·14641,325	·10687,528	·07813,272	·05720,594	·04194,648	·02265,264
66	·19598,593	·14214,879	·10326,114	·07512,760	·05474,253	·03994,903	·02137,041
67	·19120,578	·13800,853	·09976,922	·07223,809	·05238,519	·03804,670	·02016,077
68	·18654,223	·13398,887	·09639,538	·06945,970	·05012,937	·03623,495	·01901,959
69	·18199,242	·13008,628	·09313,563	·06678,818	·04797,069	·03450,948	·01794,301
70	·17755,358	·12629,736	·08998,612	·06421,940	·04590,497	·03286,617	·01692,737

III. Table showing the AMOUNT OF AN ANNUITY of 1*l.* per Annum, improved at Compound Interest, at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent., at the end of each Year, from 1 to 70.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	1·00000,000	1·00000,000	1·00000,000	1·00000,000	1·00000,000	1 00000,000	1·00000,000
2	2·02500,000	2·03000,000	2·03500,000	1·04000,000	2·04500,000	2·05000,000	2·06000,000
3	3·07562,500	3·09090,000	3·10622,500	3·12160,000	3·13702,500	3·15250,000	3·18360,000
4	4·15251,562	4·18362,700	4·21494,287	4·24646,400	4·27819,112	4·31012,500	4·37461,600
5	5·25632,852	5·30913,581	5.36246,588	5·41632,256	5 47070,978	5·52563,125	5·63709,296
6	6·38773,673	6·46840,988	6.55015,218	6·63297,546	6·71689,166	6·80191,281	6.97531,854
7	7·54743,015	7·66246,218	7·77940,751	7·89829,448	8·01915,179	8·14200.845	8·39383,765
8	8·73611,590	8·89233,605	9·05168,677	9·21422,626	9·38001,362	9·54910,888	9·89746,791
9	9·95451,880	10·15910,613	10·36849,581	10·58279,531	10·80211,423	11·02656,432	11·49131,598
10	11·20338,177	11·46387,931	11·73139,316	12·00610,712	12·28820,937	12·57789,254	13·18079,494
11	12·48346,631	12·80779,569	13·14199,192	13·48635,141	13·84117,879	14·20678,716	14·97164,264
12	13·79555,297	14·19202,956	14·60196,164	15·02580,546	15·46403,184	15·91712,652	16·86994,120
13	15·14044,179	15·61779,045	16·11303,030	16 62683,768	17·15991,327	17·71298,285	18·88213,767
14	16·51895,284	17·08632,416	17·67698,636	18·29191,119	18·93210,937	19·59863,199	21·01506,593
15	17·93192,666	18·59891,389	19·29568,088	20·02358,764	20·78405,429	21·57856,359	23·27596,988
16	19·38022,483	20 15688,130	20·97102,971	21·82453,114	22·71933,673	23·65749,177	25 67252,808
17	20·86473,045	21·76158.774	22·70501,575	23·69751,239	24·74170,689	25·84036,636	28·21287,976
18	22·38634,871	23·41443.577	24·49969,130	25·64541,288	26·85508,370	28·13238,467	30·90565,255
19	23·94600,743	25·11686,844	26·35718,050	27·67122,940	29·06356,246	30·53900,391	33·75999,170
20	25·54465,761	26·87037,449	28·27968,181	29·77807,858	31·37142,277	33·06595,410	36·78559,120
21	27·18327,405	28·67648.572	30·26947,068	31·96920,172	33·78313,680	35·71925,181	39·99272,668
22	28·86285,590	30 53678,030	32·32890,215	34·24796,979	36·30337,795	38·50521,440	43·39229,028
23	30·58442,730	32·45288,370	34·46041,373	36·61788,858	38·93702,996	41·43047,512	46·99582,769
24	32·34903,798	34·42647,022	36·66652,821	39·08260,413	41·68919,631	44·50199,887	50·81557,735
25	34·15776,393	36·45926 432	38·94985,669	41·64590,830	44·56521,014	47·72709,882	54·86451,200
26	36·01170,803	38·55304,225	41·31310,168	44·31174,463	47·57064,460	51·11345,376	59·15638,272
27	37·91200,073	40·70963,352	43·75906,024	47·08421,441	50·71132,361	54·66912,645	63·70576,568
28	39·85980,075	42·93092,252	46·29062,734	49·96758,299	53·99333,317	58·40258,277	68 52811,162
29	41·85629,577	45·21885,020	48·91079,930	52·96628,631	57 42303,316	62·32271,191	73·63979,832
30	43·90270,316	47·57541,571	51·62267,728	56·08493,776	61·00706,966	66·43884,750	79·05818,622
31	46·00027,074	50·00267,818	54.42947,098	59 32833,527	64·75238,779	70·76078,988	84·80167,739
32	48·15027,751	52·50275,852	57·33450,247	62·70146,868	68·66624,524	75·29882,536	90·88977,803
33	50·35403,445	55·07784,128	60 34121,005	66·20952,743	72·75622,628	80·06377,663	97·34316,471
34	52·61288,531	57·73017,652	63.45315,240	69·85790,853	77·03025,646	85·06695,537	104·18375,460
35	54·92820,744	60·46208,181	66·67401,274	73·65222,487	81·49661,800	90·32030,734	111·43477,987
36	57·30141,263	63·27594,427	70·00760,318	77·59831,387	86·16396,581	95·83632,271	119·12086,666
37	59·73394,794	66·17422,250	73·45786,930	81·70224,642	91·04134,427	101·62813,884	127·26811,866
38	62·22729,664	69·15944,927	77·02889,472	85·97033,628	96·13820,476	107·70954,579	135·90420,578
39	64·78297,906	72·23423,275	80·72490,604	90·40914,973	101·46442,398	114·09502,308	145·05845,813
40	67·40255,354	75·40125,973	84·55027,775	95·02551,572	107·03032,306	120·79977,423	154·76196,562
41	70·08761,737	78·66329,753	88·50953,747	99·82653,635	112·84668,759	127·83976,294	165·04768,356
42	72·83980,781	82·02319,645	92·60737,128	104·81959,780	118·92478,854	135·23175,109	175·95054,457
43	75·66080,300	85·48389,234	96·84862,928	110·01238,171	125·27640,402	142·99333,864	187·50757,724
44	78·55232,308	89·04840,911	101·23833,130	115 41287,658	131 91384,220	151·14300,558	199·75803,188
45	81·51613,116	92·71986,139	105·78167,290	121·02939,206	138·84996,510	159·70015,586	212·74351,379
46	84 55403,443	96·50145,723	110·48403,145	126·87056,774	146·08921,353	168·68516,365	226·50812,462
47	87·66788,529	100·39650,095	115 35097,255	132 94539,045	153·67263,314	178·11942,183	241·09861,209
48	90·85958,243	104·40389,598	120·38825,659	139·26320,607	161·58790,163	188·02539,292	256·56452,882
49	94·13107,199	108·54064,785	125·60184,557	145·83373,431	169·85935,720	198·42666,257	272·95840,055
50	97·48434,879	112·79686,729	130·99791,016	152·66708,368	178·50302,828	209·34799,570	290·33590,458
51	100·92145,751	117·18077,331	136·58283,702	159·77376,703	187·53566,455	220·81539,548	308·75605,886
52	104·44449,395	121·69619,651	142·36323,631	167·16471,771	196·97476,946	232·85616,526	328·28142,239
53	108·05560,629	126·34708,240	148·34594,958	174·85130,642	206 83863,408	245·49897,352	348·97830,773
54	111·75699,645	131·13749,488	154·53805,782	182·84535,868	217·14637,261	258·77392,220	370·91700,620
55	115·55092,136	136·07161,972	160·94688,984	191·15917,302	227·91795,938	272·71261,831	394·17202,657
56	119·43969,440	141·15376,831	167·58003,099	199·80553,994	239·17426,755	287·34824,922	418·82284,816
57	123·42568,676	146·38838,136	174·44533,207	208 79776,154	250·93710,959	302·71566,168	444·95168,905
58	127·51132,893	151·78003,280	181·55091,879	218·14967,200	263·22927,953	318·85144,477	472·65879,039
59	131·69911,215	157·33343,379	188·90520,085	227·87565,888	276·07459,710	335 79401,700	502·00771,782
60	135·99158,995	163,05343,680	196·51688,288	237·99068,524	289·49795,397	353·58371,785	533·12818,089
61	140·39137,970	168·94503,991	204·39497,378	248·51031,265	303·52536,190	372·26290,375	566·11587,174
62	144·90116,419	175·01339,110	212·54879,786	259·45072,516	318·18400,319	391·87604,893	601·08282,404
63	149·52369,330	181·26379,284	220·98800,579	270·82875,416	333·50228,333	412·46985,138	638·14779,349
64	154·26178,563	187·70170,662	229·72258,599	282·66190,433	349·50988,608	434·09334,395	677·43666,110
65	159·11833,027	194·33275,782	238·76287,650	294·96838,050	366·23783,096	456·79801,115	719·08286,076
66	164·09628,853	201·16274,055	248·11957,718	307·76711,572	383·71853,335	480·63791,170	763·22783,241
67	169·19869,574	208·19762,277	257·80376,238	321·07780,035	401·98586,735	505·66980,729	810·02150,235
68	174·42866,313	215·44355,145	267·82689,406	334·92091,236	421·07523,136	531·95329,765	859·62279,249
69	179·78937,971	222·90985,800	278·20083,535	349·31774,886	441·02361,679	559·53096,254	912·20016,004
70	185·28411,421	230 59406,374	288·93786,459	364·29045,881	461·86067,955	588·52851,066	967·93216,964

IV. Table showing the PRESENT VALUE OF AN ANNUITY of 1*l.* per Annum, to continue for any given Number of Years, from 1 to 70, reckoning Compound Interest at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	0·97560,976	0·97087,379	0·96618,357	0.96153,846	0·95693,780	0·95238,095	0·94339,623
2	1·92742,415	1·91346,969	1·89969,427	1·88609,467	1·87266,775	1·85941,043	1·83339,267
3	2·85602,356	2·82861,135	2·80163,698	2·77509,103	2·74896,435	2·72324,803	2·67301,195
4	3·76197,421	3·71709,840	3·67307,921	3·62989,522	3·58752,570	3·54595,050	3·46510,561
5	4·64582,849	4·57970,719	4·51505,237	4·45182,233	4·38997,674	4·32947,667	4·21236,378
6	5·50812,536	5·41719,144	5·32855,302	5·24213,686	5·15787,248	5·07569,207	4·91732,432
7	6·34939,060	6·23028,295	6·11454,398	6·00205,467	5·89270,094	5·78637,340	5·58238,144
8	7·17013,717	7·01969,219	6·87395,553	6·73274,488	6·59588,607	6·46321,276	6·20979,381
9	7·97086,553	7·78610,892	7·60768,651	7·43533,161	7·26879,049	7·10782,167	6·80169,227
10	8·75206,393	8·53020,284	8·31660,532	8·11089,578	7·91271,818	7·72173,493	7·36008,705
11	9·51420,871	9·25262,410	9·00155,103	8·76047,671	8·52891,692	8·30641,422	7·88687,457
12	10·25776,460	9·95400,398	9·66333,433	9·38507,376	9·11858,078	8·86325,164	8·38384,393
13	10·98318,497	10·63495,532	10·30273,848	9·98564,785	9·68285,242	9·39357,299	8·85268,295
14	11·69091,217	11·29607,312	10·92052,027	10·56312,293	10·22282,528	9·89864,094	9·29498,392
15	12·38137,773	11·93793,507	11·51741,089	11·11838,744	10·73954,573	10·37965,804	9·71224,898
16	13·05500,266	12·56110,201	12·09411,681	11·65229,561	11·23401,505	10·83776,956	10·10589,526
17	13·71219,772	13·16611,845	12·65132,058	12·16566,886	11·70719,143	11·27406,625	10·47725,968
18	14·35336,363	13·75351,306	13·18968,172	12·65929,698	12·15999,180	11·68958,690	10·82760,347
19	14·97889,134	14·32379,909	13·70983,741	13·13393,940	12·59329,359	12·08532,086	11·15811,648
20	15·58916,228	14·87747,484	14·21240,330	13·59032,635	13·00793,645	12·46221,034	11·46992,121
21	16·18454,857	15·41502,412	14·69797,420	14·02915,995	13·40472,388	12·82115,271	11·76407,661
22	16·76543,824	15·93691,662	15·16712,483	14·45111,534	13·78442,476	13·16300,258	12·04158,171
23	17·33211,048	16·44360,837	15·62041,047	14·85684,167	14·14777,489	13·48857,388	12·30337,897
24	17·88498,583	16·93554,210	16·05836,760	15·24696,314	14·49547,837	13·79864,179	12·55035,752
25	18·42437,642	17·41314,766	16·48151,459	15·62207,995	14·82820,896	14·09394,457	12·78335,615
26	18·95061,114	17·87684,239	16·89035,226	15·98276,918	15·14661,145	14·37518,530	13·00316,618
27	19·46401,087	18·32703,145	17·28536,450	16·33958,575	15·45130,282	14·64303,362	13·21053,413
28	19·96488,865	18·76410,820	17·66701,884	16·68306,322	15·74287,351	14·89812,726	13·40616,428
29	20·45354,991	19·18845,456	18·03576,700	16·98371,464	16·02188,853	15·14107,358	13·59072,101
30	20·93029,259	19·60044,132	18·39204,541	17·29203,330	16·28888,854	15·37245,103	13·76483,115
31	21·39540,741	20·00042,847	18·73627,576	17·58849,356	16·54439,095	15·59281,050	13·92908,599
32	21·84917,796	20·38876,550	19·06886,547	17·87355,150	16·78889,086	15·80267,667	14·08404,338
33	22·29188,093	20·76579,175	19·39020,818	18·14764,567	17·02286,207	16·00254,921	14·23022,961
34	22·72378,628	21·13183,665	19·70068,423	18·41119,776	17·24675,796	16·19290,401	14·36814,114
35	23·14515,734	21·48722,004	20·00066,109	18·66461,323	17·46101,240	16·37419,429	14·49824,636
36	23·55625,107	21·83225,247	20·29049,381	18·90828,199	17·66604,058	16·54685,171	14·62098,713
37	23·95731,811	22·16723,541	20·57052,542	19·14257,880	17·86223,979	16·71128,734	14·73678,031
38	24·34860,304	22·49246,156	20·84108,736	19·36786,424	18·04999,023	16·86789,271	14·84601,916
39	24·73034,443	22·80821,510	21·10249,987	19·58448,484	18·22965,572	17·01704,067	14·94907,468
40	25·10277,505	23·11477,195	21·35507,234	19·79277,389	18·40158,442	17·15908,636	15·04629,687
41	25·46612,200	23·41239,995	21·59910,371	19·99305,181	18·56610,949	17·29436,796	15·13801,591
42	25·82060,683	23·70135,917	21·83488,281	20·18562,674	18·72354,976	17·42320,758	15·22454,331
43	26·16644,569	23·98190,211	22·06268,870	20·37079,494	18·87421,029	17·54591,198	15·30617,294
44	26·50384,945	24·25427,389	22·28279,102	20·54884,129	19·01838,306	17·66277,331	15·38318,202
45	26·83302,386	24·51871,251	22·49545,026	20·72003,970	19·15634,742	17·77406,982	15·45583,209
46	27·15416,962	24·77544,904	22·70091,812	20·88465,356	19·28837,074	17·88006,650	15·52436,990
47	27·46748,255	25·02470,780	22·89943,780	21·04293,612	19·41470,884	17·98101,571	15·58902,821
48	27·77315,371	25·26670,660	23·09124,425	21·19513,088	19·53560,655	18·07715,782	15·65002,661
49	28·07136,947	25·50165,689	23·27656,449	21·34147,200	19·65129,813	18·16872,173	15·70757,227
50	28·36231,168	25·72976,397	23·45561,787	21·48218,462	19·76200,778	18·25592,546	15·76186,063
51	28·64615,774	25·95122,716	23·62861,630	21·61748,521	19·86795,003	18·33897,663	15·81307,607
52	28·92308,072	26·16623,996	23·79576,454	21·74758,193	19·96933,017	18·41807,298	15·86139,252
53	29·19324,948	26·37499,025	23·95726,043	21·87267,493	20·06634,466	18·49340,284	15·90697,407
54	29·45682,877	26·57766,043	24·11329,510	21·99295,667	20·15918,149	18·56514,556	15·94997,554
55	29·71397,928	26·77412,761	24·26405,323	22·10861,218	20·24802,057	18·63347,196	15·99054,296
56	29·96485,784	26·96540,370	24·40971,327	22·21981,940	20·33303,404	18·69854,473	16·02881,412
57	30·20961,740	27·15093,563	24·55044,760	22·32674,943	20·41438,664	18·76051,879	16·06491,898
58	30·44840,722	27·33100,546	24·68642,281	22·42956,676	20·49223,602	18·81954,170	16·09898,017
59	30·68137,290	27·50583,055	24·81779,981	22·52842,957	20·56673,303	18·87575,400	16·13111,336
60	30·90865,649	27·67556,364	24·94473,412	22·62348,997	20·63802,204	18·92928,953	16·16142,770
61	31·13039,657	27·84035,304	25·06737,596	22·71489,421	20·70624,119	18·98027,574	16·19002,618
62	31·34672,836	28·00034,276	25·18587,049	22·80278,289	20·77152,267	19·02883,404	16·21700,579
63	31·55778,377	28·15567,258	25·30035,796	22·88729,124	20·83399,298	19·07508,003	16·24245,829
64	31·76369,148	28·30647,823	25·41097,388	22·96854,927	20·89377,319	19·11912,384	16·26647,008
65	31·96457,706	28·45289,149	25·51784,916	23·04668,199	20·95097,913	19·16107,033	16·28912,272
66	32·16056,298	28·59504,028	25·62111,030	23·12180,959	21·00572,165	19·20101,936	16·31049,313
67	32·35176,876	28·73304,881	25·72087,951	23·19404,768	21·05810,685	19·23906,606	16·33065,390
68	32·53831,099	28·86703,768	25·81727,489	23·26356,739	21·10823,622	19·27530,101	16·34967,349
69	32·72030,341	28·99712,396	25·91041,053	23·33029,556	21·15620,691	19·30981,048	16·36761,650
70	32·89785,698	29·12342,132	26·00039,664	23·39451,497	21·20211,187	19·34267,665	16·38454,387

V. Table of MORTALITY; showing the Number of Persons alive at the End of every Year, from 1 to 100 Years of Age, out of 1,000 born together, in the different Places, and according to the Authorities undermentioned.

Ages.	England.			France.			Sweden.	Vienna.	Berlin.	Switzerland.	Silesia.	Holland.
	Simpson. London.	*Price.* Northampton.	*Hopkins.* Carlisle.	*Deparcieux.* Annuitants, &c.	*Buffon.* Part Population.	*Duvillard.* Whole Population.	*Wargentin.* Whole Population.	*Sussmilch.*	*Sussmilch.*	*Muret.* Pays de Vaud.	*Halley.* Breslaw.	*Kersseboom.* Life Annuitants.
1	680	743	846	745	731	768	780	542	633	811	769	804
2	548	625	778	709	632	672	730	471	528	765	638	768
3	492	582	725	682	591	625	695	430	485	735	614	736
4	452	553	700	662	557	599	671	400	454	715	585	709
5	426	536	680	647	540	583	656	377	403	701	563	699
6	410	521	668	634	523	573	644	357	387	688	546	676
7	397	509	659	624	511	565	634	344	376	677	532	664
8	388	499	654	615	501	560	625	337	367	667	523	652
9	380	492	649	607	494	556	618	331	361	659	515	646
10	373	487	646	600	489	551	611	327	356	653	508	639
11	367	483	643	595	486	547	606	322	353	648	502	633
12	361	478	640	590	482	543	602	318	350	643	497	627
13	356	474	637	585	479	538	597	314	347	639	492	621
14	351	470	634	581	476	534	594	310	344	635	488	616
15	347	465	630	578	472	529	590	306	341	631	483	611
16	343	461	626	574	468	524	586	302	338	626	479	606
17	338	457	622	570	464	519	582	299	335	622	474	601
18	334	452	618	565	459	514	578	295	332	618	470	596
19	329	446	613	561	455	508	574	291	328	614	465	590
20	325	441	609	556	449	502	570	288	324	610	461	584
21	321	434	605	551	445	496	565	284	320	606	456	577
22	316	428	601	545	438	490	560	280	315	602	451	571
23	310	421	596	540	432	484	555	276	310	597	446	566
24	305	415	592	534	430	478	551	273	305	592	441	559
25	299	409	588	529	419	471	546	269	297	587	436	551
26	294	402	584	523	414	465	541	265	293	582	431	543
27	288	396	579	517	408	458	535	261	287	577	426	535
28	283	389	575	512	402	452	530	256	281	572	421	526
29	278	383	570	506	398	445	525	251	275	567	415	517
30	272	376	564	500	388	438	519	247	269	563	409	508
31	266	370	559	495	384	432	513	243	264	558	403	499
32	260	364	553	490	377	425	507	239	259	553	397	490
33	254	357	547	484	371	418	501	235	254	548	391	482
34	248	351	542	479	366	411	495	231	249	544	384	474
35	242	344	536	474	355	404	488	226	243	539	377	467
36	236	338	531	460	339	397	482	221	237	533	370	460
37	230	331	525	464	341	390	477	216	230	527	363	453
38	224	325	519	459	334	383	471	211	223	520	356	446
39	218	318	514	454	330	376	465	205	216	513	349	439
40	212	312	508	449	314	369	459	199	209	506	342	432
41	207	305	501	444	310	362	453	194	203	500	335	425
42	201	299	499	439	302	355	446	189	197	494	328	419
43	194	292	487	434	297	348	437	185	192	488	321	413
44	187	285	480	429	292	341	430	181	187	482	314	407
45	180	279	473	424	279	334	422	176	182	476	307	400
46	174	272	466	419	273	327	414	171	177	469	299	393
47	167	265	459	413	269	320	407	165	172	461	291	386
48	159	259	452	408	262	312	400	159	167	451	283	378
49	153	252	456	402	258	305	392	153	162	441	275	370
50	147	245	440	396	242	297	385	147	157	431	267	362
51	141	238	434	390	239	289	376	142	152	422	259	354
52	135	231	428	384	233	282	367	137	147	414	250	345
53	130	224	421	378	229	274	358	133	142	406	241	336
54	125	217	414	371	224	265	349	128	137	397	232	327
55	120	210	407	363	212	256	340	123	132	388	224	318
56	116	203	400	355	207	249	331	117	127	377	216	309
57	111	196	392	346	202	240	322	111	121	364	209	300
58	106	189	384	338	194	232	312	106	115	348	201	291
59	101	182	375	329	190	223	303	101	109	331	193	282
60	96	175	364	319	168	214	293	96	103	314	186	273
61	92	168	352	309	165	204	282	91	97	299	178	264
62	87	161	340	299	157	195	271	87	92	286	170	255
63	83	154	327	288	150	186	259	82	88	274	163	245
64	78	147	314	278	144	176	247	77	84	262	155	235
65	74	140	302	267	135	166	235	72	80	250	147	225
66	70	133	289	256	126	157	224	67	75	236	140	215
67	65	126	277	245	117	147	212	62	70	220	132	205
68	61	119	265	234	106	137	200	57	65	202	124	195
69	56	113	251	222	96	129	187	52	60	184	117	185
70	52	106	240	211	90	118	175	48	55	168	109	175
71	47	99	228	199	86	108	162	44	51	153	101	165
72	43	92	214	187	75	99	149	40	47	140	93	155
73	39	85	200	175	70	89	135	36	43	129	85	145
74	35	78	184	162	68	80	121	33	39	119	77	135
75	32	71	168	148	52	72	108	30	35	109	69	125

Table of Mortality—(*continued.*)

Ages.	England			France.			Sweden.	Vienna.	Berlin.	Switzerland.	Silesia.	Holland.
	Simpson. London.	*Price.* Northampton.	*Hoyeham.* Carlisle.	*Deparcieux.* Annuitants, &c.	*Buffon.* Part Population.	*Dunillard.* Whole Population.	*Wargentin.* Whole Population.	*Suessick.*	*Suessick.*	*Muret.* Pays de Vaud.	*Halley.* Breslaw.	*Kersseboom.* Life Annuitants.
76	28	65	152	134	47	63	96	27	32	98	61	114
77	25	58	136	120	42	56	84	24	29	85	53	103
78	22	52	121	106	36	48	75	21	26	71	45	92
79	19	46	108	94	34	41	65	18	23	58	38	82
80	17	40	95	81	23	35	56	16	20	46	32	72
81	14	35	84	70	21	29	47	14	18	36	26	62
82	12	30	73	59	18	24	38	12	16	29	22	53
83	10	25	62	49	15	19	31	10	14	24	18	45
84	8	20	53	40	12	15	24	8	12	20	15	38
85	7	16	45	33	10	12	19	7	10	17	12	31
86	6	12	37	26	8	9	14	6	8	14	9	25
87	5	9	30	21	7	7	11	5	7	11	6	19
88	4	7	23	16	5	6	8	4	6	9	4	14
89	3	5	18	12	4	5	6	3	5	7	2	10
90	2	4	14	8	3	4	5	2	4	5	1	7
91	1	3	10	5	3	3	3	1	3	4		5
92		2	8	3	2	3	2		2	3		4
93		1	5	1	2	2	1		1	2		2
94		1	4	1	1	2				1		1
95			3		1	1						
96			2			1						
97			2			1						
98			1									
99			1									
100												

VI. Table of the PROGRESSIVE DECREMENT OF LIFE among 1,000 Infants of each Sex, born together, according to Mr. Finlaison's Observations on the Mortality of the Nominees in the Government Tontines and Life Annuities in Great Britain.

Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.
0	1,000	1,000	17	860	870	34	696	748	51	552	616	68	322	443	85	56	117
1	981	981	18	854	863	35	687	740	52	542	608	69	305	428	86	44	103
2	963	967	19	846	856	36	679	732	53	531	601	70	288	412	87	34	89
3	949	955	20	837	848	37	670	724	54	520	593	71	270	395	88	24	76
4	937	945	21	827	841	38	662	716	55	508	585	72	253	377	89	17	64
5	927	935	22	816	834	39	653	708	56	495	576	73	235	358	90	11	52
6	919	926	23	804	827	40	644	700	57	482	568	74	218	339	91	7	41
7	912	919	24	793	820	41	636	693	58	468	559	75	202	319	92	4	30
8	906	913	25	782	813	42	627	685	59	454	549	76	185	298	93	3	21
9	901	908	26	771	805	43	619	677	60	440	539	77	171	277	94	1	14
10	896	903	27	761	798	44	610	669	61	426	529	78	156	255	95		8
11	891	899	28	751	791	45	602	661	62	413	519	79	141	233	96		5
12	886	895	29	742	784	46	594	654	63	399	508	80	125	210	97		2
13	881	892	30	732	777	47	586	646	64	385	496	81	110	189	98		1
14	876	887	31	723	770	48	578	638	65	370	484	82	95	168	99		
15	872	883	32	714	763	49	570	631	66	355	471	83	81	149	100		
16	866	876	33	705	755	50	561	623	67	339	457	84	68	132			

VII. Table showing the EXPECTATION OF LIFE at every Age, according to the Observations made at Northampton.

Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.
0	25·18	17	35·20	33	26·72	49	18·49	65	10·88	81	4·41
1	32·74	18	34·58	34	26·20	50	17·99	66	10·42	82	4·09
2	37·79	19	33·99	35	25·68	51	17·50	67	9·96	83	3·80
3	39·55	20	33·43	36	25·16	52	17·02	68	9·50	84	3·58
4	40·58	21	32·90	37	24·64	53	16·54	69	9·05	85	3·37
5	40·84	22	32·39	38	24·12	54	16·06	70	8·60	86	3·19
6	41·07	23	31·88	39	23·60	55	15·58	71	8·17	87	3·01
7	41·03	24	31·36	40	23·08	56	15·10	72	7·74	88	2·86
8	40·79	25	30·83	41	22·56	57	14·63	73	7·33	89	2·66
9	40·36	26	30·33	42	22·04	58	14·15	74	6·92	90	2·41
10	39·78	27	29·82	43	21·54	59	13·68	75	6·54	91	2·09
11	39·14	28	29·30	44	21·03	60	13·21	76	6·18	92	1·75
12	38·49	29	28·79	45	20·52	61	12·75	77	5·83	93	1·37
13	37·83	30	28·27	46	20·02	62	12·28	78	5·48	94	1·05
14	37·17	31	27·76	47	19·51	63	11·81	79	5·11	95	0·75
15	36·51	32	27·24	48	19·00	64	11·35	80	4·75	96	0·50
16	35·85										

VIII. Table showing the EXPECTATION OF LIFE at every Age, according to the Observations made at Carlisle.

Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.
0	38·72	18	42·87	36	30·32	53	18·97	70	9·19	87	3·71
1	44·68	19	42·17	37	29·64	54	18·28	71	8·65	88	3·59
2	47·55	20	41·46	38	28·96	55	17·58	72	8·16	89	3·47
3	49·82	21	40·75	39	28·28	56	16·89	73	7·72	90	3·28
4	50·76	22	40·04	40	27·61	57	16·21	74	7·33	91	3·26
5	51·25	23	39·31	41	26·97	58	15·55	75	7·01	92	3·37
6	51·17	24	38·59	42	26·34	59	14·92	76	6·69	93	3·48
7	50·80	25	37·86	43	25·71	60	14·34	77	6·40	94	3·53
8	50·24	26	37·14	44	25·09	61	13·82	78	6·12	95	3·53
9	49·57	27	36·41	45	24·46	62	13·31	79	5·80	96	3·46
10	48·82	28	35·69	46	23·82	63	12·81	80	5·51	97	3·28
11	48·04	29	35·00	47	23·17	64	12·30	81	5·21	98	3·07
12	47·27	30	34·34	48	22·50	65	11·79	82	4·93	99	2·77
13	46·51	31	33·68	49	21·81	66	11·27	83	4·65	100	2·28
14	45·75	32	33·03	50	21·11	67	10·75	84	4·39	101	1·79
15	45·00	33	32·36	51	20·39	68	10.23	85	4·12	102	1·30
16	44·27	34	31·68	52	19·68	69	9·70	86	3·90	103	0·83
17	43·57	35	31·00								

IX. Table giving a COMPARATIVE VIEW of the Results of the undermentioned Tables of Mortality, in relation to the following Particulars.

	By Dr. Price's Table, founded on the Register of Births and Burials at Northampton.	By the First Swedish Tables, as published by Dr. Price; for both Sexes.	By Mr. Deparcieux's Table, founded on the Mortality in the French Tontines, prior to 1745.	By Mr. Milne's Table, founded on the Mortality observed at Carlisle.	By Mr. Griffith Davies's Table, founded on the Experience of the Equitable Life Insurance Office.	By Mr. Finlaison's Table, founded on the Experience of the Government Life Annuities.	
						According to his *First* Investigation, as mentioned in his Evidence in 1825.	According to his *Second* Investigation, as mentioned in his Evidence in 1827.
						Mean of both Sexes.	*Mean of both Sexes.*
Of 100,000 persons aged 25 there would be alive at the age of 65 - -	34,286	43,137	51,033	51,335	49,330	53,470	53,950
Of 100,000 persons aged 65, there would be alive at the age of 80 - -	28,738	23,704	29,837	31,577	37,267	38,655	37,355
Expectation of life at the age of 25 - years	30·85	34·58	37·17	37·86	37·45	38·35	38·52
Expectation of life at the age of 65 - years	10·88	10·10	11·25	11·79	12·35	12·81	12·50
Value of an annuity on a life aged 25, interest being at 4 per cent. -	£15·438	£16·839	£17·420	£17·645	£17·494	£17·534	£17·634
Value of an annuity on a life aged 65, interest being at 4 per cent. -	£7·761	£7·328	£8·039	£8·307	£8·635	£8·896	£8·751
Value of a deferred annuity commencing at 65, to a life now aged 25, interest at 4 per cent. -	£0·55424	£0·65842	£0·85452	£0·88823	£0·88723	£0·99078	£0·98334

Note. — In all the Tables above mentioned, it is to be observed that the mortality is deduced from an equal, or nearly equal, number of each sex; with the single exception of Mr. Davies's Table, founded on the experience of the Equitable, in which office, from the practical objects of life insurance, it is evident the male sex must have composed the vast majority of lives subjected to mortality. But as it is agreed on all hands that the duration of life among females exceeds that of males, it follows that the results of Mr. Davies's Table fall materially short of what they would have been, if the facts on which he has reasoned had comprehended an equal number of each sex. The Tables have not, in all cases, been computed [illegible] per cent, the rate allowed by government.

X. Table showing the VALUE OF AN ANNUITY ON A SINGLE LIFE, according to the Northampton Table of Mortality.

Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.	Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.	Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.
1	16·021	13·465	11·563	33	16·343	14·347	12·740	65	8·304	7·761	7·276
2	18·599	15·633	13·420	34	16·142	14·195	12·623	66	7·994	7·486	7·034
3	19·575	16·462	14·135	35	15·938	14·039	12·502	67	7·682	7·211	6·787
4	20·210	17·010	14·613	36	15·729	13·880	12·377	68	7·367	6·930	6·536
5	20·473	17·248	14·827	37	15·515	13·716	12·249	69	7·051	6·647	6·281
6	20·727	17·482	15·041	38	15·298	13·548	12·116	70	6·734	6·361	6·023
7	20·853	17·611	15·166	39	15·075	13·375	11·979	71	6·418	6·075	5·764
8	20·885	17·662	15·226	40	14·848	13·197	11·837	72	6·103	5·790	5·504
9	20·812	17·625	15·210	41	14·620	13·018	11·695	73	5·794	5·507	5·245
10	20·663	17·523	15·139	42	14·391	12·838	11·551	74	5·491	5·230	4·990
11	20·480	17·393	15·043	43	14·162	12·657	11·407	75	5·199	4·962	4·744
12	20·283	17·251	14·937	44	13·929	12·472	11·258	76	4·925	4·710	4·511
13	20·081	17·103	14·826	45	13·692	12·283	11·105	77	4·652	4·457	4·277
14	19·872	16·950	14·710	46	13·450	12·089	10·947	78	4·372	4·197	4·035
15	19·657	16·791	14·588	47	13·203	11·890	10·784	79	4·077	3·921	3·776
16	19·435	16·625	14·460	48	12·951	11·685	10·616	80	3·718	3·643	3·515
17	19·218	16·462	14·334	49	12·693	11·475	10·443	81	3·499	3·377	3·268
18	19·013	16·309	14·217	50	12·436	11·264	10·269	82	3·229	3·122	3·020
19	18·820	16·167	14·108	51	12·183	11·057	10·097	83	2·982	2·887	2·797
20	18·638	16·033	14·007	52	11·930	10·849	9·925	84	2·793	2·708	2·627
21	18·470	15·912	13·917	53	11·674	10·637	9·478	85	2·620	2·543	2·471
22	18·311	15·797	13·833	54	11·414	10·421	9·567	86	2·461	2·393	2·328
23	18·148	15·680	13·746	55	11·150	10·201	9·382	87	2·312	2·251	2·193
24	17·983	15·560	13·658	56	10·882	9·977	9·193	88	2·185	2·131	2·080
25	17·814	15·438	13·567	57	10·611	9·749	8·999	89	2·015	1·967	1·924
26	17·642	15·312	13·473	58	10·337	9·516	8·801	90	1·794	1·758	1·723
27	17·467	15·184	13·377	59	10·058	9·280	8·599	91	1·501	1·474	1·447
28	17·289	15·053	13·278	60	9·777	9·039	8·392	92	1·190	1·171	1·153
29	17·107	14·918	13·177	61	9·493	8·795	8·181	93	0·839	0·827	0·816
30	16·922	14·781	13·072	62	9·205	8·547	7·966	94	0·536	0·530	0·524
31	16·732	14·639	12·965	63	8·910	8·291	7·742	95	0·242	0·240	0·238
32	16·540	14·495	12·854	64	8·611	8·030	7·514	96	0·000	0·000	0·000

XI. Table showing the VALUE OF AN ANNUITY ON A SINGLE LIFE, according to the Carlisle Table of Mortality.

Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.	Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.	Age.	3 ℘ Cent.	4 ℘ Cent.	5 ℘ Cent.
1	20·085	16·556	13·995	36	18·183	15·856	13·987	70	7·123	6·709	6·336
2	21·501	17·728	14·983	37	17·928	15·666	13·843	71	6·737	6·358	6·015
3	22·683	18·717	15·824	38	17·669	15·471	13·695	72	6·373	6·026	5·711
4	23·285	19·233	16·271	39	17·405	15·272	13·542	73	6·044	5·725	5·435
5	23·693	19·592	16·590	40	17·143	15·074	13·390	74	5·752	5·458	5·190
6	23·846	19·747	16·735	41	16·890	14·883	13·245	75	5·512	5·239	4·989
7	23·867	19·790	16·790	42	16·640	14·694	13·101	76	5·277	5·024	4·792
8	23·801	19·766	16·786	43	16·389	14·505	12·957	77	5·059	4·825	4·609
9	23·677	19·693	16·742	44	16·130	14·308	12·806	78	4·838	4·622	4·422
10	23·512	19·585	16·669	45	15·863	14·104	12·648	79	4·592	4·394	4·210
11	23·327	19·460	16·581	46	15·585	13·889	12·480	80	4·365	4·183	4·015
12	23·143	19·336	16·494	47	15·294	13·662	12·301	81	4·119	3·953	3·799
13	22·957	19·210	16·406	48	14·986	13·419	12·107	82	3·898	3·746	3·606
14	22·769	19·082	16·316	49	14·654	13·153	11·892	83	3·672	3·534	3·406
15	22·582	18·956	16·227	50	14·303	12·869	11·660	84	3·454	3·329	3·211
16	22·404	18·837	16·144	51	13·932	12·566	11·410	85	3·229	3·115	3·009
17	22·232	18·723	16·066	52	13·558	12.258	11·154	86	3·033	2·928	2·830
18	22·058	18·608	15·987	53	13·180	11·945	10·892	87	2·873	2·776	2·685
19	21·879	18·488	15·904	54	12·798	11·627	10·624	88	2·776	2·683	2·597
20	21·694	18·363	15·817	55	12·408	11·300	10·347	89	2·665	2·577	2·495
21	21·504	18·233	15·726	56	12·014	10·966	10·063	90	2·499	2·416	2·339
22	21·304	18·095	15·628	57	11·614	10·625	9·771	91	2·481	2·398	2·321
23	21·098	17·951	15·525	58	11·218	10·286	9·478	92	2·577	2·492	2·412
24	20·885	17·801	15·417	59	10·841	9·963	9·199	93	2·687	2·600	2·518
25	20·665	17·645	15·303	60	10·491	9·663	8·940	94	2·736	2·650	2·569
26	20·442	17·486	15·187	61	10·180	9·398	8·712	95	2·757	2·674	2·596
27	20·212	17·320	15·065	62	9·875	9·137	8·487	96	2·704	2·628	2·555
28	19·981	17·154	14·942	63	9·567	8·872	8·258	97	2·559	2·492	2·428
29	19·761	16·997	14·827	64	9·246	8 593	8·016	98	2·388	2·332	2·278
30	19·556	16·852	14·723	65	8·917	8·307	7·765	99	2·131	2·087	2·045
31	19·348	16·705	14·617	66	8·578	8·010	7·503	100	1·683	1·653	1·624
32	19·134	16·552	14·506	67	8·228	7·700	7·227	101	1·228	1·210	1·192
33	18·910	16·390	14·387	68	7·869	7·380	6·941	102	0·771	0·762	0·753
34	18·675	16·219	14·260	69	7·499	7·049	6·643	103	0·324	0·321	0·317
35	18·433	16·041	14·127								

XII. Table showing the VALUE OF AN ANNUITY ON THE JOINT CONTINUANCE OF TWO LIVES OF EQUAL AGES according to the Northampton Table of Mortality.

Ages.	3 p Cent.	4 p Cent.	5 p Cent.	Ages.	3 p Cent.	4 p Cent.	5 p Cent.	Ages.	3 p Cent.	4 p Cent.	5 p Cent.
1 & 1	9·490	8·352	7·387	33 & 33	12·079	10·902	9·919	65 & 65	5·471	5·201	4·960
2 — 2	12·789	11·107	9·793	34 — 34	11·902	10·789	9·801	66 — 66	5·231	4·982	4·759
3 — 3	14·191	12·325	10·862	35 — 35	11·722	10·612	9·680	67 — 67	4·989	4·760	4·555
4 — 4	15·181	13·185	11·621	36 — 36	11·539	10·462	9·555	68 — 68	4·747	4·537	4·348
5 — 5	15·638	13·591	11·984	37 — 37	11·351	10·307	9·427	69 — 69	4·504	4·312	4·140
6 — 6	16·099	14·005	12·358	38 — 38	11·160	10·149	9·294	70 — 70	4·261	4·087	3·930
7 — 7	16·375	14·224	12·596	39 — 39	10·964	9·986	9·158	71 — 71	4·020	3·862	3·719
8 — 8	16·510	14·399	12·731	40 — 40	10·764	9·820	9·016	72 — 72	3·781	3·639	3·510
9 — 9	16·483	14·396	12·744	41 — 41	10·565	9·654	8·876	73 — 73	3·548	3·421	3·304
10 — 10	16·339	14·277	12·669	42 — 42	10·369	9·491	8·737	74 — 74	3·324	3·211	3·105
11 — 11	16·142	14·133	12·546	43 — 43	10·175	9·326	8·599	75 — 75	3·114	3·015	2·917
12 — 12	15·926	13·966	12·411	44 — 44	9·977	9·161	8·457	76 — 76	2·926	2·833	2·750
13 — 13	15·702	13·789	12·268	45 — 45	9·776	8·990	8·312	77 — 77	2·741	2·656	2·583
14 — 14	15·470	13·604	12·118	46 — 46	9·571	8·815	8·162	78 — 78	2·550	2·470	2·410
15 — 15	15·229	13·411	11·960	47 — 47	9·362	8·637	8·008	79 — 79	2·338	2·271	2·217
16 — 16	14·979	13·212	11·793	48 — 48	9·149	8·453	7·849	80 — 80	2·122	2·068	2·018
17 — 17	14·737	13·019	11·630	49 — 49	8·930	8·266	7·686	81 — 81	1·917	1·869	1·827
18 — 18	14·516	12·841	11·483	50 — 50	8·714	8·080	7·522	82 — 82	1·719	1·681	1·642
19 — 19	14·316	12·679	11·351	51 — 51	8·507	7·900	7·366	83 — 83	1·538	1·510	1·472
20 — 20	14·133	12·535	11·232	52 — 52	8·304	7·723	7·213	84 — 84	1·416	1·387	1·357
21 — 21	13·974	12·409	11·131	53 — 53	8·098	7·544	7·056	85 — 85	1·309	1·339	1·256
22 — 22	13·830	12·293	11·042	54 — 54	7·891	7·362	6·897	86 — 86	1·218	1·195	1·171
23 — 23	13·683	12·179	10·951	55 — 55	7·681	7·179	6·735	87 — 87	1·141	1·124	1·098
24 — 24	13·534	12·062	10·858	56 — 56	7·470	6·993	6·571	88 — 88	1·103	1·030	1·063
25 — 25	13·383	11·944	10·764	57 — 57	7·256	6·805	6·404	89 — 89	1·036	1·015	1·001
26 — 26	13·230	11·822	10·667	58 — 58	7·041	6·614	6·234	90 — 90	0·938	0·922	0·909
27 — 27	13·074	11·699	10·567	59 — 59	6·826	6·421	6·062	91 — 91	0·769	0·756	0·748
28 — 28	12·915	11·573	10·466	60 — 60	6·606	6·226	5·888	92 — 92	0·591	0·583	0·576
29 — 29	12·754	11·445	10·362	61 — 61	6·386	6·030	5·712	93 — 93	0·369	0·365	0·361
30 — 30	12·589	11·313	10·255	62 — 62	6·166	5·831	5·533	94 — 94	0·203	0·201	0·199
31 — 31	12·422	11·179	10·146	63 — 63	5·938	5·626	5·347	95 — 95	0·060	0·060	0·059
32 — 32	12·252	11·042	10·034	64 — 64	5·709	5·417	5·158	96 — 96	0·000	0·000	0·000

XIII. Table showing the VALUE OF AN ANNUITY ON THE JOINT CONTINUANCE OF TWO LIVES OF EQUAL AGES, according to the Carlisle Table of Mortality.

Ages.	3 p Cent.	4 p Cent.	5 p Cent.	Ages.	3 p Cent.	4 p Cent.	5 p Cent.	Ages.	3 p Cent.	4 p Cent.	5 p Cent.
1 & 1	14·079	11·924	10·299	36 & 36	14·477	12·919	11·627	70 & 70	4·556	4·367	4·191
2 — 2	16·155	13·671	11·793	37 — 37	14·231	12·724	11·470	71 — 71	4·217	4·050	3·893
3 — 3	18·030	15·260	13·162	38 — 38	13·981	12·525	11·309	72 — 72	3·904	3·755	3·615
4 — 4	19·065	16·147	13·932	39 — 39	13·727	12·322	11·144	73 — 73	3·631	3·497	3·371
5 — 5	19·815	16·801	14·507	40 — 40	13·481	12·125	10·984	74 — 74	3·400	3·279	3·165
6 — 6	20·156	17·112	14·789	41 — 41	13·254	11·945	10·839	75 — 75	3·231	3·119	3·015
7 — 7	20·280	17·242	14·917	42 — 42	13·036	11·772	10·701	76 — 76	3·068	2·966	2·870
8 — 8	20·261	17·251	14·942	43 — 43	12·822	11·602	10·566	77 — 77	2·927	2·833	2·744
9 — 9	20·146	17·179	14·898	44 — 44	12·600	11·426	10·425	78 — 78	2·784	2·698	2·617
10 — 10	19·963	17·049	14·803	45 — 45	12·371	11·243	10·278	79 — 79	2·610	2·533	2·460
11 — 11	19·748	16·891	14·684	46 — 46	12·128	11·047	10·119	80 — 80	2·459	2·390	2·324
12 — 12	19·538	16·737	14·568	47 — 47	11·870	10·837	9·947	81 — 81	2·283	2·222	2·163
13 — 13	19·327	16·582	14·450	48 — 48	11·591	10·607	9·756	82 — 82	2·135	2·079	2·027
14 — 14	19·115	16·425	14·331	49 — 49	11·279	10·345	9·535	83 — 83	1·978	1·929	1·882
15 — 15	18·908	16·272	14·215	50 — 50	10·942	10·059	9·291	84 — 84	1·825	1·782	1·741
16 — 16	18·719	16·134	14·112	51 — 51	10·579	9·748	9·023	85 — 85	1·657	1·619	1·583
17 — 17	18·542	16·007	14·018	52 — 52	10·215	9·434	8·751	86 — 86	1·509	1·476	1·444
18 — 18	18·365	15·880	13·925	53 — 53	9·849	9·117	8·474	87 — 87	1·389	1·359	1·331
19 — 19	18·182	15·748	13·827	54 — 54	9·480	8·796	8·192	88 — 88	1·328	1·301	1·275
20 — 20	17·998	15·610	13·724	55 — 55	9·103	8·465	7·900	89 — 89	1·248	1·223	1·199
21 — 21	17·797	15·466	13·616	56 — 56	8·721	8·128	7·600	90 — 90	1·088	1·066	1·045
22 — 22	17·588	15·310	13·497	57 — 57	8·334	7·783	7·293	91 — 91	1·060	1·028	1·007
23 — 23	17·372	15·148	13·372	58 — 58	7·954	7·444	6·988	92 — 92	1·120	1·096	1·073
24 — 24	17·148	14·978	13·240	59 — 59	7·605	7·131	6·705	93 — 93	1·226	1·199	1·173
25 — 25	16·916	14·800	13·101	60 — 60	7·295	6·854	6·456	94 — 94	1·302	1·273	1·245
26 — 26	16·681	14·620	12·960	61 — 61	7·044	6·630	6·257	95 — 95	1·383	1·353	1·323
27 — 27	16·437	14·431	12·811	62 — 62	6·804	6·417	6·067	96 — 96	1·424	1·394	1·364
28 — 28	16·196	14·244	12·663	63 — 63	6·563	6·202	5·875	97 — 97	1·395	1·366	1·339
29 — 29	15·976	14·075	12·530	64 — 64	6·308	5·974	5·669	98 — 98	1·375	1·349	1·328
30 — 30	15·784	13·930	12·419	65 — 65	6·047	5·738	5·456	99 — 99	1·294	1·272	1·251
31 — 31	15·591	13·784	12·308	66 — 66	5·774	5·490	5·230	100 — 100	0·991	0·976	0·962
32 — 32	15·392	13·632	12·191	67 — 67	5·486	5·228	4·990	101 — 101	0·687	0·679	0·670
33 — 33	15·180	13·469	12·064	68 — 68	5·188	4·954	4·737	102 — 102	0·387	0·383	0·379
34 — 34	14·954	13·294	11·926	69 — 69	4·877	4·666	4·471	103 — 103	0·108	0·107	0·106
35 — 35	14·720	13·111	11·780								

XIV. Table showing the VALUE OF AN ANNUITY on the joint Continuance of Two Lives, when the DIFFERENCE OF AGE IS FIVE YEARS, according to the Northampton Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 6	12·346	10·741	9·479	32 & 37	11·775	10·659	9·716	62 & 67	5·503	5·285	4·986
2 — 7	14·461	12·581	11·100	33 — 38	11·591	10·508	9·591	63 — 68	5·265	5·017	4·786
3 — 8	15·300	13·319	11·755	34 — 39	11·404	10·354	9·463	64 — 69	5·025	4·798	4·585
4 — 9	15·809	13·775	12·165	35 — 40	11·213	10·196	9·331	65 — 70	4·782	4·573	4·378
5 — 10	15·974	13·933	12·315	36 — 41	11·021	10·037	9·198	66 — 71	4·540	4·349	4·169
6 — 11	16·110	14·068	12·447	37 — 42	10·828	9·877	9·062	67 — 72	4·298	4·124	3·960
7 — 12	16·137	14·111	12·498	38 — 43	10·634	9·716	8·927	68 — 73	4·059	3·901	3·752
8 — 13	16·089	14·089	12·492	39 — 44	10·437	9·550	8·787	69 — 74	3·825	3·683	3·547
9 — 14	15·957	13·992	12·421	40 — 45	10·235	9·381	8·643	70 — 75	3·599	3·471	3·347
10 — 15	15·762	13·841	12·302	41 — 46	10·033	9·210	8·497	71 — 76	3·386	3·270	3·159
11 — 16	15·538	13·664	12·158	42 — 47	9·829	9·037	8·350	72 — 77	3·175	3·070	2·971
12 — 17	15·308	13·480	12·009	43 — 48	9·623	8·862	8·200	73 — 78	2·963	2·869	2·780
13 — 18	15·086	13·303	11·864	44 — 49	9·414	8·683	8·046	74 — 79	2·743	2·659	2·580
14 — 19	14·870	13·130	11·723	45 — 50	9·204	8·503	7·891	75 — 80	2·526	2·448	2·381
15 — 20	14·660	12·961	11·585	46 — 51	8·997	8·326	7·737	76 — 81	2·325	2·258	2·195
16 — 21	14·457	12·799	11·452	47 — 52	8·790	8·147	7·582	77 — 82	2·131	2·077	2·013
17 — 22	14·265	12·646	11·327	48 — 53	8·579	7·965	7·424	78 — 83	1·947	1·899	1·838
18 — 23	14·082	12·500	11·209	49 — 54	8·366	7·780	7·262	79 — 84	1·792	1·751	1·750
19 — 24	13·908	12·361	11·096	50 — 55	8·151	7·593	7·098	80 — 85	1·645	1·608	1·573
20 — 25	13·741	12·229	10·989	51 — 56	7·910	7·409	6·936	81 — 86	1·510	1·478	1·447
21 — 26	13·584	12·105	10·890	52 — 57	7·730	7·225	6·774	82 — 87	1·385	1·356	1·329
22 — 27	13·433	11·987	10·796	53 — 58	7·518	7·039	6·609	83 — 88	1·284	1·259	1·235
23 — 28	13·280	11·866	10·699	54 — 59	7·304	6·850	6·442	84 — 89	1·187	1·104	1·145
24 — 29	13·124	11·743	10·600	55 — 60	7·088	6·659	6·272	85 — 90	1·074	1·054	1·038
25 — 30	12·966	11·618	10·499	56 — 61	6·870	6·465	6·100	86 — 91	0·921	0·902	0·892
26 — 31	12·805	11·489	10·396	57 — 62	6·651	6·270	5·925	87 — 92	0·755	0·738	0·734
27 — 32	12·641	11·359	10·289	58 — 63	6·427	6·070	5·744	88 — 93	0·561	0·554	0·547
28 — 33	12·474	11·225	10·181	59 — 64	6·201	5·867	5·561	89 — 94	0·377	0·373	0·369
29 — 34	12·304	11·088	10·069	60 — 65	5·970	5·658	5·372	90 — 95	0·179	0·177	0·175
30 — 35	12·131	10·948	9·954	61 — 66	5·737	5·447	5·180	91 — 96	0 000	0·000	0·000
31 — 36	11·955	10·805	9·837								

XV. Table showing the VALUE OF AN ANNUITY on the joint Continuance of Two Lives, when the DIFFERENCE OF AGE IS FIVE YEARS, according to the Carlisle Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 6	16·828	14·269	12·331	34 & 39	14·290	12·773	11·508	67 & 72	4·580	4·386	4·207
2 — 7	18·087	15·341	13·258	35 — 40	14·048	12·581	11·354	68 — 73	4·297	4·123	3·961
3 — 8	19·100	16·214	14·019	36 — 41	13·812	12·394	11·204	69 — 74	4·035	4·878	3·731
4 — 9	19·584	16·644	14·402	37 — 42	13·579	12·209	11·056	70 — 75	3·804	3·661	3·528
5 — 10	19·874	16·913	14·649	38 — 43	13·346	12·024	10·907	71 — 76	3·568	3·439	3·319
6 — 11	19·935	16·989	14·731	39 — 44	13·107	11·833	10·753	72 — 77	3·353	3·237	3·127
7 — 12	19·889	16·975	14·736	40 — 45	12·868	11·641	10·598	73 — 78	3·152	3·047	2·948
8 — 13	19·771	16·900	14·689	41 — 46	12·630	11·450	10·444	74 — 79	2·952	2·857	2·767
9 — 14	19·606	16·785	14·606	42 — 47	12·389	11·256	10·287	75 — 80	2·790	2·704	2·623
10 — 15	19·410	16·643	14·500	43 — 48	12·139	11·053	10·121	76 — 81	2·618	2·540	2·467
11 — 16	19·208	16·495	14·389	44 — 49	11·868	10·830	9·937	77 — 82	2·471	2·400	2·333
12 — 17	19·014	16·354	14·284	45 — 50	11·580	10·591	9·737	78 — 83	2·318	2·255	2·194
13 — 18	18·820	16·213	14·178	46 — 51	11·271	10·332	9·519	79 — 84	2·155	2·099	2·045
14 — 19	18·622	16·068	14·069	47 — 52	10·955	10·065	9·292	80 — 85	1·993	1·943	1·895
15 — 20	18·423	15·922	13·959	48 — 53	10·628	9·787	9·054	81 — 86	1·834	1·790	1·747
16 — 21	18·230	15·781	13·853	49 — 54	10·284	9·492	8·799	82 — 87	1·704	1·664	1·626
17 — 22	18·036	15·639	13·746	50 — 55	9 924	9·181	8·528	83 — 88	1·606	1·569	1·535
18 — 23	17·838	15·493	13·636	51 — 56	9·550	8·855	8·242	84 — 89	1·496	1·464	1·433
19 — 24	17·633	15·341	13·520	52 — 57	9·172	8·524	7·950	85 — 90	1·385	1·307	1·279
20 — 25	17·421	15·182	13 398	53 — 58	8·797	8·194	7·657	86 — 91	1·255	1·229	1·203
21 — 26	17·204	15·019	13·272	54 — 59	8·439	7·876	7·375	87 — 92	1·245	1·218	1·192
22 — 27	16·977	14·846	13·137	55 — 60	8·098	7·574	7·106	88 — 93	1·272	1·245	1·219
23 — 28	16·747	14·670	13·000	56 — 61	7·788	7·299	6·860	89 — 94	1·266	1·240	1·214
24 — 29	16·524	14·500	12·867	57 — 62	7·480	7·025	6·615	90 — 95	1·217	1·191	1·167
25 — 30	16·311	14·339	12·742	58 — 63	7·175	6·752	6·370	91 — 96	1·210	1·185	1·161
26 — 31	16·097	14·176	12·615	59 — 64	6·875	6·482	6·127	92 — 97	1·230	1·205	1·181
27 — 32	15·875	14·006	12·482	60 — 65	6·589	6·225	5·89	93 — 98	1·262	1·238	1·215
28 — 33	15·648	13·830	12·344	61 — 66	6·323	5·986	5·678	94 — 99	1·234	1·212	1·191
29 — 34	15·424	13·657	12·206	62 — 67	6·054	5·743	5·458	95 — 100	1·072	1·055	1·038
30 — 35	15·209	13·491	12·078	63 — 68	5·779	5·493	5·230	96 — 101	0·851	0·839	0·828
31 — 36	14·989	13·321	11·944	64 — 69	5·490	5·229	4·988	97 — 102	0·568	0·563	0·555
32 — 37	14·764	13·146	11·806	65 — 70	5·193	4·956	4·737	98 — 103	0·254	0·252	0·249
33 — 38	14·531	12·964	11·661	66 — 71	4·882	4·667	4·469				

The Northampton Table (No. VII.), by under-rating the duration of life, was a very advantageous guide for the insurance offices to go by in insuring lives; but to whatever extent it might be beneficial to them in this respect, it became equally injurious when they adopted it as a guide in selling annuities. And yet, singular as it may seem, some of the insurance offices granted annuities on the *same* terms that they insured lives; not perceiving that, if they gained by the latter transaction, they must obviously lose by the former. Government also continued for a lengthened period to sell annuities according to the Northampton Tables, and without making any distinction between male and female lives! A glance at the Tables of M. Deparcieux ought to have satisfied them that they were proceeding on entirely false principles. But, in despite even of the admonitions of some of the most skilful mathematicians, this system was persevered in till within these few years! We understand that the loss thence arising to the public may be moderately estimated at 2,000,000*l.* sterling. Nor will this appear a large sum to those who recollect that, supposing interest to be 4 per cent., there is a difference of no less than 91*l.* 1*s.* in the value of an annuity of 50*l.* for life, to a person aged 45, between the Northampton and Carlisle Tables.

INVOICE, an account of goods or merchandise sent by merchants to their correspondents at home or abroad, in which the peculiar marks of each package, with other particulars, are set forth. — (See example, *antè*, p. 143.)

IONIAN ISLANDS, the name given to the islands of Corfu, Paxo, Santa Maura, Ithaca, Cephalonia, Zante, Cerigo, and their dependent islets. With the exception of Cerigo, which lies opposite to the south-eastern extremity of the Morea, the rest lie pretty contiguous, along the western coasts of Epirus and Greece; the most northerly point of Corfu being in lat. 39° 48′ 15″ N., and the most southerly point of Zante (Cape Kieri, on which there is a light-house) being in lat. 37° 38′ 35″ N. Kapsali, the port of Cerigo, is in lat. 36° 7′ 30″ N., lon. 23° E.

The area and population of the different islands may be estimated as follows: —

Islands.	Area in Square Miles 15 to a degree.	Population in 1836.
Corfu	10·76	65,057
Cephalonia	16·20	63,197
Zante	5·60	35,348
Santa Maura	4.25	17,195
Ithaca and Calamos	3·32	9,644
Cerigo and Cerigotto	4·50	8,707
Paxo and Antipaxo	1·90	5,064
Totals	47·12*	204,212

* This is equal to 1001·3 English square miles of 69·15 to the degree.

Soil and Climate. — These are very various — Zante is the most fruitful. It consists principally of an extensive plain, occupied by plantations of currants, and having an air of luxuriant fertility and richness. Its climate is comparatively equal and fine, but it is very subject to earthquakes. Corfu and Cephalonia are more rugged and less fruitful than Zante; and the former, from its vicinity to the snowy mountains of Epirus, and the latter from the Black Mountain (the Mount Ænos of antiquity) in its interior, are exposed in winter to great and sudden variations of temperature. In January, 1833, the cold was more rigorous than usual, the frost damaging to a great extent the oranges and vines of these islands and those of Santa Maura. The latter is, in the hot season, exceedingly unhealthy, — a consequence of the vapours arising from the marshes and the shallow seas to the N. E. Cerigo is rocky and sterile; it is subject to continued gales, and the currents seldom permit its waters to remain unruffled.

History, Government, &c. — These islands have undergone many vicissitudes. Corfu, the ancient Corcyra, was famous in antiquity for its naval power, and for the contest between it and its mother state Corinth, which eventually terminated in the Peloponnesian war. Ithaca, the kingdom of Ulysses; Cephalonia, sometimes called Dulichium, from the name of one of its cities; Zante, or Zacynthus; Santa Maura, known to the ancients by the names of Leucas or Leucadia, celebrated for its promontory, surmounted by a temple of Apollo, whence Sappho precipitated herself into the ocean; and Cerigo, or Cythera, the birth-place of Helen, and sacred to Venus; — have all acquired an immortality of renown. But, on comparing their present with their former state, we may well exclaim, —

Heu quantum hæc Niobe, Niobe distabat ab illâ!

After innumerable revolutions, they fell, about 350 years ago, under the dominion of Venice. Since the downfall of that republic, they have had several protectors, or rather masters, being successively under the dominion of the Russians, the French, and the English. By the treaty of Paris, in 1815, they were formed into a sort of semi-independent state. They enjoy an internal government of their own, under the protection of Great Britain; a Lord High Commissioner, appointed by the king of England, having charge of the foreign relations, and of the internal, maritime, and sanitary police. His Majesty's commander-in-chief has the custody of the fortresses, and the disposal of the forces. It is stipulated in the treaty of Paris, that the islands may be called upon for the pay and subsistence of 3,000 men, as well as for the repair of their fortresses occupied by the British troops. The executive government is vested in a president nominated by the commissioner, and a senate of 5 members (1 for each of the larger islands of Corfu, Cephalonia, Zante, and Santa Maura, and 1 representing collectively the smaller ones of Ithaca, Cerigo, and Paxo, by each of which he is elected in rotation). The senators are elected at the commencement of every quinquennial parliament (subject to a negative from the commissioner) from a legislative chamber of 40 members, themselves elected by the constituencies of the different islands, for 5 years. The senate and legislative assembly, together with the commissioner, are thus the supreme authority: they are, when united, termed the Parliament, and, as such, pass, amend, and repeal laws, in the mode prescribed by the constitution of 1817. Besides the general government, there is in each island a local administration, composed of a regent, named by the senate, and from 2 to 5 municipal officers elected by their fellow citizens.

The State of Society in these islands is far from being good, and was formerly the most depraved imaginable. The people, when they were placed under the ægis of England, were at once lazy, ignorant, superstitious, cowardly, and bloodthirsty. Their vices may, we believe, be, in a great degree, ascribed to the government and religion established amongst them. The latter consisted of little more than a series of fasts and puerile observances; while the former was both weak and corrupt. The Venetians appointed to situations of power and emolument belonged mostly to noble but decayed families, and looked upon their offices merely as means by which they might repair their shattered fortunes. Hence the grossest corruption pervaded every department. There was no crime for which impunity might not be purchased. Justice, in fact, was openly bought and sold; and suits were decided, not according to the principles of law or equity, but by the irresistible influence of faction or of gold. In consequence, the islands became a prey to all the vices that afflict and degrade a corrupt and semi-barbarous society. Sandys, one of the best English travellers who ever visited the Levant, having touched at Zante in 1610, expresses himself with respect to the inhabitants as follows: — "In habite they imitate the Italians, but transcend them in their revenges, and infinitely less civil. They will threaten to kill a merchant that will not buy their commodities; and make more conscience to breake a fast than commit a murther. He is weary of his life that hath a difference with any of them, and will walke abroad after daylight. But cowardice is joined with their crueltie, who dare doe nothing but sodainly upon advantage; and are ever privately armed. They are encouraged to villainies by the remissnesse of their laws. The labourers do go into the fields with swords and partizans, as if in an enemie's countrey; bringing home their oils and wines in hogskins, the inside turned out." — (p. 7. ed. 1637.)

If the Zantiotes did not deteriorate during the next 2 centuries, which, indeed, was hardly possible, they certainly did not improve. Dr. Holland, by whom they were visited in 1812, tells us that he heard, "on sure authority, that the number of assassinations in Zante has been more than 1 for each day of the year, though the population was only 40,000!" — (*Travels in the Ionian Isles, &c.* 4to ed. p. 23.)

Matters were, if not quite so bad, very little better in the other islands. In Cephalonia, the inhabitants were divided into factions, entertaining the most implacable animosities, and waging a war of extermination against each other. A little vigour on the part of their rulers would have served to suppress their murderous contests. But this was not an object they wished to attain: on the contrary, their selfish and crooked policy made them seek to strengthen their own power by fomenting the dissensions that prevailed amongst their subjects. — (*Bellin, Description du Golfe de Venise*, p. 165.) Considering the state of society at home, we need not wonder that the Cephalonians, who were distinguished among the islanders for activity and enterprise, were much addicted to emigration. The Venetians attempted to check its prevalence; but, as they neglected the only means by which it could be prevented, — the establishment of security and good order at home, — their efforts were wholly unsuccessful.

The islanders did not, however, satisfy themselves with attempting to stao and prey upon each other. They were much addicted to piracy, particularly the inhabitants of Santa Maura and Cerigo; and it has been alleged that the Venetian government participated in the profits of this public robbery, which, at all events, they took little pains to suppress.

A long series of years will be required to eradicate vices so deeply rooted, and to effect that thorough change in the habits and morals of the people that is so indispensable. The power and influence of the British government has already, however, had a very decided effect: assassination has become comparatively unknown; piracy has been suppressed; and a spirit of industry, sincerity, and fair dealing is beginning to manifest itself. The present generation of nobles possess a superior degree of information, and a knowledge of the true interests of their country, which, if not all that could be wished, was, at least, unknown to their fathers. It is not easy to exaggerate the difficulties with which Sir Thomas Maitland had to struggle during the first years of the British government. He was opposed by every means that feudal rancour, corruption, and duplicity could throw in his way. Those accustomed to the treachery, shuffling, and jobbing of the Venetian and Russo-Turkish governments, and the intrigues of the French, could neither appreciate nor understand the plain, straightforward course natural to British officers. These difficulties have, however, materially diminished; and it is to be hoped that the influence of our example, and of that education now pretty generally diffused, will gradually accomplish the regeneration of the islanders.

Manufactures, &c.—These islands possess few manufactures properly so termed. The wives of the villani, or peasants, spin and weave a coarse kind of woollen cloth, sufficient in great part for the use of their families. A little soap is made at Corfu and Zante. The latter manufactures a considerable quantity of silk gros-de-Naples and handkerchiefs; the art of dyeing is, however, too little studied, and the establishments are on too small a scale. The peasantry, in general, are lazy, vain, delighting in display, and very superstitious. Those of Zante and Cephalonia are more industrious than the Corfiotes; in the first, particularly, their superior condition is probably to be ascribed, in part at least, to the nobles residing more on their estates in the country, and contributing, by their example, to stimulate industry. In Corfu, the taste for the city life, which prevailed in the time of the Venetian government, still operates to a great degree. The Corfiote proprietor resides but little in his villa; his land is neglected, while he continues in the practice of his forefathers, who preferred watching opportunities at the seat of a corrupt government, to improving their fortunes by the more legitimate means of honourable exertion and attention to their patrimony. In this respect, however, a material change for the better has taken place during the last 20 years.

Imports of Grain, &c. — Great part of the land is held under short tenures, on the *metayer system*, the tenant paying half the produce to the landlord. Owing to the nature of the soil, and the superior attention given to the culture of olives and currants, the staple products of the islands, most part of the grain and cattle required for their consumption is imported. The hard wheat of Odessa is preferred, and large sums are annually sent to the Black Sea in payment. The parliament, in March, 1833, repealed the duties on the introduction of corn; and the grain monopoly of Corfu, which had been established in favour of government, in order to provide against the possibility of a general or partial scarcity, was then also suffered to expire. These 2 sources of revenue, while they existed, did not probably produce less than 20,000*l.* annually.

Cattle. — They are similarly dependent upon Greece and Turkey for supplies of butcher's meat; a small number only of sheep and goats being bred in the islands. Oxen, whether for agriculture or the slaughter-house, are principally brought from Turkey. The beef eaten by the troops is 6 weeks or 2 months walking down from the Danube, and the provinces that skirt it, to the shores of Epirus, where they remain in pasture until fit for the table.

Exports. — The staple exports from these islands are oil, currants, valonia, wine, soap, and salt. The first is produced in great abundance in Corfu and Paxo, and in a less quantity in Zante, Santa Maura, and Cephalonia. Corfu has, in fact, the appearance of a continuous olive wood; a consequence, partly, of the extraordinary encouragement formerly given to the culture of the plant by the Venetians. Although there is a harvest every year, the great crop is properly biennial; the tree generally reposing for a year after its effort. (In France and Piedmont the period of inactivity is of 2 and 3 years.) During 5 or 6 months, from October till April, the country, particularly in Corfu, presents an animated appearance, persons of all ages being busily employed in picking up the fruit. The average price may be about 1*l.* 11*s.* per barrel. Under the old Venetian system, the oil could only be carried to Trieste. It is charged with an *ad valorem* duty of 19¼ per cent., payable on the export. The quality might be much improved by a little more care in the manufacture, the trees being generally finer than in any other country.

Currants, originally introduced from the Morea, are grown in Zante, Cephalonia, and Ithaca, but principally in the first. The plant is a vine of small size and delicate nature, the cultivation of which requires much care. Six or 7 years elapse after a plantation has been made, before it yields a crop. In the beginning of October, the earth about the roots of the plant is loosened, and gathered up in small heaps, away from the vine, which is pruned in March; after which the grounds again laid down smooth around the plant, which grows low, and is supported by sticks. The crops are liable to injury in spring from the blight called the "brina," and rainy weather in harvest produces great mischief. The currants are gathered towards September, and after being carefully picked, are thrown singly upon a stone floor, exposed to the sun in the open air. The drying process may occupy a fortnight or longer, if the weather be not favourable. A heavy shower or thunder storm (no unfrequent occurrence at that season) not only interrupts it, but sometimes causes fermentation. The fruit is then only fit to be given to animals. Should it escape these risks, it is deposited in magazines called "*seraglie*," until a purchaser casts up. The "*seraglienie*," or warehouse keeper, delivers to the depositor a paper acknowledging the receipt of the quantity delivered, which passes currently in exchange from hand to hand till the time of export. Under the old Venetian government, the liberty of traffic in this produce was exceedingly restricted. In Zante 5 persons chosen out of the council of nobles assembled in presence of the *proveditore*, regulated what should be the price; and those who wished to purchase were under the necessity of describing to the government the quantity they desired. This system was called the "*collegetto*." The export duties consisted of an original duty of 9 per cent. *ad valorem*; a *dazio fisso*, or fixed duty of about 4*s.* 4*d.* per cwt.; and afterwards of a *novissimo*, or most recent duty, of 2*s.* 2*d.* per cwt. This latter was remitted in favour of vessels bringing salt fish, &c. from the northern ports (chiefly English, Danes, and Dutch): it was afterwards relaxed in favour of Russian vessels from Odessa, and abandoned altogether as vexatious and unproductive. The *proveditore* received in addition 2 per cent., and each of his 2 Venetian councillors 1 per cent.; so that the fruit, the original cost of which was about 9*s.* the cwt., stood the exporter in little less than 18*s.* or 19*s.* Even under British protection, the fruit, which some years before had fetched as much as 30*s.* and 32*s.* the cwt., but had declined in 1832 to 8*s.* the cwt., was burdened with the *dazio fisso* of 4*s.* 4*d.*

and a duty of 6 per cent. *ad valorem*, being equivalent together, *at that price*, to an *ad valorem* duty of nearly 60 per cent. In the mean time the British parliament had, in 1829, raised the import duties payable in England to the enormous amount of 44*s.* 4*d.* the cwt., which, at the same low price, made an *ad valorem* duty of 500 per cent. The consequences were rapidly visible; a decline took place in the culture of the plant, as well as in the circumstances and in the *affections* of the proprietors, whose staple export and means of existence were almost annihilated. As the prices fell, and the distress became greater, the necessitous grower was obliged to borrow money at ruinous interest from foreign merchants, or from the Jews, who were, consequently, able to dictate the price at which they would take his produce. A legislative enactment on a scale commensurate with the difficulties which it had to grapple with, was, after much deliberation, matured and adopted by the 4th parliament in its session of 1833. By it the whole of the duties upon currants were commuted for an *ad valorem* tax of 19½ per cent., being the same as that laid upon oil. The same act increased, in a small degree, the duties previously paid on the importation of coffee, tea, and sugar, and upon foreign wines, silks, and gloves, articles which, being chiefly consumed by the affluent, were more appropriately subjected to an increase of duty, to supply in part the serious defalcation of revenue consequent to the reduction of the currant duty. The duties thus increased upon objects of luxury may now amount to from 20 to 25 per cent., which is far from exorbitant. The good effects of this enactment were manifested by an almost instantaneous rise in the price of the fruit which had remained on hand of the crop of 1832. The average export of currants during the 3 years ending with 1839, has been 17,747,000 lbs. a year. The duty on currants imported into England was reduced in 1834 to 22*s.* 2*d.* a cwt.

Salt may be obtained in considerable quantities in Corfu, Zante, and Santa Maura, for exportation: the latter island alone produced it until the late act of parliament, which provided that government should let the salt pans in all the islands to those bidders who should offer, by sealed tenders, to supply it at the lowest rate to the consumer, paying at the same time the highest price to government. No export duty is charged upon it.

It is apparent from these statements, that heavy duties are levied upon the exportation of the staple products of the islands, — an objectionable system, and one which, if it is to be excused at all, can only be so by the peculiar circumstances under which they are placed. There is no land tax or impost on property in the Ionian Islands, such as exists in many other rude countries: and, supposing it were desirable to introduce such a tax, the complicated state of property in them, the feudal tenures under which it is held, and the variety of usages with respect to it, oppose all but invincible obstacles to its imposition on fair and equal principles. At the same time, too, a large amount of revenue is required to meet the expenses of the general and local governments, to maintain an efficient police, and to prevent smuggling and piracy. However, we cannot help thinking that some very material retrenchments might be made from the expenditure; and it is to this source, more, perhaps, than to any other, that the inhabitants must look for any real or effectual relief from their burdens.

Account of the Quantities and Values of the Exports from the Ionian Islands, in 1837, 1838, and 1839.

Articles.		1837.		1838.		1839.	
		Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
			£		£		£
Produce, olive oil	barrel of 16 impl. gall.	21,537	42,485	45,690	87,392	25,275	51,452
currants	lbs.	23,144,793	256,266	14,212,484	185,715	15,882,669	215,918
wine	barrels	6,815	2,929	5,212	2,048	4,256	1,405
spirits	—	393	504	252	149	100	67
valonia	lbs.	38,000	71	297,022	850	180,197	479
salt	bushel	23,050	471	84,282	1,405	54,858	914
wheat	—	10	2	1			
all other produce	£	-	1,718	-	2,149	-	2,550
Native manufactures of all sorts	—	-	29,525	-	33,678	-	29,178
Foreign	—	-	8,355	-	8,442	-	6,961
	Total	-	342,326	-	321,828	-	338,914
Value of merchandise in transit		-	114,864	-	109,566	-	98,755

Revenue and Expenditure. — In 1837, the revenue and expenditure were as follows: —

Revenue.	£	Expenditure.	£
Customs	54,593	General government	41,307
Transit duty	483	Local do. on the separate islands	58,648
Duty on oil	8,514	Contingencies of police and courts of justice	7,551
Do. currants	45,191	Education	11,330
Do. wine and spirits	2,891	Rents of public offices	3,044
Do. tobacco	2,523	Public works, roads, &c.	16,800
Do. cattle	2,086	Public buildings and salines	4,562
Stamp duties	13,726	Salaries	6,836
Port duties	2,044	Hospitals and other contingencies	9,515
Monopoly of salt and gunpowder	5,310	Collection of revenue	1,982
Rents of public property	11,392	Packet service	7,422
Rates for roads, &c.	9,271	Military protection	29,914
Sanità and post-office surplus	4,005		199,211
Miscellaneous	7,178		
	147,507		

Shipping. — Account of the Tonnage of the Shipping that entered inwards and cleared out from the Ionian Islands, in 1837, 1838, and 1839.

Flags.	1837.		1838.		1839.	
	Inwards.	Outwards.	Inwards.	Outwards.	Inwards.	Outwards.
Ionian	123,230	134,667	122,702	127,436	127,556	127,661
British	32,154	30,960	27,058	27,729	28,067	23,696
Austrian	33,079	37,419	42,067	35,761	33,938	34,194
Russian	12,508	11,594	16,922	14,240	19,223	20,078
French	104	104	203	203	230	1,025
Neapolitan	3,600	3,158	5,136	4,718	4,240	3,220
Papal	1,105	1,298	485	348	354	437
Sardinian	2,989	2,504	4,720	4,287	4,100	3,736
Greek	44,169	46,244	45,291	44,800	42,568	44,113
Turkish	3,838	3,647	5,092	4,367	4,939	4,937
All other countries	1,816	2,106	2,713	4,686	2,428	2,542
Total	259,542	273,001	278,030	267,474	285,253	285,599

Account of the Quantities and Values of the various Articles imported into the Ionian Islands, in 1837, 1838, and 1839.

Articles.		1837.		1838.		1839.	
		Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
			£		£		£
Produce, sugar	lbs.	1,568,449	33,835	1,218,896	23,146	1,298,088	26,875
coffee	—	387,997	9,504	508,848	11,375	459,412	10,325
drugs, gums, medicines, dyeing materials, &c.	£	-	11,030	-	10,539	-	7,827
Manufactures of all sorts	£	-	194,628	-	177,713	-	105,649
Raw silk	lbs.	2,626	1,215	1,439	565	1,227	486
Raw cotton	—	88,895	3,386	90,492	3,346	54,651	1,851
Wool	—	16,529	306	37,750	555	9,826	145
Hemp and flax	—	105,697	2,288	126,674	3,037	86,886	2,015
Staves for large casks	No.	577,801	5,902	227,804	5,444	270,797	5,153
Hoops for do.	—	325,387		637,051		681,577	
Iron	lbs.	325,664	1,986	354,748	2,263	161,908	1,103
Timber	£	-	26,277	-	24,888	-	17,194
Firewood	pezzi	17,764	7,285	16,396	5,965	13,549	4,863
Wheat	kilog.	974,340	168,770	1,201,639	214,680	1,079,271	225,834
Indian corn	—	165,100	19,851	211,895	24,721	342,329	45,078
Barley and oats	—	114,238	10,170	105,814	8,518	102,461	9,330
Beans and other pulse	—	22,886	4,750	18,344	3,657	15,253	3,413
Potatoes	lbs.	1,059,164	2,106	1,097,904	2,095	1,357,977	2,658
Rice	—	1,075,661	10,292	1,042,449	9,719	894,861	8,454
Maccaroni	—	134,034	1,333	108,847	1,028	44,194	452
Flour	—	119,621	987	65,929	515	75,172	599
Biscuits	—	46,705	369	22,843	181	24,444	200
Cheese	—	905,942	12,154	944,564	12,201	671,[illegible]	8,731
Butter	—	94,248	3,095	75,285	2,623	57,[illegible]	2,115
Salt meat	—	39,587	1,008	25,941	687	25,008	585
Stock fish, and baccala	—	1,005,408	7,870	570,324	4,827	745,431	5,990
Bottarga and Caviare	—	77,918	3,746	122,573	5,646	74,103	3,511
Sardinias and anchovies	—	1,663,644	18,026	1,761,770	19,784	1,257,397	14,518
Onions and garlic	heads	7,562,859	1,624	10,560,612	2,363	6,718,165	1,434
Dried fruits	£	-	6,648	-	4,017	-	4,101
Poultry	No.	22,535	1,388	19,285	1,127	22,614	1,422
Wines, foreign	barrels	1,058	5,966	847	4,448	948	4,935
Spirits	—	1,150	2,729	1,146	2,712	858	2,509
Horned cattle	No.	9,041	32,805	9,012	32,011	9,688	34,446
Horses, mules, and asses	—	490	3,446	782	5,323	484	3,333
Sheep, goats, and pigs	—	66,946	29, 01	60,688	25,045	56,146	23,868
Tobacco	lb.	287,806	6,139	302,437	6,944	227,857	5,084
All other articles	£	-	17,236	-	25,124	-	18,750
Total		-	669,579	-	690,750	-	612,299
Value of merchandise in transit		-	91,659	-	93,470	-	84,08

Ports.—The principal ports in the Ionian republic are Corfu and Zante, in the islands of the same name, and Argostoli in Cephalonia. The city and port of Corfu lie on the east side of the island, on the canal or channel between it and the opposite continent, which is here about 5 miles wide. The citadel, which projects into the sea, is furnished with a light-house, 240 feet high; the latter being in lat. 39° 37′ N., lon. 19° 56′ E. The town is but indifferently built. Population about 17,000, exclusive of the military. The fortifications are very strong, both towards the sea and the land. The canal has deep water throughout; its navigation, which is a little difficult, has been much facilitated by the erection of a light-house on the rock of Tignoso in the northern entrance; where the channel is less than a mile in width; and by the mooring of a floating light off Point Leschimo, in the southern entrance. Ships anchor between the small but well fortified island of Vido and the city, in from 12 to 17 fathoms water.

The port, or rather gulph, of Argostoli in Cephalonia, lies on the south-west side of the island. Cape Ajil, forming its south-western extremity, is in lat 38° 8′ 40″ N., lon. 20° 23′ 30″ E. Cape San Nicolo, forming the other extremity, is about 4¼ miles from Cape Ajil; and between them, within about 1½ mile of the latter, is the small islet of Guardiani, on which is a light-house. From this island the gulph stretches N. ¼ W., from 7 to 8 miles inland. The town of Argostoli lies on the west side of a haven on the east side of the gulph formed by Point Statura. The situation is low and rather unhealthy. When visited by Dr. Holland, its population did not exceed 4,000. Its appearance and police, particularly the latter, have been much improved since its occupation by the English. There is deep water and good anchorage ground in most parts of the gulph. The best entrance is between Cape San Nicolo and Guardiani, keeping rather more than a mile to the eastward of the latter, on account of a reef that extends N.E. and S.W. from it nearly that distance.

The port and city of Zante are situated on the eastern side of the island, in lat. 37° 47′ N. lon. 20° 54′ 42″ E. The city, the largest in the Ionian Islands, extends along the shore for nearly 1½ mile, but it is no where above 300 yards in breadth, except where it ascends the hill on which the citadel is erected. The style of building is chiefly Italian; and the interior of the city displays every where great neatness, and even a certain degree of magnificence. Population estimated by Dr. Burgess at about 20,000. It has a mole or jetty of considerable utility, at the extremity of which a light-house is erected; and a lazaretto, situated a little to the south-west. The harbour is capacious. Ships anchor opposite the town at from 500 to 1,000 yards' distance, in from 12 to 15 fathoms, availing themselves of the protection of the mole when the wind is from the N. E. When our troops took possession of Zante, in 1810, the fortifications were found to be in very bad repair; but immense sums have since been expended upon their improvement and extension.

Trade with England.—This is but of very limited extent. During the year 1840 we imported from the Ionian Islands 135,343 cwt. currants, 56,319 gallons olive oil, 2,000 cwt. valonia, and 1,177 gallons wine. The real or declared value of the articles of British produce and manufacture exported to them during the same year, amounted to only 87,204*l.*

The total value of the imports from all countries in 1839 is estimated at 611,759*l.* and that of the exports at 338,915*l.* But a considerable part of the imports is not destined for the consumption of the islands, but is sent thither merely as to a convenient *entrepôt*, being intended for the supply of the contiguous provinces of Greece and Turkey. The amount of exports depends materially on the circumstance whether the year be one in which there is, or is not, a crop of olives.

Money.—Accounts are kept in sterling money, or in Spanish dollars and oboli, 100 oboli being = 1 doll. = 4*s.* 4*d.*: a doubloon = 1 dollar.—(*Tate's Cambist.*)

Weights.—English weights and measures are sometimes made use of, though with Italian denominations; but the following are most generally used.

The pound *peso grosso*, or great weight of 12 oz. = 7,584 grains Troy: 94·8 lbs. = 100 lbs. avoirdupois.

The pound *peso sottile*, or small weight used for precious metals and drugs, is 2·7d lighter than the foregoing; 12 oz. peso sottile corresponding to 8 oz. peso grosso.

The oke, used in the southern islands, weighs about 18,900 grains Troy, or 2·7/10 lbs. avoirdupois. The Levant cantar, or quint 1, should contain 44 okes.

The migliajo (1,000 lbs.), for currants, in Zante, is 1 per cent. lighter than for other articles.

Measures of Length.—

The Venetian foot of 12 once = 13⅛ inches English.

Passo = 5 Venetian feet.

Braccio, for cloths, &c. = 27 3/16 inches English.

Do. for silks = 25 3/8

Land is measured by the *misura* or 1/8 of a moggio, or bacile;

400 square *passi* being 1 misura, or bacile, about 3/10 of an acre English.
Vineyards are measured by the *zappade*: 3 zappade (a computed day's work) being 1 misura.
Fire-wood is measured by the square passo, usually, however, only 2 feet thick, this depending on the quality of the wood.
Stone is measured by the passo cubo.

Measures of Capacity.—
Corn.—Corfu and Paxo: Moggio of 8 misure, about 5 Winchester bushels.
Cephalonia: Bacile should contain 80 lbs. peso grosso, best quality wheat.
Santa Maura: Cado, of 8 crivelli, 4 = 3 mog.; 1 cado = 3¼ bushels English.
Ithaca: 5 Bacile = 1 moggio.
Cerigo: Chilà, the measure of Constantinople, = 1 bushel English.

Wine.—Corfu and Paxo: 32 quartucci = 1 jar, and 4 jars = 1 barrel = 18 English wine gallons.
Cephalonia and Ithaca: 2 quartucci = 1 boccale; 12 boccali = 1 secchio; 6 secchio = 1 barrel = 18 English wine gallons.
Zante: 13 1/3 quartucci = 1 lire; 40 quartucci = 1 jar; 3 jars = 1 barrel = 17 5/8 English wine gallons.
Santa Maura: 32 quartucci = 1 stamno; 6 stamni = 1 barrel = 18 English wine gallons.
Cerigo: 2 agosten = 1 boccia; 30 boccie = 1 barrel = 18 English wine gallons.

Oil.—Corfu and Paxo: 4 quartucci = 1 rulitro; 6 mitri = 1 jar; 4 jars = 1 barrel = 18 English wine gallons.
Cephalonia: 9 pagliazzi = 1 barrel = 18 Eng. wine galls.
Zante: 9 lire, or 3 jars of 46 qu. each = 1 barrel = 17 5/8 English wine gallons.

Santa Maura: 7 stamni	= 1 barrel	= 18 Eng. wine galls.	
Ithaca: 13 pagliazzi	= 1	= 18	
Cerigo: 24 bozze	= 1	= 14 0/5	

Salt. — Centinajo, about 4,000 lbs. Venetian peso grosso.
Lime.—Corfu, measure of 4 English cubic feet.

In compiling this article, we have consulted, besides the works referred to above, the *Voyage Historique, Pittoresque, &c.*, by Saint Sauveur, — a diffuse but valuable work. The account of Zante, in the last volume (tome iii. pp. 101–278.), is particularly good. We have also looked into the *Voyage en Grèce* of Scrofani, 3 tomes, Paris, 1801; the *Archives du Commerce*; the *Papers laid before the Finance Committee, &c.* But the most important part of the information we have been able to lay before the reader was derived from manuscript notes obligingly communicated by Earl Lovelace, who (when Lord King) was secretary to the British government in these islands.

IPECACUANHA (Fr. *Ipecacuanha*; Ger. *Amerikanische brechwurzel*; It. *Ipecoacanna*; Port. *Cipo de camaras, Ipecacuanha*; Sp. *Ipecacuana, Raiz de oro*), the root of a perennial plant (*Cephaëlis ipecacuanha*) growing in Brazil and other parts of South America. It is, from its colour, usually denominated *white*, *grey*, or *ash-coloured*, and *brown*. The whole of the first variety is found in the shops. The grey and brown varieties are brought to this country in bales from Rio Janeiro. Both are in short wrinkled, variously bent and contorted pieces, which break with a resinous fracture. The grey is about the thickness of a small quill, full of knots and deep circular fissures, that nearly reach down to a white, woody, vascular cord that runs through the heart of each piece; the external part is compact, brittle, and looks smooth: the brown is smaller, more wrinkled, of a blackish brown colour on the outside, and whitish within: the white is woody, and has no wrinkles. The entire root is inodorous; but the powder has a faint disagreeable odour. The taste is bitter, sub-acrid, and extremely nauseous. In choosing ipecacuanha, the larger roots, which are compact and break with a resinous fracture, having a whitish grey, somewhat semi-transparent, appearance in the outside of the cortical part, with a pale straw-coloured medullary fibre, are to be preferred. When pounded, ipecacuanha forms the mildest and safest emetic in the whole materia medica. Though probably employed in America from time immemorial, it was not introduced into Europe till the time of Louis XIV., when one Grenier, a French merchant, brought 150 lbs. of it from Spain, with which trials were made at the Hôtel Dieu. Helvetius first made known its use in dysentery, for which Louis XIV. munificently rewarded him by a douceur of 1,000*l.* sterling. —(*Thomson's Dispensatory*; *Thomson's Chemistry.*)

IRON (Dan. *Jern*; Du. *Yzer*; Fr. *Fer*; Ger. *Eisen*; It. *Ferro*; Lat. *Ferrum, Mars*; Pol. *Zelazo*; Por. *Ferro*; Rus. *Scheleso*; Sp. *Hierro*; Sw. *Jern*; Gr. Σίδηρος; Sans. *Loha*; Arab. *Hedeed*; Pers. *Ahun*), the most abundant and most useful of all the metals. It is of a bluish white colour; and, when polished, has a great deal of brilliancy. It has a styptic taste, and emits a smell when rubbed. Its hardness exceeds that of most other metals; and it may be rendered harder than most bodies by being converted into steel. Its specific gravity varies from 7·6 to 7·8. It is attracted by the magnet or loadstone, and is itself the substance which constitutes the loadstone. But when iron is perfectly pure, it retains the magnetic virtue for a very short time. It is malleable in every temperature, and its malleability increases in proportion as the temperature augments; but it cannot be hammered out nearly as thin as gold or silver, or even as copper. Its ductility is, however, more perfect; for it may be drawn out into wire as fine at least as a human hair. Its tenacity is such, that an iron wire 0·078 of an inch in diameter, is capable of supporting 549·25 lbs. avoirdupois without breaking.

Historical Notice. — Iron, though the most common, is the most difficult of all the metals to obtain in a state fit for use; and the discovery of the method of working it seems to have been posterior to the use of gold, silver, and copper. We are wholly ignorant of the steps by which men were led to practise the processes required to fuse it and render it malleable. It is certain, however, that it was prepared in ancient Egypt, and some other countries, at a very remote epoch; but it was very little used in Greece till after the Trojan war.—(See the admirable work of *M. Goguet* on the *Origin of Laws, Arts, &c.*, vol. i. p. 140.)

Species of Iron.—There are many varieties of iron, which artists distinguish by particular names; but all of them may be reduced under one or other of the 3 following classes: *cast* or *pig iron*, *wrought* or *soft iron*, and *steel*.

1. Cast or pig iron is the name given to this metal when first extracted from its ores. The ores from which iron is usually obtained are composed of oxide of iron and clay. The object of the manufacturer is to reduce the oxide to the metallic state, and to separate all the clay with which it is combined. This is effected by a peculiar process; and the iron, being exposed to a strong heat in furnaces, and melted, runs out into moulds prepared for its reception, and obtains the name of cast or pig iron.

The cast iron thus obtained is distinguished by manufacturers into different varieties, from its colour and other qualities. Of these the following are the most remarkable:—

a. White cast iron, which is extremely hard and brittle, and appears to be composed of a congeries of small crystals. It can neither be filed, bored, nor bent, and is very apt to break when suddenly heated or cooled.

b. Grey or *mottled* cast iron, so called from the inequality of its colour. Its texture is granulated. It is much softer and less brittle than the last variety; and may be cut, bored, and turned on the lathe. Cannons are made of it.

c. Black cast iron is the most unequal in its texture, the most fusible, and least cohesive, of the three.

2. Wrought or soft iron is prepared from cast iron by a process termed a refinement of finery. The wrought iron manufactured in Sweden is reckoned the finest in the world.

3. Steel consists of pieces of wrought iron hardened by a peculiar process. The Swedish iron imported into this country is mostly used in the manufacture of steel. — (See STEEL.) — (*Thomson's Chemistry.*)

Uses of Iron. — To enumerate the various uses of iron would require a lengthened dissertation. No one, who reflects for a moment on the subject, can doubt that its discovery and employment in the shape of tools and engines has been of the utmost importance to man; and has done more, perhaps, than any thing else, to accelerate his advance in the career of improvement. Locke has the following striking observations on this subject: — "Of what consequence the discovery of one natural body, and its properties, may be to human life, the whole great continent of America is a convincing instance; whose ignorance in useful arts, and want of the greatest part of the conveniences of life, in a country that abounded with all sorts of natural plenty, I think may be attributed to their ignorance of what was to be found in a very ordinary, despicable stone — I mean the mineral of iron. And whatever we think of our parts or improvements in this part of the world, where knowledge and plenty seem to vie with each other; yet, to any one that will seriously reflect upon it, I suppose it will appear past doubt, that, were the use of iron lost among us, we should in a few ages be unavoidably reduced to the wants and ignorance of the ancient savage Americans, whose natural endowments and provisions came no way short of those of the most flourishing and polite nations; so that he who first made use of that one contemptible mineral, may be truly styled the father of arts and author of plenty." — (*Essay on the Understanding*, book iv. c. 12.)

Manufacture of Iron in Great Britain. — We are ignorant of the period when iron began to be made in England, but there is authentic evidence to show that iron works were established by the Romans in the Forest of Dean, in Gloucestershire, and in other parts of the kingdom. — (*Pennant's Wales*, ed. 1810, vol. i. p. 89.) They were also established, at an early period, in Kent and Sussex; these counties being well supplied, not only with iron ore, but (which was at the time of still more importance) with timber, the only species of fuel that was then used in the furnaces. It is to this latter circumstance that the slow increase in the production of iron in England, during a lengthened period, is to be ascribed. Complaints were very early made of the destruction of timber by the iron works; and in the reign of Elizabeth, when an unusual demand for timber for the navy, and for merchant vessels also, took place, the decrease of timber excited a great deal of attention. At length, in 1581, an act was passed prohibiting the manufacturers of iron from using any but small wood, and from establishing any new works any where within 22 miles of the city of London, and 14 miles of the river Thames, and in several parts of Sussex specified in the act. Soon after this, Edward, Lord Dudley, invented a process for smelting iron ore with pit-coal instead of timber; and it is difficult to point out many inventions that have been so advantageous. The patent which his lordship obtained in 1619, was exempted from the operation of the act of 1623 (21 James I. c. 23.), setting aside monopolies; but though, in its consequences, it has proved of immense value to the country, the works of the inventor were destroyed by an ignorant rabble, and he was well nigh ruined by his efforts to introduce and perfect his process. — (*Report of Committee of House of Commons on Patents*, p. 168, &c.) The invention seems, in consequence, to have been for many years almost forgotten. The complaints of the destruction of timber continued; so much so, that, in 1637, the exportation of iron without licence was prohibited, and fresh restrictions were laid on the felling of timber. But the evil could not be abated by such means; and, in the early part of last century, complaints of the destruction of timber by the iron works became more prevalent than ever, and their total suppression began to be contemplated as a lesser evil than the continued decrease of the stock of timber. At this period more than two thirds of the iron made use of was imported, and the condition of the manufacture was most unprosperous. But the growing scarcity and high price of timber, coupled with the increasing demand for iron, at last succeeded in drawing the attention of some ingenious persons to Lord Dudley's process; and, about 1740, iron was made at Colebrook Dale, and one or two other places, by means of pit-coal, of about as good a quality as that made with timber. From this period the business steadily increased; at first, however, its progress was comparatively slow, and the furnaces of Kent and Sussex were not wholly relinquished for more than 30 years after iron began to be largely produced by means of pit-coal. The great demand for iron occasioned by the late war, and the obstacles which it threw in the way of supplies from abroad, gave the first extraordinary stimulus to the manufacture, which has now become of vast importance and great value. In 1740 the quantity of pig-iron made in England and Wales amounted to about 17,000 tons, produced by 59 furnaces. Since this epoch the increase is believed to have been nearly as follows; viz: — in 1750, 22,000 tons; in 1788, 68,000 tons, produced by 85 furnaces; in 1796, 125,000 tons, produced by 121 furnaces; in 1806, 250,000 tons, produced by 169 furnaces; and in 1820, about 400,000 tons were produced, but there is no account of the number of furnaces. From extensive inquiries made by government and others connected with the iron trade, the following statements have been deduced, which exhibit the districts in which iron is made, the number of furnaces, and the total quantity produced in 1825, 1830, and 1840.

Account of the Number of Furnaces, and of the Quantities of Iron produced, in 1825, 1830, and 1840.

Districts.	Number of Furnaces.							Tons of Iron produced.			Tons of Coal consumed in the Production of Iron.
	1825.			1830.	1840.						
	In Blast.	Out.	Total.	Total.	In Blast.	Out.	Total.	1825.	1830.	1840.	1840.
South Wales	80	27	107	113	132	31	163	230,412	277,643	505,000	1,436,000
Staffordshire*	80	27	107	123	123	28	151	182,156	212,604	427,550	1,665,000
Shropshire	36	13	49	48	24	7	31	89,596	73,418	82,750	409,000
Yorkshire	22	12	34	27	25	7	32	39,104	27,926	56,000	306,500
Derbyshire	14	5	19	18	13	5	18	22,672	17,999	31,000	129,000
North Wales	8	6	14	20	12	3	15	17,756	25,000	26,500	110,000
Forest of Dean	-	5	5		4	-	4	-	-	15,500	60,000
Scotland	17	8	25	27	64	6	70	33,540	37,500	241,000	725,000
Ireland	2	-	2	-	-	-	-	5,000			
Various (including Northumberland)	-	-	-	-	5	1	6	-	5,327	11,000	38,500
Totals	259	103	362	376	402	88	490	618,236	677,417	1,396,400	4,877,000
					Coal used in converting pig to wrought iron						2,000,000
											6,877,000

	Furnaces.	Tons.
Annual produce of iron by furnaces with hot air	162	625,000
Do. do. with cold air	240	771,400
	402	1,396,400

The increase of production, as evinced by this table, is to be matched only by the progress of the cotton manufacture, after the introduction of the inventions of Arkwright and others. It has no doubt been occasioned by various causes, among the more prominent of which may be specified the greater cheapness of iron, and its consequent application to a great many purposes to which it was not formerly applied. We believe, however, that the extraordinary increase in the production of iron, since 1830, is principally to be ascribed to the extensive construction of railways in this country and in the U. States between that epoch and 1838, and the consequent increase in the home demand for iron, and in the shipments for America. But a demand of this sort could hardly be otherwise than temporary; and it has already all but ceased in Great Britain, at the same time that the exports to the U. States have been materially reduced, partly through the abandonment of railway projects, and partly through the increase of iron works in the Union, and the discouragement given by the tariff to the importation of foreign iron. It is true that the exports to other places have increased more than those to the U. States have fallen off, and that they were greater in 1841 than in any preceding year. Still, however, that increase was a most inadequate compensation for the falling off in the home demand; and we need not, therefore, be surprised at the fact of the iron trade having been, during the two or three years ending with 1843, involved in the greatest difficulties, and extremely depressed. The price of pig iron, which, a few years ago, had been as high as 6*l.*, 7*l.*, and even 8*l.* a ton, now ranges fron 2*l.* to 3*l.* 10*s.*; and, owing to the reluctance of the masters to put their furnaces out of blast, a large stock of iron has been accumulated for which there is no demand. It would appear, however, that the low price which iron has lately brought has led to its still more extensive employment, and that there has already been a considerable increase of demand. But it is doubtful whether this increase will be able to keep the furnaces that have been constructed in full work; and if not, the pressure will, of course, be very severely felt in those parts of the country in which iron is produced at the greatest cost. This, in fact, is not a case of mere glut, arising from a sudden falling off in the demand; but is also a case in which the manufacturers in certain districts have to struggle against the competition of those in other and more favourably situated districts; and it is difficult to see how, in the long run, the former should escape being driven from their business. They are, in fact, placed under circumstances similar to those in which the producers of iron by means of wood in the weald of Kent, Sussex, and elsewhere were placed, after pit-coal had been successfully employed in its manufacture.

The employment of the hot-blast, or of air heated to a high temperature, instead of common atmospheric air, in the working of furnaces, has been one of the greatest improvements in the manufacture; and has at once reduced the cost of iron and increased its quantity. It was first used in Lanarkshire, in Scotland; and has been one of the principal causes of the extraordinary extension of the trade in that part of the empire. (See annexed Tables, on the opposite page.)

Estimating the total quantity of iron produced at present (1843) in Great Britain at 1,300,000 tons, its value when cast and manufactured into bolts, rods, &c. may be estimated at 8*l.* or 8*l.* 10*s.* a ton, making its entire value 10,400,000*l.* or 11,050,000*l.* And if we recollect that wrought iron is to the hardware manufacture what malt is to the manufacture of beer, or leather to that of shoes, we shall be satisfied alike of its paramount importance in the arts, and as a most prolific source of employment and of public wealth.

Account of the Quantities and Declared Value of the Iron and Steel (wrought and unwrought) exported from the U. Kingdom during the 5 Years from 1837 to 1841 inclusive, specifying the Countries to which these Quantities were sent, and the Value of those sent to each.

Countries.	1837.		1838.		1839.		1840.		1841.	
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
	Tons.	£	*Tons.*	£	*Tons.*	£	*Tons.*	£	*Tons.*	£
Russia	644	10,810	580	12,490	633	14,355	802	16,461	1,029	20,411
Denmark	3,443	29,870	11,852	97,629	6,153	47,600	13,540	97,920	14,949	75,671
Prussia	1,851	16,780	2,005	12,852	3,350	31,848	5,975	31,186	26,215	136,968
Germany	11,018	111,473	16,182	164,880	12,122	126,816	17,981	152,852	23,794	203,291
Holland	18,568	155,746	26,499	224,896	23,858	229,208	30,014	234,769	36,246	220,894
Belgium	10,809	64,366	6,775	60,278	2,453	28,375	1,598	21,283	1,628	21,488
France	15,015	96,415	15,723	103,026	14,288	93,356	16,804	88,631	19,099	95,943
Portugal Proper	5,529	52,118	7,871	73,863	6,244	60,865	7,440	62,068	10,176	73,510
Gibraltar	1,508	15,820	2,148	26,103	2,568	33,769	2,523	25,699	2,703	25,564
Spain and Balearic Islands	1,196	13,643	1,192	12,528	961	11,883	1,818	17,787	7,804	59,224
Italy and the Italian Islands	12,120	108,093	20,593	186,368	18,775	174,926	23,298	187,698	25,149	177,583
Turkey	4,696	40,827	8,358	78,997	6,105	59,720	7,011	56,646	5,665	41,607
Western coast of Africa	955	12,512	1,465	16,591	1,739	19,964	1,824	18,588	1,909	17,864
Cape of Good Hope	1,836	25,008	2,094	30,877	2,130	31,837	1,485	20,565	1,584	17,451
E. I. Co's. territ. & Ceylon	13,571	137,294	13,508	137,707	16,309	190,468	30,894	302,349	36,938	317,127
British settlem. in Australia	3,593	50,131	5,077	71,350	5,818	90,420	9,158	132,574	6,847	84,487
N. American colonies	11,493	156,935	13,139	163,491	19,921	248,431	23,202	218,800	25,693	253,640
West Indies	6,821	148,963	6,223	131,377	5,481	118,510	5,796	122,289	5,165	106,886
Cuba & other for. W. Indies	7,260	87,575	6,415	81,746	5,952	72,696	6,450	72,517	5,140	60,574
United States of America	49,204	489,309	71,235	634,395	74,772	801,196	38,603	355,534	79,186	626,532
Brazil	2,909	50,850	3,568	50,527	3,885	53,371	4,336	59,390	5,241	59,900
Chili	534	8,036	460	5,205	1,763	22,671	2,007	29,693	92	1,940
All other countries	9,707	126,705	13,255	158,516	12,832	158,134	15,769	176,720	21,453	193,403
Totals	194,292	2,009,259	256,017	2,535,692	247,912	2,719,824	268,328	2,524,859	360,875	2,877,278

Account of the different Descriptions of Iron (including unwrought Steel) exported from the U. Kingdom during 1842, specifying the Quantities sent to the different Countries.

Countries to which exported.	Bar Iron.	Bolt and Rod Iron.	Pig Iron.	Cast Iron.	Iron Wire.	Wrought Iron, viz.				Unwrought Steel.
						Anchors, Grapnels, &c.	Hoops.	Nails.	Of all other Sorts (except Ordnance).	
	Tons. cwt.	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tns.cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*
Russia	57 5	5 8	220 0	19 2	223 17	176 1	1 6	3 3	59 5	181 15
Sweden	4 0	3 1	22 0	15 18	2 5	11 12	3 0	0 17	178 16	1 16
Norway	39 5	55 5	79 0	5 16	12 18	52 13	21 17	3 2	180 1	6 9
Denmark	6,227 17	563 1	7,573 4	5 2	8 15	27 8	377 6	3 0	1,956 16	14 10
Prussia	13,202 0	199 19	12,564 2	74 0	76 [redacted]	18 5	641 8	38 18	364 4	31 13
Germany	17,783 18	3,292 14	6,216 0	367 10	369 15	178 7	1,815 2	172 9	6,609 15	323 15
Holland	16,980 10	1,239 5	26,666 12	4,684 6	102 9	180 4	1,377 0	78 4	4,992 0	210 13
Belgium	166 14	0 8	1,499 17	26 12	397 17	90 9	2 1	11 4	62 8	345 12
France	4,566 1	174 17	16,464 0	52 16	39 0	289 8	506 14	1 1	834 13	347 7
Portugal, Azores, and Madeira	2,989 1	2,480 9	371 10	598 6	23 13	8 10	1,244 7	47 8	496 18	4 2
Spain, and the Canaries	375 8	31 16	1,393 13	1,046 13	75 14	84 4	1,286 16	46 1	547 16	13 8
Gibraltar	1,308 11	37 0	90 17	31 17	7 13	137 16	803 3	21 17	226 7	41 17
Italy	19,854 11	2,831 15	3,174 0	711 8	68 15	125 12	1,873 4	38 6	1,709 10	
Malta	1,433 5	250 15	- -	3 0	0 8	14 14	103 3	5 14	13 14	-
Ionian Islands	273 4	18 11	- -	1 3	- -	12 18	30 5	0 9	11 13	
Morea and Greek islands	799 10	78 3	- -	2 10	- -	165 8	20 0	0 14	35 5	0 11
Turkey and Cont. Greece	5,191 2	1,968 1	- -	16 7	28 19	200 4	136 10	20 10	353 15	
Syria and Palestine	196 0	62 0	12 0	7 0	- -	- -	12 0	- -	11 0	
Egypt	964 0	- -	154 0	62 7	- -	2 1	20 0	- -	45 16	0 1
Tripoli, Tunis, Algiers, and Morocco	793 10	15 0	187 0	- -	- -	- -	54 0	- -	38 10	0 3
Western coast of Africa	1,622 6	3 5	20 0	252 19	12 14	12 12	98 8	24 10	228 4	
Cape of Good Hope	848 13	18 19	- -	184 16	3 2	42 9	165 11	72 8	406 3	3 5
Cape de Verde Islands	- -	- -	- -	0 3	- -	- -	1 5	0 8	1 1	
St. Helena and Ascension Island	35 0	0 15	- -	0 7	- -	- -	- -	4 7	16 10	
Mauritius	418 15	1 10	- -	165 19	- -	29 13	43 10	35 12	496 14	2 7
Arabia	18 3	- -	- -	1 0	2 0	- -	- -	- -	1 15	
East India Company's territories and Ceylon	17,017 15	2,476 0	240 0	452 4	12 7	343 15	1,223 11	165 19	5,010 14	52 15
Sumatra, Java, and other Islands of Indian seas	1,813 0	203 0	153 0	49 3	3 12	76 19	127 10	3 18	229 18	
Philippine Islands	33 0	2 0	- -	- -	- -	- -	5 0	- -	1 5	
China	356 10	2,336 12	- -	1 1	- -	- -	52 1	20 11	26 18	
British Australian settlements	1,417 5	50 15	177 0	146 0	1 12	70 18	79 5	297 19	1,264 10	18 19
New Zealand	67 3	1 5	- -	24 5	1 5	7 1	0 11	30 10	95 11	0 2
Brit. N. Amer. colonies	4,971 13	125 14	3,199 10	2,905 3	14 2	147 1	689 14	1,403 14	2,916 7	168 4
British West Indies	522 19	25 8	85 0	1,275 7	8 16	30 12	562 15	1,078 5	1,670 0	2 4
Foreign West Indies	5,084 15	22 0	20 0	876 0	4 10	3 10	142 1	637 1	493 18	3 4
United States of America	39,964 19	115 15	13,075 5	463 17	91 0	48 14	594 4	166 5	2,590 19	1,507 6
Texas	- -	- -	- -	1 0	0 3	1 9	- -	0 11	25 10	
Mexico	566 0	3 0	- -	47 18	9 0	- -	10 6	21 5	19 19	3 14
Colombia	63 0	1 0	- -	179 11	- -	- -	1 14	51 1	17 8	0 2
Brazil	2,088 10	110 5	40 0	483 11	1 13	109 9	520 12	722 13	697 7	12 0
States of Rio de la Plata	1,563 14	0 8	- -	460 2	1 12	29 18	159 17	293 8	421 3	12 5
Chili	1,349 7	6 0	- -	48 19	3 8	- -	29 7	175 11	184 12	
Peru	742 0	- -	- -	55 1	- -	- -	24 0	124 1	195 6	
Falkland Islands	- -	- -	- -	- -	- -	- -	- -	- -	0 4	
Isles of Guernsey, Jersey, Alderney, and Man	679 5	59 16	123 10	151 14	2 1	32 16	55 5	129 16	281 7	7 15
Total	172,379 16	18,921 3	93,851 8	15,934 15	1,611 6	2,693 2	14,914 17	6,000 12	35,891 11	3,308 0

N.B. — Quarters of a cwt. and lbs. are omitted in this table, but they are allowed for in the summing up.

Total quantity of iron exported in 1842, 265,506½ tons.

Perhaps in nothing has the fall of price, consequent to the diminution of the cost of production, that has taken place since the peace of 1815, been more conspicuous than in hardware. At an average, articles

of hardware are at present (1843) full 50 per cent. lower than in 1820. And it may be safely affirmed that there are very few descriptions of articles in which a fall of price would have been so advantageous.

We still import a small quantity, from 15,000 to 18,000 tons, of Swedish iron, for conversion into steel, for which purpose it is better fitted than British iron.

IRON-WOOD (Ger. *Eisenholz*; Du. *Yserhout*; Fr. *Bois de fer*; It. *Legno di ferro*; Sp. *Plo hierro*; Lat. *Sideroxylon, Lignum ferreum*), a species of wood of a reddish cast, so called on account of its corroding as that metal does, and its being remarkably hard and ponderous, — even more so than ebony. The tree which produces it grows principally in the West India islands, and is likewise very common in South America, and in some parts of Asia, especially about Siam.

ISINGLASS (Ger. *Hausenblase, Hausblase*; Fr. *Colle de poisson, Carlock*; It. *Cola di pesce*; Rus. *Klei rübii, Karluk*), one of the purest and finest of the animal glues. It is a product the preparation of which is almost peculiar to Russia. It is made of the air-bladders and sounds of different kinds of fish which are found in the large rivers that fall into the North Sea and the Caspian. That prepared from the sturgeon is generally esteemed the best; next to that, the beluga; but isinglass is also prepared from sterlets, shad, and barbel, though not so good. The best is usually rolled in little ringlets; the second sort is laid together like the leaves of a book; and the common sort is dried without any care. When fine, it is of a white colour, semi-transparent, and dry. It dissolves readily in boiling water, and is used extensively in cookery. It is also used for stiffening silk, making sticking plaster, &c. The duty of 47*s.* 6*d.* a cwt. on isinglass produced, in 1840, 3,722*l.* showing that 1,567½ cwt. had been entered for consumption. The price varies from 5*s.* to 14*s.* 6*d.* per lb. — (See *Thomson's Chemistry*; *Tooke's View of Russia*, 2d ed. iii. 343, &c.)

ISLE OF MAN. See MAN, ISLE OF.

JUICE OF LEMONS, LIMES, OR ORANGES. The 9th section of the act 6 Geo. 4. c. 111. is as follows: — "For ascertaining the degrees of specific gravity or strength, according to which the duty on the juice of lemons, limes, and oranges shall be paid, it is enacted, that the degrees of such specific gravity or strength shall be ascertained by a glass citrometer, which shall be graduated in degrees in such manner, that distilled water being assumed as unity at the temperature of 60° by Fahrenheit's thermometer, every degree of the scale of such citrometer shall be denoted by a variation of $\frac{1}{1000}$ parts of the specific gravity of such water."

JUNIPER BERRIES. See BERRIES.

IVORY, the name given to the teeth or tusks of the elephant, and of the walrus or sea-horse. Each male elephant come to maturity has 2 tusks. These are hollow at the root, tapering, and of various sizes, depending principally on the age of the animal. Colour externally yellowish, brownish, and sometimes dark, internally white. The best are large, straight, and light-coloured, without flaws; not very hollow in the stump, but solid and thick. The most esteemed come from Africa, being of a closer texture, and less liable to turn yellow, than those from the East Indies.

The trade in London thus divide them: —

First sort, weighing 70 lbs. or upwards; second sort, weighing 56 lbs. to 60 lbs.; third sort, weighing 38 lbs. to 56 lbs.; fourth sort, weighing 28 lbs. to 37 lbs.; fifth sort, weighing 18 lbs. to 27 lbs.

All under 18 lbs. are called *scrivellors*, and are of the least value. In purchasing elephants' teeth, those that are very crooked, hollow, and broken at the ends, or cracked and decayed in the inside, should be rejected; and care taken that lead or any other substance has not been poured into the hollow. The freight is rated at 16 cwt. to the ton. — (*Milburn's Orient. Com.*)

Supply of Ivory. — The imports of elephants' teeth, in 1840 and 1841, were, at an average, 5556 cwt., of which 4520 cwt. were retained for consumption. The medium weight of a tusk may be taken at about 60 lbs.; so that the yearly imports of 1840 and 1841 may be taken at 10,372 tusks; a fact which supposes the destruction of at least 5186 male elephants! But, supposing the tusks could only be obtained by killing the animal, the destruction would really be a good deal greater, and would most probably, indeed, amount to about 7,000 elephants. Occasionally, however, tusks are accidentally broken, one lost in this way being replaced by a new one; and a good many are, also, obtained from elephants that have died in the natural way. Still it is sufficiently obvious, that the supply from the sources now alluded to cannot be very large; and if to the quantity of ivory required for Great Britain, we add that required for the other countries of Europe, America, and Asia, the slaughter of elephants must, after every reasonable deduction is made, appear immense; and it may well excite surprise, that the breed of this noble animal has not been more diminished. The western and eastern coasts of Africa, the Cape of Good Hope, Ceylon, India, and the countries to the eastward of the Straits of Malacca, are the great marts whence supplies of ivory are derived. The imports from Western Africa into Great Britain, in 1840, amounted to 1,933 cwt.; the Cape furnished only 97 cwt. The imports during the same year from India, Ceylon, and other Eastern countries, were 2,418 cwt.

The Chinese market is principally supplied with ivory from Malacca, Siam, and Sumatra.

The chief consumption of ivory in England is in the manufacture of handles for knives; but it is also extensively used in the manufacture of musical and mathematical instruments, chess-men, billiard-balls, plates for minatures, toys, &c. Ivory articles are said to be manufactured to a greater extent, and with better success, at Dieppe, than in any other place in Europe. But the preparation of this beautiful material is much better understood by the Chinese than by any other people. No European artist has hitherto succeeded in cutting concentric balls after the manner of the Chinese: and their boxes, chess-men, and other ivory articles, are all far superior to any that are to be met with any where else.

Historical Notice. — It is a curious fact, that the people of all Asiatic countries in which the elephant is found, have always had the art of taming the animal and applying it to useful purposes, but that no such art has ever been possessed by any native African nation. Is this owing to any difference between the Asiatic and African elephants, or to the inferior sagacity of the African people? We incline to think that the latter is the true hypothesis. Alexander the Great is believed to have been the first European who employed elephants in war. It appears pretty certain, that the elephants made use of by the Carthaginians were mostly, if not wholly, brought from India; and that they were managed by Indian leaders. Some of the latter were captured by the Romans, in the great victory gained by Metellus over Asdrubal. — (See, on this curious subject, two very learned and valuable notes in the *Ancient Universal History*, 8vo. ed. vol. xvii. p. 529. and p. 549. *Buffon's Article on the Elephant* is a splendid piece of composition.)

The price per cwt., duty (1*l.* per cwt.) included, of elephants' teeth in the London market, in June, 1843, was —

	£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
1st, 79 to 90 lbs. - -	25	0	0	to 31	0	0		5th, 18 to 27 lbs. - -	19	0	0	to 21	0	0	
2d, 56 — 60 — - -	23	0	0	— 27	0	0		Scrivelloes - -	10	0	0	— 35	0	0	
3d, 38 — 55 — - -	21	0	0	— 24	0	0		Sea horse teeth, per lb. -	0	5	0	— 0	15	0	
4th, 28 — 37 — - -	20	0	0	— 22	0	0									

K.

KELP. A substance composed of different materials, of which the fossil or mineral alkali, or, as it is commonly termed, soda, is the chief. This ingredient renders it useful in the composition of soap, in the manufacture of alum, and in the formation of crown and bottle glass. It is formed of marine plants, which, being cut from the rocks with a hook, are collected and dried on the beach to a certain extent; they are afterwards put into kilns prepared for the purpose, the heat of which is sufficient to bring the plants into a state of semi-fusion. They are then strongly stirred with iron rakes; and when cool, condense into a dark blue or whitish mass, very hard and solid. Plants about 3 years old yield the largest quantity of kelp. The best kelp has an acrid caustic taste, a sulphurous odour, is compact, and of a dark blue greenish colour. It yields about 5 per cent. of its weight of soda. — (*Barry's Orkney Islands*, p. 377.; *Thomson's Dispensatory.*)

The manufacture of kelp is, or rather *was*, principally carried on in the Western Islands, and on the western shores of Scotland, where it was introduced from Ireland, about the middle of last century. Towards the end of the late war, the kelp shores of the island of North Uist let for 7,000*l.* a year. It has been calculated that the quantity of kelp annually manufactured in the Hebrides only, exclusive of the mainland, and of the Orkney and Shetland isles, amounted, at the period referred to, to about 6,000 tons a year; and that the total quantity made in Scotland and its adjacent isles amounted to about 20,000 tons. At some periods during the war, it sold for 20*l.* a ton; but at an average of the 23 years ending with 1822, the price was 10*l.* 9*s.* 7*d.* — (Art. *Scotland, Edinburgh Encyclopædia.*)

Unluckily, however, the foundations on which this manufacture rested were altogether factitious. Its existence depended on the maintenance of the high duties on barilla and salt. Inasmuch, however, as kelp could not be substituted, without undergoing a very expensive process, for barilla, in a great many departments of industry in which the use of mineral alkali is indispensable, it became necessary materially to reduce the high duty laid on barilla during the war. The ruin of the kelp manufacture has been ascribed to this reduction; but though barilla had been altogether excluded from our markets, which could not have been done without great injury to many most important manufactures, the result would have been perfectly the same, in so far as kelp is concerned, unless the high duty on salt had also been maintained. It was the repeal of the latter that gave the kelp manufacture the *coup de grace*. The purification of kelp, so as to render it fit for soap-making, is a much more troublesome and expensive process than the decomposition of salt; and the greatest quantity of alkali used, is now obtained by the latter method. Had the duty on salt not been repealed, kelp might still have been manufactured, notwithstanding the reduction of duty on barilla.

The manufacture is now almost extinct. Shores that formerly yielded the proprietors a rent of 200*l.* to 500*l.* a year, are now worth next to nothing. The price of kelp since 1822 has not been, at an average, above 4*l.* a ton; and the article will, most probably, soon cease to be produced.

This result, though injurious to the proprietors of kelp shores, and productive of temporary distress to the labourers employed in the manufacture, is not to be regretted. It could not have been obviated, without keeping up the price of some of the most important necessaries of life at a forced and unnatural elevation. The high price of kelp was occasioned by the exigencies of the late war, which, besides obstructing the supply of barilla, forced government to lay high duties on it and on salt. The proprietors had not the vestige of a ground for considering that such a state of things would be permanent; they did right in profiting by it while it lasted; but they could not expect that government was to subject the country, during peace, to some of the severest privations occasioned by the war, merely that they might continue to enjoy an accidental advantage.

KENTLEDGE, the name sometimes given to the iron pigs cast in a particular form for ballasting ships, and employed for that purpose.

KERMES (Ger. *Scharlachbeeren*; Du. *Grein Scharlakenbessen*; It. *Grana, Chermes, Cremese, Cocchi*; Sp. *Grana Kermes, Grana de la coscoja*), an insect (*Coccus ilicis* Lin.) of the same species as the true Mexican cochineal, found upon the *quercus ilex*, a species of oak growing in Spain, France, the Levant, &c. Before the discovery of America, kermes was the most esteemed drug for dyeing scarlet, and had been used for that purpose from a very remote period. Beckmann inclines to think that it was employed by the Phœnicians, and that it excelled even the famous Tyrian purple. — (*Hist. of Invent.* vol. ii. p. 197. Eng. ed.) From the name of *coccum* or *coccus*, cloth dyed with kermes was called *coccinum*, and persons wearing this cloth were said by the Romans to be *coccinati*. — (*Mart.* lib. i. epig. 97. lin. 6.) It is singular, however, notwithstanding its extensive use in antiquity, that the ancients had the most incorrect notions with respect to the nature of kermes; many of them supposing that it was the grains (*grana*) or fruit of the *ilex*. This was Pliny's opinion: others, after him, considered it in the same light, or as an excrescence formed by the puncture of a particular kind of fly, like the gall nut. It was not till the early part of last century that it was finally and satisfactorily established that the kermes is really nothing but an insect, assuming the appearance of a berry in the process of drying. The term kermes is of Persian origin. The Arabians had been acquainted with this production from the earliest periods in Africa; and having found it in Spain, they cultivated it extensively as an article of commerce, as well as a dye drug for their own use. But since the introduction of cochineal, it has become an object of comparatively trifling importance. It is still, however, prepared in some parts of Spain. Cloths dyed with kermes are of a deep red colour; and though much inferior in brilliancy to the scarlet cloths dyed with real Mexican cochineal, they retain the colour better, and are less liable to stain. The old tapestries of Brussels, and other places in Flanders, which have scarcely lost any thing of their original vivacity, though 200 years old, were all dyed with kermes. The history of this production has been treated with great learning by Beckmann (*Hist. of Invent.* vol. i. pp. 171—191. 1st ed. trans.); and by Dr. Bancroft (*Permanent Colours*, vol. i. pp. 393—409.)

KINO (Fr. *Gomme de Kino*; Ger. *Kinoharz*; It. *Chino*), a gum, the produce of trees that grow in the East and West Indies, Africa, Botany Bay, &c. The kino now found in the shops is said by Dr. A. T. Thomson to come from India, and to be the produce of the *nauclea gambir*. The branches and twigs are bruised and boiled in water. The decoction is then evaporated until it acquires the consistence of an extract, which is kino. It is imported in chests containing from 1 to 2 cwt.; and on the inside of the lid of each chest is a paper, inscribed with the name of John Brown, the month and year of its importation, and stating that it is the produce of Amboyna. It is inodorous, very rough, and slightly bitter when first taken into the mouth; but it afterwards impresses a degree of sweetness on the palate. It is in small, uniform, deep brown, shining, brittle fragments, which appear like portions of a dried extract broken down; being perfectly uniform in their appearance. It is easily pulverised, affording a powder of a lighter brown colour than the fragments. But it may be doubted whether the inspissated juice of the *nauclea gambir* ought to be considered as kino. Dr. Ainslie says that Botany Bay kino is the only kind he had seen in an Indian bazaar. The tree which yields it grows to a great height: it flows from incisions made into the wood of the trunk. — (*Thomson's Dispensatory; Ainslie's Materia Indica.*)

KNIVES. (Ger. *Messer*; Du. *Messen*; Fr. *Couteaux*; It. *Coltelli*; Sp. *Cuchillos*; Rus. *Noshi*) well known utensils made of iron and steel, and employed to cut with: they are principally manufactured in London and Sheffield. Knives are made for a variety of purposes, as their different denominations imply; such as table knives, pen-knives, oyster knives, pruning knives, &c. Although England at present excels every part of the world in the manufacture of knives, as in most branches of cutlery, the finer kinds were imported until the reign of Elizabeth. It is stated by Mr. Macpherson (*Annals of Com., Anno* 1563), that knives were not made for use in England till 1563; but there can be no doubt that this is an error. They had been made, though probably of a rude and clumsy pattern, for centuries before, in the district called Hallamshire, of which Sheffield is the centre; and the cutlers of London were formed into a corporation in 1417. — (*Manufactures in Metal*, vol. ii. c. i., in *Lardner's Cyclopædia.*)

KÖNIGSBERG, the capital of East Prussia, in lat. 54° 42′ 11″ N., lon. 20° 29′ 45″ E. Population, in 1838, 68,000.

Port, &c. — Königsberg is situated on the Pregel, which flows into the Frische Haff, or Fresh Bay, a large lake having from 10 to 14 feet water. The bar at the mouth of the Pregel has only from 5 to 6 feet water, so that none but flat-bottomed boats can ascend to the city. Pillau, in lat. 54° 38′ 39″ N., lon. 19° 52′ 20″ E., on the north side of the entrance from the Baltic to the Frische Haff, is properly the port of Königsberg. Within these few years, a light-house has been erected on a rising ground, a little to the

south of Pillau, the lantern of which is elevated 103 feet above the level of the sea. The light is fixed and brilliant. The entrance to the harbour is marked by buoys; those on the larboard side being surmounted by small flags. A Gothic building, 120 feet above the level of the sea, has been erected to serve for a land-mark; at a distance it looks like a three-masted ship under sail. There is usually from 15 to 16 feet water between the buoys on entering the harbour; but particular winds occasion material differences in this respect.

Trade of Königsberg. — Being situated on a navigable river of considerable importance, Königsberg has a large command of internal navigation, and is the principal emporium of a large extent of country. Wheat, rye, and other species of grain are the chief articles of export. The wheat is somewhat similar to that of Dantzic, but of inferior quality, being larger in the berry, and thicker skinned. The rye is thin, and also the barley, with few exceptions, and light. Peas are of a remarkably large quality. Oats are common feed, with a slight admixture of tares; but as these last answer in some degree the purpose of beans, the value of the oats is rather enhanced than otherwise by the circumstance. More tares are shipped here than from any other port in the Baltic. The prices of all sorts of grain are usually lower at Königsberg than at the neighbouring Prussian ports. Linseed, hemp, flax, lemons, bristles, and oil cake are largely exported; with smaller quantities of bones, mats, ashes, feathers, wax, hides and skins, &c. The bristles are the best in the Baltic. Timber, deals, and staves are as good as at Memel, but are rather scarce. The imports are coffee, sugar, herrings, iron and steel, wines, tin and tin plates, dye woods, spices, coals, &c. Salt is a government monopoly; any person being allowed to import it, but he must either sell it to government at a price fixed by them, or export it again.

Money, Weights, and Measures, same as at DANTZIC; which see.

Account of the Products exported from Königsberg by Sea in 1842, specifying the Quantities exported to the U. Kingdom and other Foreign Countries, with their estimated Values.

Articles.	To the United Kingdom.	To all other Countries.	Total Quantity.	Amt. in Sterling.	Articles.	To the United Kingdom.	To all other Countries.	Total Quantity.	Amt. in Sterling.
				£					£
Wheat {lasts of 10½ imp. qrs. or 10⅔ Winch. qrs. }	4,942	1,788	6,730	133,292	Feathers and quills {stones 66 lbs. to a ton}	- -	1,080	1,080	2,647
Rye - —	- -	9,913	9,913	98,149	Hides and skins —	574	436	1,010	1,305
Barley - —	560	1,710	2,270	17,418	Linen - —	- -	15,807	15,807	23,475
Oats - —	355	486	841	4,580	Oil cakes - —	149,037	149,037	149,037	7,378
Peas - —	1,187	1,743	2,930	34,812	Hemp oil - —	- -	903	903	536
Beans - —	537	64	601	7,438	Tallow - - —	- -	753	753	559
Tares - —	567	148	715	6,372	Molasses - —	- -	5,367	5,367	1,594
Linseed and rape-seed - —	2,334	2,827	5,161	91,978	Bones and bone dust lasts	1,315	78	1,393	7,962
Clover and Timothy seed - - cwt.	30	950	980	1,868	Mats - bundles of 5 p.	- -	11,070	11,070	986
Flax - {stones 66 lbs. to a ton}	75,000	737	75,737	33,741	Deals - - - lasts	- -	150	150	535
Flax codilla —	24,733	24	24,757	4,903	Ashes - - - —	- -	847	847	293
Hemp - —	1,460	997	18,457	8,680	Salted beef and pork - —	11,823	11,823	11,823	7,024
Hemp codilla —	- -	5,717	5,717	1,273	Brandy - - hhds.	- -	846	846	2,764
Bristles - —	43	4,507	4,550	14,866	Sundry exports of various descriptions - - -	- -	- -	- -	7,426
					Total - -	- -	- -	- -	523,757

Account of the Products imported into Königsberg by Sea in the Year 1842, specifying the Quantities imported from the U. Kingdom, and elsewhere, with their estimated Values.

Articles.	From the U. Kingdom.	From all other Countries.	Total Quantity.	Amt. in Sterling.	Articles.	From the U. Kingdom.	From all other Countries.	Total Quantity.	Amt. in Sterling.
				£					£
Arrack, rum and brandy {cwt. Prussian equal to 113⅓ lbs. English}	322	4,102	4,424	11,169	Molasses {cwt. Prussian equal to 313⅓ lbs. English}	288	492	780	1,042
Cotton wool - —	908	376	1,284	4,386	Mustard —	22	- -	22	140
Cotton yarn - —	94	472	566	5,044	Train oil - —	- -	1,132	1,132	1,343
Coffee - —	1	11,190	11,191	38,227	Rice - - —	500	3,113	3,613	5,366
Cheese - —	7	548	555	824	Salt - - —	97,614	14,377	111,991	8,516
Copperas - —	3,220	72	4,292	1,912	Seed oil - —	17	347	364	541
Coals - —	92,611	- -	92,611	4,585	Spices of all kinds - —	1,061	1,242	2,303	5,472
Dyewood - —	21	3,598	3,619	4,031	Sugar, refined —	- -	163	163	557
Drugs - —	2,577	4,276	6,853	19,337	Sugar, raw and crushed, lumps —	35,375	32,922	68,297	152,147
Glass and glass-ware - —	12	94	106	567	Southern fruit —	- -	3,049	3,049	9,056
Hops - - —	27	100	127	604	Tea - - —	766	406	1,172	14,989
Herrings - barrels	180	64,181	64,361	76,469	Tin - - —	28	329	357	1,060
Indigo {cwt. Prussian equal to 113⅓ lbs. English}	304	35	339	15,101	Tin plate - —	920	1,901	2,821	15,082
Iron and steel ware - —	118	3,628	3,746	36,162	Tobacco, manufactured - —	- -	1,041	1,041	11,751
Iron and steel, raw - - —	10,994	1,142	12,136	16,221	Tobacco leaves —	- -	969	969	2,878
Iron and steel, new - - —	11,546	20,149	31,695	51,779	China and earthenware —	29	76	115	649
Lead - - —	2,185	424	2,609	3,487	Wine - - —	43	7,213	7,256	43,105
White lead - —	270	225	495	956	Tar - - —	552	12,201	12,754	2,841
Malt liquors - —	2,449	42	2,491	3,330	Tiles and bricks —	- -	135	135	802
Mill and grindstones lasts	295	215	510	6,060	Sundry imports of various descriptions -	- -	- -	- -	22,277
					Total - -	- -	- -	- -	599,650

Account of the Exports of Corn from Königsberg during each of the Six Years ending with 1842.

Species of Grain.	1837.	1838.	1839.	1840.	1841.	1842.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
Wheat - - -	30,515	142,485	114,691	71,190	71,708	70,665
Rye - - -	100,716	72,755	208,002	169,564	37,855	104,085
Barley - - -	34,041	11,592	39,214	24,270	2,772	23,835
Oats - - -	58,230	14,537	67,137	23,530	- -	8,850
Peas - - -	19,488	6,216	29,421	11,602	18,185	30,765
Beans - - -	8,977	913	16,810	10,290	16,611	6,310
Tares - - -	2,594	1,449	3,180	6,352	13,755	7,510
Linseed - - -	31,280	46,011	42,787	51,912	99,088	54,190
Total	285,641	293,958	515,242	368,710	259,952	306,190

L.

LAC, or GUM LAC (Ger. *Lack, Gummilack;* Fr. *Lacque, Gomme lacque;* It. *Lacca, Gommalacca;* Sp. *Goma laca;* Rus. *Laka, Gummilak;* Arab. *Laak;* Hind. *Lak'h;* Sans. *Lākshā*), a substance, which has been improperly called a gum, produced in Bengal, Assam, Pegu, Siam, &c. on the leaves and branches of certain trees, by an insect (*chermes lacca*). The trees selected by the insect on which to deposit its eggs are known by the names of the bihar tree (*Croton lacciferum* Lin.), the pepel (*Butea frondosa*), bott, and coosim trees, &c. After being deposited, the egg is covered by the insect with a quantity of this peculiar substance, or lac, evidently intended to serve, in the economy of nature, as a nidus and protection to the ovum and insect in its first stage, and as food for the maggot in its more advanced stage. It is formed into cells, finished with as much art as a honeycomb, but differently arranged. Lac yields a fine red dye, which, though not so bright as the true Mexican cochineal, is said to be more permanent; and the resinous part is extensively used in the manufacture of sealing wax and hats, and as a varnish.

Lac, when in its natural state, encrusting leaves and twigs, is called *stick lac:* it is collected twice a year; and the only trouble in procuring it is in breaking down the leaves and branches, and carrying them to market. When the twigs or sticks are large, or only partially covered, the lac is frequently separated from them, as it always ought to be when shipped for Europe, to lessen the expense of freight. The best stick lac is of a deep red colour. When held against the light, it should look bright, and when broken should appear in diamond-like points. If it be not gathered till the insects have left their cells, it becomes pale, and pierced at the top; and is of little use as a dye, though probably better for a varnish.

Lac dye, lac lake, or *cake lac,* consists of the colouring matter extracted from the stick lac. Various processes have been adopted for this purpose. It is formed into small square cakes or pieces, like those of indigo. It should, when broken, look dark-coloured, shining, smooth, and compact; when scraped or powdered, it should be of a bright red colour, approaching to that of carmine. That which is sandy, light-coloured, and spongy, and which, when scraped, is of a dull brickdust colour, should be rejected.

Notwithstanding the continued fall in the price of cochineal, the use of lac dye has been extending in this country. The annual consumption may at present amount to about 700,000 lbs., having more than trebled since 1818. The finest qualities of lac dye are seldom met with for sale in Calcutta, being generally manufactured under contract for the European market.

When stick lac has been separated from the twigs to which it naturally adheres, and coarsely pounded, the native silk and cotton dyers extract the colour as far as it conveniently can be done by water. The yellowish, hard, resinous powder which remains, having somewhat of the appearance of mustard seed, is called *seed lac.* When liquefied by fire, it is formed into cakes, and denominated *lump lac.* The natives use the latter in making bangles, or ornaments in the form of rings, for the arms of the lower class of females; the best *shellac* being used in manufacturing these ornaments for the superior classes.

Shellac is produced from seed lac, by putting the latter into bags of cotton cloth, and holding it over a charcoal fire, when the lac melts, and being strained through the bag, the resinous part, which is the most liquefiable, is obtained in a considerable degree of purity; it is formed into thin sheets or plates. Thin, transparent, or amber-coloured shellac is best; avoid that which is thick, dark, or speckled; it should always, when broken, be amber-coloured on the edge; that which has a dark brown fracture, however thin, should be rejected. When laid on a hot iron, shellac, if pure, will instantly catch fire, and burn with a strong but not disagreeable smell. It used to be principally employed in this country in the manufacture of sealing wax, and as a varnish; but it is now very extensively used in the manufacture of hats: the entries for consumption in 1842 amounted to 1,082,570 lbs.

In Bengal, lac is chiefly produced in the forests of Sylhet and Burdwan. The finest dye is said to be obtained from the stick lac of Siam and Pegu; but the shellac or resinous part obtained from the latter is inferior to that produced from Sylhet stick lac. It may be obtained in almost any quantity.

Account of the Quantities of Lac Dye and of Shellac imported into the U. Kingdom from the East India Company's Territories and Ceylon, and of the Quantities entered for home Consumption during each of the Twelve Years ending with 1842.

Years.	Lac Dye.		Shellac		Years.	Lac Dye.		Shellac.	
	Imported.	Entered for Consumption.	Imported.	Entered for Consumption.		Imported.	Entered for Consumption.	Imported.	Entered for Consumption.
	Lbs.	Lbs.	Lbs.	Lbs.		Lbs.	Lbs.	Lbs.	Lbs.
1831	753,252	450,048	1,144,329	517,500	1839	1,166,562	585,078	5,176,167	798,742
1832	459,379	606,506	1,069,116	374,622	1840	1,254,037	643,082	2,825,632	682,809
1833	299,405	423,325	770,544	408,657	1841	1,221,308	769,187	3,944,552	858,967
1834	696,339	388,745	941,179	409,019	1842	728,995	834,062	1,663,782	1,082,570
1835	528,490	590,540	1,179,899	578,219	Total	9,736,559	6,853,793	22,245,284	7,696,663
1836	547,053	599,542	1,372,519	580,360					
1837	900,560	596,197	2,194,938	570,654	Average of 12 years.	811,547	571,149	1,853,774	641,389
1838	1,096,179	624,081	2,659,827	827,564					

The finest lac dye is distinguished by the mark D. I., the 2d by D. T., the 3d by J. Mc. R., C. E., &c. In July 1842 and 1843, the prices of the different species of lac in bond in the London market were as follows: —

		July, 1842.		July, 1843.	
		s. d.	s. d.	s. d.	s. d.
Lac dye, diamond, I.	per lb.	1 8 to 1 9		2 4 to 2 6	
D. T.	—	1 2 — 1 4		2 0 — 2 1	
J. Mc. R.	—	0 8 — 0 9		0 9 — 0 10	
Other marks	—	0 2 — 1 6		0 2 — 1 3	
Lac lake	—	0 1 to 0 2		0 1 — 0 2	

	July, 1843.			
	£ s. d.		£ s. d.	
Shellac, liver, per cwt.	2 6 0	to	2 15 0	
Shellac, block	per cwt.	1 17 6	to 2 5 0	
— orange	—	3 5 0	— 3 15 0	
— block	—	2 5 0	— 2 15 0	

In 1823, D. T. lac dye was as high as *8s. 3d.* and *8s. 6d.* per lb. The duties used to be 5 per cent. on lac dye, seed lac, and stick lac; and 20 per cent. on shellac; but it was obviously absurd to charge shellac, which, as already seen, is prepared from the refuse of lac dye, with *four* times the duty laid upon the latter. This ridiculous distinction has, however, been for some years at an end. In 1842, the duties were reduced to *1s.* a cwt. — (*Bancroft on Permanent Colours*, vol. ii. pp. 1—60.; *Ainslie's Mat. Med.*; *Milburn's Orient. Com.*; and *private information.*)

LACE (Du. *Kanten*; Fr. *Dentelle*; Ger. *Spitzen*; It. *Merletti, Pizzi*; Rus. *Krushewo*; Sp. *Encajes*), a plain or ornamented net-work, tastefully composed of many fine threads of gold, silver, silk, flax, or cotton, interwoven, from *Lacinia* (Lat.), the guard hem or fringe of a garment.

The origin of this delicate and beautiful fabric is involved in considerable obscurity; but there is no doubt it lays claim to high antiquity. In Mr. Hope's Costumes of the Ancients, many beautiful lace patterns are portrayed on the borders of the dresses of Grecian females; and from the derivation of the word "*lace*," it is probable it was not unknown to the Romans. It is supposed that Mary de' Medici was the first who brought lace into France, from Venice, where, and in the neighbouring states of Italy, it is understood to have been long previously worn; but we find that in England, so early as 1483, "laces of thread, and laces of gold, and silk and gold," were enumerated among the articles prohibited to be imported. — (1 *Rich.* 3. c. 10.) It is, therefore, fair to presume that this manufacture had begun in England *prior* to that period, as this and many subsequent acts were passed — (19 Hen. 7. c. 21.; 5 Eliz. c. 7.; 13 & 14 Car. 2. c. 13.; 4 & 5 W. & M. c. 10., &c.) — for the encouragement and protection of our home manufacture; but it may equally be concluded, that as *pins* (which are indispensable in the process of lace making) were not used in England till 1543, the manufacture of lace must have been vulgar in fabric, and circumscribed in its extent. Tradition says that the lace manufacture was introduced into this country by some refugees from Flanders, who settled at or near Cranfield, now a scattered village on the west side of Bedfordshire, and adjoining Bucks; but there is no certain evidence that we are indebted to the Flemings for the introduction of this beautiful art, though we undoubtedly owe to them most part of our manufactures of articles of dress; we have also imitated many of their lace fabrics, and greatly improved our manufacture, by profiting by the superior taste which they have displayed in the production of this article. In 1626, Sir Henry Borlase founded and endowed the free school at Great Marlow, for 24 boys, to read, write, and cast accounts; and for 24 girls, to knit, spin, and make *bone lace* — (*Lewis's Topography*); so that there is reason to suppose that at this time the manufacture had commenced in Buckinghamshire, which by degrees extended to the adjoining counties of Bedford and Northampton. In 1640, the lace trade was a flourishing interest in Buckinghamshire — (*Fuller's Worthies*, and different *Itineraries*); and so greatly had it advanced in England, that by a royal ordinance in France, passed in 1660, a mark was established upon the thread lace *imported from this country* and from Flanders, and upon the point lace from Genoa, Venice, and other foreign countries, in order to secure payment of the customs duties. — (*Universal Dictionary.*)

Pillow Lace — the original manufacture — is worked upon a hard stuffed pillow, with silk, flax, or cotton threads, according to a parchment pattern placed upon it, by means of pins, bobbins, and spindles, which are placed and displaced, twisting, and interweaving the threads, so as to imitate the pattern designed. This manufacture has been long pursued in almost every town and village in the midland counties, particularly in Buckinghamshire, Bedfordshire, and Northamptonshire, besides at Honiton, in Devon, and various other places in the west of England. The principal places where it is made in the Netherlands are Antwerp, Brussels, Mechlin, Louvaine, Ghent, Valenciennes, and Lisle. It is also made at Chantilly near Paris (celebrated for veils), Charleville, Sedan, Le Compté de Bourgoyne, Liege, Dieppe, Havre, Harfleur, Pont l'Evesque, Gosors, Fecamp, Caen, Arras, Bapaume, &c. in France; and at various places in Spain, Portugal, and Italy. In England and Ireland, besides the laws passed at different times to encourage and protect the manufacture, associations were formed in various places, with the view of exciting a spirit of emulation and improvement, by holding out premiums for the production of the best pieces of bone lace; and although smuggling of foreign lace was carried on to a great extent, (in 1772, 72,000 ells of French lace were seized in the port of Leigh, and lodged in the king's warehouse there, besides numerous other seizures,) the British manufacture advanced in an unparalleled degree. — (*Gentleman's Mag.* 1751, vol. xxi. p. 520.; vol. xlii. p. 434.) It is imagined that the first lace ever made in this country was of the sort called *Brussels point*, the net work made by bone bobbins on the pillow, and the pattern and sprigs worked with the needle. Such

appears to have been the kind worn by the nobility and people of high rank, as is evident by the different portraits now in existence, painted by Vandyke, in the time of Charles I., and afterwards by Sir Peter Lely and Sir Godfrey Kneller, in the succeeding reigns of Charles II., Queen Anne, and George I. About a century since, the *grounds* in use were the old Mechlin, and what the trade termed the *wire ground*, which was very similar, if not identical, with the *modern* Mechlin, the principal article in the present French manufacture. The laces made in these grounds were singularly rich and durable; the designs of the *old Mechlin* resembled the figures commonly introduced in ornamental carving. Between 70 and 80 years ago, a great deterioration was occasioned by the introduction of the *Trolly* ground, which was exceedingly coarse and vulgar, the figures angular, and altogether in the worst taste conceivable. An improvement, however, took place about the year 1770, when the ground, which is probably the most ancient known, was re-introduced; this was no other than the one still in partial use, and denominated the *old French ground*. About 1777, or 1778, quite a *new* ground was attempted by the inhabitants of Buckingham and its neighbourhood, which quickly superseded all the others; this was the *point ground*, which had (as is supposed) been imported from the Netherlands. From the first appearance of this ground may be dated the origin of the modern pillow lace trade; but it was not until the beginning of the present century that the most striking improvements were made; for during the last quarter of the eighteenth century, the article, though certainly much more light and elegant from the construction of the ground, was miserably poor and spiritless in the design. Soon after the year 1800, a freer and bolder style was adopted; and from that time to 1812, the improvement and consequent success were astonishing and unprecedented. At Honiton, in Devon, the manufacture had arrived at that perfection, was so tasteful in the design, and so delicate and beautiful in the workmanship, as not to be excelled even by the best specimens of Brussels lace. During the late war, veils of this lace were sold in London at from 20 to 100 guineas; they are now sold from 8 to 15 guineas. The effects of the competition of machinery, however, were about this time felt; and in 1815, the broad laces began to be superseded by the new manufacture. The pillow lace trade has since been gradually dwindling into insignificance, compared with its condition 30 years back. It is difficult to form an estimate of the number of persons employed in pillow lace making during its prosperity; but in a petition from the makers in Buckingham and the neighbourhood, presented to her present Majesty in 1830, it was stated that 120,000 persons were dependent on the trade; but this number has since been very greatly diminished.

Nottingham Lace. — A frame-work knitter of Nottingham, named Hammond, about the year 1768, was the first who made lace by machinery. Dissipated in habits, and destitute of money, employment, or credit, the idea struck him, while looking at the broad lace on his wife's cap, that he could fabricate a similar article by means of his stocking frame. — (*Gravenor Henson on Hosiery, Lace, &c.* p. 295.) He tried, and succeeded. The first machine ostensibly for lace (introduced at Nottingham about the same period, by A. Else and Harvey of London) was called a pin machine, for making single press *point net* in imitation of the Brussels ground. This machine, although lost here, is still used in France in manufacturing the net called *tulle*. This was the age of experiments; and workmen at their leisure hours employed themselves in forming new meshes on the hand, in the hope of perfecting a complete hexagon, which had hitherto eluded all their efforts to discover. In 1782, the warp frame was introduced, which is still in use for making *warp lace*; and in 1799 it was first attempted to make *bobbin net* by machinery; but this was not found to answer. During the succeeding 10 years many alterations were made in the construction of the machines, with no better success, until at length, in 1809, Mr. Heathcoat of Tiverton succeeded in discovering the correct principle of the bobbin net frame, and obtained a patent for 14 years for his invention.* Steam power was first introduced by Mr. John Lindley, in 1815-16; but did not come into active operation till 1820. It became general in 1822-23; and a great stimulus was at this period given to the trade, owing to the expiration of Mr. Heathcoat's patent, the increased application of power, and the perfection to which the different hand frames had by this time been brought. A temporary prosperity shone on the trade; and numerous individuals — clergymen, lawyers, doctors, and others — readily embarked capital in so tempting a speculation. Prices fell in

* Since this article was printed in our first edition, Mr. Heathcoat was pointed out to us as the original inventor of the bobbin net machine, and that, prior to his patent being obtained, bobbin net by machinery was unknown, although numerous attempts had been made to produce it by its means. Mr. Brunel, engineer, who was examined, as a witness, in the action *Boville* v. *Moore*, tried before Sir Vicary Gibbs, in March, 1816, stated, in reference to this machine, that when Mr. Heathcoat had separated one half of the threads, and placed them on a beam as warp threads, and made the bobbin which carried the other half of the threads act between those warp threads, so as to produce Buckinghamshire or pillow lace, *the lace machine was invented*. Relying upon the authenticity of this statement, we feel it due to Mr. coat to give this explanation.

proportion as production increased; but the demand was immense; and the Nottingham lace frame became the organ of general supply, — rivalling and supplanting, in plain nets, the most finished productions of France and the Netherlands.

The contrast is so remarkable between the production of former times and the results of the present day, through the employment of machinery, in spinning and doubling the yarn, and in the fabrication of the net itself, that it presents a subject of much interest. In 1812, the price of No. 200. yarn was 40*s.* per lb.; in 1835, it was only 12*s.*; while a square yard of middle quality bobbin net, which in 1812 sold for about 40*s.* per yard, could be purchased in 1835 at 10*d.* A pillow lace maker even of the present day (1843) can only fabricate from 4 to 5 meshes per minute: the earliest machines accomplished 1,000 meshes per minute; but at present not less than 30,000 meshes per minute are made by the machines!

Since the publication of our last edition, this trade has experienced great fluctuations. Mr. Felkin, of Nottingham, who has devoted great attention to the statistics of the manufacture, and is favourably known as the author of different periodical statements respecting it, estimated that in 1831 the quantity produced was 23,400,000 square yards, worth 1,891,875*l.*; in 1833, 30,771,000 square yards, worth 1,850,650*l.*; and in 1836, 28,740,674 square yards, value 1,369,938*l.* At present (1843) the whole number of machines in the bobbin net trade is about 3,200, and of these about 2,600 are in full work (1,400 power, and 1,200 hand machines), and others which have been discontinued are coming into employment. About 2,000 of these machines are situated in Nottingham and the neighbourhood, and the remainder in Leicestershire, Derbyshire, the west of England, and the Isle of Wight. It is considered that the produce of this branch of trade for 1842, may be estimated thus —

Weight of raw silk used, 125,000 lbs.; weight when prepared, 100,000 lbs., value -	£100,000
Weight of Sea Island cotton, costing 140,000*l.*, 2,200,000 lbs.; weight when prepared, 1,400,000 lbs., value - - - - - - - -	492,000
Total value of material - - - -	£592,000
This amount of yarn is calculated to have produced —	
Plain quillings and Brussels nets - - - - - - -	£330,000
Fancy and platt nets - - - - - - - -	890,000
Silk ditto - - - - - - - - -	200,000
	1,420,000
Value of embroidery - - - - - - - -	440,000
Interest of capital, rent, wages, profits, &c. - - - - -	530,000
Total value of bobbin net trade, which may be divided into plain finished goods, 750,000*l.*; and fancy and embroidered articles, 1,640,000*l.*: of which sum not less than 1,100,000*l.* has been paid for labour, divided amongst 73,000 men, women, and children - -	£2,390,000

The business is in the hands of about 100 establishments.

Warp lace trade (a separate branch), employing about 800 machines, almost entirely worked by hand, is estimated thus —

Weight of raw silk used, 40,000 lbs.; when prepared, 30,000 lbs. - -	£40,000
Weight of cotton wool, cost 25,000*l.*, 600,000 lbs.; when prepared, 450,000 lbs. -	65,000
Total value of material	£105,000
Calculated to have produced — Silk lace, value -	150,000
Cotton lace, value -	200,000
	350,000

This branch is estimated to employ 4,000 hands, receiving 165,000*l.* in wages; and the produce is disposed of by about 15 houses in Nottingham and the neighbourhood.

Estimated total value of bobbin net and warp lace trade - - - £2,740,000

It is believed that more than half this amount is used for home consumption, of which the larger part is sold by London houses: the remainder is exported chiefly to Hamburg, the Leipsic and Frankfort fairs, Antwerp and the rest of Belgium, France (contraband), Italy, Sicily, North and South America, and to our colonies in the East and West Indies and Australia.

This manufacture would now seem to be recovering from the depression which it has suffered for some years past. Its improvement has been chiefly effected by the adaptation of machinery to the production of lace in imitation of the best specimens of the pillow lace of former times. This has been accomplished by

perfection have these improvements in machinery arrived, that the lace now produced by the frame bears so close a resemblance to the ancient and most elaborate of the foreign grounds, viz. Priest's lace, Valenciennes, Mechlin, and Brussels, as to deceive even a practised eye; and so remarkable has the difference in value become to the trade itself, that while a single yard of 12-4ths *plain* net may be bought for one shilling, platt lace of first-rate design in pattern may bring even from 5*l.* to 10*l.* per yard. To produce the former, the cost of a machine might amount to 250*l.*, while the improved machinery, required to produce the latter, would incur an outlay of perhaps 1,000*l.* By the application of the "Jacquard" to the bobbin net frame (by far the most intricate, delicate, and expensive of all looms), a triumph of a most important kind has been achieved for the English manufacture, as it has been attended with a solidity and certainty, both with respect to capital and labour, which was formerly unknown in the trade, when confined to the production of plain nets alone; the character of the manufacture has been elevated, and this has been further promoted by the establishment of government schools of design, where youths are assiduously studying the art of pattern-drawing, and the taste of the court and the higher classes has again been attracted to this most delicate of all our fabrics. Machines of greater width and speed have superseded the narrow frames formerly used; while numbers of the old machines have acquired an enhanced value by their adaptation to the modern improvements. The greater skill required in working the Jacquard mountings, as well as greater power necessary for the wider frames, now being introduced, has called for a larger amount of adult labour than was used with the narrow machines, and has materially improved the condition of the workmen from an increased rate of wages. On the other hand, not less than 260 small owners of machines have disappeared from the list of manufacturers since 1835-36; (at least 500 of the narrow machines formerly in use have been sold as old iron;) and the number of embroiderers, formerly employed to a great extent on plain nets, but

now chiefly engaged on the most tasteful description of work, may have been reduced from 100,000 women and children, in 1833, to perhaps 50,000 at present, and even these, unless in the highest branches, only derive a precarious employment.

The condition of the workpeople is generally improving (except in the case of those engaged on plain common goods); their nett wages may vary from 12*s.* to 60*s.* a week, or may average 20*s.* Women, 5*s.* to 12*s.* or average 7*s.*, and children, 1*s* to 6*s.*, or average, 2*s.* 6*d.* In the superior departments of the trade employment is on the increase. But the working of machinery by night, and the long hours in which women and children are engaged in labour, deserve the most serious attention, and should, if possible, be restricted. It is right, however, to state that the health of the power machine workman is on the whole understood to be good; the factories are neither hot nor confined; and the hands have only to superintend, not work the machines. Hand machine labour is much heavier, but as it is the custom to work by "shifts" the men are seldom more than 6 hours a day at the frame. The embroidery frame is perhaps the most injurious to health; the workers in general commence at a tender age, and from constantly leaning over the frame while their bodies remain in a state of inactivity, they are frequently distorted in their persons, and become the victims of pulmonary disease. Notwithstanding the sedentary habits of the pillow lace workers, their general health is understood to be better than that of the lace embroiderers, but in both these employments, the hours of labour are much too long for children. They are, however, purely domestic employments under the superintendence of parents; and as the existence of the latter depends in a great measure on the quantity of labour they can bring into operation, their necessities too frequently overbalance their affections, and it is not easy for the legislature to interfere in such cases.

A considerable increase within the last few years has also taken place in bobbin net machinery on the Continent, particularly at Calais, where, in 1823, there were not 35 machines, and perhaps not 100 on the Continent altogether. Mr Felkin stated the number of frames employed there in 1833, as under —

Calais	600	8-4ths 11 point hand circular quillings.
Do.	60	7-4ths 11 point hand levers.
Do.	45	various widths; old machines, pusher, traverse, &c.
Boulogne	30	hand circular; chiefly 8-4ths quillings.
St. Omers	30	hand machines; plain nets.
Douay	145	part power, part hand machines; plain net.
Lisle	120	chiefly 8-4ths, 10-4ths, and 12-4ths, power; plain net.
Ghent	33	power, 12-4ths.
St. Quentin	90	chiefly hand; plain nets.
Do.	80	8-4ths, 10-4ths, and 12-4ths, power; plain nets chiefly.
Caen	55	hand; quillings chiefly.
Paris	10	hand machines chiefly.
—	50	do. do.
Villages in the north of France	340	do. do.
Switzerland	50	nearly all hand machines.
Saxony	70	do. do.
Austria	60	power and hand do.
Russia and Prussia	20	probably; both hand and power.
Total	1,850	

N. B. — The last mentioned countries, judging from their efforts to obtain model machines, were preparing to manufacture very extensively.

The produce of these machines was estimated at 9,824,000 square yards of net of the value of 570,250*l.*; but they have since increased perhaps 1,000 in number. It was stated in an address presented to the Chamber of Deputies, in March 1833, that bobbin net to the value of 1,000,000*l.* sterling was annually used in France, formed of equal moieties of French and English manufacture. Since that period, the machines have increased from 1,650 to about 2,600, at least 100 having been imported hence since 1836, besides about 200 additional "*insides*," which are the most difficult in construction. Any important improvements which have been made in the machinery have been wholly effected by English mechanics; but these improvements have been speedily copied, and applied on the Continent. Notwithstanding the advantages derived by the lace manufacturer from the acquisition of English machines, a movement is at this time making in France to prevent the importation of English machinery. It is, however, an important fact in reference to the lace trade, that the bobbin net now produced on the Continent, is fully as large as in England. Hitherto the French manufacturers have confined themselves to medium qualities and prices; but they have acquired some advantage over us by the greater taste they display in getting up the goods for the market; and the effects of this competition, which we are now feeling, in the American and other markets, will, no doubt, put our manufacturers on the alert to meet it. French lace is said to be smuggled into this country at from 5 to 10 per cent.; but so superior is the French Custom-house superintendence, that for several years past the smugglers' charge on English lace has been not less than 50 per cent. premium.

The most celebrated foreign laces are —

1. *Brussels*, the most valuable. There are 2 kinds: *Brussels ground*, having a hexagon mesh, formed by platting and twisting 4 threads of flax to a perpendicular line of mesh; *Brussels wire ground*, made of silk — meshes partly straight and partly arched. The pattern is worked separately, and set on by the needle.
2. *Mechlin*; a hexagon mesh formed of 3 flax threads twisted and platted to a perpendicular line or pillar. The pattern is worked in the net.
3. *Valenciennes*; an irregular hexagonal formed of 2 threads, partly twisted and platted at the top of the mesh. The pattern is worked in the net similar to Mechlin lace.
4. *Lisle*; a diamond mesh, formed of 2 threads platted to a pillar.
5. *Alencon* (called blond); hexagon of 2 threads, twisted similar to Buckingham lace; considered the most inferior of any made on the cushion.
6. *Alencon Point*; formed of 2 threads to a pillar, with octagon and square meshes alternately.

The French nets made by machinery are —

1. *Single Pressepoint*, called, when not ornamented, *tulle* and when ornamented, *dentelle*; made of silk; is an inferior net, but is attractive from the beautiful manner in which it is stiffened.
2. *Twice Berlin*; so called from being invented at Berlin, and the stitch being removed 3 needles from its place of looping; is fanciful and ornamented in appearance, but not in demand in England.
3. *Fleur de Tulle*, made from the warp lace machine; mesh of ¼ descriptions, which gives a shaded appearance to the net.
4. *Tulle Anglois* is double pressed point lace.
5. *Bobbin net*, } principally made by English emigrants, who
6. *Warp net*, } have settled in France.

*** We are indebted for this learned and very excellent article to Mr. Robert Slater, of Fore Street, London.

LACK, a word used in the East Indies to denote the sum of 100,000 rupees, which, supposing them standards, or siccas, at 2*s.* 6*d.*, amounts to 12,500*l.* sterling.

LADING, BILL OF. See Bill of Lading.

LAGAN. See Flotsam.

LA GUAYRA, the principal sea-port of the republic of Venezuela, in the province of Caraccas, on the Caribbean Sea, lat. 10° 36′ 19″ N., lon. 67° 6′ 45″ W. Population 8,000? In 1810, the population is believed to have amounted to 13,000; the reduction being a consequence of the loss of life caused by the tremendous earthquake of 1812, and the massacres and proscriptions incident to the revolutionary war. The population of the city of Caraccas, of which La Guayra may be considered as the port, fell off, from the same causes, from 43,000 in 1810, to 23,000 in 1830; but they are now both increasing.

Port. — There is neither quay nor mole at La Guayra. Ships moor E. N. E. and W. S. W., with their heads to the north, at from ¼ to ⅝ of a mile from the land, in from 9 to 18 fathoms. The holding ground is good; and notwithstanding the openness of the road, vessels properly found in anchors and cables run very little risk of being driven from their moorings.

Trade. — The principal articles of export are coffee, cocoa, indigo, hides, sarsaparilla, &c. La Guayra shares the trade of Venezuela with the ports of Cumana, Puerto Cabello, Maracaybo, &c., having about a half of its entire amount. The imports and exports of Venezuela in 1833-34 were as follows: —

Imports.	Value.	Exports.	Lbs.	Value.
	Dollars.			*Dollars.*
Cotton goods	1,063,527	Coffee	11,602,634	1,253,655
Linen ditto	615,270	Cacao	5,384,916	706,248
Woollen ditto	75,457	Indigo	421,602	504,818
Silk	96,912	Dye-woods	17,667,853	72,925
Flour	140,770	Tobacco, cinchona bark, baize, hides, &c.		816,857
Pork	123,447			
Other imports	1,181,048			
Total	3,296,411	Total		3,394,483

Countries.	Imports.	Exports.	Countries.	Imports.	Exports.
	Dollars.	*Dollars.*		*Dollars.*	*Dollars.*
Great Britain	897,742·76	520,542·08	Denmark	980,161·15	740,205·33
United States	783,061·33	1,115,490·38	Mexico	5,030	
France	61,969·21	205,750·21	Sardinia		28,658·19
Germany	326,972·56	384,527·26	Hayti		1,018·90
Spain	82,369·01	205,750·60	Various	68,416·30	18,316·67
New Granada	121·90	18,764·33			
Holland	90,597·29	155,459·46	Total	3,296,411·31	3,394,483·41

	Exports of Coffee.	Exports of Cocoa.
	Quintals.	*Quintals.*
Year ending 30th June, 1835	59,527	42,333
— — 1836	115,911	52,422
— — 1837	166,348	67,798
— — 1838	174,912	58,102

Port Charges payable by a Ship of 300 Tons, discharging and loading at La Guayra.

	National. $	National. cts.	Foreign (not privileged). $	Foreign (not privileged). cts.
Tonnage duty	37	50	150	0
Entrance fee	4	0	6	0
Anchorage	12	0	16	0
Captain of port's fee	3	0	6	0
Interpreter's fee and translating manifest	2	0	4	0
Permit to discharge and stamp	1	12½	1	12½
Health officer's fee	4	0	4	0
Municipal charge for water	40	0	40	0
Municipal bill of health	2	0	2	0
Permit to load and stamp	1	12½	1	12½
Certificate of sea-worthiness from captain of port, prior to loading, and stamp	2	0	2	0
	108	75	232	25
Value in sterling money	£17	15 10	£38	14 2

N.B. — A ship introducing a cargo, and sailing in ballast, would be liable to all the above charges, with the exception of the last two.

The charge for water is levied without regard to tonnage; viz. sloops and schooners, 20 dollars each, brigs 30, and ships 40.

Port Regulations. — On casting anchor, a visit is paid by the collector of customs, or his agent, accompanied by other officers, who take from the master his register, manifest, and muster-roll, and an officer is left on board until the cargo is discharged. The master must swear to his manifest within 24 hours after his arrival, when the permit to discharge is granted, and within 3 days all invoices must be presented. The discharge completed, the same officers repair on board to examine the vessel, and all being found in order, the officer is withdrawn. The clearing of a vessel outwards (that has entered with cargo) in ballast is then completed by paying the port charges; proof whereof being produced, the permission to sail is signed by the governor and harbour master. If the vessel take cargo on board, then the same formality, as to visiting, is pursued, as on the entry of a vessel.

Credit. — Goods imported are almost invariably sold upon credit; those exported are, on the other hand, always sold for ready money. The terms of credit vary from 2 to 6 months, or more. Bankruptcy is very rare.

Commission, Brokerage, &c. — Any one who pleases may undertake the functions of broker, factor, or merchant in Venezuela. The only obligation is the paying the patent or licence, that must be taken out by every one exercising such trades. This varies, according to the business, from about *1l.* 13*s.* 4*d.* to 66*l.* 18*s.* 4*d.* a year, and falls on natives as well as foreigners. The rates of commission are as follows:—

On sales of goods imported	5 per cent.	But when monies are collected, and remittance is ordered in bills of exchange, including guarantee of the same	2½ per cent.
Guaranteeing the same without regard to time	2½	Negotiating and indorsing bills	2½
On sales of produce	2½	On money remitted as return for goods sold	1
On shipping produce, as returns for goods imported, or upon orders where cash is provided for the purchase	2½	On bills remitted as return for goods sold, including guarantee thereof, as may be agreed	1 to 2½
But upon orders where the amount has to be drawn for, or when provision is made in bills of exchange	5	Advancing money upon letters of credit and drawing for the same	2½
Collecting monies, and remitting the same	1	Collecting or procuring freight for vessels	5

Insurance. — There are no establishments for conducting the business of insurance in Venezuela.

Money, Weights, and Measures. — The currency of the country consists of silver money, known by the name of *macuquena*, divided into dollars of 8 reals, ½ do. of 4 reals, besides reals, ½ reals, and quartillas or ¼ reals. This money is of very unequal weight and purity, the coins issued since the commencement of the revolutionary war having been often a good deal defaced. The real should be worth 5*d.* sterling.

Weights and measures same as those of Spain.

Tares. — Real tare is taken both at the Custom-house and by the merchant.

Commercial Prospects. — The commerce and industry of Venezuela suffered severely from the revolutionary struggle of which she was the theatre. But the country has been for some time past comparatively tranquil. As the riches of Venezuela consist entirely of the products of her agriculture, the legis-

lature has wisely exerted itself to give it encouragement. by abolishing tithes, the tobacco monopoly, &c. But the want of a supply of efficient labour, arising out of the measures in progress for the abolition of slavery, is the grand obstacle to the progress of industry. The English consul at Puerto Cabello, in adverting to the deficiency of labour, in a communication dated June, 1843, says that an able-bodied man can earn enough by a day's labour to keep himself for a week; and such being the case, can any one expect industry to flourish, unless some sort of system for the supply of compulsory labour be resorted to? Indeed, the consul, though a warm advocate for the abolition of slavery, is, though not very consistently, alive to the necessity of what he calls "a mild compulsory system!" The truth is, that in countries like this, freedom and idleness are synonymous.

We have derived these details partly from *Consular Returns*, and partly from *private information*.

LAMAR, formerly COBIJA, a sea-port of the republic of Bolivia, the ci-devant Upper Peru, on the west coast of South America, lat. 22° 39′ 30″ S., long. 70° 12′ W. Population, 5,000.?

In 1833 Lamar was declared a free port, and in it centres almost the whole foreign trade of the republic. Its situation is, however, very unfavourable. It labours under a great want of fresh water; and is obliged to import all its provisions by sea, either from Valparaiso, on the one hand, or from Arica on the other. The desert of Atacama lies between it and the internal and populous part of the country, where the towns of Potosi, Cochabamba, Charcas, &c. are situated. The produce imported at Lamar is conveyed across the desert on the backs of mules to the interior; the gold and silver of the mines being brought in the same way to the port to be shipped. These, with copper, saltpetre, chinchilli skins, and wool, form the principal articles of export. Saltpetre is found in large quantities in the desert; the copper is found near the coast, and, owing to the scarcity of fuel, most part of it is exported in the shape of ore.

Peru possesses a long narrow slip of land, stretching along the coast of the Pacific from Arequipa to the Bay of Pica, which ought naturally to belong to Bolivia, being, in fact, the *littoral* of the latter. The Bolivian government has set on foot various negotiations to obtain the cession of this tract, which, besides greatly improving the frontier of the republic, would, at the same time, render her mistress of Arica, which is, in all respects, much better fitted than Lamar for becoming the entrepôt of her trade. Hitherto, however, these negotiations have proved abortive, so that, as already stated, Lamar at present engrosses most part of the foreign trade of the state.

We subjoin the decree constituting Lamar a free port: —

1. From and after the 1st of July of this present year, 1833, Port Lamar shall be absolutely free and open.
2. Vessels of every nation may enter this port and remain as long as they please, without being subjected to any tax whatever, either on entrance, or during their stay, or on their departure.
3. They shall be free from all duties of anchorage, tonnage, shifting, unloading, or reloading of cargo, deposit, storage, or any other of whatever denomination.
4. Goods may be deposited in private warehouses, without any intervention on the part of the government.
5. The Custom-house of Port Lamar is suppressed. In its stead will be a commissioner's office, for the purpose of distributing permits for the transportation of goods into the interior.
6. Whenever goods are to be sent into the interior, they must first be submitted to the commissioner, together with the invoice corresponding.
7. The commissioner will register them in a book, together with their valuation made by two merchants of the place, and the names of their owners, of the person to whom, and the place where they are to be sent. This is to be signed by the person entering the goods, who at the same time binds himself to have them transported direct to the Custom-house for which they are destined, without opening any of the cases, bags, or other envelopes, each of which shall be sealed, marked, and numbered before departure. These points are to be expressed in the permit.
8. The commissioner shall by the earliest post send a notice to the collector of the Custom-house for which any merchandise is destined, specifying the numbers, characters, quantities, and qualities of the several articles.
9. The goods must not be carried by any unaccustomed roads, but only through Calama and the public thoroughfares: and whenever they pass through any place at which a guard or commissioner is stationed, the permits must be exhibited, in order that their arrival with their seals unbroken may be ascertained.
10. Merchants, either in person or by a representative, must produce to the commissioner of the port a certificate of the delivery of the goods at the Custom-house for which they are destined within 6 months from the day of their entry; in case they do not, they must at the end of that period pay the whole of the duties on them.
11. From and after the 1st of July, 1833, all goods entered at Port Lamar shall pay a duty of only 5 per cent. over and above that of half per cent. to the consulado.
12. The duty of 5 per cent. shall be paid thus: at the port, 2 per cent. on the valuation made as aforesaid; and the other 3 at the Custom-house in the interior for which the goods are destined. In each case one half at the end of 3, the other half at the end of 5 months.
13. All goods carried from Port Lamar by land to any of the adjoining republics shall only pay a transit duty of 2 per cent.
14. A duty of 2 per cent. shall be paid on three fourths of all gold and silver money entered at any of the custom-houses in the interior for exportation through Port Lamar.
15. It is absolutely prohibited to export gold or silver, in bullion or plate, except in small quantities for the use of the person carrying it out. It will be seized wherever it is found on this side the districts of San Antonio San Vincente, Atocs, Aguas de Castilla, Lequepate, or the line of the canal.
16. All hardware for agriculture and mining, machinery, instruments of science or the arts, iron, steel, quicksilver, and moral books, may be introduced free of duty into the republic, and productions of Bolivia may be exported likewise free.
17. A premium of 2 per cent. on their value shall be allowed on the exportation through Port Lamar, of cascarilla, wool, tin, cocoa, and coffee, in the shape of remission from duties to the amount on goods carried into the interior from the same port.

The remaining articles of the Decree are of a purely local nature.

Account of the Quantity and Value free on board of the Bolivian, Peruvian, and Argentine Products, exported from Lamar, in 1840.

Products.	Quantity.	Price per Weight or Quantity.	Value in Dollars.	Value in £ sterling.	Country of Production.
	quintals.	$ cf. £ s. d.			
Bark, Calisaya -	90	40 0 = 8 0 0	3,600 0	720 0	Bolivia.
Copper - -	4,420	1 6 = 0 7 9	7,735 0	1,547 0	Bolivia (mines of Lamar or Cobija).
Coined money -	-	- -	1,533,485 6	306,697 3	Bolivia (Potosi).
Ditto - -	-	- -	57,200 0	11,440 0	Argentine Republic.
	marcs oz.				
Pine silver -	3,200 6	8 0 = 1 12 0	25,606 0	5,121 4	Bolivian and Peruvian Republics.
	quint. lbs.				
Wool, Vicuña -	59 61	12 0 = 2 8 0	715 2	143 1	Bolivian province of Chichas.
Wool, sheep's -	548 16	10 0 = 2 0 0	3,481 0	696 4	Ditto.
Total -	-	- -	1,631,823 0	326,364 12	

N.B.—As this return has been prepared from one published by the Bolivian authorities, we have not altered the prices; but it must be observed that the average value of pine silver free on board in a port of Bolivia, Peru, or Chili, is $94 = 1*l.* 18*s.*, and bar silver $10 0 = 2*l.* a marc; and the price of Vicuña wool is about 6 rials = 3*s.* the pound, or $75 = 15*l.* the quintal.

Inasmuch, however, as the greater part of the foreign products for the consumption of Bolivia are imported *viâ* Arica, we subjoin an

Account of the Value of the Principal Foreign Articles imported into the Peruvian Port of Arica in Transit for Bolivia, in 1840, specifying the Countries under whose Flags the Articles were imported, and the Quantity imported under each: Exchange, 4*s.* per dollar.

Articles.	Flags under which the Articles were imported.									Total Value.		Amount of Duties.	
	Britain.	France.	U. S.	Sardin.	Hamb.	Spain.	Peru.	Chili.	Equat.	Dollars.	£ sterling.	Dollars.	£ sterling.
	$	$	$	$	$	$	$	$	$				
Cottons	40,778	9,789	1,197	418	-	-	-	-	-	52,183	10,436 12 3	2,456 1	491 4 6
Linens	2,236	1,792	585	39	-	-	-	778	-	5,430	1,086 2 0	245 1	49 0 6
Silks	5,481	42,706	-	1,762	-	-	-	2,240	-	52,354	11,466 18 3	2,092 4½	418 10 3
Woollens	85,445	17,186	921	196	451	3,143	-	2,481	-	106,681	21,336 6 9	4,962 0½	992 8 3
Wine and spirits	-	2,151	1,026	312	-	-	-	-	-	4,475	895 2 0	374 3½	74 17 9
Iron & other wares	30,335	29,779	4,534	9,923	925	986 2,514	930	2,007	3,272	84,222	16,844 18 9	4,684 6	936 19 0
Totals	164,276	105,405	8,264	12,651	1,376	6,643	930	7,507	3,272	310,320	62,065 12 0	14,815 0½	2,963 0 3

Note. — Quicksilver, bar iron, scientific instruments, books, and other articles, the importation of which is free, are excluded from the account. — (*Consular Returns and private information from Peru.*)

LAMB-SKINS (Ger. *Lammsfelle*; Fr. *Peaux d'ageneaux*; It. *Pelli agnelline*; Sp. *Pielles de corderos*). The value of lamb-skins varies according to the fineness, brilliancy, and colour of the wool. Black lamb-skins are more generally esteemed than those of any other colour. English lamb-skins are seldom to be met with perfectly black; but since the introduction of Merino sheep into this country, many of the white fleeces have, in point of quality, arrived at a pitch of perfection which justly entitles them to be ranked with some of the best fleeces in Spain. The importation of lamb-skins is immense. Eight tenths of the whole quantity are supplied by Italy. They are mostly used in the glove manufacture.

LAMP (Ger. *Lampe*; Fr. *Lampe*; It. *Lucerna*; Sp. *Lampara*; Rus. *Lampadu*), an instrument used for the combustion of liquid inflammable bodies, for the purpose of producing artificial light.

It is unnecessary to give any description of instruments that are so well known. We may, however, remark that the discovery of Sir H. Davy, who, by covering the flame with wire gauze, succeeded in producing a lamp that may be securely used in coal mines charged with inflammable gas, is one of the most ingenious and valuable that has ever been made. The following extracts from a communication of the late Mr. Buddle, an able and well-informed coal engineer, evince the great importance of Sir Humphry Davy's invention.

"Besides the facilities afforded by this invention to the working of coal mines abounding in fire damp, it has enabled the directors and superintendents to ascertain, with the utmost precision and expedition, both the presence, the quantity, and correct situation of the gas. Instead of creeping inch by inch with a candle, as is usual, along the galleries of a mine suspected to contain fire damp, in order to ascertain its presence, we walk firmly on with the safe lamps, and, with the utmost confidence, prove the actual state of the mine. By observing attentively the several appearances upon the flame of the lamp, in an examination of this kind, the cause of accidents which happened to the most experienced and cautious miners is completely developed; and the [illegible] has hitherto been in a great measure matter of mere conjecture.

"It is not necessary that I should enlarge upon the national advantages which must necessarily result from an invention calculated to prolong our supply of mineral coal, because I think them obvious to every reflecting mind; but I cannot conclude without expressing my highest sentiments of admiration for those talents which have developed the properties, and controlled the power, of one of the most dangerous elements which human enterprise has hitherto had to encounter."

LAMP-BLACK (Ger. *Kienruss*; Fr. *Noir de fumée*; *Nero di fumo*, *Negro-fumo*; *Negro de humo*). "The finest lamp-black is produced by collecting the smoke from a lamp with a long wick, which supplies more oil than can be perfectly consumed, or by suffering the flame to play against a metalline cover, which impedes the combustion, not only by conducting off part of the heat, but by obstructing the current of air. Lamp-black, however, is prepared in a much cheaper way for the demands of trade. The dregs which remain after the eliquation of pitch, or else small pieces of fir wood, are burned in furnaces of a peculiar construction, the smoke of which is made to pass through a long horizontal flue, terminating in a close boarded chamber. The roof of this chamber is made of coarse cloth, through which the current of air escapes, while the soot remains."—(*Ure's Dictionary of Chemistry.*)

LAND-WAITER, an officer of the Custom-house, whose duty it is, upon landing any merchandise, to taste, weigh, measure, or otherwise examine the various articles, &c., and to take an account of the same. They are likewise styled searchers, and are to attend, and join with, the patent searchers, in execution of all cockets for the shipping of goods to be exported to foreign parts; and, in cases where drawbacks or bounties are to be paid to the merchant on the exportation of any goods, they, as well as the patent searchers, are to certify the shipping thereof on the debentures.

LAPIS LAZULI. See ULTRAMARINE.

LAST, an uncertain quantity, varying in different countries, and with respect to different articles. Generally, however, a last is estimated at 4,000 lbs.; but there are great discrepancies.

The following quantities of different articles make a last, viz. — 14 barrels of pitch, tar, or ashes; 12 dozen of hides or skins; 12 barrels of cod-fish, potash, or meal; 20 cades, each of 1,000 herrings, every 1,000 ten hundred, and every 100 five score; 10½ quarters of cole-seed; 10 quarters of corn or rape-seed;

in some parts of Russia, 21 quarters of corn go to a last; 12 sacks of wool; 20 dickers (every dicker 12 skins) of leather; 18 barrels of unpacked herrings; 10,000 pilchards; 24 barrels (each barrel containing 100 lbs.) of gunpowder; 1,700 lbs. of feathers or flax. Last is sometimes used to signify the burden or lade of a ship.

LATH, LATHS (Du. *Latten*; Fr. *Lattes*; Ger. *Latten*; It. *Correnti*; Rus. *Slegii*), long, thin, and narrow slips of wood, nailed to the rafters of a roof or ceiling, in order to sustain the covering. Laths are distinguished into various sorts, according to the different kinds of wood of which they are made, and the different purposes to which they are to be applied. They are also distinguished, according to their length, into *5*, 4, and 3 feet laths. Their ordinary breadth is about an inch, and their thickness ¼ of an inch. Laths are sold by the bundle, which is generally called a hundred: but 7 score, or 140, are computed in the hundred for 3 feet laths; 6 score, or 120, in such as are 4 feet; and for those which are denominated *5* feet the common hundred, or *5* score.

LATTEN, a name sometimes given to tin plates; that is, to thin plates of iron, tinned over. —(See TIN.)

LAWN (Ger. and Fr. *Linon*; It. *Linone, Rensa*; Sp. *Cambray clarin*), a sort of clear or open worked cambric, which, till of late years, was exclusively manufactured in France and Flanders. At present, the lawn manufacture is established in Scotland, and in the north of Ireland, where articles of this kind are brought to such a degree of perfection, as nearly to rival the productions of the French and Flemish manufactories. In the manufacture of lawns, finer flaxen thread is used than in that of cambric.

LAZARETTO. See QUARANTINE.

LEAD (Ger. *Bley, Blei*; Du. *Lood, Loot*; Fr. *Plomb*; It. *Piombo*; Sp. *Plomo*; Rus. *Swinetz*; Pol. *Olow*; Lat. *Plumbum*; Arab. *Anuk*; Hind. *Sisa*; Pers. *Surb*), one of the most useful metals. It is of a bluish white colour, and when newly melted is very bright, but it soon becomes tarnished by exposure to the air. It has scarcely any taste, but emits, on friction, a peculiar smell. It stains paper or the fingers of a bluish colour. When taken internally, it acts as a poison. It is one of the softest of the metals; its specific gravity is 11·35. It is very malleable, and may be reduced to thin plates by the hammer; it may also be drawn out into wire, but its ductility is not very great. Its tenacity is so small, that a lead wire $\frac{1}{12}$ inch diameter is capable of supporting only 18·4 lbs. without breaking. It melts at 612°. —(*Thomson's Chemistry.*)

Lead is a metal of much importance, as, from its durability, it is extensively used in the construction of water-pipes and cisterns, as a covering for flat surfaces or tops of buildings, &c. &c. Its salts, which are poisonous, are used in medicine to form sedative external applications; and frequently not a little, by the disreputable wine merchant, to stop the progress of acetous fermentation. Wine thus poisoned, may, however, be readily distinguished; a small quantity of the bicarbonate of potass producing a white precipitate, and sulphureted hydrogen a black one. Pure wine will not be affected by either of these tests. "The oxide of lead enters into the composition of white glass, which it renders clearer and more fusible: it is also used in glazing common earthern vessels; hence the reason that pickles kept in common red pans become poisonous. Lead, with tin, and a small quantity of some of the other metals, forms pewter; with antimony, it forms the alloy of which printing types are made."—*Joyce's Chem.* (*Mineralogy.*)

Mines of this valuable mineral have been wrought in England from the æra of the Romans. It does not, however, appear that it was obtained any where except in Derbyshire, till 1289, when it was discovered in Wales: and the fact having transpired that silver was found intermixed with the Welsh ores, gave a new stimulus to the business; but in other respects the discovery of silver was of no use; the quantity obtained being insufficient to defray the cost of its separation from the lead. At present, the most productive lead mines are situated in Allendale, and other parts of Northumberland, in Oldstone Moor, &c. in Cumberland, in the western parts of Durham, in the hundred of High Peak in Derbyshire, in Flintshire, in Salop, and in Scotland, at Leadhills on the confines of Dumfries-shire, and Lanarkshire. There are no means by which to arrive at any correct estimate of the annual produce of these mines; but in the aggregate it must be very large, and is believed, indeed, not to fall short of from 45,000 to 50,000 tons. The foreign lead imported is mostly all re-exported; so that the supply obtained from our own mines must be adequate, not only to furnish an annual export of from 16,000 to 20,000 tons a year, but to supply the home consumption, which is very great. The price of lead declined considerably after 1820, a result principally to be ascribed to the increased supplies of lead from Adra and other mines in Granada, Spain, and to the comparatively cheap rate at which they were furnished. Latterly, however, the supplies from the Spanish mines have fallen off, and prices have again risen; pig lead, which in 1832 was worth only 13*l.* 10*s.* a ton, being now (1843) worth 17*l.* per do. A considerable quantity of silver is now obtained from lead; the

expense of its extraction having been materially diminished by the invention of improved processes. It is believed that of 45,000 tons of lead raised in Great Britain, about 25,000 yield 8 oz. per ton of silver. Supposing this estimate to be correct, the entire produce of silver will be 200,000 oz.; which, at 5s. per oz., will be 50,000*l.* a year.

Lead is raised in Ireland in different parts; in the county of Wicklow, in Clare, at Carne in Wexford, and in Armagh and Donegal. But some of the lead mines that were formerly wrought in Kerry and Mayo have been abandoned.

An Account of British Lead and Lead Ore exported from the United Kingdom from the 5th of January, 1842, to the 5th of January, 1843; distinguishing the Countries to which it was sent. — (Quarters and Pounds omitted in the Columns, but allowed for in the summing up.)

Countries to which exported.	British Lead and Lead Ore.												Foreign Lead.	
	Pig and rolled Lead and Shot		Litharge.		Red Lead.		White Lead.		Lead Ore.		Total of British Lead and Lead Ore.		Pig Lead.	White Lead.
	Tons.	*cwt.*	*Tons.*	*cwt.*	*Tons.*	*cwt.*	*Tons.*	*cwt.*	*Tons.*	*cwt.*	*Tons.*	*cwt.*	*Tons.* *cwt.*	*Tons.* *cwt.*
Russia	3,109	1	240	9	4	11	8	4	-	-	3,362	6	251 19	
Sweden	81	0	6	1	6	19	125	19	-	-	220	0		
Norway	44	16	1	8	1	1	36	16	-	-	84	1		
Denmark	200	15	11	2	11	0	125	11	-	-	348	7		
Prussia	630	17	37	6	5	3	19	10	-	-	692	18	157 5	
Germany	768	13	118	6	79	17	130	5	0	2	1,097	5	65 4	
Holland	3,323	11	10	8	162	18	30	14	144	0	3,671	13	429 19	
Belgium	889	9	33	8	29	14	8	15	-	-	961	7	350 5	
France	5,382	9	9	14	1	19	2	7	0	5	5,396	14	48 3	
Portugal, Azores and Madeira	140	0	24	5	40	2	137	18	-	-	342	4		
Spain and the Canaries	1	5	9	11	9	0	3	15	-	-	23	12		
Gibraltar	12	1	-	-	2	0	1	3	-	-	15	4		
Italy	775	4	39	0	81	17	-	-	-	-	896	2	10 0	
Malta	19	1	0	1	1	10	-	-	-	-	20	12		
Ionian Islands	4	12	-	-	0	10	3	15	-	-	8	18		
Morea and Greek Islands	11	10	-	-	-	-	-	-	-	-	11	10		
Turkey and Continental Greece	75	18	1	0	8	2	1	2	-	-	86	9		
Syria and Palestine	-	-	-	-	0	10	0	1	6	0	6	11		
East Indies and China	2,357	6	-	-	70	4	62	13	-	-	2,490	2	518 16	3 15
Australian settlements	377	15	0	2	0	17	33	18	-	-	412	13		
New Zealand	4	3	-	-	-	-	4	6	-	-	8	9		
Cape of Good Hope	126	15	-	-	4	11	19	18	2	0	153	4		
Other parts of Africa	267	2	-	-	1	9	20	6	108	10	397	7		
British North American colonies	395	2	1	0	27	5	76	16	-	-	500	4		
British West Indies	360	9	0	2	1	14	76	19	-	-	439	4		
Foreign West Indies	86	0	-	-	-	-	8	12	-	-	94	12		
United States of America	-	-	-	-	-	-	37	5	-	-	37	5		
Texas	2	8	-	-	-	-	-	-	-	-	2	8		
Mexico	1	4	-	-	-	-	-	-	-	-	1	4		
Columbia	16	6	-	-	-	-	-	-	-	-	16	6		
Brazil	493	18	0	5	22	14	58	6	-	-	575	2		
States of the Rio de la Plata	41	13	-	-	0	15	7	7	-	-	49	15	3 19	
Chili	36	17	-	-	0	8	0	10	-	-	37	16		
Peru	2	4	0	6	-	-	-	-	-	-	2	10		
Isles of Guernsey, Jersey, Alderney, and Man	165	16	0	10	-	-	33	1	-	-	189	7		
Total	20,205	8	544	12	576	17	1,066	0	260	17	22,653	15	1,835 13	3 15

The consumption of lead in France is rapidly increasing. It is nearly all imported; and the importations have increased from 6,211,500 kilogrammes, at an average of the 4 years ending with 1822, to 15,742,192 kilogrammes, at an average of the 2 years ending with 1830. The imports are almost entirely from Spain; and their increase is, no doubt, principally a consequence of the fall of prices. — (*Journal des Mines, Troisième Série*, iii. 517.)

Lead Mines of the United States.— These have recently become of very considerable value and importance. They are principally situated in Illinois and the Wisconsin territory on the Upper Mississippi. We subjoin an account, derived from an authentic source, of the produce of these mines in 1841 and 1842.

Statement of Lead shipped from Galena, Illinois, including Dubuque in Wisconsin, and all other Points on the Upper Mississippi, in 1841 and 1842.

	1841.	1842.
Pigs	452,814	447,859
Shipped by the lakes	—	25,000
884 boxes bar lead	2,750	—
2,614 kegs shot	7,840	—
Small bar lead	—	840
Totals	463,404	473,699

Estimated value, in 1841, of	452,814	pigs of 70 lbs. is	31,693,980 lbs. at 3 cents, is		$950,939 40
——	2,750	do. small bar, is	192,500 lbs. at 3½ cents, is		6,737 50
——	7,840	do. in shot, is	548,800 lbs. at 4½ cents, is		24,696 00
	463,404		32,438,280		$982,243 90
In 1842—					
——	447,859	pigs is	31,330,130 lbs. at $2,37½, is		$744,895 58
——	840	do. small bar is	58,800 lbs. at 3 cents, is		1,764 00
	448,699	pigs.			$746,329 58

LEAD, BLACK, OR PLUMBAGO. See BLACK L[illegible].

LEAD, RED, OR MINIUM. See MINIUM.

LEAGUE, a measure of length, containing more or fewer geometrical paces, according to the customs of different countries. — (See WEIGHTS AND MEASURES.)

LEAKAGE, in commerce, an allowance in the customs, granted to importers of

wine, for the waste and damage the goods are supposed to receive by keeping. — (See *Warehousing Act*, in art. WAREHOUSING SYSTEM.)

LEATHER (Ger. *Leder*; Du. *Leder, Lêr*; Da. *Læder*; Sw. *Läder*; Fr. *Cuir*; It. *Cuojo*; Sp. *Cuero*; Rus. *Kosha*; Lat. *Corium*), the skins of various quadrupeds, dressed in a particular manner for the use of manufacturers, whose business it is to make them up, according to their different employments.

The leather manufacture of Great Britain is of very great importance, and ranks either third or fourth on the list; being inferior only in point of value and extent to those of cotton, wool, and iron, if it be not superior to the latter. Sir F. M. Eden, in his work on *Insurance*, estimated the value of the different articles manufactured of leather, in 1803, at 12,000,000*l.*; and there is reason to think that this statement was not very wide of the mark. The total quantity of all sorts of leather tanned, tawed, dressed, and curried, in Great Britain, may at present be estimated at about 60,000,000 lbs.; which, at 1*s.* 6*d.* per lb., gives 4,500,000*l.* as the value of the leather only. Now, supposing, as is sometimes done, the value of the leather to amount to *one third* part of the value of the finished articles produced from it, that would show the value of the manufacture to be about 13,500,000*l.*: but if, as others contend, the value of the leather does not exceed *one fourth* part of the value of the finished articles, then the value of the manufacture must exceed 18,000,000*l.* We, however, are inclined to think that we shall be nearer the truth, if we take the smaller sum, and estimate the value of the manufacture at 13,500,000*l.* To get the number of persons employed, we have first to deduct from this sum, 4,500,000*l* for the material, which leaves 9,000,000*l.* as the aggregate amount of profits, wages, &c. And setting aside 25 per cent. as profit, rent of workshops, compensation for capital wasted, &c., we have a sum of 6,750,000*l.* remaining as wages: and supposing those employed as shoemakers, saddlers, glovers, &c. to make at an average 30*l.* a year each, the entire number of such persons will amount to 225,000.

This, however, does not give the total number of persons employed in the leather trade, inasmuch as it excludes the tanners, curriers, &c. employed in dressing and preparing the leather. But if, from the value of the prepared leather, 4,500,000*l.*, we deduct 1,500,000*l.* for the value of the hides, and 2,000,000*l.* for tanners' and curriers' profits, including the expense of lime, bark, pits, &c., we shall have 1,000,000*l.* left as wages. Now, as the wages of tanners, curriers, leather dressers, &c. may, we believe, be taken at 35*l.* a year at an average, we shall have 28,300 as the number employed in these departments. And adding these to the persons employed in manufacturing the leather, we have a grand total of 253,300 persons employed in the various departments of the business.

Those who may be inclined to suspect these estimates of exaggeration, would do well to reflect on the value of the shoes annually manufactured. It is generally supposed that the expenditure upon shoes may be taken, at an average of the whole population, at 10*s.* each individual, young and old; which, supposing the population to amount to 18,500,000*l.* would give 9,250,000*l.* for the value of shoes only; but taking the value of the shoes at only 8*s.* each individual, it gives 7,400,000*l.* for the amount. Mr. Stevenson (art. *England, Edin. Ency.*) supposes that the value of the saddlery, harness, gloves, &c. may be assumed to be at least equal to that of the shoes; but we believe this is too high, and have taken it at 1,300,000*l.* below the value of the shoes. In estimating the value of the entire manufacture at 13,500,000*l.*, we incline to think that we are as near the mark as it is easy to come in such investigations.

In speaking of the leather manufacture, Dr. Campbell has the following striking observations: — "If we look abroad on the instruments of husbandry, on the implements used in most mechanic trades, on the structure of a multitude of engines and machines; or if we contemplate at home the necessary parts of our clothing — breeches, shoes, boots, gloves — or the furniture of our houses, the books on our shelves, the harness of our horses, and even the substance of our carriages; what do we see but instances of human industry exerted upon leather? What an aptitude has this single material in a variety of circumstances for the relief of our necessities, and supplying conveniences in every state and stage of life? Without it, or even without it in the plenty we have it, to what difficulties should we be exposed?" — (*Political State of Great Britain*, vol. ii. p. 176.)

Leather was long subject to a duty; the manufacture being, in consequence, necessarily conducted under the *surveillance* of the excise. In 1812, the duty, which had previously amounted to 1¼*d.* per lb., was doubled; and continued at 3*d.* per lb. till July, 1822, when it was again reduced to 1½*d.* per lb. The reduced duty produced a nett revenue of about 360,000*l.* It is clear, however, that either the duty ought not to have been reduced in 1822, or that it ought to have been totally repealed. The continuance of any part of the duty rendered it necessary to continue all the vexatious regulations required to insure the collection of the revenue, while the reduction to 1½*d.* in the cost of preparing a pound of leather was so trifling as hardly to be sensible. It is, however, unnecessary to enter into any discussion to show the extreme inexpediency of laying any duty on an article so indispensable to the labouring class, and to the prosecution of many branches of industry, as leather; and still less to show the inexpediency of subjecting so very important and valuable a manufacture to a vexatious system of revenue laws, for the sake of only 360,000*l.* a year. Luckily, however, these have become matters of history. The leather duties were totally abolished in 1830; and as the manufacture has since been relieved from every sort of trammel and re-

straint, it has rapidly increased. It is to be hoped that no future necessity may arise to occasion the reimposition of the leather duty.

Account of the Number of Pounds' Weight of Leather charged with Duties of Excise in England in 1824—1829.

1824	-	53,429,539	1826	-	44,927,216	1828	-	50,233,6[illegible]
1825	-	52,274,957	1827	-	47,616,816	1829	-	46,900,843

The quantity annually charged with duty in Scotland during the same period was, at an average, about 6,000,000 lbs.

The quantity of wrought and unwrought leather exported in 1840, amounted to 2,404,067 lbs., of the declared value of 320,912*l*. The value of the saddlery and harness exported during the same year was 96,162*l*. Above two thirds of the leather exported is sent, principally in the shape of shoes, to the British West Indian, North American, and Australian colonies.

LEDGER, the principal book of accounts kept by merchants and tradesmen, wherein every person's account is placed by itself, after being extracted from the Journal. — (See Book-Keeping.)

LEECH FISHERY. The demand for the medicinal leech (*Hirudo medicinalis*) is so great as to afford employment to a considerable number of persons in catching and selling the animal. It is common throughout Europe, America, and India, inhabiting lakes and pools. Norfolk supplies the greater part of the leeches brought to the London market; but some are taken in Kent, Suffolk, Essex, and Wales; and large quantities are imported from Bordeaux and Lisbon. They are caught in spring and autumn, by people who wade into the pools and allow them to fasten on their limbs; or more generally the catchers beat, as they wade in, the surface of the water with poles, which sets the leeches in motion, and brings them to the surface; when they are taken with the hand and put into bags. As they come to the surface just before a thunder storm, this is regarded a good time for collecting them. — (*Thomson's Dispensatory.*)

We extract from the *Gazette des Hopitaux* the following interesting account of the fishery of leeches at La Brenne, in France: —

"The country about La Brenne is, perhaps, the most uninteresting in France. The people are miserable looking, the cattle wretched, the fish just as bad — but the leeches are admirable.

"If ever you pass through La Brenne, you will see a man, pale and straight haired, with a woollen cap on his head, and his legs and arms naked; he walks along the borders of a marsh, among the spots left dry by the surrounding waters, but particularly wherever the vegetation seems to preserve the subjacent soil undisturbed: this man is a leech fisher. To see him from a distance, — his woe-begone aspect — his hollow eyes — his livid lips — his singular gestures, — you would take him for a patient who had left his sick bed in a fit of delirium. If you observe him every now and then raising his legs, and examining them one after the other, you might suppose him a fool; but he is an intelligent leech fisher. The leeches attach themselves to his legs and feet as he moves among their haunts; he feels their presence from their bite, and gathers them as they cluster about the roots of the bullrushes and sea weeds, or beneath the stones covered with green and gluey moss. Some repose on the mud, while others swim about; but so slowly, that they are easily gathered with the hand. In a favourable season, it is possible, in the course of 3 or 4 hours, to stow 10 or 12 dozen of them in the little bag which the gatherer carries on his shoulder. Sometimes you will see the leech fisher armed with a kind of spear or harpoon; with this he deposits pieces of decayed animal matter in places frequented by the leeches; they soon gather round the prey, and are presently themselves gathered into a little vessel half full of water. Such is the leech fishery in spring.

"In summer, the leech retires into deep water; and the fishers have then to strip themselves naked, and walk immersed up to the chin. Some of them have little rafts to go upon; these rafts are made of twigs and rushes, and it is no easy matter to propel them among the weeds and aquatic plants. At this season, too, the supply in the pools is scanty; the fisher can only take the few that swim within his reach, or those that get entangled in the structure of his raft.

"It is a horrid trade, in whatever way it is carried on. The leech gatherer is constantly more or less in the water, breathing fog and mist and fetid odours from the marsh; he is often attacked with ague, catarrhs, and rheumatism. Some indulge in strong liquors, to keep off the noxious influence, but they pay for it in the end by disorders of other kinds. But, with all its forbidding peculiarities, the leech fishery gives employment to many hands: if it be pernicious, it is also lucrative. Besides supplying all the neighbouring *pharmaciens*, great quantities are exported, and there are regular traders engaged for the purpose. Henri Chartier is one of those persons; and an important personage he is when he comes to Meobecq, or its vicinity; his arrival makes quite a fête — all are eager to greet him.

"Among the interesting particulars which I gathered in La Brenne relative to the leech trade, I may mention the following: — One of the traders — what with his own fishing and that of his children, and what with his acquisitions from the carriers, who sell quantities *second-hand* — was enabled to hoard up 17,500 leeches in the course of a few months; he kept them deposited in a place where, in one night, they all became frozen *en masse*. But the frost does not immediately kill them; they may generally be thawed into life again. They easily, indeed, bear very hard usage. I am told by one of the carriers, that he can pack them as closely as he pleases in the moist sack which he ties behind his saddle; and sometimes he stows his cloak and boots on top of the sack. The trader buys his leeches *pêle mêle*, big and little, green and black — all the same; but he afterwards sorts them for the market. Those are generally accounted the best which are of a green ground, with yellow stripes along the body."

LEGHORN, a city and sea-port of Italy, in Tuscany, lat. 43° 33′ 5″ N., lon. 10° 16′ E. Population, in 1836, 76,397.

Harbour, Road, &c. — Leghorn has an outer harbour, protected by a fine mole, running in a N.N.W. direction upwards of ½ a mile into the sea, and a small inner harbour or basin. The water in the harbour is rather shallow, varying from 8 feet in the inner basin to 18 or 19 feet at the end of the mole. The rise of the tides is about 14 inches. Ships lie within the mole with their sterns made fast to it by a cable, and an anchor out ahead. The light-house is built on a rock a little to the S.W. of the mole. It is a conspicuous object, being about 170 feet above the level of the sea. The roadstead lies W.N.W. of the harbour, between it and the Melora bank. The latter is a sand, lying N. and S., 4 miles in length by 2 in breadth, the side nearest the shore being about 4 miles from it. It consists, for the most part, of sand and mud, and has from 3 fathoms to 4 do. water over it; but towards its southern extremity it is rocky; and there, on some of the points which project above the water, the Melora tower has been constructed to serve as a sea-mark; it bears from the light-house W. ½ N., distant about 4 miles. The best course for

entering the roads is to keep to the northward of the Melora bank at about a mile from it, and then, having doubled it, to stand on for the light-house about 2½ miles, anchoring in from 7 to 9 fathoms, the light-house bearing S.S.E. ½ E. 4 miles off. The entrance by the channel to the south of the Melora bank is also quite safe; but it is not so suitable for large ships as that by the north. During southerly winds there is sometimes a heavy sea in the roads, but the holding ground is good; and with sufficient anchors and cables, and ordinary precaution, there is no danger. The lazaretto lies to the south, about 1 mile from the tower, and is said to be one of the best in Europe.

Trade, &c. — The comparative security and freedom which foreigners have long enjoyed in Tuscany, still more than its advantageous situation, render Leghorn the greatest commercial city of Italy. Its exports are similar to those from the other Italian ports; consisting principally of raw and manufactured silks, olive oil, borax, fruits, shumac, valonia, wines, rags, brimstone, cheese, marble, argol, anchovies, manna, juniper berries, hemp, skins, cork, &c. Leghorn platting for straw hats is the finest in the world; and large quantities are imported into Britain. — (See HATS, STRAW.) Besides the above, all sorts of articles the produce of the Levant may be had at Leghorn. Recently, however, this trade has fallen off; the English and other nations who used to import Levant produce at second hand from Italy, preferring now, at least for the most part, to bring it direct from Smyrna, Alexandria, &c. The imports are exceedingly numerous and valuable, comprising all sorts of commodities, with the exception of those produced by Italy. Sugar, coffee, and all sorts of colonial produce; cotton stuffs, yarn, and wool; corn, woollen stuffs, spices, dried fish, indigo, dye woods, rice, iron, tin, hides, &c.; are among the most prominent articles. Ships with corn on board may unload within the limits of the lazaretto, without being detained to perform quarantine; a circumstance which has contributed to make Leghorn one of the principal *depôts* for the wheat of the Black Sea. Hard wheat, particularly from Taganrog, is in high estimation here and in the other Italian ports. It is particularly well fitted for making vermicelli, maccaroni, &c. The government do not publish any official account of the imports and exports of Leghorn; and no mercantile circulars that we have been fortunate enough to fall in with, supply the deficiency.

Money. — Down to 1837 accounts were principally kept in *pezze da otto reali* (or dollars of 8 reali), the pezza being divided into 20 solds or 240 denari; but this money has been discontinued since the above date, and accounts are now kept in *lire Toscane*. The lira of 100 centesimi is worth 7·82*d.*, so that the par of exchange with London is 30·69 lire per 1*l.* The lira is divided in 20 soldi di lira each of 5 centesimi. — (*Tate's Cambist*, p. 37.)

Weights and Measures. — The pound by which gold and silver and all sorts of merchandise are weighed is divided into 12 ounces, 96 drachms, 288 denari, and 6,912 grani. It is = 339·542 French grammes, or 5,240 English grains. Hence 100 lbs. of Leghorn = 74·864 lbs. avoirdupois; but in mercantile calculations it is usual to reckon 100 lbs. of Leghorn = 77 lbs. avoirdupois: this, perhaps, has arisen from taking the tares and other allowances, as to which there is a good deal of uncertainty, into account. Thus it is found that the English cwt. seldom renders more than 140 or 142 lbs. at Leghorn, though it is = 150 lbs.; in the instances of lead, tobacco, and a few others, it does not render more than 135 lbs. The quintal, or centinajo = 100 lbs. The cantaro is generally 150 lbs.; but a cantaro of sugar = 151 lbs.; that of oil = 88 lbs.; of brandy = 120 lbs.; of stock-fish, and some other articles = 160 lbs. The rottolo = 3 lbs.

Corn is sold by the sacco or sack, = 2·0739 Winch. bushels; hence 4 sacks = 1 Imperial quarter very nearly.

The liquid measures are —

2 Mezzette = 1 Boccale.
2 Boccali = 1 Fiasco.
20 Fiaschi = 1 Barile = 12 English wine gallons.

The barile of oil is 16 fiaschi, of two boccali each, = 8·83 wine gallons; it weighs about 66 lbs. avoirdupois. A large jar of oil contains 30 gallons; a small one 15; and a box with 30 bottles = 4 gallons.

The long measure is the braccio, which is divided into 20 soldi, 60 quattrini, or 240 denari; it contains 22·98 English inches. 155 bracci = 100 English yards. The canna of 4 bracci = 92 English inches.

Credit, Charges, &c. — Goods in general are bought and sold for silver money; between which, and the money in which bills of exchange are bought, there is a difference of 7 per cent. (agio) against silver; *i. e.* 107 dollars in silver are equal to 100 in gold.

On goods bought or sold (unless it be in effective money, where there is no discount) there is, generally speaking, a discount of 3 per cent.; on all cotton manufactures, 4 per cent.

Charges on sales, including commission, are generally from 6 to 8 per cent.; on fish, 8 or 10 per cent.

In 1836 a joint-stock bank was established in Leghorn, with a capital of 2,000,000 lire (66,666*l.* sterling, taking the lira at 8*d.*) in shares of 1,000 lire each. The whole of the capital is paid up, and the responsibility is limited to the capital. The managers have the power of issuing promissory notes to the extent of 6,000,000 lire. These notes, though received by the government, are not legal tender. The operations of the Bank are confined to the discounting bills of exchange not having more than four months to run, and to the purchase and sale of foreign coins. The rate of discount is fixed at 5 per cent. The superintendence is vested in a director and eight regents, nominated by the shareholders; and the government appoints a commissary and 3 censors (from among the shareholders), who exercise the highest authority, to secure obedience to the statutes. An annual report and balance sheet is produced, and is accessible to all shareholders. The maximum amount for which notes are issued is 2,000 lire = 66*l.* 13*s.* 4*d.* sterling, the lowest, 200 lire = 6*l.* 13*s.* 4*d.* sterling. It is a profitable establishment; its shares are at a considerable premium, and it has every prospect of success.

Account of the Imports of some of the leading Articles into Leghorn during each of the Seven Years ending with 1842.

Articles,	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Sugar, Havannah	3,664,800	1,844,900	1,471,700	2,487,320	2,062,000	1,588,000	1,779,000
„ crushed	4,107,000	8,819,000	7,623,400	6,853,000	9,515,000	7,362,000	12,126,000
„ loaf	130,500	105,430	112,500	163,400	183,000	255,000	34,000
Brazil	940,500	14,000	132,000	556,100	443,000	536,000	80,400
E. I. and Santos	5,111,900	3,686,300	558,700	955,300	2,241,000	940,000	416,900
Coffee	2,670,000	2,205,400	1,458,300	1,799,000	4,025,000	1,450,000	1,965,000
Cotton	1,781,700	2,316,000	906,700	1,864,400	478,000	374,000	401,000
Pepper	1,519,500	1,334,400	965,000	1,086,000	756,000	641,000	902,000
Indigo { cases	254	183	109	82	200	134	207
Indigo { serons	46	76	107	71	131	94	56

Account of the Principal Articles of Export from Leghorn, with their Prices, free on board, in Italian and English Money, on 1st January 1843.—(*From the Circular of Grants, Baltour, & Co., Leghorn.*)

Articles.	Prices in Italian Money.	Prices in English Money.	English Weights and Measures.
	Livres.	£ s. d.	
Anchovies, Gorgona - dble bar.	26 to 0	0 18 3	dble. bar.
Argol, viz.: —			
Bologna, white in boxes, lb. 100	44 — 0	2 6 7	cwt.
Florence, red in casks, garbled lb. 100	42 — 43	2 5 6	—
Boracic acid - - —	35 — 0	1 16 8	—
Borax - - —	66 — 67	3 10 2	—
Brimstone, viz.: —			
Sicily, rough - - —	6 — 0	6 11 2	ton
Tuscan, do. - - —	7 — 0	7 13 0	—
Rolls - - —	10 — 11	11 18 2	—
Bark, viz.; —			
cork tree, sun-dried - lb. 1000	90 — 0	9 13 11	—
Oak tree - - —	38 — 0	4 4 3	—
Candles, tallow - - lb. 100	48 — 0	2 16 6	cwt.
Cotton, Mako - - —	0 — 0	0 0 0	lb.
Cream of tartar - - —	61 — 62	3 5 0	cwt.
Essence of lemon - lb.	5 — 5½	0 5 0	lb.
bergamot - - —	9½ — 10½	0 9 10	—
Flax, Egyptian - - lb. 100	34 — 36	37 18 1	ton
Galls in sorts - - —	45 — 46	2 7 9	cwt.
blue and green - - —	53 — 54	2 16 9	—
blue - - —	65 — 68	3 10 7	—
Gum Arabic, picked - - —	110 —160	8 6 8	—
in sorts - - —	65 — 67	3 9 10	—
Grain, viz.: —			
Wheat, Tuscan white - sack	15 — 16	2 5 5	Imp. qr.
Red - - —	12 — 14	1 19 8	—
Roman - - —	12 — 12½	1 15 0	—
Barletta - - —	0 — 0	0 0 0	—
Marian and Berdianska - —	12 — 0	1 13 8	—
Odessa - - —	11 — 12	1 13 8	—
Polish - - —	12 — 0	1 13 8	—
Tanganrog - - —	0 — 0	0 0 0	—
Danube - - —	10 — 10½	1 9 7	—
Bannat - - —	0 — 0	0 0 0	—
hard Taganrog - —	12 — 14	1 19 2	—
Marianople - - —	10½ — 12	1 3 8	—
Odessa - - —	0 — 0	0 0 0	—
Meschiglie - - —	9 — 10½	1 9 7	—
beans, Italian - - —	8 — 8½	1 4 11	—
Egyptian - - —	6½ — 7	1 0 11	—
Barley - - —	5½ — 0	0 17 2	—
Oats - - —	5½ — 0	0 16 4	—
Indian corn, Tuscan - —	6 — 6½	0 19 0	—
Naples - - —	0 — 0	0 0 0	—
Black Sea - - —	0 — 0	0 0 0	—
Linseed, Italian - - —	16 — 0	2 5 6	—
Egyptian and Black Sea —	14½ — 15	2 2 8	—
Hemp, viz.: —			
Bologna, Londrina, Floretta, lb. 100	47 — 48	50 13 6	—
— 2d and 1st —	41 — 42	44 6 10	ton.
— cordage, 1st —	35 — 30	37 19 10	—

Articles.	Prices in Italian Money.	Prices in English Money.	English Weights and Measures.
	Livres.	£ s. d.	
Hemp, — Bologna, &c. — lb. 100			
— 3d and 2d —	31 to 32	33 15 6	ton
Ferrara - - —	30 — 31	32 14 5	—
Juniper berries - B. lb. 170	54 — 58	0 3 9	—
Liquorice paste, Calabria, lb. 100	49 — 52	2 16 6	cwt.
Madder root, Smyrna - —	0 — 0	0 0 0	—
Syria - - —	38 — 42	2 4 8	—
Manna, in flakes - - lb.	4 — 4½	0 3 11	lb.
in sorts - - —	1½ — 0	0 1 5	—
Oil, viz : —			
Tuscan, in jars, 24 old gal. jar	140 — 0	4 18 2	jar
¼ chests, 30 flasks - ¼ chest	18½ — 19	0 13 4	¼ chest
— with ribbons - —	20½ — 21	0 14 9	—
Fancy flasks, large size —	23 — 0	0 16 2	—
in pipes - - B. lb. 88	57 — 48	62 13 11	252 Imp. gallo.
Naples, Spain, Barbary, and Levant - - B. lb. 88	0 — 0	0 0 0	—
basket of 12 bottles of 2 lbs., basket	16½ — 17	0 12 0	basket
Opium, Turkey - - lb.	9½ — 10½	0 9 10	lb.
Egyptian - - —	0 — 0	0 0 0	—
Paper, Floretto - - bale	118 —140	0 5 2	ream
Medio - - —	105 —115	0 4 2	of 425 sh.
Al Masso, 2d and 1st - —	135 —170	0 6 3	—
Wrapping - - —	35 — 0	0 1 5	—
Potash - - lb. 100	26 — 28	1 9 7	cwt.
Rags, linen, 1st - - —	47 — 0	1 9 5	—
2d - - —	18½ — 0	1 0 7	—
3d - - —	14 — 0	0 16 2	—
Shumac, Sicily - - —	7½ — 0	0 8 0	—
Soap, white - - —	34 — 36	2 0 11	—
marbled - - —	30 — 32	1 16 3	—
Tallow, Tuscan - - —	38½ — 39	2 1 3	—
Valonea, ½ camata and camata, lb. 1000	140 —150	16 1 10	ton
Smyrna, large - - —	0 — 0	0 0 0	—
Morea, and islands, large —	0 — 0	0 0 0	—
Wools, viz.: —			
Bistosa and matricina of Crete, lb. 100	78 — 85	0 0 9½	lb.
Matricina and bistosa of Marem, lb. 100	75 — 84	0 0 9½	—
Lamb - - —	70 — 0	0 0 7½	—
Merinos, Roman - - —	137 —142	0 1 3½	—
Bastard - - —	128 —130	0 1 2½	—
Vissane and sopravissane —	105 —110	0 1 0¼	—
Lamb - - —	80 —108	0 0 10½	—
Taganrog, washed - —	58 — 60	0 0 6½	—
Tunis - - —	38 — 39	0 0 4	—
Bengasi, Derna, & Tripoli —	24 — 29	0 0 3½	—

Return of the British Shipping at the Port of Leghorn during the Year ending 31st December, 1841.

Arrivals.		Departures.	
From the United Kingdom, —		For the United Kingdom,—	
with general cargoes	74	with wheat	51
herrings	13	beans	26
iron	1	lentils	2
coals	9	timber	13
Newfoundland, with codfish	28	bark	9
Halifax, Nova Scotia, with general cargo	1	general cargoes	35
Malta, with general cargoes	13	Malta, with charcoal	9
with grain	1	with general cargoes	13
Genoa, with general cargoes	3	Gibraltar, with general cargoes	1
Constantinople		Naples, with general cargoes (partly loaded)	3
Odessa and Taganrog, with grain	5	Odessa, with general cargoes	1
Alexandria, with beans	2	Copenhagen, with general cargoes	1
St. Domingo and Cuba, with coffee	3	Venice, with general cargoes	1
Malaga and Adra, with lead	2	Algiers, with hay	1
Vera, with iron	1		
Total with cargoe	156	Total with cargoes	166
Malta, in ballast	9	In ballast for different ports	19
Genoa, in ballast	38		
Palermo, Messina, Naples, &c., in ballast	30	Total departures	185
		Total tonnage	27,990
Total arrivals	233		
Total of crews	2,031		
Total tonnage	36,096		

Account of the Quantities of the Principal Articles of Foreign and Colonial Merchandise exported from the U. Kingdom to Italy and the Italian Islands during each of the Seven Years ending with 1841.

Principal Articles.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
Cassia lignea - - - lbs.	391,485	80,695	23,766	105,943	166,609	144,590	200,437
Cinnamon - - - - —	73,590	71,983	88,076	59,179	49,795	48,379	28,937
Cloves - - - - —	100,532	1,421	- -	3,401	976	29,655	3,267
Cochineal - - - - —	15,893	20,449	19,062	22,077	54,580	70,556	58,188
Cocoa - - - - —	435,082	35,167	28,814	214,316	82,581	- -	7,635
Coffee - - - - —	1,735,103	2,060,916	1,095,759	2,308,842	595,342	675,554	621,793
Cortex Peruvianus, or Jesuits' bark - - - - —	82,977	9,150	13,768	701	10,046	38,747	115,563
Gum, shellac - - - - —	121,359	231,237	146,066	311,737	349,316	442,536	286,440
Indigo - - - - —	386,985	295,457	330,186	540,846	401,271	428,346	424,740
Pepper - - - - —	7,228	317,115	1,473,098	297,205	1,498,499	456,802	682,386
Pimento - - - - —	185,294	204,300	43,050	53,615	89,071	208,563	146,221
Spirits, rum - proof galls.	97,957	47,527	88,855	107,164	103,513	70,675	58,344
Tobacco, unmanufactured - lbs.	1,230,469	4,391,036	1,741,917	1,424,883	735,166	1,055,867	682,352
Wool, cotton - - - —	3,601,702	2,971,185	2,274,311	2,930,756	5,642,207	6,689,560	1,745,396

Statement of the Number and Tonnage of Vessels, distinguishing the Countries to which they belonged, which entered at and cleared from the Port of Leghorn, in 1840, with the total Vessels for 1839.

Countries.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
Italy { Two Sicilies	257	35,500	331	60,100
Italy { Sardinian States	606	42,250	575	40,000
Italy { Roman States	515	16,300	474	16,550
Italy { Austria	20	3,750	9	1,900
France	601	66,260	618	71,730
Algiers	49	5,080	70	11,510
Great Britain	114	24,800	119	26,400
Malta and the Ionian Islands	60	23,580	60	20,670
Gibraltar	2	350	5	850
Russia	304	67,950	44	11,550
Turkey, and States of Barbary	66	9,550	145	30,080
Egypt	70	15,650	27	6,150
Greece	15	2,550	49	11,[illegible]
Spain	78	5,850	62	[illegible]
United States	15	3,700	26	[illegible]
Belgium and the Netherlands	21	4,450	15	3,150
Sweden and Norway	21	5,250		
West Indies	7	1,450	3	700
Hanse Towns	2	400	8	1,700
Other Foreign States	28	5,550	2	400
Tuscany and Lucca (coasters)	280	24,100	1,375	27,500
Total in 1840	4,131	368,820	4,017	354,050
Total of 1839	4,219	431,870	3,894	385,500

The navigation of the Port of Leghorn for 1841, comprised in the arrivals 233 British vessels of 36,096 tons, with crews of 2,031 seamen; 1,736 Tuscan vessels; 283 French; 131 Austrian; 231 Russian; 36 Spanish; 21 Dutch; 2 Belgian; 26 Swedish; 10 Danish; 4 Hanoverian; 23 American; 264 Lucchese; 78 Roman; 157 Neapolitan; 847 Sardinian; 109 Greek; and 9 Ottoman. Total, 4,200 vessels.

Account of the Quantities and declared Values of the Principal Articles of British and Irish Produce and Manufacture exported from the U. Kingdom to Italy and the Italian Islands during each of the Four Years ending with 1841.

Principal Articles.	1838.		1839.		1840.		1841.	
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
Cotton manufactures, entered by the yard - - yds.	62,512,224	£ 1,337,390	39,313,685	£ 842,735	38,866,278	£ 1,119,135	56,296,126	£ 1,114,791
Hosiery, lace, and small wares - £	-	41,692	-	35,235	-	41,947	-	41,070
Twist and yarn - - - lbs.	12,829,923	626,503	8,035,742	381,899	11,490,034	510,010	11,616,731	497,954
Earthenware of all sorts - pieces	981,610	15,897	818,855	13,078	984,780	14,650	769,222	13,529
Fish, herrings - - - barr.	20,954	20,964	29,648	30,138	34,035	34,259	20,360	21,374
Hardware and cutlery - - cwt.	8,227	49,598	6,997	42,548	6,683	37,240	6,988	36,994
Iron and steel, wrought and unwrought - - - tons	20,593	186,368	18,775	174,926	23,298	187,628	25,149	177,583
Linen manufactures, entered by the yard - - - yds.	635,761	49,897	945,189	76,751	801,724	61,643	933,721	69,721
Do. yarn - - - lbs.	133,017	7,725	182,290	12,112	243,263	15,479	223,862	10,614
Machinery and mill-work - £	-	41,985	-	29,347	-	53,429	-	58,773
Sugar, refined - - - cwt.	115,020	226,372	18,126	34,627	70,066	132,105	87,143	152,556
Tin and pewter wares, and tin plates - - - £	-	38,245	-	26,070	-	25,299	-	14,866
Woollen manufactures, entered by the piece - - pieces	129,515	234,068	105,422	192,558	128,784	198,787	116,298	174,398
Do. by the yard - yds.	228,295	19,851	189,976	18,230	161,857	14,976	257,340	24,175
All other articles - - £	-	179,676	-	168,826	-	213,782	-	180,296
Total declared values -	-	3,076,231	-	2,079,010	-	2,660,338	-	2,576,697

Account of the Quantities of the Principal Articles imported into the U. Kingdom from Italy and the Italian Islands during each of the Seven Years ending with 1841.

Principal Articles.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
Barilla - - - - cwt.	20,432	22,274	28,838	13,911	20,905	19,788	18,570
Bark, for tanning or dyeing - —	95,817	54,729	78,425	47,890	73,648	78,718	37,720
Brimstone - - - —	589,326	625,739	761,543	833,710	115,648	695,324	119,152
Corn, wheat - - - qrs.	-	4	4,483	30,264	335,612	149,328	114,700
peas and beans - —	-	103	8,114	-	8	15,191	51,512
Hemp, undressed - - cwt.	18,926	4,784	3,126	4,949	14,691	6,622	12,744
Lemons and oranges, in packages not exceeding 5,000 cubic inches - - pckgs.	39,172	39,042	56,951	39,146	19,015	20,403	28,518
Do., exceeding 5,000, and not exceeding 7,500 cubic inches —	36,834	23,416	36,809	29,323	23,871	31,334	26,240
Oil, olive - - - galls.	376,434	1,818,735	882,606	1,365,734	783,024	719,355	563,436
Seeds, flaxseed and linseed - bush.	35,182	12,027	171,937	209,174	146,759	164,406	49,831
Senna - - - - lbs.	34,850	2,570	1,329	5,797	84,070	152,894	68,182
Shumac - - - - cwt.	174,522	154,415	116,060	203,080	164,761	182,097	179,617
Silk, raw and waste - - lbs.	391,271	467,293	291,291	379,294	618,562	500,834	755,120
Skins, kid, undressed - number	257,084	180,530	249,828	54,303	116,347	94,960	54,016
lamb - - - —	1,894,211	2,132,887	1,389,696	1,410,541	1,783,260	1,400,749	865,879
Spirits, brandy - proof galls.	7,575	2,015	119	22,970	76,880	189,728	163,603
Tallow - - - cwt.	7,978	14,038	1,571	10,011	27,050	11,922	1,179
Tobacco, unmanufactured - lbs.	6,283	1,889	10	-	29,858	469,943	174,989
Valonia - - - - cwt.	26,854	7,210	13,619	17,348	26,858	15,193	12,274
Wool, cotton - - - lbs.	2,704,968	2,799,288	1,440,174	996,764	3,360,009	845,009	661,649
sheep's - - - —	1,051,005	2,824,896	1,314,407	1,756,894	1,892,037	1,658,541	1,509,854
Italian wines - - - galls.	511,522	391,037	432,430	426,909	540,579	628,256	495,146

Port Charges are the same on native and foreign ships. The anchorage dues on a vessel of 300 tons amount to 112 current lire, or to 3*l.* 14*s.* sterling; besides which, she must have a bill of health, which costs 7*s.* 2*d.* sterling. These, if she clear out in ballast, are the only charges to which she is subject; but if she clear out loaded, the bill of health will cost about 9*s.* sterling, and there is besides a charge of about 3*d.* sterling for each bill of lading. There are no other port charges whatever. Good water may be

had at about 11*d.* sterling per tun; and beef, bread, and fuel are all reasonably cheap. There are companies for the insurance of ships, but not of lives or houses. — We have gleaned these particulars from *Kelly's Cambist; Nelkenbrecher, Manuel Universel; Circular Statement of Grant and Co.*, Leghorn, 2d of January, 1843; *Macgregor's Italian Tariffs, &c.* A plan of the road of Leghorn is given in Captain Smyth's *General Chart of the Mediterranean.*)

LEMONS (Ger. *Limonen*; Du. *Limoenen*; Fr. *Limons, Citrons*; It. *Limoni*; Sp. *Limones*; Port. *Limões*; Rus. *Limonii*; Arab. *Lémōn*), the fruit of the lemon tree (*Citrus medica*, var. *β.* C.) It is a native of Assyria and Persia, whence it was brought into Europe; first to Greece, and afterwards to Italy. It is now cultivated in Spain, Portugal, and France, and is not uncommon in our greenhouses. Lemons are brought to England from Spain, Portugal, and the Azores, packed in chests, each lemon being separately rolled in paper. The Spanish lemons are most esteemed. — (For an account of the imports, see ORANGES.)

LEMON JUICE, OR CITRIC ACID (Ger. *Zitronensaft*; Fr. *Jus de limon*; It. *Sugo o Sugo de' limone*; Sp. *Jugo de limon*), the liquor contained in the lemon. It may be preserved in bottles for a considerable time by covering it with a thin stratum of oil; thus secured, great quantities of the juice are exported from Italy to different parts of the world; from Turkey, also, where abundance of lemons are grown, it is a considerable article of export, particularly to Odessa. The discovery of the antiscorbutic influence of lemon juice is one of the most valuable that has ever been made. The scurvy, formerly so fatal in ships making long voyages, is now almost wholly unknown; a result that is entirely to be ascribed to the regular allowance of lemon juice served out to the men. The juice is also frequently administered as a medicine, and is extensively used in the manufacture of punch.

LEMON PEEL (Ger. *Zitronenshalen, Limonschellen*; Fr. *Lames d'écorce de citron*; It. *Scorze de' limone*; Sp. *Courtezas de citra*). The outward rind of lemons is warm, aromatic, and slightly bitter, — qualities depending on the essential oil it contains. It is turned to many uses; and when well candied, constitutes a very good preserve. In Barbadoes, a *liqueur*, known under the name of *Eau de Barbade*, is manufactured from lemon peel, which the inhabitants have the art of preserving in a manner peculiar to themselves. Both the liqueur and the conserve used to be in high repute, especially in France.

LETTER. (See POST OFFICE.)

LETTER OF CREDIT, a letter written by one merchant or correspondent to another, requesting him to credit the bearer with a certain sum of money. Advice by post should always follow the granting of a letter of credit; a duplicate of it accompanying such advice. It is prudent, also, in giving advice, to describe the bearer of the letter, with as many particulars as possible, lest it fall improperly into other hands.

LETTERS OF MARQUE AND REPRISAL, "are grantable by the law of nations, whenever the subjects of one state are oppressed and injured by those of another, and justice is denied by that state to which the oppressor belongs." — *Chitty's Com. Law*, vol. iii. p. 604.) Before granting letters of marque, government is directed by the *5* Hen. *5.* c. 7., to require that satisfaction be made to the party aggrieved; and in the event of such satisfaction not being made within a reasonable period, letters of marque and reprisal may be issued, authorising the aggrieved party to attack and seize the property of the aggressor nation, without hazard of being condemned as a robber or pirate. Such letters are now only issued to the owners or captains of privateers during war, or when war has been determined upon. They may be revoked at the pleasure of the sovereign; and when hostilities terminate, they cease to have any effect.

LICENCES, in commercial navigation. The rules and regulations to be observed in the granting of licences to ships are embodied in the act 3 & 4 Will. 4. c. 53., and are as follow: —

Vessels of certain Proportions, not being square-rigged, &c., to be licensed. — All vessels belonging in the whole or in part to his Majesty's subjects, not being square-rigged, or propelled by steam, and all vessels belonging as aforesaid, whether propelled by steam or otherwise, being of less burden than 200 tons, of which the length is to the breadth in a greater proportion than 3 feet 6 inches to 1 foot, and all such last-mentioned vessels carrying arms for resistance, and all vessels of more than 200 tons burden, belonging as aforesaid, armed with more than 2 carriage guns of a calibre exceeding 4 pounds, and with more than 2 muskets for every 10 men, and all boats belonging as aforesaid, which shall be found within 100 leagues of the coast of the U. Kingdom, shall be forfeited, unless the owners thereof shall have obtained a licence from the commissioners of his Majesty's customs in the manner herein-after directed. — § 1.

British Vessels and Boats, or those whereof Half the Persons on board are British Subjects, not to be navigated with more than a specified Number of Persons, unless licensed. — Every vessel or boat belonging in the whole or in part to his Majesty's subjects, or whereof half the persons on board shall be subjects of his Majesty, (not being a lugger, and at the time fitted and rigged as such,) which shall be navigated by a greater number of men (officers and boys included) than in the following proportions (that is to say,) if of 30 tons or under, and above 5 tons, 4 men; if of 60 tons or under, and above 30 tons, 5 men; if of 80 tons or under, and above 60 tons, 6 men; if of 100 tons or under, and above 80 tons, 7 men; and above that tonnage, 1 man for every 15 tons of such additional tonnage; or if a lugger, then in the following proportions; (that is to say,) if of 30 tons or under, 8 men; if of 50 tons or under, and above 30 tons, 9 men; if of 60 tons or under, and above 50 tons, 10 men; if of 80 tons or under, and above 60 tons, 11 men; if of 100 tons or under, and above 80 tons, 12 men; and if above 100 tons, 1 man for every

10 tons of such additional tonnage, which shall be found within 100 leagues of the coast of the U. Kingdom, shall be forfeited, unless such vessel, boat, or lugger shall be especially licensed for that purpose by the commissioners of customs. — § 17.

Certain Particulars to be inserted in Licences for Vessels and Boats. — Every licence granted by the commissioners of customs under this act shall contain the proper description of the vessel or boat, the name or names of the owner or owners, with his or their place or places of abode, and the manner and the limits in which the same is to be employed, and, if armed, the numbers and description of arms, and the quantity of ammunition, together with any other particulars which the said commissioners may require and direct; and it shall be lawful for the commissioners of customs to restrict the granting of a licence for any vessel or boat in any way that they may deem expedient for the security of the revenue. — § 18.

The Owners to give Security by Bond, with the Condition herein-mentioned. — Before any such licence shall be issued or delivered, or shall have effect for the use of such vessel or boat, the owner or owners of the same shall give security by bond in the single value of such vessel or boat, with condition as follows; (that is to say,) that the vessel or boat shall not be employed in the importation, landing, or removing of any prohibited or uncustomed goods, contrary to the true intent and meaning of this act or any other act relating to the revenues of customs or excise, nor in the exportation of any goods which are or may be prohibited to be exported, nor in the relanding of any goods contrary to law, nor shall receive or take on board or be found at sea or in port with any goods subject to forfeiture, nor shall do any act contrary to this act, or any act hereafter to be made relating to the revenues of customs or excise, or for the protection of the trade and commerce of the U. Kingdom, nor shall be employed otherwise than mentioned in the licence, and within the limits therein mentioned; and in case of loss, breaking up, or disposal of the vessel or boat, that the licence shall be delivered, within 6 months from the date of such loss, breaking up, or disposal of such vessel or boat, to the collector or principal officer of customs at the port to which such vessel or boat shall belong; and that no such bond given in respect of any boat shall be liable to any stamp duty. — § 19.

Penalty not to exceed 1,000*l.*, *or single Value of the Vessel.* — Nothing herein contained shall authorise the requiring any bond in any higher sum than 1,000*l.*, although the single value of the vessel or boat for which such licence is to be issued may be more than 1,000*l.* — § 20.

Licence Bonds given by Minors to be valid. — All bonds given by persons under the age of 21 years, in pursuance of the directions herein contained, shall be valid and effectual to all intents and purposes, any thing in any act, or any law or custom, to the contrary in anywise notwithstanding. — § 21.

Vessels not to be used in any Manner not mentioned in the Licence. — When any vessel or boat shall be found or discovered to have been used or employed in any manner or in any limits other than such as shall be specified in the licence, or if such licence shall not be on board such vessel or boat, or shall not at any time be produced and delivered for examination to any officer or officers of the army, navy, or marines duly employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, demanding the same, then and in every such case such vessel or boat, and all the goods laden on board, shall be forfeited. — § 22.

Certain Vessels, Boats, and Luggers not required to be licensed. — Nothing herein contained shall extend or be deemed or taken to extend to any vessel, boat, or lugger belonging to any of the royal family, or being in the service of the navy, victualling, ordnance, customs, excise, or post-office, nor to any whale boat, or boat solely employed in the fisheries, nor to any boat belonging to any square-rigged vessel in the merchant service, nor to any life boat, or tow boat used in towing vessels belonging to licensed pilots, nor to any boat used solely in rivers or inland navigation, nor to any boats used solely in fishing on the coasts of the North and West Highlands of Scotland, nor to any boats so used on the coast of Ireland. — § 23.

Penalty for counterfeiting or falsifying Licences, or making use thereof. — If any person or persons shall counterfeit, erase, alter, or falsify, or cause to be counterfeited, erased, altered, or falsified, any licence so to be granted as aforesaid, or shall knowingly make use of any licence so counterfeited, erased, altered, or falsified, such person or persons shall for every such offence forfeit the sum of 500*l.* — § 24.

How long Bonds are to be in force. — No bond given on account of the licence of any vessel or boat under the said act for the prevention of smuggling shall be cancelled until the space of 12 months after the licence for which such bond had been entered into shall have been delivered up to the proper officer of the customs, and such bond shall remain in full force and effect for 12 months after the delivering up of the licence as aforesaid. — § 25.

Licences and Bonds granted previous to this Act to continue valid. — § 26.

Provisions as to Licences to extend to Guernsey, Jersey, Alderney, Sark, and Man. — § 27.

LICENCES, in the excise, are required in order that individuals may engage in certain businesses. — Subjoined is

An Account of the Businesses that cannot be carried on in Great Britain without Excise Licences; of the Sums charged for such Licences; of the Number of Licences granted for carrying on each Business, in the Year ended the 5th of January, 1843; and of the total Amount of Revenue derived therefrom, — (*Obtained from the Excise.*)

Description of Licence.	Rate of Licence per Annum. £	s.	d.	Number of Annual Licences granted.
Auctions —				
auctioneers - - -	5	5	0	3,680
Beer —				
Brewers of strong beer, not exceeding 20 brls.	0	10	6	8,111
Exceeding 20 — 50 —	1	4	0	8,832
— 50 — 100 —	1	16	6	9,710
— 100 — 1,000 —	2	2	0	15,574
— 1,000 — 2,000 —	3	3	0	666
— 2,000 — 5,000 —	7	17	6	557
— 5,000 — 7,500 —	11	16	3	138
— 7,500 — 10,000 —	15	15	0	76
— 10,000 — 20,000 —	31	10	0	77
— 20,000 — 30,000 —	47	5	0	42
— 30,000 — 40,000 —	63	0	0	6
exceeding 40,000 —	78	15	0	20
Brewers of table beer, not exceeding 20 brls.	0	10	6	124
Exceeding 20 — 50 —	1	1	0	17
— 50 — 100 —	1	1	6	7
exceeding 100 —	2	2	0	11
Retail brewers of strong beer only, under the act 5 Geo. 4. c. 54. -	5	10	3	37
Sellers of strong beer only, not being brewers - - -	3	6	1½	1,013
Beer—*continued.* —				
Retailers of beer, cider, or perry, whose premises are rated at a rent under 20*l.* per annum - -	1	2	0½	53,865
at 20*l.* per annum or upwards -	3	6	1½	19,265
Retailers of beer, cider, or perry, under the provisions of the act 4 & 5 Will. 4. c. 85. to be drunk on the premises - - -	3	6	1½	31,307
Ditto, not to be drunk on the premises	1	2	0½	4,372
Retailers of cider and perry only, under the act 1 Will. 4. c. 64. -	1	2	0½	700
Coffee —				
Dealers in coffee, cocoa nuts, chocolate, tea, or pepper - -	0	11	6½	96,263
Glass —				
Glass makers, for every glass house -	21	0	0	121
Malt —				
Maltsters or makers of malt, not exceeding 50 qrs.	0	7	10½	1,972
Exceeding 50 — 100 —	0	15	9	1,151
— 100 — 150 —	1	3	7½	1,084
— 150 — 200 —	1	11	6	933
— 200 — 250 —	1	19	4½	734
— 250 — 300 —	2	7	3	581

Table of Licences — *continued.*

Description of Licence.	Rate of Licence per Annum.	Number of Annual Licences granted.
	£ s. d.	
Maltsters or makers of malt,		
Exceeding 300 and not exceeding 350 qrs.	2 15 1½	450
— 350 — 400 —	3 3 0	371
— 400 — 450 —	3 10 10½	285
— 450 — 500 —	3 18 9	246
— 500 — 550 —	4 6 7½	201
exceeding 550 —	4 14 6	1,512
not exceeding 5 —	0 2 7½	751
Roasters of malt - - -	20 0 0	13
Dealers in roasted malt -	10 0 0	15
Paper —		
Makers of paper, or pasteboard -	4 4 0	408
Postmasters —		
Licences to let horses for hire -	0 7 6	11,232
Soap —		
Soap makers - - -	4 4 0	179
Spirits —		
Distillers - - - -	10 10 0	186
Rectifiers - - - -	10 10 0	93
Dealers in spirits, not being retailers -	10 10 0	3,198
Retailers of spirits whose premises are rated under 10*l.* per annum	2 4 1	25,146
at 10*l.* and under 20 —	4 8 2½	23,766
20 — 25 —	6 12 3½	3,714
25 — 30 —	7 14 4	2,530
30 — 40 —	9 16 5½	5,908
40 — 50 —	9 18 5½	2,426
50 per annum or upwards -	11 0 6	6,452
Makers of stills, "Scotland only" -	0 10 6	9
Persons not being distillers or rectifiers, using stills, "Scotland only"	0 10 6	43

Description of Licence.	Rate of Licence per Annum.	Number of Annual Licences granted.
	£ s. d.	
Sweets —		
Retailers of sweets or made wines -	[redacted]	3,062
Tobacco —		
Manufacturers of tobacco and snuffs, not exceeding 20,000 lbs.	5 5 0	275
Exceeding 20,000 — 40,000 —	10 10 0	82
— 40,000 — 60,000 —	15 15 0	26
— 60,000 — 80,000 —	21 0 0	22
— 80,000 — 100,000 —	26 5 0	19
exceeding 100,000 —	31 10 0	41
Dealers in tobacco and snuff -	0 5 3	172,340
Vi[redacted] —		
[redacted]s of vinegar or acetous acid -	5 5 0	55
W[redacted] —		
Dealers in foreign wine, not having a licence for retailing spirits, and a licence for retailing beer - -	10 10 0	1,708
Retailers of foreign wine, having a licence to retail beer, but not having a licence to retail spirits - -	4 8 2½	81
Retailers having a licence to retail beer and spirits - - -	2 4 1	21,953
Passage vessels —		
Vessels on board which liquors and tobacco are sold - - -	0 7 6	346

Total amount of revenue derived from licences, £928,145 9*s.* 8*d.*

LICENCES, in the stamps, are required by those engaged in the professions and businesses mentioned below: —

	Per Annum. £ s. d.
Pawnbrokers, in London and Westminster, or within twopenny post limits - -	15 0 0
In any other place - - -	7 10 0
Appraisers (not being auctioneers) - -	0 10 0
Bankers - - - -	30 0 0
Physic, to exercise the faculty of -	15 0 0
All persons trading in gold or silver plate, in which any quantity of gold exceeding 2 pennyweights, and under 2 ounces, or any quantity of silver exceeding 5 pennyweights and under 30 ounces, in 1 piece - - - - -	2 6 0
Do. of greater weight, and every pawnbroker taking in or delivering out pawns of such plate, and every refiner of gold or silver - - -	5 15 0

Gold or silver lace is not deemed plate.

LIGHT-HOUSE, a tower situated on a promontory, or headland, on the sea coast, or on rocks or buildings in the sea, for the reception of a light for the guidance of ships at night.* There are also floating lights, or lights placed on board vessels moored in certain stations, and intended for the same purposes as those on shore.

Historical Notices. — The lighting of fires for the direction of ships at night is of such obvious utility, that we need not wonder at the practice having originated at a very remote æra. The early history of light-houses is, however, involved in much obscurity; but it is reasonable to suppose that no long period would elapse after fires were lighted for the premonition and guidance of mariners, till towers would begin to be constructed for their reception. The most celebrated of all the ancient light-houses was that erected by Ptolemy Soter, on the small island of Pharos, opposite to Alexandria, —*nocturnis ignibus cursum navium regens.* — (*Plin.* lib. v. cap. 31.) It was of great height, and is said to have cost 800 talents.† Its celebrity was such, that Pharos rapidly became, and still continues to be in many countries, a generic term equivalent to light-house. In the ancient world, there were light-houses at Ostia, Ravenna, Puteoli, Caprea, Rhodes, on the Thracian Bosphorus, &c. — (See *Suetonii Opera*, ed. *Pitisci*, tom. i. p. 755.; and the *Ancient Universal History*, ix. 366. 8vo ed.

The *Tour de Cordouan*, at the entrance of the Gironde, the Eddystone light-house, opposite to Plymouth Sound, and that more recently constructed on the Bell Rock, opposite to the Frith of Tay, are the most celebrated modern light-houses. The Tour de Cordouan was begun in 1584, by order of Henry IV., and was completed in 1611. It was at first 169 feet (Fr.) high; but in 1727 it was enlarged, by the addition of an iron lantern, to the height of 175 French, or 186¼ English feet. It used to be lighted by a coal fire, but it is now a revolving dioptric light of the first order. It is altogether a splendid structure; and is, besides, remarkable for being the first light-house on which a revolving light was exhibited. — (See BORDEAUX.)

The first light-house erected on the Eddystone rocks only stood about 7 years, having been blown down in the dreadful storm of the 27th of November, 1703; a second, erected in 1708, was burnt down in 1755. The present light-house, constructed by the celebrated engineer Smeaton, was completed in 1759. It is regarded as a master-piece of its kind; and bids fair to be little less lasting than the rocks on which it stands.

* *Usus ejus, nocturno navium cursu ignes ostendere, ad prænumtianda vada, portusque intr* — (*Plin. Hist. Nat.* lib. xxxvi. cap. 13.)

† Dr. Gillies tells us (*Hist. of Alexander's Successors*, vol. ii. p. 138. 8vo ed.) that the tower was [redacted] in height; that each side of its square base measured 600 feet, and that its "beaming summit" was seen at the distance of 100 miles! It is almost needless to add, that there is no authority for such statements, which, indeed, carry absurdity on their face.

LIGHT-HOUSE.

The Bell Rock light-house was built by Mr. Stevenson on the model of the Eddystone. Numerous light-houses, marking the most dangerous points and the entrance to the principal harbours, are now erected in most civilised maritime countries. They are particularly abundant in the Baltic and in the Sound, and have contributed, in no ordinary degree, to render their navigation comparatively safe. Within these few years several new ones have been erected on the British coasts, and on those of France, the United States, &c.

Precautions as to Light-houses. — Many fatal accidents have arisen from ships mistaking one light for another; and hence the importance of those on the same coast being made to differ distinctly from each other, and of their position and appearance being accurately laid down and described. The modern inventions of revolving, intermitting, and coloured lights, afford facilities for varying the appearance of each light unknown to our ancestors, and have been, in this respect, of the greatest importance.

Chart of Light-houses, &c. — A good descriptive work on light-houses, beacons, &c. is a desideratum. That of Coulier, *Guide des Marins pendant la Navigation nocturne*, Paris, 1829, is perhaps the best. It must not be judged by its preface, which is as bad as possible; consisting of scraps from the most fantastical parts of Bryant's Mythology, and of attacks on us for our conduct in relation to Parga, and the alleged ill-treatment of the crew of a vessel wrecked on the island of Alderney! The book is really pretty good, which could not certainly be anticipated from such a commencement. The reader will find the existing English and Irish light-houses, and the greater number of those belonging to Scotland, laid down in the chart attached to the article CANALS in this work. Its accuracy may be depended upon; as it has been copied from the chart of the light-houses on the British and contiguous coasts recently published by the Trinity House; the corporation having readily and obligingly granted permission to that effect.

Law as to British Light-houses. — The 8 Eliz. c. 13. empowers the corporation of the Trinity House to erect beacons, &c. to prevent accidents to ships; and though the act does not expressly mention light-houses, it has been held to extend to them; and on its authority, and the privileges attached to the office of buoyage and beaconage conferred on the Trinity House in 1594, the corporation erects light-houses. The tolls for their maintenance are generally collected under the authority of letters patent from the Crown; those for the support of the Eddystone light, and some others in different parts of the kingdom, being, however, established by act of parliament. The first light-house erected by the Trinity Corporation was in 1675; but several had been previously erected by private parties in virtue of letters patent. Customs' officers are prohibited from making out any cocket or other discharge, or taking any report outwards for any ship, until the light duties are paid, and the master shall have produced a light-bill testifying the receipt thereof. It is lawful for persons authorised by the Trinity House to go on board any British or foreign ship to receive the duties, and for non-payment to distrain the tackle of the ship; and in case of delay of payment for 3 days after distress, the collectors of the said duties may cause the same to be appraised by two persons, and proceed to sell the distress. — (6 & 7 *Will.* 4. c. 79. § 54.)

All the light-houses, floating lights, &c., exclusive of harbour lights, from the Fern Islands, on the coast of Northumberland, round by Beachy Head and the Land's End, to the coast of Lancashire, have always belonged to the Trinity House, with the exception of about a dozen lights, viz. Tynemouth, Spurn (shore), Winterton and Orford, Harwich, Dungeness, Skerries, &c. These lights have been partly public and partly private property; but they have latterly been all acquired by the Trinity House. — (See below.) The duties on their account have been, for the most part, always payable to the Trinity collectors.

Trinity Lights. — The rules and regulations as to lights may be altered by the Trinity House, with consent of the privy council. We subjoin a copy of the existing instructions issued by the Corporation to their collectors.

TRINITY HOUSE, LONDON.

Instructions to for the collection of light duties, &c. at the port of and the creeks and members thereunto belonging.

In the fulfilment of your duty as collector of light duties payable to this corporation, to the commissioners for northern lights, Edinburgh, and to the corporation for improving the port of Dublin, your particular attention is directed to the respective tables of duties with which you are herewith furnished, to the observance of the regulations as therein set forth, under which the same are leviable as they respectively apply to British-owned traders and foreign privileged vessels, to foreign vessels not privileged, and to vessels in the coasting trade; also of the following in addition thereto, viz.:—

1st. You are to demand and receive from the master, owner, or agent of every vessel (not being vessels *bona fide* belonging to her Majesty, or otherwise exempt) the amount of tolls or duties, according to the rate per ton, and per vessel, specified in the said tables, for the particular voyage on which the vessel shall be destined, or from which she may have arrived, subject to the regulation contained in article 5. Loaded vessels bound to or coming from ports overseas, but intermediately touching at any port in the U. Kingdom, are to be charged with the rates in the overseas table, for any lights which they may pass, over and above those in the direct course from her first port of departure, or last of arrival, unless such deviation shall be occasioned by stress of weather.

2d. You are to take care to rate all vessels belonging to the U. Kingdom, of every class or description, to their full amount of their register tonnage; and foreign vessels are to be charged to the full amount of their tonnage, as ascertained by the proper officer of her Majesty's customs.

3d. You are to observe, that neither vessels belonging to the U. Kingdom, nor foreign vessels, are to be charged with the duties on account of a voyage which may have taken place, or may be thereafter contemplated, being from one foreign port to another foreign port, unless, in the prosecution of such voyages, they shall actually arrive or touch at a port or roadstead in the U. Kingdom.

4th. On receipt of any light duties, you are to give a certificate of payment, signed by yourself, to the master, owner, or agent of every ship or vessel for which payment is made, expressing plainly and fully the name of the vessel, the master's name, and the place to which she belongs, her voyage and tonnage, the amount paid, and other particulars specified in the forms provided for your use. Books, containing forms of these certificates, will be regularly supplied to you when required. Each form of certificate is furnished with a counterpart, the blanks whereof are to be filled up with great accuracy, and the counterparts carefully preserved in order to their transmission to this house, with your other accounts, at the periods hereinafter prescribed; and when any circumstance requires variation from the full charge laid down in the tables, you are to note the cause of such variation, both on the certificate and on its counterpart. In numbering the receipts and counterparts, you are to commence each quarter with No. 1., numbering continuously to its termination; and you are to prefix to the entry in your account the number of the certificate and counterpart to which the charge refers. At the termination of each quarter you are to make a return on the quarterly abstracts (afterwards mentioned) of the number of certificates sent to you, expended, and remaining on hand. You are further to take special care that none of the blank certificates fall into improper hands, or are wasted, as a complete register of the number sent from this house is kept, and you are rendered answerable for each. In the event of the duties being of such an amount as to require a stamped receipt, you are to affix one to the light certificate, expressing therein that the same is "for amount of light duties, &c., as per annexed certificate," and charge the cost of the stamp to the account of this corporation.

5th. In order the more effectually to secure payment of the duties, and to prevent evasion thereof, you are to call the attention of the proper officer of customs at your port to the provisions of the act 6 & 7 Will. 4. c. 79. s. 55., and require him, in conformity therewith, not to receive any entry or reports, or cocquets, or other discharge, or clearance inwards or outwards, for any vessel liable to any of the duties specified in the tables before referred to, until the owner, master, or agent of such vessel, shall show to such officer of the customs, the certificate of payment thereof, duly signed by yourself, for the voyage from which she may have arrived, or on which she may be about to depart; observing, nevertheless, that the duties for vessels in the coasting trade (including colliers coastways) are to be paid at the port at which they deliver their cargoes, and not at the port of loading; and that the duties on all British vessels overseas, and foreign vessels, are to be received previously to clearing outwards for an outward voyage, and inwards for a homeward voyage. In the execution of this article, you are to observe, that your duty, as collector, extends to all

the creeks, members, and roads within the limits of your port, and you are to take all possible means to secure payment of the duties for vessels subject thereto, although not liable to take custom-house clearances.

6th. You are to keep true and correct accounts of your collection of light duties on the forms supplied you for that purpose, numbered 1, 2, and 3, setting forth therein, the numbers of the certificates, and dates of payment, the vessels and masters' names, to what port (if British) or country (if foreign) belonging, the voyage, tonnage, rate per ton and per vessel, and the amount received; distinguishing the tonnage of foreign vessels from that of vessels belonging to the U. Kingdom; and also setting forth at what port the duties were last paid, with such other remarks as you may consider needful. The accounts of your collection on the forms before referred to, made up quarterly, to the 31st March, 30th June, 30th September, and 31st December, inclusive, in each year, are to be regularly transmitted to the secretary at this house, at any time not exceeding 21 days from the termination of each quarter, together with abstract statements or accounts current, on the printed forms with which you will be from time to time furnished. The general statement is to be verified by declaration before a magistrate, and in the printed form annexed thereto. You are to give due advice by letter to the secretary, of the transmission of these accounts, enclosing in such letter a remittance for the balance due thereon.

In the application of the tables of duties to foreign vessels, you are to observe, that vessels belonging to the following states are to be considered and treated as British vessels, until further orders, subject, nevertheless, to the limitations expressed in the note at the foot hereof; viz. America (U. States), Austria, Belgium, Brazil, Bremen, Columbia, Denmark, France, Frankfort, Hamburg, Hanover, Lubeck, Mecklenburg, Mexico, Netherlands, Norway, Oldenburg, Greece, Venezuela, Monte Video, Portugal, Prussia, Rio de la Plata, Russia, Sweden, Sardinia, Peru, Bolivian confederacy, Uruguay.

For your services in collecting these duties, you will be allowed a commission of 5 per cent., besides the necessary expenses which you may incur in making the collection; and you are authorised to take credit for these allowances, in your quarterly accounts.

By command of the Corporation of Trinity House.
(Signed) J. HERBERT, Secretary.

Form of Declaration to be made in verification of your Quarterly Abstract Statement.

I [or we] do solemnly and sincerely declare that the preceding is a just and true account of my [or our] collection of light duties, for the period within mentioned. And that who is surety [or are sureties] for me [or us] as collector of these duties, is [or are] alive, and to the best of my [or our] knowledge and belief, is [or are] in good and solvent circumstances; and I [or we] make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of an act made and passed in the fifth and sixth year of the reign of His late Majesty, intituled "An Act to repeal an Act of the present Session of Parliament, intituled 'An Act for the more effectual Abolition of Oaths and Affirmations taken and made in various Departments of the State, and to substitute Declarations in lieu thereof, and for the more entire Suppression of voluntary and extra-judicial Oaths and Affidavits, and to make other Provisions for the Abolition of unnecessary Oaths.'"

Declared before me this day of 18 .

Collector [or Collectors].

Limitations above referred to.

Vessels belonging to Oldenburg, by order in council, 19th October, 1824, those of Mecklenburg, by order in council, 14th June, 1825, and those of Columbia and Mexico, by order in council, 3d September, 1827, are privileged inwards, only when coming direct from ports in their respective countries; outwards, under all circumstances.

Vessels belonging to Rio de la Plata, by order in council, 3d September, 1827, under 120 tons, are not privileged.

Vessels belonging to France, by order in council, 26th January, 1826, and those of the Netherlands, by order in council, 11th December, 1837, are privileged only when coming from or departing for ports in their respective countries if laden; but if in ballast, they are privileged under any circumstances.

Fees on account of Light-houses. — A wish to keep the charges on native ships as low as possible, and to secure them a preference, seems to have given rise to the practice that has long existed, of exacting comparatively high duties from the foreign shipping entering our ports. But whatever may have been the motives for making this distinction, its policy seems more than questionable. It is quite right that the foreign ships coming to our shores for commercial purposes should be made to pay the *same* light and harbour duties as British vessels; but the imposition of comparatively high duties on them is decidedly injurious, inasmuch as it provokes retaliatory measures on the part of other states, obstructs the resort of foreigners to our markets, and, consequently, checks the growth of commerce.

This system was very properly condemned in a report by a committee of the House of Commons, in 1822. There is, in the evidence annexed to that report, some well-authenticated instances of foreign ships having been totally lost, from the disinclination of the captains to enter a British port, while it was in their power, on account of the heavy charges to which they would have been exposed for lights, &c.! Down, indeed, to 1835, all ships, whether native or foreign, coming into any British port by *stress of weather*, were charged with full light duties; but this inhospitable regulation was repealed by an order in council of the 7th of February that year, issued on the recommendation of the Trinity House, which exempts such vessels from all charge on account of lights. Our whole policy as to light duties, port charges, &c. has, within the few years, been materially improved, and is now the very reverse of illiberal. It is true that the discriminating duties on foreign ships are still kept up; but in consequence of the general establishment of reciprocity treaties, the distinction has become nominal rather than real, and affects comparatively few of the ships using our seas.

We are glad, also, to have to announce, that very large deductions have been, in most instances, made from the light-house duties. It is, indeed, quite essential to their utility that these should be moderate. They have the same influence upon the intercourse carried on by sea, that tolls have upon that carried on by land; and it is needless to add, that oppressive tolls are amongst the most effectual of all the engines by which rapacious ignorance has contrived to injure a country. *

Charges on account of Collection, &c. — The charges under this head for the lights under the control of the Trinity House amounted, in 1840, to 7,848*l.*, the *expenses of maintenance* (including payments on account of works at different lights, about 35,000*l.*) for the same year being 118,694*l.*, leaving a *nett surplus* of 57,705*l.* It is plain, therefore, that the light-house revenue is, at this moment, very much greater than is necessary for keeping the establishment in the most perfect state of efficiency. The surplus revenue is, we believe, in so far at least as the Trinity House is concerned, very judiciously expended in maintaining decayed seamen, and other useful purposes. But, considering the vast importance of low shipping charges, it is probable, perhaps, that such persons might be provided for in some less onerous way, and that the light duties might be still further reduced. It has been proposed to reduce them to such a rate of charge as may be required to keep the lights in the most perfect state. Originally they seem to have been imposed only in this view; but circumstances are now so very different, that it might be inexpedient or impracticable to reduce them to that level, though no one can doubt the advantage of their being reduced to the lowest point, all things considered, that the exigencies of the public service will admit. Instead of reducing the charges generally on all lights, it has been proposed to make some of the more important lights duty free, as by this means the expense of collection would be saved, and business materially facilitated. This, however, would in effect impose a proportionally heavy charge on the ships belonging to the less frequented ports; so that, on the whole, the general reduction of the rates would seem to be the better plan.

* There is nothing new in this statement: — "*Avara manus portus claudit; et cum digitos contrahit, navium simul vela concludit; meritò enim illa mercatores cuncti refugiunt quæ sibi dispendia esse cognoscunt.*" — (*Cassiodorus*, lib. vii. cap. varia, 9.)

Account specifying the various Light-houses and Floating Lights under the Management of the Corporation of the Trinity House of Deptford Strond; the Rates of Charge on the British and Foreign Ships passing such Lights; with the Amount of Duties collected on account of each Light, during 1841. —(Furnished by *Trinity House*.)

Names of Lights.	Rate of Charge. British and Foreign Privileged Vessels, per ton.	Foreign unprivileged Vessels, per Ton.	Coasting Vessels.	Nett Revenue, 1841. £ s. d.
East Coast.				
Fern - - - 3 lighthouses -	3 farthings - -	3 halfpence - -	3 farthings - -	3,466 8 8½
Tynemouth - - 1 lighthouse -	¼th of a penny, and 1 shilling per vessel	1 farthing per ton, and 3s. per vessel.	¼th of a penny, and 1 shilling per vessel.	4,437 4 7½
Flamboro' - - - 1 lighthouse -	1 far[illegible] - -	1 halfpenny - -	1 farthing - -	5,068 7 7
Spurn Shore - - 2 lighthouses -	1 [illegible] - -	1 penny - - -	1 halfpenny - -	10,477 14 8½
Dudgeon - - - 1 floating light	1 [illegible] - -	1 halfpenny - -	1 farthing - -	5,185 5 7½
Foulness - - - 1 lighthouse -	1 far[illegible] - -	1 farthing - -	1 farthing - -	4,763 6 2½
Leman and Ower - 1 floating light	1 halfpenny - -	1 penny - - -	- - -	2,231 2 2½
Haisbro' Sand (N. end) - 1 floating light	1 farthing - -	1 halfpenny - -	1 farthing - -	4,753 6 7
Winterton and Orford - 3 lighthouses -	1 halfpenny - -	1 halfpenny - -	1 halfpenny - -	11,676 10 2½
Haisbro' and Newarp - 2 lighthouses, and 1 floating light.	1 farthing - -	1 halfpenny - -	1 farthing - -	4,735 11 0½
St. Nicholas Gait - 1 floating light	¼th of a penny -	1 farthing - -	¼th of a penny -	2,411 18 8½
Ditto, Buoys - - -	¼th of a penny -	¼th of a penny -	¼th of a penny -	
Lowestoft - - - 3 lighthouses, and 1 floating light.	1 farthing - -	1 halfpenny - -	1 farthing - -	4,823 16 0½
N. E. Shipwash - - 1 floating light	¼th of a penny -	1 farthing - -	¼th of a penny -	2,299 19 2½
Harwich - - - 2 lighthouses -	1 halfpenny - -	1 penny - -	1 halfpenny - -	11,216 18 6½
Sunk and Galloper - 2 floating lights and buoys.	1 halfpenny - -	1 penny - -	1 halfpenny - -	6,825 5 1½
Kentish Knock - - 1 floating light	1 farthing - -	1 halfpenny - -	1 farthing - -	1,495 17 11½
English Channel.				
Forelands - - - 3 lighthouses -	1 farthing - -	1 halfpenny - -	1 farthing - -	3,865 12 1½
Goodwin and Gull Stream - 2 floating lights	1 halfpenny - -	1 penny - -	1 shilling per vessel	5,493 0 [illegible]
South Sand Head - 1 floating light	1 farthing - -	1 halfpenny - -	¼th of a penny -	2,924 7 10
Dungeness - - 1 lighthouse -	1 halfpenny - -	1 halfpenny - -	1 halfpenny - -	6,936 5 4½
Beachy Head - - 1 lighthouse -	1 farthing - -	1 halfpenny - -	1 shilling per vessel	2,624 15 2½
Owers and Bembridge - 2 floating lights	1 halfpenny - -	1 penny - -	1 shilling per vessel	4,504 [illegible] 9½
Needles - - - 1 lighthouse, 2 lighthouses at Hurst; 1 light-house at Katherine's Point.	1 halfpenny - -	1 penny - -	1 shilling per vessel	4,652 [illegible] 1½
Portland - - - 2 lighthouses -	1 halfpenny - -	1 penny - -	1 shilling per vessel	4,576 10 0½
Caskets - - - 3 lighthouses -	1 halfpenny - -	1 penny - -	6 pence per vessel	4,361 13 6
Start - - - 1 lighthouse -	1 farthing - -	1 halfpenny - -	1 shilling per vessel	2,410 13 2½
Eddystone - - - 1 lighthouse -	1 halfpenny - -	1 penny - -	2 shillings per vessel	5,066 3 5
Lizard - - - 2 lighthouses -	1 halfpenny - -	1 penny - -	2 shillings per vessel	4,377 9 6½
Longships - - - 1 lighthouse -	1 halfpenny - -	1 penny - -	1 halfpenny - -	7,908 15 6½
Scilly - - - 1 lighthouse -	1 farthing - -	1 halfpenny - -	1 shilling per vessel	3,445 7 11½
Seven Stones* - - 1 floating light	⅛ of a penny - -	3 farthings - -	⅛ths of a penny -	592 5 6½
Bristol and St. George's Channels.				
Lundy - - - 1 lighthouse -	1 farthing - -	1 halfpenny - -	1 farthing - -	1,835 9 7½
Nash - - - 2 lighthouses -	1 halfpenny - -	1 penny - -	1 farthing - -	2,239 6 9½
Flatholm - - - 1 lighthouse -	3 farthings - -	3 halfpence - -	1 farthing - -	1,952 14 11½
Bristol Channel - - buoys, beacons, 1 floating light, and 1 lighthouse.	¼th of a penny, or 1 farthing	1 farthing, or 1 halfpenny	[illegible] of a penny, or 1 [illegible]thing	1,694 15 5
Smalls - - - 1 lighthouse -	1 penny - - -	2 pence - - -	1 halfpenny - -	14,093 19 7
Milford - - - 2 lighthouses -	1 halfpenny - -	1 penny - -	1 shilling per vessel	6,128 17 4½
South Bishop - - 1 lighthouse -	- - -	- - -	¼th of a penny -	457 19 9½
Bardsey - - - 1 lighthouse -	1 farthing - -	1 farthing - -	1 farthing - -	2,337 5 9½
South Stack - - 1 lighthouse -	1 farthing - -	1 halfpenny - -	1 farthing - -	4,113 19 3
Skerries† - - - 1 lighthouse -	1 penny - - -	2 pence - - -	1 penny - - -	5,666 15 7
East Coast lights payable only by certain voyages.				
Coquet (payable by all coasters). ‡ - 1 li[illegible]house	1 halfpenny - -	1 penny - -	1 halfpenny, or 1 farthing	257 16 10½
Spurn (payable by all coasters). - 1 floating light	1 farthing - -	1 halfpenny - -	1 farthing - -	5,145 10 0½
Heligoland - - - 1 lighthouse -	1 penny - - -	2 pence - - -	- - -	2,010 18 3½
Swin Middle - - 1 floating light	¼th of a penny -	1 farthing - -	¼th of a penny -	1,691 8 2½
Maplin - - - 1 floating light	¼th of a penny -	1 farthing - -	¼th of a penny -	1,647 18 4½
Mouse - - - 1 floating light	¼th of a penny -	1 farthing - -	¼th of a penny -	1,647 18 3½
				200,973 2 4½

* Revenue from 1st September, 1841. † Revenue from 1st of October, 1841. ‡ Revenue from 1st of October, 1841.

Private Light-houses. — Private individuals erecting light-houses have generally obtained a lease of the same from the Crown for a definite number of years, with authority to charge certain fees on shipping. Owing to the great increase of navigation, some of these light-houses became very valuable properties. The most valuable were—

The Skerries, on a small islet or rock, to the north-west of the Island of Anglesey was granted to the ancestor of its late proprietor, to be *for ever* holden by him, his heirs and assignees, by the act 3 Geo. 2. c. 36., which also gave the proprietor power to charge certain rates on all vessels passing the light. Previously to its purchase by the Trinity House, this light produced a nett revenue of about 20,000*l.* a year.

Harwich Lights, were held by General Rebow, under lease from the Crown, for 22 years from the 5th of January, 1827, paying to the Crown 3-5ths of the nett duty collected.

Dungeness Light, was held under lease from the Crown by the Earl of Leicester for 20 years from Midsummer, 1829. Nett produce of the duties equally divided between the Crown and the lessee. The duties were reduced at the renewal of the lease from 1*d.* to ½*d.* per ton; and it was provided, that at its termination the light-houses and buildings connected therewith, and the ground on which they are erected, should become the property of the Crown.

Winterstonness and Orfordness Lights, were held by Lord Braybrooke under a lease from the Crown, which would have expired on the 1st of June, 1849. Nett produce of the duties equally divided between the Crown and his lordship. The duties were reduced at the last renewal of the lease in 1828, from 2*d.* to ½*d.* per ton. At the expiration of the lease, the light-houses, grounds, &c. were to become the property of the Crown.

Hunstanton Cliff Light, was held by S. Lane, Esq. under a lease from the Crown, which would have

expired in 1849. From the 16th of October, 1837, 4-15th parts of the nett produce would have gone to the Crown; and the light-houses, &c. would have become, at the expiration of the lease, the property of the Crown, as in the case of the Dungeness and Winterton lights.

The Smalls light-house in St. George's Channel belonged originally to the Trinity Corporation; but having been leased by that body to private individuals, it became, in consequence of the great increase of navigation, a most valuable property. In proof of this it is only necessary to state that the Trinity House having, in 1822, proposed to purchase the reversion of the lease, which had then 54 years to run, the lessees demanded for it no less than 148,430*l.* The Trinity House subsequently effected the purchase; but, owing to the increase of commerce in the interim, they had to pay a larger sum, notwithstanding the diminished length of the lease! This fact affords a striking illustration of the extreme inexpediency of the practice of leasing light-houses to private parties. Wherever they are necessary, they ought to be raised at the public expense, and the fees kept as low as possible. There cannot, in fact, be any greater improvidence or abuse, than to make over to a private individual or association a power to levy, for a long series of years, a certain amount of toll on the ships passing particular lights. The renewals mentioned above are, however, the last transactions of the sort that are ever likely to occur; for by the act 6 & 7 Will. 4. c. 79., the whole right and property in the Harwich, Dungeness, Winterton and Orford, and Hunstanton lights was vested in the Trinity House, subject to the existing leases; and the corporation has, also, acquired, under the powers conveyed to them in the same act, the property of the Skerries light-house, and of the Spurn and other lights. Hence, all the light-houses on the coast, with the exception of those belonging to other boards, are now subject to the same management and regulations; and it is also enacted by the act 6 & 7 Will. 4. c. 79., that no light-house shall be erected on the Scotch or Irish coasts, without the approval of the Trinity House, and that the officers of the latter shall at all times have power to enter upon and examine such lights.

The Scotch or Northern Lights are under the management of a set of parliamentary commissioners. The act 6 & 7 Will. 4. c. 79. s. 40. enacts, that from the 1st of January, 1837, all British and foreign privileged vessels, not wholly in ballast, which shall pass any Scotch light-house, or derive any benefit therefrom, shall pay ½*d.* per ton for each time of passing every such light-house, except that on the Bell Rock, for which they are to pay 1*d.* per ton each time of passing. Foreign vessels, not privileged, pay double these rates.

Irish Lights.—It appears from the *Parl. Paper* No. 331. Sess. 1842, that the gross sum collected for Irish light duties during 1841, amounted to 49,999*l.*, of which 37,964*l.* 10*s.* 4*d.* was collected in Great Britain. The rates of charge are as follows:—

Foreign vessel, ½*d.* per ton for each light passed; except harbour lights, which are only chargeable to vessels entering the ports within which they are situated.

British and Irish, ½*d.* per ton (¼*d.* if in ballast) for each light, except as above.

With a duty of 2*s.* on every entry, cocket, or warrant, when from foreign ports, but not otherwise.

Compensation to Private Parties.—The authority acquired by certain individuals and public bodies, under letters patent, acts of parliament, and otherwise, of levying certain duties on account of lights, beacons, pilotage, harbour dues, &c. entitled them, for the most part, to demand higher fees from foreign than from British shipping. When, therefore, we entered into reciprocity treaties with foreign powers, government had to compensate the parties in question for the diminution that consequently took place in their charges on foreign ships. But this payment has now ceased, the Trinity Corporation having long since relinquished their claim to compensation; and the act 6 & 7 Will. 4. c. 79. having forbid such compensation being made to them, the Commissioners of Northern Lights, and the commissioners for managing the Irish lights.—(For some account of the Trinity Corporation, the reader is referred to that article; and for accounts of the charges on account of Beaconage, Ballastage, Pilotage, &c. see these titles.)

The following account of the principal British and Irish Light-houses has been taken from the official statement published by the Admiralty.

I. English Light-houses.

Those marked * are what are called first-class lights.

Name of Light.	Place.	N. Latitude.	W. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution or Flash.	Miles seen in clear Weather.	Colour, or any Peculiarity of Light-house.	Height in Feet of Lantern above High Water.	Height in Feet of Building.	Year erected.
		° ′ ″	° ′ ″								
Scilly.*	Summit of St. Agnes Island.	49 53 37	6 19 23	1	Revolving.	Every minute.	16	White.	138	53	1680
Seven Stones, Light-vessel.	E. side of the rocks.	50 2	6 7	2	Fixed.	- -	9	Painted red.	F. 20 M. 38	- -	1841
Longships.*	Longships Rock, off Land's End.	50 4	5 44	1	Fixed.	- -	14	White.	88	56	1795
Penzance Pier.	Pier head.	50 7	5 31	1	Fixed.	- -	9	White.	29	22	1817
Lizard.*	Lizard Cliff.	49 57 18	5 10 39	2	Fixed.	- -	20	White.	E. 221 W. 224	Both 45	1751
Falmouth.	St. Anthony Point.	50 9	5 0	1	Intermitting.	Every minute.	12	White.	65	40	1835
Eddystone.*	Eddystone Rock.	50 10 54	4 15 3	1	Fixed.	- -	13	White.	72	72	1759
Plymouth Breakwater, Light vessel.	Off West End.	50 20	4 9	2	Fixed.	- -	7	Carries a flag.	13		
Plymouth Harbour.	W. Barbican pier head.	50 22	4 7	1	Fixed.	- -	9	- -	29	20	1822
Start Point.*	140 yards from the S. E. extreme of the Point.	50 13 22	3 37 43	1	Intermitting.	Every minute.	19	White.	204	94	1836
Dartmouth.	St. Petrox Point, W. side of entrance.	50 20	3 33	1	Fixed.	- -	7	- -	49	52	1837
Brixham.	Pier head.	50 24	3 30	1	Fixed.	- -	- -	On an iron stand.	20	- -	1839
Casquets.*	Highest of the Casquet Rocks.	49 42 17	2 23 34	3	Intermitting.	Every 15 seconds.	15	White.	81 each.	One 18, others 38	1725
Guernsey.	Pier head, St. Pierre, South side of entrance.	49 27	3 33	1	Fixed.	- -	11	White.	40	30	1832
Portland.*	Bill of Portland.	50 31 22	2 26 49	2	Fixed.	- -	19	White.	198	28	16
							16	White.	131	70	1789
Hurst.	Hurst Beach.	50 42 23	1 32 50	2	Fixed.	- -	12	Red.	66	60	1818
Needles.*	Needles Cliff, Isle of Wight.	50 39 53	1 33 55	1	Fixed.	- -	9 27	White.	29 469	23 36	1786 1786
Calshot.	Calshot Castle.	50 48	1 18	1	Fixed.						
Calshot Spit, Light-vessel.	Off Calshot Castle.	50 48	1 16	1	Revolving.	Every minute.	- -	- -	- -	- -	1839
Southampton.	Royal Pier. *	50 54	1 24	2	Fixed.	- -	- -	- -	- -	- -	1811
Southsea.	Southsea Castle.	50 47	1 5	1	Fixed.	- -	9	- -	51	- -	1822

English Light-houses — *continued.*

Name of Light.	Place.	N. Latitude.	W. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution, or Flash.	Miles seen in clear Weather.	Colour, or any Peculiarity of Light-house.	Height in Feet of Lantern above High Water.	Height in Feet of Building	Year erected.
		° ′ ″	° ′ ″								
St. Catherine.	St. Catherine Point.	50 36	11 8	1	Fixed.	- -	18	Stone.	178	105	1840
Bembridge, light-vessel.	Off Bembridge Point, near the Nab Rock.	50 42	1 2	2	Fixed.	- -	9 8	Red; carries a ball.	Mainmast light, 32; foremast light, 20.	- -	1812
Owers, light-vessel.	E. end of the Owers Shoals, coast of Sussex.	50 41	0 39	1	Fixed.	-	9	Red: carries a ball.	28	- -	1788
Shoreham.	Opposite the entrance of Shoreham harbour.	50 50	0 18	2	Fixed.	- -	10	White.	49 23	38 Lowest 5	1825
Brighton.	Chain Pier Head.	50 50	0 9 East long.	1	Fixed.	- -	10	- -	35	22	1824
Newhaven.	East Pier.	50 47	0 3	2	Fixed.	- -	8 7	- -	23 11		
Beachy Head.*	Belletout Cliff.	50 44	0 13	1	Revolving.	Every 2 minutes.	22	White.	285	20	1828
Hastings.	Upper light in the town: lower on the beach.	50 52	0 36	2	Fixed.	- -	12 9	- -	60 50	Lower 25	
Rye Harbour.	Camber, north side of entrance.	50 57	0 45	2	Fixed.	- -	10 9	White.	36 26	30 20	
Dungeness.*	Extreme point.	50 55	0 57 48	1	Fixed.	- -	14	Brt. red.	99	86	1792
Folkstone.	West pier head.	51 5	1 11	1	Fixed.	- -	9	- -		- -	1810
Dover.	South pier. North pier.	51 7	1 18	2 1	Fixed. Fixed.	- - - -	12	White. - -	60 12	19 - -	1842
South Foreland.*	South Foreland.	51 8	1 22	2	Fixed.	- -	25 22	White.	380 275	41 32	1793 1795
Goodwin. South Sand Head, light-vessel.	South end of the Goodwin Sands.	51 10	1 27	1	Fixed.	-	10	Red; carries a ball.	38	- -	1832
Goodwin. Gull, light-vessel.	Western edge of the Goodwin Sands.	51 17	1 30	2	Fixed.	- -	7	Red; carries a ball.	14	- -	1809
Goodwin. North Sand Head, light-vessel.	North end of the Goodwin Sands.	51 19	1 35	3	Fixed.	-	10	Red; carries a ball.	Foremast 28, Main 42, Mizen 27.	- -	1793
Ramsgate.	South pier head.	51 20	1 26	1	Fixed.	-	6	White.			
North Foreland.*	North Foreland.	51 22	1 27	1	Fixed.	- -	24	White.	184	70	1790
Margate.	West end of the pier.	51 24	1 25	1	Fixed.	- -	10	Stone fluted column.	85	70	1829
Nore, light-vessel.	East end of the Nore Sands.	51 29	0 48	1	Fixed.	-	10	Red; carries a ball.	33	- -	1734
Mouse, light-vessel.	On W. end of Mouse Sand.	51 32	1 0	1	Fixed.	-	9	Red; carries a ball.	28	- -	1838
Maplin.	S. E. part of Maplin Sand.	51 35	1 3	1	Fixed.	-	10	16 sided polygon on pile.	36	- -	1841
Swin Middle, light-vessel.	West end of Swin Middle Sand.	51 39	1 7	1	Revolving.	Every minute.	10	Red; carries a ball.	38	- -	1837
Kentish Knock, light-vessel.	East side of Kentish Knock Sand.	51 39	1 38	1	Revolving.	- -	10	Red; carries 2 balls.	38	- -	1840
Galloper, light-vessel.	S. W. part of the Galloper Shoal.	51 45	1 54	2	Fixed.	- -	10	Red; carries a ball.	38	- -	1803
Sunk, light-vessel.	East end of the Sunk Sand off Harwich.	51 47	1 29	1	Fixed.	- -	9	Red; carries a ball.	36	- -	1802
Harwich.	Entr. of Harb. S. W. of the town.	51 56 39	1 17 8	2	Fixed.	- -	12 9	White.	69 29	68 25	1818
Shipwash, light-vessel.	N. W. end of Shipwash Sand.	52 1	1 38	1	Fixed.	- -	10	Red; carries a ball.	38	- -	1837
Orford.*	Orfordness.	52 4 50	1 34 15	2	Fixed.	- -	12	White.	- -	83 55	1792
Pakefield.*	South part of Pakefield Cliff.	52 26	1 44	1	Fixed.	- -	9	White.	68	23	1832
Lowestoffe.*	Lowestoffe.	52 29 10	1 45 14	2	Fixed.	- -	16 10	White.	119 38	35	1609
Stanford, light-vessel.	North end of Newcome Sand, off Lowestoffe.	52 29	1 47	2	Fixed.	- -	9	Red; carries a ball.	23	- -	1802
St. Nicholas Gat, light-vessel.	S.W. point of Kettle Bottom Sand.	52 34	1 47	1	Fixed.	- -	10	Red; carries a ball.	38	- -	1837
Winterton.*	Winterton Point.	52 43	1 41	1	Fixed.	- -	14	White.	- -	52	1790
Newarp, light-vessel.	North end of the Newarp Sand.	52 44	1 52	3	Fixed.	- -	10 8	Red; carries a ball.	Mainmast 38, others 27.	- -	1791
Haisborough, light-vessel.	North end of Haisborough Sand.	52 58	1 36	2	Fixed.	- -	10	Red; carries a ball.	38	- -	1831
Haisborough.*	Near Haisborough.	52 49	1 38	2	Fixed.	- -	18 15	Red.	137 100	77 63	1791
Cromer.*	On Cromer Cliffs.	52 55 20	1 19 30	1	Revolving.	Every minute.	22	White.	274	38	1719
Hunstanton, or [illegible].*	Hunstanton Point.	52 56 54	0 29 50	1	Fixed.	- -	13	White.	115	49	1665
[illegible]well, light-vessel.	Off the hook of the Long Sand, Lynn Deeps.	53 1 40	0 25	2	Fixed.	- -	10	Red; carries a ball.	38	- -	1828
Leman and Ower, light-vessel.	Between Leman and Ower Sands.	53 9	2 3	2	High revolving, low fixed.	- -	10	Carries a red ball at each masthead.	38 27	- -	1840
Dudgeon, light-vessel.	Dudgeon Shoal.	53 15	0 58 40	1	Fixed.	- -	10	Red; carries a ball.	38	- -	1[illegible]
Spurn, light-vessel.	Off Spurn Point, River Humber.	53 34	0 13	1	Revolving.	Every ½ minute.	9	Red; carries a ball.	38	- -	1830

English Light-Houses — *continued.*

	Name of Light.	Place.	N. Latitude.	E. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution or Flash.	Miles seen in clear Weather.	Colour or any Peculiarity of Light-house.	Height in Feet of Lantern, above High Water.	Height in Feet of Building.	Year erected.
			° ′ ″	° ′ ″								
	Spurn.*	Spurn Point.	53 34 44	0 7	2	Fixed.	- -	15 11	Highest, dark brick; lowest, dark red.	100 50	90 44	1776
Humber River.	Bull Sand, light-vessel.	S. E. end of Bull Sand.	53 34	0 5 W. Long.	1	Fixed.	- -	10	Red; carries a ball.	- -	- -	1832
	Killingholme.	S. Killingholme.	53 39	0 12	2	Fixed.	- -	11	White.	57 43	50 35	1836
	Paull.	On Paull Cliff.	53 43	0 13	1	Fixed.	- -	7	White.	56	30	1836
	Heebles, light-vessel.	S. side of Heebles Channel.	53 44	0 16	1	Fixed.	- -	5	Red; carries a ball.	18	- -	
	Flamborough.	Flamborough Head.	54 7	0 5	1	Revolving.	Every 2 minutes.	19	White.	214	72	1806
	Scarborough.*	Vincent pier head.	54 17	0 23	1	Fixed.	- -	13	White.	41	48	1806
	Whitby.	West pier head.	54 30	0 37	1	Fixed.	- -	13	Yellowish stone.	83	60	1831
Tees River.	Bran Sands.	West part of Bran Sands.	54 38	1 13	2	Fixed.	- -	- -	- -	- -	- -	
	Seaton.	High light half a mile inland, and low light on the shore near Long-scar Rocks.	54 40	1 12	2	Fixed.	- -	13	- -	- -	85 30	
	Care Sand, light-vessel.	Off S. part of N. Care Sand, W. side of entrance.	54 38	1 13	1	Fixed.	- -	- -	- -	- -	- -	1836
	Hartlepool.	Pier head.	54 41	1 11	2	Fixed.	- -	- -	- -	- -	- -	1836
	Sunderland.	North and South Piers.	54 55	1 22	2	Fixed.	- -	13 10	Yellow.	75 32	64 25	1802 1780
	Tyne.	Front of Dock-Way Square; lowest near Clifford Fort.	55 0	1 26	2	Fixed.	- -	16 13	White.	123 77	49 76	1818 1810
	Tynemouth.*	Tynemouth Castle Yard.	55 1	1 25	1	Revolving.	Every minute.	17	Stone.	148	62	1802
	Blyth.	South end of the town.	55 7	1 30	1	Fixed.	- -	11	White.	52	37	
	Coquet.	S.W. part of Coquet Island.	55 20	1 32	1	Fixed.	- -	- -	Granite, tower, with turretted parapet.	80	57	
	Longstone.*	Longstone Rock.	55 39	1 38	1	Intermitting.	Every ½ minute.	13	Painted red.	75	71	1827
	Farn.*	Highest near S.W. point of Farn Island; lowest near the N.W. point.	55 37	1 40	2	Highest intermitting; Lowest fixed.	Every ½ minute.	14 10	White.	Revolving 28; the other 28.	28 16	1776 1816
	Berwick.	East end of the pier.	55 46	1 58	2	Fixed.	- -	11 8	Stone.	44 24		
	Skinburness.	On the Ness.										
	Maryport Harbour.	South Pier.	54 44	3 33	2	Fixed.	- -	9 8	Brown.	39 23	17	1796
	Workington.	End of Johns and Wooden Piers.	54 40	3 36	2	Fixed.	- -	11	- -	53	23	1825
	Harrington Harbour.	Pier Head.	54 38	3 36	1	Fixed.	- -	11	On a mast.	44	36	1797
	Whitehaven	New quay.	54 33	3 38	2	One Revolving one Fixed.	Every 2 minutes.	11	White.	47	37	1821
	St. Bees.*	St. Bees Head.	54 31	3 39	1	Fixed.	- -	3	White.	335	33	1718
	Walney.*	South Point of Walney I.	54 4	3 12	1	Revolving.	Every 5 minutes.	13	Stone.	70	60	1790
	Wyre.	N.E. elbow of North Wharf Bank.	- -	- -	1	Fixed.	- -	10	Octagonal on piles.	30	- -	1840
	Fleetwood.	High light in the Town, Low light on the Esplanade.	- -	- -	2	Fixed.	- -	- -	Upper red, lower stone colour.	90 30	- -	1841
	Lytham Harbour.	N. side of entrance to River Ribble.	53 45	2 57	1							
	Formby, Light-vessel	In the New Channel	53 31	3 10	2	- -	- -	8	Painted red; carries a ball.	- -	- -	1836
	Crosby.	1¼ miles N. of Crosby Point.	53 31	3 4	1	Fixed.	- -	13	Wood.	81	80	1839
	Crosby, Light-vessel.	E. elbow of Burbo Bank.	- -	- -	1	Fixed.	- -	- -	Painted red; carries a red ball.	- -	- -	1840
	Black Rock.	Rock Pt., entrance of the Mersey.	53 26 45	3 2 56	1	Revolving.	Every minute.	14	White.	8	75	1830
	Leasowe.	On the shore between the Mersey and Dee.	53 24 49	3 7 27	1	Fixed.	- -	15	White	118	118	
	Bidston.*	Bidston Hill	53 24	3 4	1	Fixed.	- -	23	Stone.	300	50	
	Hoylake.	Near Hoylake Church.	53 24	3 11	2	Fixed.	- -	13 11	White. White.	71 47	39 19	1763
	Liverpool N.W. Light-vessel.	Off the Horse and Helbre Channels.	53 28	3 17	3	Fixed.	- -	10	Carries a flag.	36	- -	1814
	Air.*	Ayr Point at high-water mark.	53 21 26	3 19 14	2	Fixed.	- -	11 7	Striped red and white horizontally.	49 12	49	1776 1817
	Lynas.*	Point Lynas, I. of Anglesea.	53 25 0	4 17 16	2	Intermitting.	Twelve seconds.	16	Castellated building, white base.	128	19	1835

English Light-houses — *continued.*

Name of Light.	Place.	N. Latitude.	W. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution, or Flash.	Miles seen in clear Weather.	Colour, or any Peculiarity of Light-house.	Height in Feet of Lantern above High Water.	Height in Feet of Building.	Year erected.
		° ′ ″	° ′ ″								
Menai.	Trwyn Du Point.	53 18 51	4 2 21	1	Fixed.	- -	10	Stone.	61	61	1837
Amlwch Port.	North Pier.	53 25	4 20	1	Fixed.	- -	9	White.	26	9	1817
Skerries.*	Isle of Skerries.	53 25	4 55	1	Fixed.	- -	15	White.	117	54	1714
Holyhead Harbour.	Pier Head.	53 19	4 36	1	Fixed.	- -	11	Stone.	44	37	1820
South Stack.*	South Stack Rock, off the N.W. point of Holyhead Island.	53 18	4 41	1	Revolving.	Every 2 minutes.	19	White.	201	59	1809
Bardsey.*	Bardsey Island.	52 45	4 47	1	Fixed.	- -	17	4-sided white tower.	129	79	1821
Aberystwith.*	Entrance of the harbour.	52 25	4 6	2	Fixed.						
South Bishop.	South Bishop Rock.	51 51	5 25	1	Revolving.	Every 20 seconds.	- -	- -	144	56	1839
Smalls.*	Smalls Rock.	51 43	5 40	1	Fixed.	- -	13	Red.	70	58	1778
St. Ann's, Milford.*	St. Ann's Point.	51 41	5 10 25	2	Fixed.	- -	19	White.	192	44	1714
Weare, light-vessel.	Off Weare Spit.	51 41 48	4 58 36	1	Fixed.		17		159	17	
Carr, light-vessel.	Outer edge of Carr Bank.	51 42 6	4 57 40	1	Fixed.						
Caldy.*	Caldy Island, south point.	51 37 56	4 10 57	1	Fixed.	- -	19	White.	210	40	1829
Pembrey Harbour.	Entrance of Burry River.	51 41	4 16	1	Fixed.	- -	9	White, black top.	35	18	
Mumbles.*	Mumbles Head.	51 34 3	3 58 10	1	Fixed.	- -	15	White.	114	56	1798
Swansea.	Western Pier Head.	51 37	3 56	1	Fixed.	- -	9	White, blak top.	28	20	1803
Nash.*	Nash Point.	51 24	3 33	2	Fixed.	- -	18 16	White.	167 122	90 45	1832
Cardiff.	On the pier.										
Usk.*	West side of the entrance to the river Usk.	51 32	3 0	1	Fixed.	- -	10	White.	39	32	1821
Flatholm.*	Flatholm Island, south point.	51 22 35	3 7 3	1	Fixed.	- -	17	White.	156	77	1757
English & Welsh Grounds, light-vessel.	South side of the Bristol channel.	51 26 30	2 58	1	Revolving.	- -	- -	Red; carries a ball.	38	- -	1858
Avon.	East side of entrance.	51 30	2 42	1	Fixed.	- -	13	- -	70	65	1840
Bridgewater, or Burnham.	East side of the entrance of the Parret.	51 15	3 0	2	Upper intermitting. Lower fixed.	Bright 3½ min.; then obscured half a minute.	16 12	Upper white, lower with black streak.	91 23	- -	1832
Ilfracombe.	Lantern Hill, north side of the Harbour.	51 13	4 7	1	Fixed.	- -	15	White.	100	8	
Bideford Harbour.	Braunton Sands, N. side of the river's mouth.	51 6	4 12	2	Fixed.	- -	14 11	White.	86 40	74 40	1820
Lundy.*	Lundy Island.	51 10 7	4 40 15	2	Upper intermitting. Lower fixed.	Every 2 minutes.	30 27	Stone.	540	89	1820

II. Scotch Light-houses.

			W. Long.							
Inchkeith.*	Summit of Inchkeith Island.	56 2	3 8	1	Revolving.	Every minute.	20	Stone.	220	45	1804
Leith.	Eastern Pier.	55 59	3 10	2	Fixed.	- -	7	White. Red.	10	- -	1780 1831
Newhaven.	On the pier.	55 59	3 11	1	Fixed.	- -	3	- -	20		
Granton.	On the pier.	55 59	3 15	1	Fixed.	- -	- - -	- -	20		
Burntisland.	Eastern Pier.	56 4	3 14	1	Fixed.	- -	8	White.	20	- -	1800
Kinghorn.	Eastern Pier.	56 4	3 11	1	Fixed.	- -	8	White.	20		1800
Kirkcaldy.	N. E. side of entr.	56 7	3 9	1	Fixed.	- -	8	- -	20		
Isle of May.*	Summit of the Isle.	56 11	2 33	1	Fixed.	- -	21	Stone.	240	57	1816
Bell Rock.*	Centre of the rock.	56 26	2 23	1	Revolving.	Every 2 minutes.	14	White.	90	100	1811
Port on Craig.	South side of the ferry.	56 27	2 49	2	Fixed.	- -	12 11	White.	65 45	53 33	1820
Newport.	On the western ferry pier.	56 26	2 57	2	Fixed	- -	7 8	White.	10 16		
Dundee Harbour.	Middle and Eastern Piers.	56 28	2 58	2	Fixed.	- -	7	White.	10 12	- -	1825
Buttonne s.*	Buttonness.	56 28	2 45	2	Fixed.	- -	14 12	White.	85 65	70 60	1720
Arbroath.	Northern Pier.	56 33	2 35	1	Fixed.	- -	8	White.	15	- -	1826
Montrose.	North side of the entrance.	56 42	2 27	2	Fixed.	- -	10 11	White.	55 45	- -	1820
Stonehaven.	On the pier.	56 58	2 12	2	Fixed.	- -	- -	- -	20		
Girdleness.*	Girdleness	57 8	2 3	2 in one tower.	Fixed.	- -	18 15	- -	185 115	- -	1833
Aberdeen.	North Pier Head. ¼ mile up Harbour on South Shore.	57 9 - - -	2 4 - - -	1 2	Fixed. Fixed.	- - - -	8 5	Red. Red.	20 47 30	- -	1842
Buchanness.*	Buchanness.	57 28	1 46	1	Intermitting.	Every 5 seconds.	16	Stone.	130	100	1827
Kinnaird.*	Kinnaird Head.	57 42	2 1	1	Fixed.	- -	16	Stone.	120	57	1787
Tarbet.*	Tarbetness.	57 51	3	1	Intermitting.	Every 3 minutes.	18	Stone.	175	120	1830
Dunnet.*	Dunnet Head.	58 40	3 22	1	Fixed.	- -	23	Stone.	346	45	1831
Kirkwall	Pier head.	59 0	2 58	1	Fixed.						
Pentland Skerries.*	On Pentland Skerry Island.	58 41 58	2 55	2	Fixed.	- -	18 16	Stone.	170 140	50 10	1794

LIGHT-HOUSE.

Scotch Light-houses — *continued.*

Name of Light.	Place.	N. Latitude.	W. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution or Flash.	Miles seen in clear Weather.	Colour or any peculiarity of Light-house.	Height in Feet of Lantern, above High Water.	Height in Feet of Building.	Year erected.
		° ′ ″	° ′ ″								
Start*	Start Point, Sanday I. Orkneys.	59 18	2 24	1	Revolving.	Every minute.	15	Stone.	100	80	1806
Sumburgh.*	Sumburgh Head, S. point of the Shetlands.	59 51	1 16	1	Fixed.	- -	23	Stone.	300	35	1821
Cape Wrath.*	Cape Wrath, N.W. point of Scotland.	58 37	5 0	1	Revolving.	Every 2 minutes.	26	White.	400	50	1828
Stornoway.	Stornoway Harbour, Lewis Isle.	58 14	6 23								
Glass.*	N.E. Point of Island Glass, Harris Isles.	57 52	6 33	1	Fixed.	- -	16	Stone.	130	80	1789
Bara Head.*	Highest part of Berneray I.; southern point of Hebrides.	56 48	7 38	1	Intermitting.	Every 3 minutes.	33	- -	680	- -	1833
Skerryvore.	Skerryvore Rock.	56 11	7 10								
Lismore.*	Mousdale I., Argyll.	56 30	5 58	1	Fixed.	- -	15	- -	103	- -	1833
Rhins of Hay.*	Oversay I., off S. W. point of Hay.	55 41	6 29	1	Intermitting.	Every 5 seconds.	17	Stone.	150	80	1825
Kintyre.*	S. W. headland of Mull of Kintyre.	55 19	5 49	1	Fixed.	- -	22	Stone.	297	28	1788
Campbelton.	Campbelton Loch, on the S. beach.	55 24	5 41	1	Fixed.	- -	9	White	25	- -	1827
Pladda.*	Pladda I., off S.E. point of Arran I.	55 25	5 7	2	Fixed.	- -	16	Stone.	150	80	1790
Cumbrae.*	Western side of little Cumbrae I.	55 43	4 55	1	Fixed.	- -	13 15	White.	77 106	27 28	1757
Toward*	Toward Point.	55 52	4 59	1	Revolving.	Every minute.	11	White.	53	44	1812
Clough.*	Clough Point.	55 58	4 52	1	Fixed.	- -	13	White.	76	70	1797
Greenock.	Custom-house Pier.	55 57	4 45	1	Fixed.						
Port Glasgow.	Pier.	55 57	4 41	2	Fixed.						
Bowling Bay.	Entrance of Firth of Clyde Canal.	- -	- -	1	Fixed.						
Troon Harbour.	South End of the Pier.	55 33	4 41	1	Intermitting.	Every minute.	9	White.	25	- -	1827
Ayr Harbour.	North Pier.	55 27	4 38	3	Fixed.	- -	Tide 7, the others 10.	White.	12 to 35	- -	1790 1820
Corsewall.*	Corsewall Point.	55 1	5 10	1	Revolving.	Every 2 minutes.	15	Stone.	112	92	1817
Port Patrick.	South Pier.	54 50	5 5	1	Fixed.	- -	9	White.	25	- -	1790
Mull of Galloway.*	South Point of Wigtonshire.	54 38	4 52	1	Intermitting.	Every 3 minutes.	23	Stone.	345	70	1830
Ross Island.	- -	54 46	4 5	1	Revolving.	- -	18	- -	175	- -	1812
Southerness.*	Southerness Point.	54 53	3 37	1	Fixed.	- -	11	White.	50	- -	1789

III.—ISLE OF MAN LIGHT-HOUSES.

Point of Ayr.	Point of Ayr, Isle of Man.	54 28	4 23	1	Revolving.	Every 2 minutes.	15	Stone.	106	80	1818
Peel Harbour.	E side of entrance.	54 13	4 42	1	Fixed.	- -	8	White.	21	13	1811
Calf of Man.*	S.W. side of Calf I.	54 3	4 49	2	Revolving.	Every 2 minutes.	25 23	Stone.	396 305	50 55	1818
Port le Mary.	S. side of entrance.	54 4	4 45	1	Fixed.	- -	9	White.	85	17	1812
Castletown Harbour.	S. side of entrance.	54 5	4 40	1	Fixed.	- -	8	White.	42	16	1765
Derby Haven.	Entrance of the harbour.	54 5	4 37	1	Fixed.	- -	11	White.	46	31	1650
Douglas.	Douglas Head	54 9	4 28	1	Fixed.	- -	15	Brown Stone. Buff.	101	61	1832
Douglas Harbour.	North Pier Head.	54 10	4 29	1	Fixed.	- -	10	White.	36	27	1796
Ramsay Harbour.	S. side of entrance.	54 21	4 22	1	Fixed.	- -	10	White.	35	29	1800

IV.—IRISH LIGHT-HOUSES.

Cape Clear.*	Cape Clear Island.	51 26 3	9 29 20	1	Revolving.	Every 2 minutes.	27	White.	455	42	1817
Kinsale.	Old Head of Kinsale.	51 36 45	8 32 16	1	Fixed.	- -	22	White.	294	42	1805
Kinsale Harbour.	Fort Charles, east side of the harbour.	51 42	8 32	1	Fixed.	- -	14	White.	98	35	1804
Cork Harbour.*	Roche Point, east side of entrance.	51 48	8 14	1	Fixed.	- -	14	White.	92	26	1817
Dunmore Harbour	Pier Head, west side of entrance to Waterford.	52 10	6 58	1	Fixed.	- -	11	White.	44	36	1826
Duncannon.	Duncannon Fort, east side of Waterford Harbour.	52 13	6 56	2	Fixed.	- -	10	White.	40	25	1803
	Duncannon, North, east side of Waterford Harbour.	- -	- -	1	Fixed.	- -	16	White.	115	- -	1838
Hook Tower.*	Hook Head, east side of entrance to Waterford.	52 7 25	6 55 58	1	Fixed.	- -	16	White.	139	110	1791
Saltees, light-vessel.*	Off Coningbeg Rock the southernmost of the Saltee Is. (now erecting).	52 3	6 37	2	Fixed.	- -	9	Carries a flag.	25	- -	1824
Coningbeg Rock, Tuskar.*	Tuskar Rock.	52 12 9	6 12 37	1	Revolving.	Every 2 minutes.	15	White.	101	81	1815
Arklow, light-vessel.*	South end of Arklow Bank.	52 44	5 57	1	- -	- -	9	Carries a flag.	25	- -	1824
Wicklow.*	Wicklow Head.	52 58	6 0	2	Fixed.	- -	21	White.	250	58	1818
Kish, light-vessel.*	Off the north point of Kish Bank.	53 19	5 58	3	Fixed.	- -	16 9	Carries a flag.	121 25	29 - -	1811
Kingstown.	East pier of Kingstown Harbour, Dublin Bay.	53 18	6 9	1	Revolving.	Every ½ minute.	9	Brown.	34	19	1822
	W. Pier.	- -	- -	1	Fixed.	- -	2				

Irish Light-houses — *continued.*

Name of Light.	Place.	N. Latitude.	W. Longitude.	Number of Lights.	Fixed, Intermitting, or Revolving.	Interval of Revolution, or Flash.	Miles seen in clear Weather.	Colour or any Peculiarity of Light-house.	Height in Feet of Lantern above High Water.	Height in Feet of Building.	Year erected.
		° ′ ″	° ′ ″								
Poolbeg.*	End of S. wall, at the entrance to the river of Dublin.	53 21 41	6 10 15	2	Fixed.	- -	12	White.	68	63	1768
North Wall.	End of N. wall, or N. quay of Dublin.	53 21	6 15	1	Fixed.	- -	10	White	33	28	1820
Howth Baily.*	Howth Baily Point, N. side of Dublin Bay.	53 22	6 3	1	Fixed.	- -	15	White.	114	42	1813
Howth Harbour.	East Pier Head.	53 24	6 4	1	Fixed.	- -	11	White.	43	37	1818
Ballruggen Harbour.	Pier, south side of the entrance.	53 37	6 12	1	Fixed.	- -	10	White.	35	35	1769
Drogheda Sandhills.	South side of River Boyne.	53 43	6 16	3	Fixed.	- -	- -	On timber framings.	30	20 30 48	1842
Carlingford.*	Haulbowline Rock.	54 1	6 6	2	Fixed.	- -	15	White.	101	11	1823
Carlingford Lough	Greenore Point.	54 1 53	6 7 52	1	Revolving.	Every 15 seconds.	9	White.	29	26	1830
St. John Point, Ardglass Harbour.	Dundrum Bay (now erecting). Pier, S.W. side of entrance.	54 15	5 37	1	Fixed.	- -	11	- -	- -	- -	1816
South Rock.*	S. Rock.	54 24	5 26	1	Revolving.	Every minute and half.	12	White.	52	60	1797
Donaghadee Harbour.	S.E. Pier Head.	54 29	5 32	1	Fixed.	- -	12	Grey.	56	53	1836
Copeland.*	Small Copeland I.	54 42	5 32	1	Fixed.	- -	16	White.	131	52	1796
Lough Larne.	Fairies Point.	54 51	5 48	1	Fixed.	- -	11	White.	42	- -	1839
Maidens.*	Maiden Rocks, N. and S.	54 56	5 44 5 44	2	Fixed.	- -	15 11	White.	84 94	60 60	1828
Innishowen.	Donagree Point.	55 14	6 56	2	Fixed.	- -	13	White.	67	- -	1837
Innistrahul.*	Innistrahul I.	55 26	7 14	1	Revolving.	Every two minutes.	18	White.	167	26	1812
Lough Swilly.*	Fanner Point.	55 16 25	7 38 1	1	Fixed.	- -	14	White.	90	26	1816
Tory Island.*	N.W. point of Is.	55 16 26	8 15 0	1	Fixed.	- -	16	Stone.	125	63	1852
Rathlin-o-Birne I.	(now erecting).										
Killybegs.*	St. John's Point.	54 33	8 28	1	Fixed.	- -	14	White.	104	41	1831
Killybegs Harbour	W. side Rotten I.	54 37	8 27	1	Fixed.	- -	12	White.	67	- -	1838
Sligo.*	Black Rock, in Sligo Bay.	54 18	8 33	1	Fixed.	- -	13	- -	74	- -	1835
	Oyster Island.	54 18	8 35	2	Fixed.	- -	11	White.	37 47	- -	1857
Eagle.*	On Eagle I. a large Rock, W.S.W. 3 miles from Erris Head.	54 16	10 1	2	Fixed.	- -	20	- -	220	- -	
Clare Island.*	N. Point of Clare I. outside of Clew Bay.	53 50	9 58	1	Fixed.	- -	27	White.	487	26	1806
Innisgort.*	Innisgort I. in Clew Bay.	53 51	9 40	1	Fixed.	- -	10	White.	36	26	1827
Slyne Head.*	On the outermost Island off Slyne Head.	53 23 51	10 16 24	2	One Revolving. One Fixed.	Every two minutes.	15	White	104	73	1836
		53 23 46	10 16 22	-			14	circular towers	96	73	
Arran.*	Summit of Great Arran I. in Galway Bay.	53 7 38	9 42 22	1	Revolving.	Every three minutes.	28	White.	498	37	1817
Mutton Island.	Mutton I. off the Town of Galway.	53 15 14	9 3 26	1	Fixed.	- -	10	White.	33	26	1817
Loophead.*	Loophead, N. side of entrance to River Shannon.	52 33 39	9 56 11	1	Fixed.	- -	22	White.	269	49	1802
Kilkadraan.	Kilkadraan Point, in River Shannon	52 35	9 40	1	Fixed.	- -	16	White.	133	26	1821
Tarbert.	On Tarbert Rock, in River Shannon.	52 36	9 20	1	Fixed.	- -	13	White.	58	74	1834
Valentia.	Cromwell's Fort.	- - -	- - -	1	- -	- -	12	- -	54	- -	1841
Skelig.*	On Skellig Rocks, 7 miles off shore	51 46 10	10 34 10	2	Fixed.	- -	25 18	White.	372 173	26 26	1826
Roanharris I.	(now erecting).										
Crookhaven.	Roe Island Point, North side of Entrance.	51 28 35	9 42 31	1	Fixed.	- -	- -	- -	67	- -	1813

LIMA, the capital of Peru, on the west coast of South America, in lat. 12° 2′ 45″ S., lon. 77° 7′ 15″ W. Population variously estimated; but may probably amount to from 50,000 to 60,000.

Callao, the port of Lima, is about 6 miles W. from the latter. The harbour lies to the north of a projecting point of land, in the angle formed by the small uninhabited island of San Lorenzo. Previously to the emancipation of Peru, and the other *ci-devant* Spanish provinces in the New World, Lima was the grand *entrepôt* for the trade of all the west coast of South America: but a considerable portion of the foreign trade of Peru is now carried on through Buenos Ayres, and the former is also in the habit of importing European goods at second hand from Valparaiso and other ports in Chili. The exports from Lima consist principally of silver, which is by far the most important article, copper ore, bark, soap, Vicunna wool, &c. The imports consist principally of cotton stuffs, linens, woollens, and hardware, principally from England; silks, brandy, wine, and quicksilver from Spain and France; stock-fish and flour from the United States, indigo from Mexico, Paraguay herb from Paraguay, spices, dye-stuffs, &c. Timber for the construction of ships and houses is brought from Guayaquil. The declared value of the different articles of British produce and manufacture exported to

Peru in 1842, amounted to 684,313*l.* The total value of the imports into Callao in 1840 was estimated at 1,171,642*l.*

Monies, *Weights*, and *Measures*, same as those of Spain; for which, see CADIZ.

The following statement has been furnished by Mr. B. H. Wilson, the very intelligent English consul in Peru.

Statement of the Total Quantities of Peruvian and Bolivian Native Products, with the Prices and Values thereof, exported from Peru to Europe and the United States, in 1838 and 1839:—Exchange 4*s.* per Dollar.

Articles exported.	Ports of Export.	Exports in 1838. Quantity.	Prices.	Total Value. Dollars.	£ sterling.	Exports in 1839. Quantity.	Prices.	Total Value. Dollars.	£ sterling.
		Quintals.	*Per quintal.* $ ct. £ s.	$ ct.	£ s.	*Quintals.*	$ ct. £ s.	$ ct.	£ s.
Bark, Calisaya	Arica and Yslay	4,809	30 0 = 6 0	144,270 0	28,854 0	866½	35 0 = 7 0	30,327 4	6,065 10
Do. red, crown and other kinds	Payta	670	30 0 = 6 0	20,100 0	4,020 0	- -	- -	20,000 0	4,000 0
	Total	5,479	- -	164,370 0	32,874 0	- -	- -	50,327 4	10,065 10
		Dollars.				*Dollars.*			
Bullion and specie	From South Peru to Great Britain and other countries	1,718,206	- -	1,718,206 0	343,641 4	1,030,645	- -	1,030,645 0	206,129 0
	From North Peru to Great Britain	2,473,856	- -	2,473,856 0	494,771 1	3,173,496	- -	3,173,496 0	634,699 0
Returns in bills for supplies to foreign vessels of war, chiefly U. States, and public agents	- -	150,000	- -	150,000 0	30,000 0	150,000	- -	150,000 0	30,000 0
Bullion and specie	From North Peru to United States, and on its account to China	1,200,000	- -	1,200,000 0	240,000 0	1,200,000	- -	1,200,000 0	240,000 0
	To France	500,000	- -	500,000 0	100,000 0	500,000	- -	500,000 0	100,000 0
	Germany								
	Italy	500,000	- -	500,000 0	100,000 0	500,000	- -	500,000 0	100,000 0
	Spain								
	Total	6,542,062	- -	6,542,062 0	1,508,112 8	6,554,141	- -	6,554,141 0	1,310,828 4
		Dozens.	*Per dozen.*			*Dozens.*	*Per dozen.*		
Chinchilla Skins	Arica	2,742	4 0 = 0 16	10,968 0	2,193 12	2,118	4 4 = 0 18	11,016 0	2,203 4
		Quintals.	*Per quintal.*			*Quintals.*	*Per quintal.*		
Copper ore, or barilla	Arica	12,073	9 0 = 1 16	108,657 0	21,731 8	10,121	9 0 = 1 16	91,089 0	18,217 16
Copper in bars	Arica	- -	- -	- -	- -	861	17 0 = 3 8	14,637 0	2,927 8
Cotton	Arica	166	12 0 = 2 8	1,992 0	398 8	589½	14 4 = 2 18		
	Yslay	- -	- -	- -	- -	30	14 0 = 2 16	6,067 6	1,213 11
	Pisco	2,546	13 4 = 2 14	34,371 0	6,874 4	7,158	13 4 = 2 14	96,633 0	19,326 12
	Samanca	1,200	13 0 = 2 12	15,600 0	3,120 0	4,929	13 4 = 2 14	66,541 4	13,308 6
	Payta	21,000	13 4 = 2 14	283,500 0	56,700 0	15,000	13 0 = 2 12	195,000 0	39,000 0
Cotton uncleaned or in seed	Other parts of the coast	5,500	4 4 = 0 18	24,750 0	4,950 0	2,111½	- -	7,558 0	1,511 12
	Total	30,412	- -	360,213 0	72,042 12	29,618	- -	371,800 2	74,360 1
		Hides.	*Per hide.*			*Hides.*	*Per hide.*		
Hides, ox and cow	Arica and Yslay	540	2 0 = 0 8	1,080 0	216 0	617	2 0 = 0 8	1,234 0	246 16
	Callao	7,615	2 2 = 0 9	17,133 6	3,426 15	2,500	2 2 = 0 9	5,625 0	1,125 0
	Total	8,155	- -	18,213 6	3,642 15	3,117	- -	6,859 0	1,371 16
							Per thousand.		
Horns, cow	Callao	- -	- -	- -	- -	8,000	40 0 = 0 8	320 0	64 0
						Skins.			
Seal skins	Arica	- -	- -	- -	- -	371	1 4 = 0 6	556 4	111 6
		Quintals.	*Per quintal.*			*Quintals.*	*Per quintal.*		
Saltpetre, nitrate of soda	Iquique	129,610	2 0 = 0 8	259,220 0	51,844 0	149,576	2 0 = 0 8	299,152 0	59,830 8
Sugar	Pisco and Cerro Azul	14,900	3 4 = 0 14	52,150 0	10,430 0	14,900	3 4 = 0 14	52,150 0	10,430 0
Tin	Arica	6,265	12 4 = 2 10	78,312 4	15,662 10	4,759	13 0 = 2 12	61,867 0	12,373 8
						Skins.	*Per skin.*		
Wool, Vicunna	Arica	- -	- -	- -	- -	1,905	0 6 = 0 3	752 2	150 9
							Per quintal.		
Wool, sheep's	Arica and Yslay	22,415	13 4 = 2 14	302,602 4	60,520 10	16,856	12 0 = 2 8	202,272 0	40,406 8
	Callao	4,000	12 4 = 2 10	50,000 0	10,000 0	1,000	12 4 = 2 10	50,000 0	10,000 0
	Total	26,415	- -	352,602 4	70,520 10	20,856	- -	252,272 0	50,406 8
Wool, Alpaca	Arica and Yslay	4,595	25 0 = 5 0	114,825 0	22,965 0	13,255	30 0 = 6 0	397,650 0	79,530 0

N.B. — The exportation of Guano (which see) began in 1841.

General Summary of the above Account.

Nature of Export.	Value of Exports in 1838. Dollars.	£ sterling.	Value of Exports in 1839. Dollars.	£ sterling.	Nature of Exports.	Value of Exports in 1838. Dollars.	£ sterling.	Value of Exports in 1839. Dollars.	£ sterling.
	$ ct.	£ s.	$ ct.	£ s.		$ ct.	£ s.	$ ct.	£ s.
Bark	164,370 0	32,874 0	50,327 4	10,065 10	Saltpetre, nitrate of soda	259,220 0	51,844 0	299,152 0	59,830 8
Bullion and specie	6,542,062 0	1,508,412 8	6,554,141 0	1,310,828 4	Sugar	52,150 0	10,430 0	52,150 0	10,430 0
Chinchilla skins	10,968 0	2,193 12	11,016 0	2,203 4	Tin	78,312 4	15,662 10	61,867 0	12,373 8
Copper ore, barilla	108,657 0	21,731 8	91,089 0	18,217 16	Wool, Vicunna	- -	- -	752 2	150 9
Copper in bars	- -	- -	14,637 0	2,927 8	Sheep's	352,602 4	70,520 10	252,272 0	50,406 8
Cotton	360,213 0	72,042 12	371,800 2	74,360 1	Alpaca	114,825 0	22,965 0	397,650 0	79,530 0
Hides, ox and cow	18,213 6	3,642 15	6,859 0	1,371 16					
Horns, cow	- -	- -	320 0	64 0					
Seal skins	- -	- -	556 4	111 6	Total	8,061,593 6	1,612,318 13	8,161,319 4	1,632,869 18

Account of the Amount of Duties collected at the Custom-house of Callao in each Year, from 1830 to 1840, both inclusive; — Exchange 4s. per Dollar.

Years.	Amount of Revenue. Dollars.	£ sterling.	Observations.
		£ s. d.	
1830	1,810,382	362,076 8 0	In this amount is not included the income derivable from the duty of 5 per cent. payable on the export of dollars; as that duty is collected by the Treasury of Lima.
1831	1,548,654	309,730 16 0	
1832	1,523,604	304,720 8 0	Upon an average, the annual amount of this duty may be stated at about $150,000 = 30,000l.
1833	1,653,966	330,793 4 0	
1834	1,090,150	218,030 0 0	From 1830 to about September 1836, not as much as two thirds of the duties on imports were paid in cash, the remainder being liquidated in government paper purchasable in the market at about 5 to 20 per cent.
1835	1,025,513	205,102 12 0	
1836	975,108	195,021 12 0	From September 1836 to the close 1838, the whole of the duties, with the exception of about 4 per cent. discount for ready money, were paid in cash; and from August 1839, to December 1840, about 5 4ths of the duty have been paid in cash, and the rest in government paper.
1837	1,218,092	243,618 8 0	
1838	881,850	176,370 0 0	
1839	1,140,055	228,011 16 0	
1840	1,200,000	240,000 0 0	
Total	13,866,614	2,763,422 8 0	Average of the 11 years, $1,260,965 = £251,393

LIME (Ger. *Kalk*; Fr. *Chaux*; It. *Calcino, Calce*; Sp. *Cal*; Rus. *Iswest*), an earthy substance, of a white colour, moderately hard, but which is easily reduced to powder, either by sprinkling it with water or by trituration. It has a hot burning taste, and in some measure corrodes and destroys the texture of those animal bodies to which it is applied. Specific gravity, 2·3. Calcium, the metallic basis of lime, was discovered by Sir H. Davy.

There are few parts of the world in which lime does not exist. It is found purest in limestone, marble, and chalk. None of these substances is, however, strictly speaking, lime; but they are all easily converted into it by a well-known process; that is, by placing them in kilns or furnaces constructed for the purpose, and keeping them for some time in a white heat, — a process called the burning of lime. — (*Thomson's Chemistry*.)

The use of lime as mortar in building has prevailed from the earliest antiquity, and is nearly universal. It is also very extensively used in this country, and in an inferior degree in some parts of the Continent and of North America, as a manure to fertilize land. But it is a curious fact that the use of lime as a manure is entirely a European practice; and that its employment in that way has never been so much as dreamed of in any part of Asia or Africa. Lime is of much importance in the arts, as a flux in the smelting of metals, in the shape of chlorate in bleaching, in tanning, &c. Lime and limestones may be carried and traded coastwise without any customs document whatever. Its consumption in this country is very great.

LIME (Fr. *Citronier*; Ger. *Citrone*; Hind. *Neembo*), a species of lemon (*Citrus medica*, var. 5 C.), which grows in abundance in most of the West India islands, and is also to be met with in some parts of France, in Spain, Portugal, and throughout India, &c. The lime is smaller than the lemon, its rind is usually thinner, and its colour, when the fruit arrives at a perfect state of maturity, is a fine bright yellow. It is uncommonly juicy, and its flavour is esteemed superior to that of the lemon; it is, besides, more acid than the latter, and to a certain degree acrid.

LINEN (Ger. *Linnen, Leinewand*; Du. *Lynwaat*; Fr. *Toile*; It. *Tela, Panno, lino*; Sp. *Lienzo, Tela de lino*; Rus. *Polotno*), a species of cloth made of thread of flax or hemp. The linen manufacture has been prosecuted in England for a very long period; but though its progress has been considerable, particularly of late years, it has not been so great as might have been anticipated. This is partly, perhaps, to be ascribed to the efforts that have been made to bolster up and encourage the manufacture in Ireland and Scotland, and partly to the rapid growth of the cotton manufacture — fabrics of cotton having to a considerable extent supplanted those of linen.

In 1698, both houses of parliament addressed his Majesty (William III.), representing that the progress of the woollen manufacture of Ireland was such as to prejudice that of this country; and that it would be for the public advantage, were the former discouraged, and the linen manufacture established in its stead. His Majesty replied, — "I shall do all that in me lies to *discourage the woollen manufacture in Ireland*, and encourage the linen manufacture, and to promote the trade of England!" We may remark, by the way, that nothing can be more strikingly characteristic of the illiberal and erroneous notions that were then entertained with respect to the plainest principles of public economy, than this address and the answer to it. But whatever the people of Ireland might think of their sovereign deliberately avowing his determination to exert himself to crush a manufacture in which they had begun to make some progress, government had no difficulty in prevailing upon the legislature of that country to second their views, by prohibiting the exportation of all woollen goods from Ireland, except to England, where prohibitory duties were already laid on their importation! It is but justice, however, to the parliament and government of England, to state that they have never discovered any backwardness to promote the linen trade of Ireland; which, from the reign of William III. downwards, has been the object of regulation and encouragement. It may, indeed, be doubted whether the regulations have been always the most judicious that might have been devised, and whether Ireland has really gained any thing by the forced extension of the manufacture. Mr. Young and Mr. Wakefield, two of the highest authorities as to all matters connected with Ireland, contend that the spread of the linen

manufacture has not really been advantageous. And it seems to be sufficiently established, that though the manufacture might not have been so widely diffused, it would have been in a sounder and healthier state, had it been less interfered with.

Bounties. — Besides premiums and encouragements of various kinds, bounties were granted on the exportation of linen for a very long period previously to 1830. In 1829, for example, notwithstanding it had then been very much reduced, the bounty amounted to about 300,000*l.*, or to nearly *one seventh* part of the entire real or declared value of the linen exported that year! It is not easy to imagine a greater abuse. A bounty of this sort, instead of promoting the manufacture, rendered those engaged in it comparatively indifferent to improvements; and though it had been otherwise, what is to be thought of the policy of persisting for more than a century in supplying the foreigner with linens for less than they cost? We have not the least doubt, that were the various sums expended in well-meant but useless attempts to force this manufacture, added together, with their accumulations at simple interest, they would be found sufficient to yield an annual revenue, little, if at all, inferior to the entire value of the linens we now send abroad. And after all, the business never began to do any real good, or to take firm root, till the manufacture ceased to be a domestic one, and was carried on principally in mills, and by the aid of machinery, a change which the old forcing system tended to counteract. The only real and effectual legislative encouragement the manufacture has ever met with, has been the reduction of the duties on flax and hemp, and the relinquishing of the absurd attempts to force their growth at home.

Belfast has long been the great seat of the manufacture in Ireland, and there it is carried on in large factories furnished with the best machinery, and conducted on the most approved principle.

The total average export of linens from Ireland during the 3 years ending with 1825, was 51,947,413 yards, of which 49,031,073 came to this country; the exports to *all* other parts being only 2,916,340. Since 1825, the trade between Ireland and Great Britain has been placed on the footing of a coasting trade; and linens being exported and imported without any specific entry at the Custom-house, no account is kept of their quantity and value.

Scotch Linen Manufacture. — In 1727, a Board of Trustees was established in Scotland for the superintendence and improvement of the linen manufacture. It is not easy to suppose that the institution of this Board could of itself have been of any material service; but considerable bounties and premiums being at the same time given on the production and exportation of linen, the manufacture went on increasing. Still, however, it did not increase so fast as cotton and some others, which have not received any adventitious support, until machinery began to be extensively employed in the manufacture; so that it is very doubtful whether the influence of the bounty has been so great as it would at first sight appear to have been. The regulations as to the manufacture, after having been long objected to by those concerned, were abolished in 1822; and the bounties have now ceased. We subjoin

An Account of the Quantity and Value of the Linen Cloth manufactured and stamped for Sale in Scotland during the Ten Years ending with 1822, being the latest Period to which it can be made up.

Years.	Yards.	Value.	Average Price per Yard.	Years.	Yards.	Value.	Average Price per Yard.
		£ s. d.	d.			£ s. d.	d.
1813	19,799,146¾	977,382 1 7¾	11·8	1818	31,283,100¼	1,253,528 8 0¾	9·6
1814	26,126,620¾	1,253,574 16 10¼	11·5	1819	29,334,428¾	1,157,923 4 11¼	9·4
1815	32,056,015¾	1,403,766 15 2¼	10·5	1820	26,259,011¾	1,038,708 18 5¼	9·4
1816	26,112,015¾	1,026,674 1 11¾	9·4	1821	30,473,161¾	1,232,038 15 4¾	9·7
1817	28,781,967¼	1,097,689 2 8¾	9·1	1822	36,268,530¾	1,396,293 19 11¾	9·2

This account is not, however, of much use. The stamp was only affixed to linen on which a bounty was paid, that is, on linen intended for exportation. Linen manufactured for home use, or intended for private sale, was not stamped. — (*Headrick's Survey of Forfar*, p. 506.)

Dundee is the grand seat of the Scotch linen manufacture; and its progress there during the last few years has been so extraordinary, that the following details in respect to it may not be unacceptable.

The manufacture appears to have been introduced into Dundee some time towards the beginning of last century; but, for a lengthened period, its progress was comparatively slow. In 1745, only 74 tons of flax were imported, without any hemp; the shipments of linen cloth during the same year being estimated at about 1,000,000 yards, no mention being made either of sail-cloth or bagging. In 1791, the imports of flax amounted to 2,444 tons and those of hemp to 299 tons; the exports that year being 7,842,000 yards linen, 280,000 yards sail-cloth, and 65,000 do. bagging. From this period the trade began to extend itself gradually, though not rapidly. Previously to the peace of 1815, no great quantity of machinery was employed in spinning; but about this period

in consequence, partly and principally, of the improvement of machinery, and its extensive introduction into the manufacture, and partly of the greater regularity with which supplies of the raw material were obtained from the Northern powers, the trade began rapidly to increase. Its progress has, indeed, been quite astonishing; the imports of flax having increased from about 3,000 tons in 1814, to 15,000 tons in 1830, and 32,000 tons at present (1843). The value of the exports of manufactured goods and yarn, from Dundee, was —

In 1836	-	- £1,651,439	In 1838	-	- £1,172,670
1837	-	- 1,284,862	1839	-	- 1,810,466

For some farther details as to the late extraordinary progress made by Dundee, the reader is referred to the art. Docks.

We believe that the shipments of linen from this single port are quite as great as those from all Ireland; while the manufacture has been slowly progressive in the latter, it has increased at Dundee even more rapidly than the cotton manufacture has increased at Manchester. It is not easy to give any satisfactory explanation of this wonderful progress. Something must be ascribed to the convenient situation of the port for obtaining supplies of the raw material; and more, perhaps, to the manufacture having been long established in the towns and villages of Strathmore, the Carse of Gowrie, and the northern parts of Fife, of which Dundee is the emporium. But these circumstances do not seem adequate to explain the superiority to which she has recently attained in this department; and, however unphilosophical it may seem, we do not really know that we can ascribe it to any thing else than a concurrence of fortunate accidents. Nothing, in fact, is so difficult to explain as the superiority to which certain towns frequently attain in particular departments of industry, without apparently possessing any peculiar facilities for carrying them on. But from whatever causes their pre-eminence may arise in the first instance, it is very difficult, when once they have attained it, for others to come into competition with them. They have, on their side, established connections, workmen of superior skill and dexterity in manipulation, improved machinery, &c. Recently, indeed, the advantages in favour of old establishments have been, to a considerable extent, neutralised by the prevalence of combinations amongst their workmen; but it is to be hoped that means may be devised for obviating this formidable evil.

Value of the Manufacture. Number of Persons employed. — There are no means by which to form an accurate estimate of the entire value of the linen manufacture of Great Britain and Ireland. Dr. Colquhoun estimated it at 15,000,000*l.*; but there cannot be the shadow of a doubt that this estimate was, at the time, absurdly exaggerated. In the last edition of this work we estimated the annual value of the manufacture at 7,500,000*l.** But it has increased very rapidly in the interval, principally through the great extension of the exports to France, and its value is at present (1843) certainly not under, if it do not exceed, 10,000,000*l.* or 12,000,000*l.* But taking it at the former amount, and setting aside a third part of this sum for the value of the raw material, and another third for profits, wages of superintendence, wear and tear of capital, coal, &c., we have 3,333,000*l.* to be divided as wages among those employed in the manufacture. And supposing each individual to earn, at an average, 18*l.* a year, the total number employed would be about 185,000. It may be thought, perhaps, that 18*l.* is too low an estimate for wages; and such, no doubt, would be the case, were not Ireland taken into the average. But as many persons are there employed in the manufacture at very low wages, we believe that 18*l.* is not very far from the mean rate. †

The rapid increase in the exports of linen goods and yarn, especially the latter, to France (see, for an account of this increase, the art. Havre), is wholly a consequence of their comparative cheapness in this country, occasioned by our superior and cheaper machinery. And if the French really wish to rival us in this department of industry, they should endeavour, by reducing or repealing the oppressive duties on iron and machinery imported into France (which would, of course, proportionally reduce the cost of spinning mills and power-loom factories), to place their manufacturers and spinners on something like the same footing as ours. In this way they might, perhaps, have some chance of rivalling us; but all attempts to bolster up the manufacture in France by means of duties, must necessarily fail; and will have no effect but to perpetuate exploded practices and to promote the trade of smuggling.

Our exports of linen goods are also increasing to most other countries, as well as to France; and we are fast superseding the Germans in most markets that are equally accessible to both. Hence the rapid decrease of late years in the exportation of linens from Hamburg. — (See Hamburg.)

* Sir F. M. Eden estimated the entire value of the linen manufacture of Great Britain, in 1800, at 2,000,000*l.* — (*Treatise on Insurance*, p. 76.)

† A great number of persons in Ireland are only partly employed in the manufacture; but the above estimate supposes that the 185,000 individuals are wholly employed in it.

The improvement in the manufacture of damasks and table linen generally, which is principally carried on in Dunfermline and Kirkcaldy, has been quite as striking as in the other departments of the trade, especially since the introduction of the Jacquard mounting. In fact, table linen is now shipped from this country for Germany; so that the duty of 15 per cent. on the importation of German damasks and such like fabrics into this country might be reduced or repealed without the measure having any injurious influence over the manufacture.

Consumption of Foreign Linens.—It will be seen from the returns of the imports and entries of foreign linens for the 4 years ending with 1841, given on page 688., that the consumption of foreign linens in this country is quite inconsiderable; the real or declared value of those entered for home consumption, in 1840, could hardly amount to 20,000*l.*

Account of the Quantities and Values of the Linen Manufactures and Linen Yarn exported from the U. Kingdom in 1841 and 1842, specifying the Countries to which the same were exported, and the Quantities and Values of those sent to each.

Countries to which exported.	1841.					1842.				
	Linen Manufactures.			Linen Yarn.		Linen Manufactures.			Linen Yarn.	
	Entered by the yard.		Thread Tapes, & Small Wares.			Entered by the Yard.		Thread Tapes, & Small Wares.		
	Quantity.	Declared Value.	Decld. Value.	Quantity.	Decld. Value.	Quantity.	Declared Value.	Decld. Value.	Quantity.	Declared Value.
NORTHERN EUROPE.	*Yards.*	£	£	*Lbs.*	£	*Yards.*	£	£	*Lbs.*	£
Russia	74,591	2,641	509	3,521	401	16,881	1,605	1,608	6,806	705
Sweden	3,950	278	29	3,205	258	1,659	160	95	2,583	178
Norway	129,618	6,672	1,086	879	40	121,241	5,362	1,498	5,011	247
Denmark	9,055	561	19	11,900	633	4,850	292	45	4,019	169
Prussia	28,723	1,359	7	-	-	28,469	852	-	522	113
Germany	657,743	31,986	32,171	994,270	63,540	597,771	26,622	51,721	1,831,275	101,321
Holland	98,103	5,380	4,558	2,524,671	66,369	202,701	8,177	6,247	5,934,229	108,764
Belgium	72,374	5,276	1,868	412,769	14,929	70,559	4,773	1,817	255,135	7,162
SOUTHERN EUROPE.										
France	8,823,593	281,982	1,809	20,832,875	806,536	8,586,667	270,019	1,771	22,202,292	749,675
Portugal Proper	781,865	21,582	10	-	-	1,275,051	28,413	30	4,813	555
Azores	11,068	468	-	-	-	17,429	422	8		
Madeira	16,523	589	6	-	-	41,040	1,258	7		
Spain & Balearic Isls.	5,934,226	185,928	245	59,131	1,908	1,908,970	72,216	1,541	597,500	21,505
Canaries	345,069	8,062	-	508	26	297,488	8,105	36	200	13
Gibraltar	5,221,461	192,270	787	95,426	6,559	1,770,279	55,174	518	280,403	15,923
Italy & Italian Islds.	933,724	69,721	501	223,362	10,611	988,036	63,578	305	344,017	17,919
Malta	89,500	4,932	45	-	-	139,420	6,621	209		
Ionian Islands	32,787	1,590	148	-	-	16,853	688	56		
Morea & Greek Islds.	1,338	117	88	-	-	237	12	75		
Turkey	92,019	4,304	97	108	7	231,441	9,643	20		
Syria and Palestine	8,916	380	-	-	-	4,777	228			
AFRICA.										
Egypt	7,011	458	-	-	-	125,610	1,559	10		
Tripoli, Tunis, Algiers, and Morocco	19,000	508	-	-	-	6,619	173	-	3,360	194
W. coast of Africa	66,223	2,779	125	-	-	115,010	4,429	120		
C. of Good Hope	264,935	12,884	1,018	-	-	388,558	13,590	1,235		
Cape Verd Islands	1,000	30	-	-	-	12,299	393	12		
St. Helena	1,853	90	-	-	-	190,354	7,700	120		
Mauritius	241,906	9,165	375	-	-	954,515	36,712	857		
ASIA.										
E. I. Co.'s territories and Ceylon	800,689	33,611	3,606	-	-	83,685	2,754			
Sumatra, Java, and other Islands of the Indian Seas	138,121	4,000	-	-	-	11,640	700			
Philippine Islands	1,500	150	-	-	-	862,568	32,999	90		
China	211,316	8,986	130	-	-	668,031	26,911	1,591	140	3
Brit. set. in Australia	971,585	40,132	1,759	1,04	105	9,758	382			
New Zealand	25,954	990	1	-	-					
AMERICA.										
Brit. N. Amer. cols.	3,926,921	129,758	17,979	1,006	63	2,751,935	98,073	9,575	450	51
West Indies	8,147,430	228,865	2,821	112	5	11,848,645	288,168	4,858	544	115
Hayti	2,344,794	51,801	66	-	-	1,711,964	43,041	140		
Cuba & other foreign W. I. colonies	3,179,565	130,153	5,177	1,200	30	3,402,580	136,952	6,705	600	20
U. S. of America	31,090,067	1,169,582	62,166	22,357	499	13,485,080	436,310	6,728	18,810	607
STATES OF CENTRAL AND SOUTHERN AMERICA, viz.—										
Texas	5,805	225								
Mexico	1,837,250	97,295	967	-	-	2,402,634	102,356	3,592		
Guatemala	67,408	3,781								
Columbia	1,044,394	21,996	135	100	2	1,621,162	37,819	107		
Brazil	8,075,584	240,508	3,489	2,000	140	5,678,104	149,953	2,531		
States of Rio de la Plata	2,015,605	68,820	1,194	-	-	2,090,621	62,496	2,356		
Chili	648,450	26,469	197	-	-	1,874,562	71,413	522		
Peru	1,481,855	66,601	827	-	-	2,270,258	80,790	526		
Isles of Guernsey, Jersey, Alderney, and Man	352,948	19,010	470	48	2	341,670	16,952	179	58	2
Total	90,321,761	3,200,467	147,088	25,220,290	972,466	69,232,682	2217,373	129,376	29,490,987	1,025,551

Regulations as to the Linen Manufacture.—Any person, native or foreigner, may, without paying any thing, set up in any place, privileged or not, corporate or not, any branch of the linen manufacture; and foreigners practising the same shall, on taking the oath of allegiance, &c., be entitled to all the privileges of natural-born subjects.—(15 *Car.* 2. c. 15.)

Persons affixing stamps to foreign linens in imitation of the stamps affixed to those of Scotland or

Ireland, shall forfeit 5*l.* for each offence; and persons exposing to sale or packing up any foreign linens as the manufacture of Great Britain or Ireland, shall forfeit the same and 5*l.* for each piece of linen so exposed to sale or packed up. — (17 *Geo.* 2. c. 30.)

Any person stealing to the value of 10*l.* any linen, woollen, silk, or cotton goods, whilst exposed during any stage of the manufacture in any building, field, or other place, shall, upon conviction, be liable at the discretion of the court to be transported beyond seas for life, or for any term not less than 7 years, or to be imprisoned for any term not exceeding 4 years, and, if a male, to be once, twice, or thrice publicly or privately whipped, as the court shall think fit. — (7 & 8 *Geo.* 4. c. 29. § 14.)

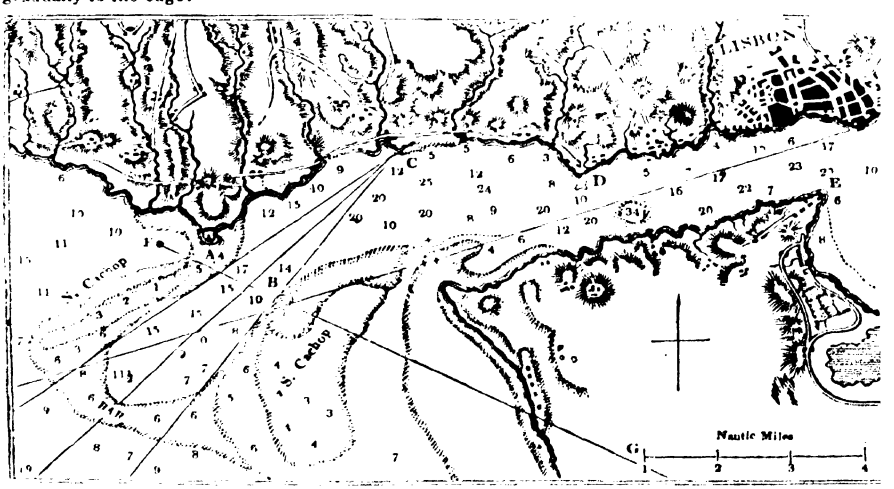
LIQUORICE (Ger. *Sussholz*; Fr. *Réglisse, Racine douce*; It. *Regolizia, Logorizia, Liquirizia*; Sp. *Regaliz Orozuz*), a perennial plant (*Glycirrhiza glabra*), a native of the south of Europe, but cultivated to some extent in England, particularly at Mitcham in Surrey. Its root, which is its only valuable part, is long, slender, fibrous, of a yellow colour, and when fresh very juicy. The liquorice grown in England is fit for use at the end of 3 years; the roots, when taken up, are either immediately sold to the brewers' druggists, or to common druggists, by whom they are applied to different purposes, or they are packed in sand, like carrots or potatoes, till wanted.

LIQUORICE JUICE (*Succus Liquoritiæ*), popularly *black sugar*, the inspissated juice of the roots just mentioned. Very little of this extract is prepared in Britain, by far the larger part of our supply being imported from Spain and Sicily. The juice obtained by crushing the roots in a mill, and subjecting them to the press, is slowly boiled till it becomes of a proper consistency, when it is formed into rolls of a considerable thickness, which are usually covered with bay leaves. This is the state in which we import it. Most part of it is afterwards redissolved, purified, and cast into small cylindrical rolls of about the thickness of a goose quill, when it is called *refined liquorice*. It is then of a glossy black colour, brittle, having a sweet mucilaginous taste. It is used in the *materia medica*, particularly in coughs, colds, &c. — (*Thomson's Chemistry*; *Thomson's Dispensatory*.)

The imports in 1840 and 1841 amounted, at an average, to 7,123 cwt. a year. The oppressive duty of 3*l.* 15*s.* a cwt., with which it was loaded down to 1842, was reduced in the course of that year to 27*s.* 6*d.* (See TARIFF.)

LISBON, the capital of Portugal, situated on the north bank of the river Tagus, the observatory of the fort being in lat. 38° 42′ 24″ N., lon. 9° 5′ 50″ W. Population about 240,000.

Port. — The harbour, or rather road, of Lisbon is one of the finest in the world, and the quays are at once convenient and beautiful. Fort St. Julian marks the northern entrance of the Tagus. It is built on a steep projecting rock. There is a light-house in the centre, 120 feet above the level of the sea. At the mouth of the Tagus are two large banks, called the North and South *Cachops*. There are two channels for entering the river; the north or little, and the south or great channel, exhibited in the subjoined plan. On the middle of the South Cachop, about 1¼ mile from Fort St. Julian, is the Bugio fort and light-house, the latter being 66 feet in height. The least depth of water in the north channel on the bar is 4 fathoms, and in the south, 6. The only danger in entering the port arises from the strength of the tide; the ebb running down at the rate of 7 miles an hour; and after heavy rains, when there is a great deal of fresh water in the river, the difficulty of entering is considerably augmented. When, at such periods, there is a strong wind from the sea, there is a complete break all over the bar; vessels moor up and down the river with open hawse to the southward. In some parts they may come within 200 yards of the shore, being guided by the depth of water, which, from nearly 20 fathoms in mid-channel, shoals gradually to the edge.



References to Plan. — A, Fort St. Julian and light-house. B, Bugio fort and light-house. C, Barcarena look-out house. D, Belem Castle. E, Point Cassilhas. F G, Bugio Fort and Sugar Loaf Hill in one, mark the north channel.

Trade, &c. — Lisbon is one of the best situated commercial cities of Europe. But notwithstanding this circumstance, the excellence of the port, and the command of the navigation of the Tagus, her commerce is comparatively trifling. The despotism, intolerance, and imbecility of the government have weighed down all the energies of the nation. The law and police being alike bad, there is no adequate security. Assassination is very frequent. Industry of all sorts is, in consequence, paralysed; and since the emancipation of Brazil, commerce has rapidly declined. Formerly Lisbon had about 400 ships, of from 300 to 600 tons burden, employed in the trade with South America. But at present there are not above 50 ships belonging to the port engaged in foreign trade; and, of these, the average burden does not exceed 150 tons! The produce of Portugal sent to foreign countries, is almost entirely conveyed to its destination in foreign ships. The trade between Lisbon and Cork is, we believe, the only exception to this; it being principally carried on in Portuguese vessels, which take salt from St. Ubes, and bring back butter in return. About 200 small craft belong to the city, which are exclusively employed in the coasting trade.

There are neither price currents, shipping lists, nor official returns of any kind, published in Lisbon. The principal exports are lemons and oranges — which, however, are very inferior to those of Spain; wine, particularly Lisbon and Calcavella; wool, oil, tanned hides, woollen caps, vinegar, salt, cork, &c. Besides colonial produce, the principal imports consist of cotton, woollen, and linen goods; hardware, earthenware, dried fish, butter, corn, cheese, timber and deals, hemp, &c.

Money. — Accounts are kept in rees, 1,000 of which = 1 milree. In the notation of accounts the milrees are separated from the rees by a crossed cypher (ℳ), and the milrees from the millions by a colon: thus, Rs. 2:700 ℳ 500 = 2,700 milrees and 500 rees.

The crusado of exchange, or old cruzado, = 400 rees; the new crusado = 480 rees; the testoon = 100 rees; and the vinten or vintem = 20 rees.

The gold piece of 6,400 rees = 35*s.* 11*d.* sterling; the gold crusado = 2*s.* 3*d.*; and the milree, valued in gold, = 67*d.* sterling. It appears, however, from assays made at the London mint, in 1812, on modern silver crusados, that the average value of the milree in *silver* may be estimated at 60*d.* or 5*s.* sterling.

Weights and Measures. — The commercial weights are, 8 ounces = 1 marc; 2 marcs = 1 pound or arratel; 32 pounds = 1 arroba; 4 arrobas = 1 quintal; 100 lbs. or 4 rotals of Portugal = 101·19 lbs. avoirdupois = 45·895 Kilog. = 94·761 lbs. of Hamburg = 92·918 lbs. of Amsterdam.

The principal measure for corn, salt, &c. is the moyo, divided into 15 fanegas, 30 alquières, 240 quartos, 480 selemis, &c. The moyo = 25·03 Winchester bushels.

The principal liquid measure is the almude, divided into 2 potes, 12 canadas, or 48 quartellos; 18 almudes = 1 barril; 26 almudes = 1 pipe; 52 almudes = 1 tonelada. The almude = 4·37 English wine gallons; and the tonelada = 227¼ ditto.

A pipe of Lisbon is estimated by the Custom-house (British) at 140 gallons; and this pipe is supposed to be 31 almudes.

A pipe of port is 168 gallons, divided into 21 almudes of Oporto.

Of measures of length, 2 pes = 3 palmos = 1 covado, or cubit; 1⅔ covados = 1 vara; 2⅔ varas = 1 brança. The pe or foot = 12·944 English inches; 100 feet of Portugal = 107·8 English feet; the vara = 43·2 English inches.

For freight a last is reckoned at 4 pipes of oil or wine, 4 chests of sugar, 4,000 lbs. of tobacco, 3,560 lbs. of shumac.

But from one place in Portugal to another, a tonelada is reckoned at 52 almudes of liquids, or 54 almudes of dry goods.

Coffee is sold per arraba; cotton, indigo, and pepper, per lb.; oil, per almude; wine, per pipe; corn, per alquière; salt, per moyo.

Grain, seed, fish, wool, and timber are sold on board.

Weights and long measures are the same throughout Portugal; but there is a great discrepancy in the measures of capacity. The almude and alquière, at the principal places, are in English measures as follows: —

Lisbon	-	Almude	= 5·37 gall.	Eng. wine measure
—	-	Alquière	= 3·07 —	Winch. measure
Oporto	-	Almude	= 6⅔ —	wine measure
—	-	Alquière	= 3⅘ —	Winch. measure
Faro	-	Almude	= 4½ —	wine measure
Faro	-	Alquière	= 3⅔ —	Winch. measure
Figuiera	-	Almude	= 5⅓ —	wine measure
—	-	Alquière	= 3⅓ —	Winch. measure
Vianna	-	Almude	= 6½ —	wine measure
—	-	Alquière	= 3⅘ —	Winch. measure.

Bank of Lisbon. — This establishment was founded in 1822. Its capital consists of about 700,000*l.* sterling, divided into 7,000 shares. The shareholders are not liable beyond the amount of their shares. The bank discounts bills not having more than 3 months to run, at 5 per cent. Its dividends, at an average of the 3 years ending with 1831, were about 6 per cent. It enjoys the singular but valuable privilege of having its claims on all estates paid off in full, provided the estate amounts to so much; other creditors being obliged to content themselves with a division of the residue, if there be any.

Port Regulations. — All vessels entering the Tagus are obliged to come to anchor off Belem Castle, where there is an office at which they must be entered, their cargoes declared, from whence they come, and whether the cargo be intended to be landed in Lisbon or not; if not, the master applies for "*franquia*," that is, for leave to remain 8 days in the port for the purpose of disposing of the cargo or of departing with it. Two Custom-house officers are then sent on board, and if the cargo is to be discharged at Lisbon, the vessel proceeds to the Custom-house, when the master makes entry, delivering the manifest and bills of lading attached to the certificate of the Portuguese consul, at the port of lading, in order to identify the cargo. The officers put on board at Belem are then relieved by 2 others, who remain until the vessel be discharged and visited by the Custom-house searcher. The port dues have to be paid in different offices; but the vessel is not subject to any other charges.

All goods sent on board for exportation must be accompanied by a permit from the Custom-house. When the clearances are obtained, the papers are presented by the master, or the ship's agent, to the authorities at Belem, who deliver the signal the vessel is to hoist when going to sea.

There is no regular warehousing and bonding system at Lisbon. All imported dry goods are allowed to remain in the Custom-house stores 2 years, and liquids 6 months, without being charged warehouse rent, provided they are intended for consumption, and pay the duties accordingly. But if, after that period, they are taken out to be exported, they are charged 2 per cent. duty.

Port Charges. — on a foreign ship of 300 tons entering the port of Lisbon, with a general or mixed cargo, and clearing out with the same: —

	Rees.
Royal passport - -	7,200
Petty expenses on entering at the Custom-house, about - -	700
Anchorage - - -	500
Ballast clearance - -	400
Tonnage, 100 rees per ton	50,000
Lights, 50 rees per ton -	15,000
Contribution to Board of Trade -	1,500
Petty charges - -	720
Bill of health - -	240
	R. 56,260 = 11*l.* 6*s.* 0*d.* sterl.

Vessels coming with a cargo, or in ballast, and departing in ballast, pay 200 rees per ton lights, or 4 times as much as if they sailed with cargoes. Vessels coming with a cargo, and sailing with the same cargo, pay no tonnage duty.

Commission. — The ordinary rates of commission are, on the sale of goods, 2½ per cent.; *del credere*, 2½ per cent.; on the value of goods landed from a vessel putting in to effect repairs, 1 per cent.; on ship's disbursements, 5 per cent.

Insurances are effected to a trifling amount. There is 1 national company for effecting insurances; but it enjoys little credit.

Taxes are not regulated by any certain rule. Those allowed are generally those invoiced or marked on the package. — (See *Annuaire du Commerce Maritime*, p. 290.; *Kelly's Cambist*; Consul's *Answers* to *Circular Queries*, &c.)

LITERARY PROPERTY. See BOOKS.

LITHARGE (Ger. *Glötte, Glätte*; Du. *Gelit*; Fr. *Litharge*; It. *Litargirio*; Sp. *Almartaga, Litarjirio*; Rus. *Glet*; Lat. *Lithargyrium*), an oxide of lead in an imperfect state of vitrification. Most of the lead met with in commerce contains silver, from a few grains to 20 ounces or more in the fodder: when the quantity is sufficient to pay the expense of separation, it is *refined*; that is, the metal is exposed to a high heat,

passing at the same time a current of air over the surface: the lead is thus oxidised and converted into *litharge*, while the silver, remaining unchanged, is collected at the end of the process. — (*Thomson's Chemistry, &c.*) Litharge is used for various purposes in the arts, by potters, glass makers, painters, &c.

LOADSTONE (Ger. *Magnet*; Du. *Magneet*; Fr. *Aimant*; It. *Calamita*; Sp. *Iman*; Rus. *Magnit*; Lat. *Magnes*). M. Haüy observes, that the ores in which the iron contains the least oxygen without being engaged in other combinations, form natural magnets; and he calls the *loadstones* of commerce, which are found in considerable masses in Germany, Sweden, Norway, Spain, Italy, China, Siam, the Philippine Isles, Corsica, and Ethiopia, *oxidulated iron*. The loadstone is characterised by the following properties: — A very strong action on the magnetic needle. Specific gravity 4·2457. Not ductile. Of a dark grey colour, with a metallic lustre. — Primitive form, the regular octahedron. Insoluble in nitric acid. This singular substance was known to the ancients; and they had remarked its peculiar property of attracting iron; but it does not appear that they were acquainted with the wonderful property which it also has, of turning to the pole when suspended, and left at liberty to move freely. Upon this remarkable circumstance the mariner's compass depends, — an instrument which gives us such infinite advantages over the ancients. It is this which enables the mariner to conduct his vessel through vast oceans out of the sight of land, in any given direction; and this directive property also guides the miner in subterranean excavations, and the traveller through deserts otherwise impassable. The natural loadstone has also the quality of communicating its properties to iron and steel; and when pieces of steel properly prepared are touched, as it is called, by the loadstone, they are denominated artificial magnets. — (See Compass.)

LOBSTER (Fr. *Ecrevisse*; Lat. *Cancer*), a fish of the crab species, of which vast quantities are consumed in London.

The minimum size of lobsters offered for sale is fixed by 10 & 11 Will. 3. c. 24., at *eight* inches from the tip of the nose to the end of the middle fin of the tail. No lobsters are to be taken on the coasts of Scotland between the 1st of June and the 1st of September, under a penalty of 5*l*. The Scilly Islands and the Land's End abound in lobsters, as well as several places on the Scotch shores, particularly about Montrose. But the principal lobster fishery is on the coast of Norway; whence it is believed about 1,000,000 lobsters are annually imported into London. Those of Heligoland are, however, esteemed the best; they are of a deeper black colour, and their flesh is firmer than those brought from Norway. Foreign caught turbots and lobsters may be imported either in British or foreign vessels free of duty.

LOCK, LOCKS (Ger. *Schlösser*; Du. *Sloten*; Fr. *Serrures*; It. *Serrature*; Sp. *Cerraduras*, *Cerrojos*; Rus. *Samki*), a well known instrument, of which there are infinite varieties. A great deal of art and delicacy is sometimes displayed in contriving and varying the wards, springs, bolts, &c., and adjusting them to the places where they are to be used, and to the occasions of using them. From the various structure of locks, accommodated to their different intentions, they acquire various names, as stock locks, spring locks, padlocks, &c. Wolverhampton was, at a very early period, famous for the superior skill and ingenuity of its locksmiths; but the best locks are now made in London and Birmingham. The grand difficulty to be overcome in making a lock is to construct it so that it may not be opened by any key except its own, nor admit of being picked; it should also be possessed of sufficient strength and durability, and not be too complex. Many ingenious contrivances have been proposed for the attainment of the desired security, — several of which are possessed of considerable merit. We believe, however, that there is none that combines all the principal requisites of a lock in so eminent a degree as "Chubb's Detector Lock," so called from the inventor, Mr. Chubb, of Portsea. Common door-locks are now usually inserted in the wood, instead of being, as formerly, screwed to it; and when so placed are called *mortise* locks.

LOGWOOD (Fr. *Bois de Campèche*; Ger. *Kampescholz*; Du. *Campecheout*; Sp. *Palo de Campeche*), the wood of a tree (*Hæmatoxylon Campechianum* Lin.), a native of America, and which attains the greatest perfection at Campeachy, and in the West Indies. It thrives best in a wet soil, with a large proportion of clay. The logwood tree is like the white thorn, but a great deal larger. The wood is hard, compact, heavy, and of a deep red colour internally, which it gives out both to water and alcohol. It is an article of great commercial importance, being extensively used as a dye wood. It is imported in logs, that are afterwards chipped. — (The logwood tree, and the adventures of those that were formerly engaged in cutting it, are described by Dampier; see his *Voyages*, vol. ii. part 2. p. 56. ed. 1729.)

The entries for home consumption, at an average of the 3 years ending with 1842, amounted to 18,713 tons a year. The old duty of 4*s.* 6*d.* a ton on foreign logwood, and of 3*s.* on that from a British plantation, produced, in 1841, 4,409*l.* 19*s.* 6*d.*; but it was reduced in the following year to 2*s.* a ton. Of 27,054 tons of logwood imported in 1840, 13,594 were from the British West Indies, 9,601 from Mexico, and the remainder principally from Hayti and the U. States. Its price in the London market in June, 1843, was — Jamaica, 6*l.* per ton; Honduras, 5*l.* 5*s.*; Campeachy, 8*l.* 8*s.*

We borrow from the learned and able work of Dr. Bancroft, the following curious

details with respect to the use of logwood in this country: — "Logwood seems to have been first brought to England soon after the accession of Queen Elizabeth: but the various and beautiful colours dyed from it proved so fugacious, that a general outcry against its use was soon raised; and an act of parliament was passed in the 23d year of her reign, which prohibited its use as a dye under severe penalties, and not only authorised but directed the *burning* of it, in whatever hands it might be found within the realm; and though this wood was afterwards sometimes clandestinely used (under the feigned name of blackwood), it continued subject to this prohibition for nearly 100 years, or until the passing of the act 13 & 14 Chas. 2.; the preamble of which declares, that the ingenious industry of modern times hath taught the dyers of England the art of fixing colours made of logwood, *alias* blackwood, so as that, by experience, they are found as lasting as the colours made with *any other sort of dyeing wood whatever*; and on this ground it repeals so much of the statute of Elizabeth as related to logwood, and gives permission to import and use it for dyeing. Probably the solicitude of the dyers to obtain this permission, induced them to pretend that their industry had done much more than it really had, in fixing the colours of logwood; most of which, even at this time, are notoriously deficient in regard to their durability."—(*On Permanent Colours*, vol. ii. p. 340.)

LOUIS D'OR, a French gold coin, first struck in 1640. It was subsequently made by the French mint regulations equal to 24 livres, or 1*l.* sterling. This, however, was under-rating it in respect of silver; and hence, as every one preferred paying his debts in the over-valued coin, silver became the principal currency of France, the gold coins being either sent to the melting-pot or exported. In Britain, the process was reversed. Gold having been, for a lengthened period, over-valued by our mint in respect to silver, it became the principal currency of the country. — (See *antè*, p. 304.)

M.

MACAO, a sea-port and settlement belonging to the Portuguese, on the island of the same name, at the mouth of the Canton river in China, in lat. 22° 12′ 45″ N., lon. 113° 35′ E. The situation of Macao strikingly resembles that of Cadiz. It is built near the extremity of a peninsula projecting from the south-west corner of the island of Macao, to which it is joined by a long narrow neck. Across this isthmus, which is not more than 100 yards wide, a wall is erected, with a gate and guard-house in the middle for the Chinese soldiers. The greatest length of the peninsula belonging to the Portuguese, from N. E. to S. W., is under 3 miles, and its breadth under ½ mile. The broadest part, to the north of the town, is flat, and of a light sandy soil; but is well cultivated, principally by Chinese, and produces all sorts of Asiatic and European culinary vegetables. Provisions are obtained from the Chinese part of the island or from the main land; and whenever the Portuguese do any thing to offend the Chinese authorities, the provisions are cut off till they are obliged quietly to submit. They are seldom allowed to pass beyond the narrow precincts of the territory assigned to them. The population of the peninsula may amount to from 12,000 to 13,000, of whom considerably more than half are Chinese. The functionaries belonging to the East India Company's factory at Canton resided here during the whole of the dead season.

The Portuguese obtained possession of Macao in 1586. It was for a considerable period the seat of a great trade, carried on not only with China, but with Japan, Siam, Cochin-China, the Philippine Islands, &c.; but for these many years past it has been of comparatively little importance, though it is probable, that if it belonged to a more enterprising and active people, it might still recover most part of its former prosperity. The public administration is vested in a senate composed of the bishop, the judge, and a few of the principal inhabitants; but all real authority is in the hands of the Chinese mandarin resident in the town.

The Harbour is on the west side of the town, between it and Priest's Island; but the water in it not being sufficiently deep to admit large ships, they generally anchor in the roads on the other side of the peninsula, from 5 to 10 miles E.S.E. from the town. All vessels coming into the roads send their boats to the Portuguese Custom-house on the south side of the town.

When a ship arrives among the islands, she is generally boarded by a pilot, who carries her into Macao roads. As soon as she is anchored, the pilot proceeds to Macao to inform the mandarin of the nation she belongs to. If there be any women on board, application must be made to the bishop and senate, for leave to send them on shore, as they will not be permitted to proceed to Whampoa in the ship. As soon as the mandarin has made the necessary inquiries, he orders off a river pilot, who brings with him a *chop* or licence to pass the Bocca Tigris, or mouth of the Canton river, and carries the ship to Whampoa.

Trade of Macao. — The Chinese regulations do not permit any vessels, except such as belong to Portuguese or Spaniards, of which there are very few, to trade at Macao. But the Portuguese inhabitants lend their names, for a trifling consideration, to such foreigners as wish to be associated with them for the purpose of trading from the port. Independently, however, of this, vessels of other nations usually experience no difficulty in obtaining the connivance of the Chinese officers to the landing or receiving of goods in the roads, by means of Portuguese boats. At intervals, indeed, the prohibitory regulation is strictly enforced; but we believe that there has been no instance of this for the last 3 years.

Vessels of other nations, if in distress, and not engaged in the contraband trade, are admitted into the harbour for repairs, on application to the senate.

Port Charges.—The measurement duty paid by Spanish and Portuguese vessels is moderate. When a vessel has once paid the full amount, and is admitted on the list of registered ships belonging to the port (limited by the Chinese to 25), she is liable only to a third of the original charges, on every subsequent occasion of her entering, so long as she continues on the register. Portuguese vessels from Europe do not possess this privilege, unless they be registered as belonging to a morador of Macao.

The rates of measurement duty, which vary, as at Canton, (which see), on three classes of vessels, are the following:—

		Taels.
1st. On vessels of 154 covids and upwards,		6·24 per covid.
2d.	— from 120 to 154	5·72 —
3d.	— from 90 to 120 covids	4 —

These rates are nearly the same as those levied on Canton junks, trading with foreign countries, and ought, in fact, to be entirely so. The dimensions are taken and calculated in the manner formerly practised at Canton; but the Chinese, at both places, speak not of the covid, but of the chang of 10 covids. However, as this is only a decimal increase, it makes no difference in the method of calculation.

The following additional charges, to be calculated on the amount of measurement duty, are the same on every class of vessels, viz

2 per cent. for inspectors.
8 — for difference in weight by the treasury scales.
10 — for loss in melting.
17 — for making sycee.

Also the sum of 70 taels for the "public purse," or hoppo's treasury.

In addition to these, the following are the charges levied by the hoppo (collector of customs), or his deputy:—

On a 1st class vessel from Europe, 250 taels; if belonging to Macao or Manilla, 50 taels.

On a 2d class vessel from Europe, 240 taels; if belonging to Macao or Manilla, 40 taels.

On a 3d class vessel from Europe, 170 taels; if belonging to Macao or Manilla, 30 taels.

Ships importing rice are exempt from the measurement duty, and pay only 50 dollars, as fees to the procurador of Macao and the officers of his department.

Portuguese vessels from Europe, in addition to the measurement duty, have to pay to the Canton hong merchants a charge, termed by the Portuguese, Hanistagem, or Consoo charge, which is usually a matter of specific bargain, varying from about 200 dollars on a vessel of 200 tons, to 3,500 dollars and upwards on those of 500 tons, and of larger sizes.

The charges on goods carried by the inner passage, between Canton and Macao, being generally less than those paid on goods to and from Whampoa; and the duties levied by the Portuguese, on articles of merchandise imported by vessels belonging to Macao, being very moderate; the Chinese are often led to engage in speculations on board the Macao vessels, the risk being so much less than in native junks. If the ship owners could manage their expenses so as to be satisfied with only the same freight as is charged by English vessels, it would probably induce many more Chinese to make remittances in this way.

Opium.—The trade in opium is prohibited at Macao by the Chinese government, as well as throughout the rest of the empire. It was, nevertheless, formerly carried on to a great extent by the Portuguese moradores, or citizens, to the exclusion of all others, even Portuguese who were not citizens. But this restriction having occasioned the decline of the trade, it was abolished in 1823, when the senate passed a regulation throwing open the trade to all, without distinction, whether Portuguese or foreigners, securing to the latter, "hospitality and the utmost freedom in their speculations." At present, however, very little opium is imported, in consequence, it is said, of the heavy bribes demanded by the Chinese officers, to insure their connivance. The trade is now principally carried on at Lintin, about 30 miles from Macao.

Imports.—Goods imported pay at the Portuguese Custom-house a duty of 6 per cent. on a fixed valuation, besides some fees, and coolie hire. The following are a few articles extracted from the tariff:—

			Valuation. *Taels.*	Duty. *Taels.*
Cotton		per picul	4	0·240
Broad cloth, middling		covid	1·600	0·096
	better than ordinary	—	0·800	0·048
	ordinary or course	—	0·480	0·028
Camlets		—	1·280	0·016
Betel nut		picul	1·200	0·072
Tin		—	8	0·480
Birds' nests, 1st sort		catty	22·100	1·344
Rattans		picul	1·200	0·072
Saltpetre, Bengal		—	4	2·240
	coast of Goa	—	1·600	0·096
Pepper		—	4	0·240

Opium imported in Portuguese ships, pays per chest, drs 104.
Do. foreign do. — 155.

Gold and silver, whether in coin, in bullion, or manufactured, pay on importation, 2 per cent.; except in Spanish vessels from Manilla, when the charge is 1¼ per cent.

Exports.—No duty is levied by the Portuguese on goods exported from Macao; nor does the Custom-house take any cognizance of them.

Duties and Charges on Goods landed at Macao.—Macao is a place without any manufactures or commerce of its own. Prices are, in consequence, generally dependent on those of Canton. Money is usually paid at 72 taels per 100 dollars.

It is a point of some interest to ascertain the internal duties and expenses to which goods landed at Macao are liable, before coming into the Chinese purchaser's hands at Canton. But the subject is so involved in mystery and uncertainty, the charges varying according to the quantity of goods laden in one boat, &c., that it is scarcely possible to arrive at any accurate information respecting it. We believe, however, that the following may be considered as a pretty close approximation to the real amount of charges incurred on cotton landed at Macao:—

Portuguese duty, fees, &c.	-	mace, 2–6 per picul.
Duties and charges on conveyance to Canton		6–3
Canton charges, difference of weight, brokerage on sale, &c.		8–0
Total, about taels,		2—6—9

The duties and charges on conveyance from Macao to Canton are, for pepper, per picul - - - mace, 9—0
Rattans — - - - 4—5
Betel nut — - - - 4—5

The hoppo's examiner charges 90 taels per boat of 1,000 piculs, the largest quantity allowed to be conveyed by a single boat; but the same charge of 90 taels is levied, although the boat should only contain 100 piculs.

The duty on exporting goods from Canton to Macao is in some cases less, in other cases greater, than the Whampoa duty. Thus, nankeens to Macao pay 2 dollars per 100 less than to Whampoa. Most descriptions of silk piece goods also pay less duty. On the other hand, tea, paper, china ware, &c. pay a higher duty to Macao than to Whampoa.

For details as to the *Weights, Measures, &c.* used at Macao, see CANTON.

For further particulars, see *Hamilton's East India Gazetteer*, art. *Macao*; *Milburn's Orient. Com.*; and the *Anglo-Chinese Kalendar and Companion to the Almanac*, Macao, 1832.

MACCARONI, a species of wheaten paste formed into long, slender, hollow tubes, used amongst us dressed with cheese, and in soups, broths, &c.

Maccaroni is the same substance as vermicelli; the only difference between them being that the latter is made into smaller tubes. Both of them are prepared in the greatest perfection in Naples, where they form the favourite dish of all classes, and the principal food of the bulk of the population. The flour of the hard wheat (*grano duro*) imported from the Black Sea is the best suited for the manufacture of maccaroni. Being mixed with water, it is kneaded by means of heavy wooden blocks wrought by levers, till it acquires a sufficient degree of tenacity; it is then forced, by simple pressure, through a number of holes, so contrived that it is formed into hollow cylinders. The name given to the tubes depends on their diameter; those of the largest size being maccaroni, the next to them vermicelli, and the smallest fedelini. At Genoa, and some other places, the paste is coloured by an admixture of saffron; but at Naples, where its preparation is best understood, nothing is used except flour and water; the best being made of the flour of hard wheat, and the inferior sorts of the flour of soft wheat. When properly prepared and boiled to a nicety, Neapolitan maccaroni assumes a greenish tinge. It is then taken out of the caldron, drained of the water, and being saturated with concentrated meat gravy, and sprinkled with finely grated cheese, it forms a dish of which all classes, from the prince to the beggar, are passionately fond. But the maccaroni used by the poor is merely boiled in plain water, and is rarely eaten with any condiment whatever. The maccaroni usually served up in England is said, by those familiar with that of Naples, to be a disgrace to the name it bears. When properly prepared, maccaroni is nutritious and easy of digestion. The lazzaroni pique themselves on the dexterity with which they swallow long strings of maccaroni and

vermicelli without breaking them. (We are principally indebted for these details to an article on maccaroni in the *Penny Magazine* for the 10th of August, 1833.)

MACE (Ger. *Macis, Muskatenbluthe;* Du. *Foelie, Foely, Muscaatbloom;* Fr. *Macis, Fleur de muscade;* It. *Mace;* Sp. *Macio;* Port. *Maxcis, Flor de noz moscada;* Lat. *Macis*), a thin, flat, membranous substance, enveloping the nutmeg; of a lively, reddish yellow colour, a pleasant aromatic smell, and a warm, bitterish, pungent taste. Mace should be chosen fresh, tough, oleaginous, of an extremely fragrant smell, and a bright colour — the brigher the better. The smaller pieces are esteemed the best. The preferable mode of packing is in bales, pressed down close and firm, which preserves its fragrance and consistence.

Account of the Quantity of Mace retained for Home Consumption, and of the Total Revenue derived therefrom, in each of the 3 Years ending with 1842.

Quantities.			Duties.					
1840.	1841.	1842.	1840.			1841.			1842.		
Lbs.	*Lbs.*	*Lbs.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
16,966	16,296	19,010	2,182	17	9	2,113	17	5	2,495	19	3

The duty on mace is 2*s.* 6*d.* per lb.

A production is met with on the coast of Malabar, so like mace, that at first it is not easy to be distinguished; but it has not the least flavour of spiciness, and when chewed has a kind of resiny taste. Eight cwt. of mace are allowed to a ton. — (*Milburn's Orient. Com.*)

MADDER (Ger. *Färberöthe;* Du. *Mee;* Fr. *Alizari, Garance;* It. *Robbia;* Sp. *Granza, Rubia;* Rus. *Mariona, Krap;* Hind. *Munjith*), the roots of a plant (*Rubia tinctorum*), of which there are several varieties. They are long and slender, varying from the thickness of a goose-quill to that of the little finger. They are semi-transparent, of a reddish colour, have a strong smell, and a smooth bark. Madder is very extensively used in dyeing red; and though the colour which it imparts be less bright and beautiful than that of cochineal, it has the advantage of being cheaper and more durable. It is a native of the south of Europe, Asia Minor, and India; but has been long since introduced into and successfully cultivated in Holland, Alsace, Provence, &c. Its cultivation has been attempted in England, but without any beneficial result. Our supplies of madder were, for a lengthened period, almost entirely derived from Holland (Zealand); but large quantities are now imported from France and Turkey.

Dutch or Zealand madder is never exported except in a prepared or manufactured state. It is divided by commercial men into four qualities, distinguished by the terms *mull, gamen, ombro,* and *crops.* The roots being dried in stoves, the first species, or mull, consists of a powder formed by pounding the very small roots, and the husk or bark of the larger ones. It is comparatively low priced, and is employed for dyeing cheap dark colours. A second pounding separates about a third part of the larger roots; and this, being sifted and packed separately, is sold here under the name of gamene, or gemeens. The third and last pounding comprehends the interior, pure, and bright part of the roots, and is sold in Holland under the name of *kor kraps,* but is here simply denominated crops. Sometimes, however, after the mull has been separated, the entire residue is ground, sifted, and packed together, under the name of *onberoofde,* or ombro. It consists of about one third of gamene, and two thirds of crops. Prepared madder should be kept dry. It attracts the moisture of the atmosphere, and is injured by it.

The Smyrna or Levant madder (*Rubia peregrina*), the alizari or lizary of the modern Greeks, is cultivated in Bœotia, along the border of lake Copais, and in the plain of Thebes. It also grows in large quantities at Kurdar near Smyrna, and in Cyprus. The madder of Provence has been raised from seeds carried from the latter in 1761. Turkey madder affords, when properly prepared, a brighter colour than that of Zealand. It is, however, imported in its natural state, or as roots: the natives, by whom it is chiefly produced, not having industry or skill sufficient to prepare it like the Zealanders, by pounding and separating the skins and inferior roots; so that, the finer colouring matter of the larger roots being degraded by the presence of that derived from the former, a peculiar process is required to evolve that beautiful Turkey red which is so highly and deservedly esteemed. — (*Thomson's Chemistry; Bancroft on Colours,* vol. ii. pp. 221—278.: see also *Beckmann, Hist. of Invent.* vol. iii. art. *Madder.*)

In France, madder is prepared nearly in the same manner as in Zealand. The following instructive details as to its cultivation, price, &c. in Provence, were obligingly furnished to us by an English gentleman, intimately acquainted with such subjects, who visited Avignon in the autumn of 1829: —

"This town (Avignon) is the centre of the madder country, the cultivation of which was introduced here about the middle of the 18th century, and, with the exception of Alsace, is still confined (in France) to this department (Vaucluse). The soil appears to be better adapted for its cultivation here than any where else, and it has long been the source of great wealth to the cultivators. Of late years, however, the prices have fluctuated so much, that many proprietors have abandoned, or only occasionally cultivated this root, so that the crop, which was formerly estimated to average 500,000 quintals, is now supposed not to exceed from 300,000 to 400,000.

"The root is called *alizari*, and the powder (made from it) *garance*. The plant is raised from seed, and requires 3 years to come to maturity. It is, however, often pulled in 18 months without injury to the quality; the quantity only is smaller. A rich soil is necessary for its successful cultivation; and when the soil is impregnated with alkaline matter, the root acquires a red colour — in other cases it is yellow. The latter is preferred in England, from the long habit of using Dutch madder, which is of this colour; but in France the red sells at 2 fr. per quintal higher, being used for the Turkey red dye.

"It is calculated that when wheat sells at 20 fr. per hectolitre, *alizari* should bring 35 fr. per quintal (poids de table), to give the same remuneration to the cultivator. That is, wheat 6*s.* per Eng. quarter, and *alizari* 31*s.* per Eng. cwt. The price has, however, been frequently as low as 22 fr. per quintal.

"Prices undergo a revolution every 7 or 8 years, touching the minimum of 22, and rising as high as 100 fr. As in every similar case, the high price induces extensive cultivation, and this generally produces its full effect 4 or 5 years after. The produce of Alsace, which is inferior both in quantity and quality to that of Vaucluse, is generally sold in Strasburg market.

"England employs both the root and the powder, according to the purpose for which they are intended. The Dutch madder is more employed by the woollen dyers, and the French by the cotton dyers and printers.

"In making purchases of *garance*, it is essential to employ a house of confidence, because the quality depends entirely upon the care and honesty of the agent. The *finest* is produced from the roots after being cleaned and stripped of their bark. The *second* by grinding the roots without cleaning. A *third* by mixing the bark of the *first* while grinding; and so on to any degree of adulteration.

"The price of *alizari* in the country, which was only 25 fr. in July, is now (November, 1829) at 36 fr., and is expected to be at 40 fr. very shortly. The crop being deficient both here and in Holland, and the certainty of its being also deficient next year, added to the small quantity existing in England, give reason to believe that the price will reach 60 fr. before many months, and will continue to advance for a year or two more.

"The *quintals* above mentioned are of 100 lbs. *poids de table* — the weight in general use over the south of France, and even in *Marseilles*. This weight is different in the different provinces, varying from 22 to 25 per cent. lighter than the *poids metrique*. At Avignon, 124 lbs. p. de table = 50 kilog., consequently 126 lbs. are equal to 1 cwt. Eng. At the exchange of 25·50 the cwt. costs (including 11*s.* for freight, duty, and all charges till delivered in London or Liverpool) 61*s.* or 60*s.*

"It is considered that only one sixth or one seventh of the present crop remains for sale.

"Madder does not deteriorate by keeping, provided it be kept dry.

"*Compte simulé.*—

	Fr.
Cost of 1 quintal of roots in the country	35
Expenses in do.	2
	37
The root gives 85 per cent. powder, consequently 1 quintal powder	= 43·50
Grinding and cask	3
Transport	2·50
	Fr. 49·0
The English cwt. costs therefore	Fr. 58·85
All expenses till on board at Marseilles	3
Besides commission	Fr. 61·85"

For an account of East Indian madder, or munjeet, see MUNJEET.

Account of the Quantities of Madder and Madder Root imported and retained for Consumption in the U. Kingdom during each of the 4 Years ending with 1840, specifying the Countries whence they were imported, and the Quantities brought from each.

Countries.	Madder.				Madder Root.			
	1837.	1838.	1839.	1840.	1837.	1838.	1839.	1840.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
Holland	33,831	42,857	35,869	47,575	448	298	102	349
Belgium	105	653	2,288	5,603				
France	49,058	53,658	58,044	82,719	53,516	36,141	13,211	31,459
Spain and the Balearic Islands	1,296	37	1,744	6,174	1,051	12		
Italy and the Italian Islands	1	-	311	562	11,040	6,523	16,714	10,120
Turkey	7	-	-	-	36,046	29,059	47,587	66,929
East India Company's territories and Ceylon	11	-	-	12	4,622	4,604	1,375	565
All other countries	229	206	640	150	972	67	1,551	393
Total	84,841	97,411	98,896	140,795	109,235	75,701	80,538	109,415
Total quantities retained for consumption	78,850	108,921	96,702	134,479	100,503	82,841	80,259	112,714

The duty on madder is 6*s.* and on madder roots 3*s.*, and their prices (duty paid) in the London market, in July, 1843, were—

		s.	*d.*	*s.*	*d.*
Madder, —					
Dutch crop	per cwt.	65	0	to 72	0
Ombro	—	56	0	— 63	0
Garnen	—	35	0	— 40	0
Mull	—	12	0	— 25	0
French	—	45	0	— 50	0
Spanish	—	0	0	— 0	0

		s.	*d.*	*s.*	*d.*
Madder roots, —					
Turkey	per cwt.	0	0	to 0	0
French	—	0	0	— 0	0
Dutch	—	0	0	— 0	0
Munjeet, E. I. *ld.*	—	12	0	— 0	0

Madder, the produce of Europe, is not to be imported for home consumption except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under forfeiture of the same, and 100*l.* by the master of the vessel. — (3 & 4 *Will.* 4. c. 52. sect. 58.)

MADEIRA. See WINE.

MADRAS, the principal emporium of the coast of Coromandel, or western shore of the Bay of Bengal, lat. 13° 4′ 22″ N., long. 80° 21′ E. It is the seat of the government of the second presidency of the British possessions in India, having under it a territory, including the tributary states, of 172,000 square miles, with a population, according to the census of 1836-37, of 18,314,000, paying a gross annual revenue of nearly 4,500,000*l.* sterling. The town is situated in the Carnatic province, a low, sandy, and rather sterile country. It is without port or harbour, lying close upon the margin of an open roadstead, the shores of which are constantly beat by a heavy surf. Besides these disadvantages, a rapid current runs along the coast; and it is within the sphere of the hurricanes or typhoons, by which it is occasionally visited. In every respect, indeed, it is a very inconvenient place for trade, and its commerce is consequently greatly inferior to that of either Calcutta or Bombay. It has been in possession of the English above two centuries, having been founded by them in 1639, and retained ever since. Fort Saint George is a strong and handsome fortification, lying close to the shore. The Black Town of Madras, as it is called, stands to the north and eastward of the fort, from which it is separated by a spacious esplanade. Here reside the native, Armenian, and Portuguese merchants, with many Europeans unconnected with the government. Like most other Indian towns, it is irregular and confused, being a mixture of brick and bamboo houses. Madras, like Calcutta and Bombay, is subject

to English law; having a Supreme Court of Judicature, the judges of which are named by the Crown, and are altogether independent of the local government and the East India Company. The population is not exactly ascertained, but there are said to be about 400,000 persons, within a radius of 2½ miles round Fort St. George.

In Madras roads, large ships moor in from 7 to 9 fathoms, with the flagstaff off the fort bearing W.N.W., 2 miles from shore. From October to January is generally considered the most unsafe season of the year, in consequence of the prevalence, during that interval, of storms and typhoons. On the 15th of October the flagstaff is struck, and not erected again until the 15th of December; during which period, a ship coming into the roads, or, indeed, any where within soundings on the coast of Coromandel (reckoned from Point Palmyras to Ceylon), vitiates her insurance, according to the conditions of the policies of all the insurance offices in India. In the fort there is a light-house, 90 feet above the level of the sea, and which may be seen from the deck of a large ship at 17 miles' distance, or from the mast-head at a distance of 26 miles. The cargo boats used for crossing the surf, called *Massula* boats, are large and light; made of very thin planks sewed together, with straw in the seams instead of caulking, which it is supposed might render them too stiff. When within the influence of the surf, the coxswain stands up, and beats time in great agitation with his voice and feet, while the rowers work their oars backwards, until overtaken by a strong surf curling up, which sweeps the boat along with frightful violence. Every oar is then plied forward with the utmost vigour to prevent the wave from taking the boat back as it recedes; until at length, by a few successive surfs, the boat is thrown high and dry upon the beach. The boats belonging to ships in the roads sometimes proceed to the back of the surf, and wait for the country boats from the beach to come to them. When it is dangerous to have communication with the shore, a flag is displayed at the beach-house, which stands near the landing-place, as a caution.

The fishermen and lower classes employed on the water use a species of floating machine of a very simple construction, named a catamaran. It is formed of 2 or 3 logs of light wood, 8 or 10 feet in length, lashed together, with a small piece of wood inserted between them to serve as a stem-piece. When ready for the water, they hold generally 2 men, who with their paddles impel themselves through the surf, to carry letters, or refreshments in small quantities, to ships, when no boat can venture out. They wear a pointed cap made of matting, where they secure the letters, which take no damage. The men are often washed off the catamaran, which they regain by swimming, unless interrupted by a shark. Medals are given to such catamaran men as distinguish themselves by saving persons in danger.

Monies, Weights, and Measures. — The Company's rupee (for an account of which, see art. CALCUTTA) is now in general circulation, and is the standard uniformly referred to in all accounts. But exclusive of the Company's rupee, several coins are in circulation in Madras and its vicinity. Of the gold coins, the principal are star or current pagodas = 7*s.* 5½*d.*; commonly, however, valued at 8*s.* The gold rupee, new coinage, is worth, according to the mint price of gold in England, 1*l.* 9*s.* 2·42*d.* The Arcot rupee (silver) is very nearly of the same value with the Company's rupee. The European merchants keep their accounts at 12 fanams the rupee; 80 cash = 1 fanam, and 42 fanams = 1 pagoda. Copper pieces of 20 cash, called pice, and of 70 and 5 cash, called dodees and half dodees, are also current.

Commercial Weights. — Goods are weighed by the candy of 20 maunds; the maund is divided into 8 vis, 320 pollams, or 3,200 pagodas; the vis is divided into 5 seers. The candy of Madras is 500 lbs. avoirdupois. Hence the pagoda weighs 2 oz. 3 grs.; and the other weights are in proportion. These weights have been adopted by the English; but those used in the Jaghire (the territory round Madras belonging to the Company), as also in most other parts of the Coromandel coast, are called the Malabar weights, and are as follows:— The gursay (called by the English garce) contains 20 baruays or candies; the baruay, 20 manungus or maunds; the maund, 8 visay or vis, 320 pollams, or 3,200 varahuns. The varahun weighs 52¾ English grains: therefore, the visay is 3 lbs. 3 dr.; the maund, 24 lbs. 2 oz.; the baruay, 482¼ lbs.; and the gursay, 9,645½ lbs. avoirdupois, or 4 tons 6 cwt. nearly.

Measures of Capacity. — The garce, corn measure, contains 80 parahs, or 400 marcals; and the marcal, 8 puddies, or 64 ollocks. The marcal should measure 750 cubic inches, and weigh 27 lbs. 2 oz. 2 dr. avoirdupois of fresh spring water: hence, 43 marcals = 15 Winch. bushels; and therefore the garce = 17½ English quarters nearly. When grain is sold by weight, 9,256½ lbs. are reckoned for 1 garce, being 18 candies 12·8 maunds.

I. Account of the Values of the principal Articles imported into Madras and the Ports subordinate to it by Sea, from foreign and other Ports (not subordinate), in 1838–39, and 1839–40.

Principal Articles imported.	1838-39.	1839-40.	Principal Articles imported.	1838-39.	1839-40.
	Co.'s Rup.	*Co.'s Rup.*	Naval stores — *continued.*	*Co.'s Rup.*	*Co.'s Rup.*
Betel nuts, raw, &c.	3,69,937	3,59,598	coir rope, private account	72,024	79,792
Books	1,88,991	97,336	naval stores of stores	-	44,187
Chanks	-	44,843	Drugs and medicines	2,49,17	2,41,977
China and earthenware	-	76,537	Oilman's stores	69,810	1,09,448
Coral beads	2,27,732	1,73,532	Paper; Bengal, China, gilt, &c.	1,02,526	60,132
Confectionery	-	35,268	Pearls and precious stones	12,700	18,870
Coffee	11,650	10,091	Perfumery	-	35,876
Cotton	48,213	46,861	Piece goods, viz.: —		
Cotton twist	5,25,721	6,02,094	cotton	4,55,250	6,75,874
Cutlery and hardware	-	63,991	ditto, British	4,00,696	5,22,049
Dyes, viz.: —			silk, Europe, &c.	1,88,791	1,79,414
chay root	-	50,447	Saddlery	88,620	54,754
indigo	-	13,445	Salt provisions, &c.	1,24,238	1,78,288
manjesty	-	26,956	Silk, raw	11,013	9,251
Fruits, viz.: —			Salt: Company's account	97,955	1,12,708
cocoa nuts, fresh and dry	97,116	1,15,178	private account	19,751	18,690
fruits of sorts	-	93,169	Spices, viz.: —		
Glass ware	97,652	99,572	cloves	12,226	77,883
Grain	25,01,950	19,75,084	pepper	1,03,927	93,405
Gunnies	-	52,863	spices of all sorts, — cardamoms, mace, nutmegs, &c.	52,698	32,512
Haberdashery, gold thread, &c.	64,862	82,297	Stationery	51,239	50,483
Gum Benjamin	38,131	32,096	Sugar	54,613	36,094
Horses: Company's account	1,24,500	94,500	Sugar candy	29,972	27,732
private account	1,70,830	1,22,575	Tea	1,05,345	91,617
Jewellery	22,565	10,459	Timber and planks	3,25,279	3,25,749
Instruments, musical, &c.	-	46,197	Wearing apparel	39,574	60,314
Liquors and wines	8,07,034	9,37,153	Woollens	1,10,577	1,27,952
Ditto, spirituous	3,15,264	3,48,617	Other articles, Europe, &c.	12,64,152	5,68,029
Metals, wrought and unwrought	5,32,036	7,99,652		1,03,48,143	1,04,76,992
Millinery	1,27,041	1,25,612	Treasure	41,80,785	33,54,590
Military stores	-	95,329			
Naval stores, viz.: —			Total	1,45,28,928	1,38,31,582
canvas, Europe	14,319	17,687			
coir rope, Company's account	18,266	17,553			

II. Account of the Values of the principal Articles exported from Madras and the Ports subordinate to it by Sea, to Foreign and other Ports (not subordinate), in 1838-1839, and 1839-1840.

Principal Articles exported.	1838-1839.	1839-1840.	Principal Articles exported.	1838-1839.	1839-1840.
	Co.'s Rup.	*Co.'s Rup.*		*Co.'s Rup.*	*Co.'s Rup.*
Betel nuts, boiled and raw	1,63,397	2,11,150	Provisions of sorts	-	25,065
Chanks	1,34,279	80,018	Salt	38,518	65,855
Chillies	-	53,184	Saltpetre	72,989	51,248
Coffee	81,208	1,59,774	Sandal wood	2,11,753	61,156
Cotton	30,91,902	37,26,927	Spices, viz. : —		
Drugs and medicines	1,26,204	87,142	cardamoms, with shells	1,03,017	1,21,766
Dyes, indigo	13,15,491	25,56,198	cassia and cinnamon	6,551	9,929
Fruits, cocoa-nuts, fresh and dry	5,00,063	9,01,711	cloves	-	40,162
Grain	45,76,059	33,86,833	pepper	7,57,088	6,20,154
Hides and goat skins, &c.	1,09,418	1,30,223	of sorts, mace and nutmegs	1,421	3,268
Horns, buffalo and deer	28,325	47,177	Stationery	-	16,337
Liquors and wines	71,579	77,711	Stick lac	-	15,175
Liquors, spirituous	19,344	25,505	Sugar	23,015	71,760
Metals	2,00,671	3,31,640	Tea	29,815	10,197
Naval stores, viz. : —			Timber, viz. : —		
coir, company's account	7,200	10,031	and planks	2,27,159	2,40,320
do. private account	1,33,783	1,58,078	red wood	9,190	30,519
Oils	-	63,261	Tobacco	-	81,992
Pearls and precious stones	27,307	44,182	Turmeric	-	46,012
Piece goods, viz. : —			Wax and wax candles	39,983	41,817
cotton	59,24,003	55,55,140	Other articles, Europe, &c.	7,29,264	4,69,065
silk	9,125	16,599			
Provisions, viz. : —				1,89,71,853	1,99,82,901
ghee	1,29,810	2,39,218	Treasure	61,10,920	1,03,07,710
shark fins	19,053	10,049			
salt provisions	49,715	82,972	Total	2,51,12,773	3,02,90,611

III. Account of the Trade of Madras with Foreign Countries in 1839-40, specifying the Value of the Imports and Exports from each.

Countries.	Imports.			Exports.		
	Merchandise.	Treasure.	Total.	Merchandise.	Treasure.	Total.
	Co.'s Rupees.	*Co.'s Rupees.*	*Co.'s Rupees.*	*Co.'s Rupees.*	*Co.'s Rupees.*	*Co.'s Rupees.*
United Kingdom	35,36,020	3,21,718	38,60,738	61,58,201	676	61,58,880
France	1,78,330	94,250	2,72,580	10,25,154	-	10,25,154
Madeira and Teneriffe	32,149	-	32,149			
America	11,483	-	11,483	52,515	-	52,515
Arabia	8,805	35,600	44,405	9,77,855	-	9,77,855
Bengal	11,46,712	5,66,850	17,13,562	9,76,010	38,23,996	48,00,006
Bombay	16,11,924	15,92,950	32,04,874	59,81,828	52,05,290	1,11,90,078
Cape of Good Hope	27,311	-	27,311	9,530	-	9,530
Ceylon	8,76,780	58,100	9,34,880	20,94,911	6,16,179	27,11,090
China	1,95,472	271	1,95,743	5,30,380	-	5,30,380
Eastward	-	-	-	26,861	-	26,861
French ports (Indian)	4,32,847	19,000	4,51,847	4,49,195	4,000	4,53,195
Goa	10,194	58,595	68,789	1,96,089	-	1,96,089
Gulph of Persia	16,145	-	16,145	95,787	-	95,787
Java	2,512	-	2,512			
Malacca Straits	3,56,992	5,93,781	9,50,773	9,11,442	6,545	9,17,987
Maldive Islands	67,343	-	67,343	39,589	-	39,589
Mauritius and Bourbon	72,713	12,000	84,713	71,096	-	71,096
New South Wales	170	-	170	310	-	310
Pegu	14,47,450	5,342	14,52,792	2,81,070	6,51,064	9,32,134
Tranquebar	3,14,119	-	3,14,119	7,140	-	7,140
Travancore	1,28,087	153	1,28,240	81,981	-	81,981
West coast of Sumatra	-	-	-	10,193	-	10,193
Total	1,04,76,992	33,54,590	1,38,31,582	1,09,82,901	1,03,07,710	3,02,90,611

IV. Summary of the external Commerce of Madras by Sea, in 1838-39, and 1839-40.

For the Year 1838-39.	Private Trade.			Company's Trade.			Grand Total.
	Merchandise.	Treasure.	Total.	Merchandise.	Treasure.	Total.	
	Co.'s Rup.	*Co.'s Rup.*	*Co.'s Rup.*	*Co.'s Rup.*	*Co.'s Rup.*	*Co.'s Rup.*	*Co.'s Rup.*
Imports	1,01,07,442	35,28,785	1,36,36,227	2,40,701	6,52,000	8,92,701	1,45,28,928
Exports	1,89,58,764	15,66,459	2,05,25,223	13,089	48,74,461	48,87,550	2,54,12,773
Total Co.'s rup.	2,90,66,206	50,95,244	3,41,61,450	2,53,790	55,26,461	57,80,251	3,99,41,701
For the Year 1839-40.							
Imports	1,02,52,231	27,88,340	1,30,40,571	2,24,761	5,66,250	7,91,011	1,38,31,582
Exports	1,99,59,668	11,10,364	2,10,70,032	23,233	91,97,346	92,20,579	3,02,90,611
Total Co.'s rup.	3,02,11,899	38,98,704	3,41,10,603	2,47,994	97,63,596	1,00,11,590	4,41,22,193

General Rates of Agency and Commission, as revised by the Chamber of Commerce, and recommended for general approval and adoption.

1. On the total sum of a debit or credit side of an account at the option of the agent, excepting items on which a commission of 5 per cent. is chargeable, 1 per cent.
2. On effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1 per cent.
3. On subscriptions to government loans, purchasing, selling, transferring or exchanging public securities, ½ per cent.
4. On delivering up public securities, or lodging them in any of the public offices, ¼ per cent.
5. On receiving and delivering private commissions of wines, cattle, and merchandise, 2½ per cent.
6. On collecting rents, 2½ per cent.
7. On purchasing of lottery tickets, and amounts of prizes, 1 per cent.
8. On the sale of lottery tickets from other settlements, 2½ per cent.
9. On letters of credit granted, 2½ per cent.
10. On executorship or administration to estates of deceased persons, 5 per cent.
11. On the management of estates for executors or administrators, 2½ per cent.
12. On becoming security for administrators, 2½ per cent.
13. On debts when a process of law or arbitration is necessary, 2½ per cent.
    And if recovered by such means, 5 per cent.
14. On bills of exchange, notes, &c. dishonoured, 1 per cent.
15. On overdue debts collected for absentees, 2½ per cent.
16. On becoming security for individuals to government or others, 2½ per cent.
17. On all sales or purchases of goods, 5 per cent.

With the following exceptions : —

On houses, lands, and ships, 2½ per cent.
On diamonds, pearls, and jewellery, 2½ per cent.
On treasure and bullion, 1 per cent.
On all goods and merchandise withdrawn, shipped, or delivered to order, half commission.
On all other descriptions of property for sale, if withdrawn

or otherwise disposed of by the owners, half commission.
On goods transferred to auction or commission salesmen, half commission.
18. On guaranteeing sales, bills, bonds, contracts for goods or other engagements, 2½ per cent.
19. On ship disbursements, 2½ per cent.
20. On chartering ships or engaging tonnage, 2½ per cent.
21. On advertising as the agents of owners or commanders of ships for freight or passengers, on the amount of freight or passage money, whether the same shall pass through the agent's hands or not, 5 per cent.
22. On effecting insurance or writing orders for insurance, whether on lives or property, ½ per cent.
23. On settling losses, partial or general, and returns of premium, 1 per cent.
24. On procuring money on respondentia, whenever payable, 2 per cent.
25. On making up or purchasing goods to order where the funds are not provided, 7½ per cent.
26. On giving orders for the provision of goods where a commission is not chargeable on sale or shipment, 2½ per cent.
27. On attending the delivery of contract goods, 2 per cent.

Rates of Godown Rent per Month.

	Rs.	a.
Bales of punjum cloth of 30 pieces, per bale	0	8
Screwed do. of cotton, of 300 lbs., per bale	0	4
Loose bundles of do. of 200 lbs., per bundle	0	4
Bales of taffaties and raw silk, per bale	1	0
Chests of opium, per chest	0	8
of indigo, per chest	0	8
of wine, of 12 dozens, per chest	0	8
Pipes of wine, puncheons and butts, each per pipe	1	0
Bags of rice and sugar, per bag	0	1
of saltpetre, per bag	0	1
Metals, per ton	0	4

* Other articles in proportion to the above.

GOVERNMENT BANK. — *Rates of Interest on Loans.*
Rates of interest on loans for a specified period (not exceeding 12 months) on mortgage of government paper, 5 per cent.
On cash accounts made up quarterly on the deposit of government paper on all payments, 6 per cent.
On all receipts, 5 per cent.
Lowest sum allowed on loan on cash accounts, 3,500 rupees.

Rates of Discount.
On private bills, 5 per cent.
On government bills, 4 per cent.
(No bills discounted that have a longer period to run than 3 months.)
To open an account, the sum required to be transmitted is 500 rupees.
The lowest sum received, after opening an account, is 100.
Do. paid on a cheque, is 35.
N.B. — No cheque paid, nor monies carried to account after half past 2 P. M.
This bank is entirely a government concern, the directors consisting of the superior officers of government; and the ministerial officers are on fixed salaries. The bank issues notes, receivable as cash at the public treasuries, within the town of Madras; it receives deposits and grants discounts. It has been proposed to establish another bank on a more liberal and comprehensive system.

Table of Port Charges at Madras.

Boat Hire.

	S. Roads. Rs.	a.	p.	N. Roads. Rs.	a.	p.
Ordinary trips	1	3	0	0	12	6
Do., do. for an accommodation boat	4	0	0	4	0	0
Transhipments	0	12	6	0	12	6
Do. for an accommodation boat	2	0	0	2	0	0
Deep do.	1	8	0	1	8	0
Do. do.	3	0	0	3	0	0
Return trip	0	10	0	0	6	3
Bad weather, ordinary trip	2	3	0	1	8	0
— for an accommodation boat	6	0	0	6	0	0
— transhipment	1	8	0	1	8	0
— jolly-boat do.	1	8	0	1	8	0
— return ships	1	3	0	0	12	6

Anchorage Dues.

British ships, and ships under foreign, European, or American colours	38	0	0	0	0	0
Country ships, from 900 to 500 tons	35	0	0	0	0	0
— 500 — 300 —	28	0	0	0	0	0
— 300 — 200 —	21	0	0	0	0	0
— 200 — 100 —	17	0	0	0	0	0
— 100 — 50 —	14	0	0	0	0	0
— 50 — 10 —	10	0	0	0	0	0
Native craft, from 400 — 300 —	0	0	0	21	0	0
— 300 — 200 —	0	0	0	17	0	0
— 200 — 100 —	0	0	0	14	0	0

	S. Roads. Rs.	a.	p.	N. Roads. Rs.	a.	p.
Native craft, from 100 to 50 tons.	0	0	0	10	0	0
— 50 — 20 —	0	0	0	3	0	0
— 20 — 10 —	0	0	0	1	0	0

Light-house Dues.

	Rs.	a.	p.
All British and foreign ships, on anchoring	25	0	0
Country ships	14	0	0
Snow, brig, ketch, and schooner	7	0	0
Sloop and cutter	5	0	0
Large dhonies	5	0	0
Small dhonies	2	0	0

Cattamaran Hire.

Small cattamarans, to all ships, on anchoring	1	0	0
— snow, brig, and ketch, do.	0	12	0
— sloop and cutter, do.	0	10	0
— dhonies and large boats	0	8	0
— carrying letters to ships	0	4	0
— carrying provisions or parcels	1	0	0
Large cattamarans, for landing or shipping a European cable of 13 to 16 inches	18	12	0
— for do. do. 17 to 22 inches	28	8	0
— for do. an anchor, 14 to 29 cwt.	18	12	0
— for do. — 30 to 50 cwt.	28	8	0

The foregoing statements sufficiently exhibit the commercial importance of Madras. The limited extent of its trade, as compared with that of Calcutta and Bombay, is partly ascribable to the badness of its port or roadstead, the want of any navigable river or other easy means of communication with the interior, and the backward state of the provinces of which it is the capital, in consequence of the heavy and fluctuating land tax to which they are subject. In 1839-40, there arrived at Madras no fewer than 5,426 vessels (including their repeated voyages) of the aggregate burden of 335,465 tons. But by far the greater number of these were of very small burden; 2,832 being country craft from Bombay, 853 from Ceylon, and 585 from Goa. In the course of the same year 31 vessels arrived from the U. Kingdom. — (*Hamilton's East Indian Gazetteer; Geog. Dict.* art. *Madras; Madras Almanack* for 1839 and 1840; *Official Returns of the Trade of Madras, &c.*)

MAGNESIA (Fr. *Magnésie*; Ger. *Gebraunte Magnesia*; It. *Magnesia*), one of the primitive earths, having a metallic basis. It is not found native in a state of purity, but is easily prepared. It is inodorous and insipid, in the form of a very light, white, soft powder, having a specific gravity of 2·3. It turns to green the more delicate vegetable blues, is infusible, and requires for its solution 2,000 parts of water at 60°.

MAHOGANY, the wood of a tree (*Swietenia Mahogani*) growing in the West Indies and Central America. There are two other species of Swietenia found in the East Indies, but they are not much known in this country.

Mahogany is one of the most majestic and beautiful of trees: its trunk is often 40 feet in length, and 6 feet in diameter; and it divides into so many massy arms, and throws the shade of its shining green leaves over so vast an extent of surface, that few more magnificent objects are to be met with in the vegetable world. It is abundant in Cuba and Hayti, and it used to be plentiful in Jamaica; but in the latter island, most of the larger trees, at least in accessible situations, have been cut down. The principal importations into Great Britain are made from Honduras and Campeachy. That which is imported from the islands is called Spanish mahogany; it is not so large as that from Honduras, being generally in logs from 20 to 26 inches square and 10 feet long, while the latter is usually from 2 to 4 feet square and 12 or 14 feet long, but some logs are much larger. Mahogany is a very beautiful and valuable species of wood: its colour is a red brown, of different shades, and various degrees of brightness; sometimes yellowish brown; often very much veined and mottled, with darker shades of the same colour. The texture is uniform, and the annual rings not very distinct. It has no larger septa; but the smaller septa are often very visible, with pores between them, which in the Honduras wood are generally empty, but in the Spanish wood are mostly filled with a whitish substance. It has neither taste nor smell, shrinks very little, and warps or twists less than any other species of timber. It is very durable when kept dry, but does not last long when exposed to the weather. It is not attacked by worms. Like the pine tribe, the

timber is best on dry rocky soils, or in exposed situations. That which is most accessible at Honduras grows upon moist low land, and is, generally speaking, decidedly inferior to that brought from Cuba and Hayti; being soft, coarse, and spongy; while the other is close grained and hard, of a darker colour, and sometimes strongly figured. Honduras mahogany has, however, the advantage of holding glue admirably well; and is, for this reason, frequently used as a ground on which to lay veneers of the finer sorts. The best qualities of mahogany bring a very high price. Not long since, Messrs. Broadwood, the distinguished pianoforte manufacturers, gave the enormous sum of 3,000*l.* for three logs of mahogany! These logs, the produce of a *single tree*, were each about 15 feet long, and 38 inches square: they were cut into veneers of 8 to an inch. The wood was particularly beautiful, capable of receiving the highest polish; and when polished, reflecting the light in the most varied manner, like the surface of a crystal; and, from the wavy form of the pores, offering a different figure in whatever direction it was viewed. Dealers in mahogany generally introduce an auger before buying a log; but, notwithstanding, they are seldom able to decide with much precision as to the quality of the wood, so that there is a good deal of lottery in the trade. The logs for which Messrs. Broadwood gave so high a price were brought to this country with a full knowledge of their superior worth. Mahogany was used in repairing some of Sir Walter Raleigh's ships at Trinidad, in 1597; but it was not introduced into use in England till 1724.

The cutting of mahogany at Honduras takes place at two different seasons; after Christmas, and towards midsummer. The negroes employed in felling the trees are divided into groups of from 10 to 50. The trees are cut about 12 feet from the ground, and are floated down the rivers.

Of 23,115 tons of mahogany imported in 1840, 17,008 came from the British West Indies (including Honduras), and 4,813 from Hayti. The duty on foreign mahogany used to be 7*l.* 10*s.* a ton, on Honduras, 1*l.* 10*s.*, and on Jamaica mahogany, 4*l.*; the effect of such a duty being to force the consumption of the inferior in preference to the superior article. Luckily, however, the duty on foreign mahogany was reduced in 1842 to 20*s.*, and that on Honduras mahogany to 5*s.* a ton. — (See *Tredgold's Principles of Carpentry*, p. 204.; *Library of Entertaining Knowledge*, volume on *Timber Trees and Fruits*; and *Edwards's West Indies*, vol. iv. p. 258. ed. 1819, *&c.*)

Mahogany from Honduras, imported into any free warehousing port in the British possessions in the West Indies or America, in a ship cleared out from Balize, and then warehoused as having been so imported and cleared, may be exported from the warehouse and imported into the U. Kingdom, as if it had been imported direct in a British ship, provided it be stated in the ship's clearance that the mahogany had been so warehoused and exported. — (9 *Geo.* 4. c. 76. § 13.)

Mahogany not to be entered as being the produce of any British possession, unless the master of the ship importing the same deliver to the collector or comptroller a *certificate*, and declare that the goods are the produce of such place. — (See *antè*, p. 672.)

MAIZE, OR INDIAN CORN (Fr. *Blé de Turquie*; Ger. *Türkisch korn*, *Mays*; It. *Grano Turco o Siciliano*; Sp. *Trigo de Indias*, *Trigo de Turquia*), one of the cereal grasses (*Zea Mays*), supposed to be indigenous to South America, being the only species of corn cultivated in the New World previously to its discovery. It was introduced into the Continent about the beginning, and into England a little after the middle, of the 16th century. Its culture has spread with astonishing rapidity; being now extensively grown in most Asiatic countries, and in all the southern parts of Europe. It has the widest geographical range of all the ceralia, growing luxuriantly at the equator, and as far as the 50th degree of north, and the 40th of south latitude. It has been raised in England, in nursery gardens near the metropolis, for more than a century; and recently it has been attempted to raise it in the fields, but with indifferent success. Like other plants that have been long in cultivation, it has an immense number of varieties. The ear consists of about 600 grains, set close together in rows, to the number of 8, 10, or 12. The grains are usually yellow; but they are sometimes red, bluish, greenish, or olive-coloured, and sometimes striped and variegated. The maize of Virginia is tall and robust, growing 7 or 8 feet high; that of New England is shorter and lower; and the Indians further up the country have a still smaller sort in common use. The stalk is jointed like the sugar cane. The straw makes excellent fodder; and the grain, as a bread corn, is liked by some; but though it abounds in mucilage, it contains little or no gluten, and is not likely to be much used by those who can procure wheaten or even rye bread. — (*Loudon's Encyclopædia of Agriculture*, *&c.*) For the imports of maize, duties, &c., see CORN LAWS AND CORN TRADE.

MALAGA, a city and sea-port of Spain, in the kingdom of Granada, in lat. 36° 43½′ N., lon. 4° 25′ 7″ W. Population, perhaps, 65,000.

Harbour. — Malaga has an excellent harbour. It is protected on its eastern side by a fine mole, full 700 yards in length. At its extremity a light-house has been constructed, furnished with a powerful light, revolving once every minute. At a distance it appears obscured for 45 seconds, when a brilliant flash succeeds for the other 15 seconds. A shoal has grown up round the mole head, and the depth of water throughout the harbour is said to be diminishing. Latterly, however, a dredging machine has been employed to deepen it, by clearing out the mud and accumulating sand. The depth of water, at the entrance to the harbour and within the mole, is from 26 to 30 feet; and close to the city, from 8 to 10 feet. The harbour could easily accommodate more than 450 merchant ships: it may be entered with all winds, and affords perfect shelter.

Trade, &c. — Owing to the want of official returns, and to the prevalence of smuggling, which may be said to have annihilated all fair trade, it is not possible to obtain any accurate accounts of the trade of Malaga, or, indeed, of any Spanish port. The great articles of export are wine and fruits, particularly raisins and almonds, grapes, figs, and lemons; there is also a considerable exportation of olive oil, with quantities of brandy, anchovies, cummin seed, aniseed, barilla, soap, &c. The lead exported from Malaga is brought from Adra. — (See LEAD.) The imports are salt fish, iron hoops, bar iron, and nails; cotton stuffs, hides, earthenware, &c., with dye stuffs, all sorts of colonial produce, butter and cheese from Holland and Ireland, linens from Germany, &c. The trade with England seems to be diminishing, and that with the United States to be increasing. This is a consequence, no doubt, of Malaga wine being very little in demand in the

former, while it is pretty largely consumed in the latter. The Americans are also the largest consumers of Malaga fruit.

The following details, abstracted from Mr. Inglis's valuable work, entitled "Spain in 1830," contain the fullest and best account we have met with of the trade of Malaga. Their authenticity may, we believe, be depended upon.

"*Wine.*— The wines of Malaga are of two sorts, sweet and dry; and of the former of these there are four kinds: first, the common 'Malaga,' known and exported under that name. In this there is a certain proportion of boiled wine, which is allowed to burn, and which communicates a slightly burnt taste to the 'Malaga.' The grape from which this wine is made is a white grape, and every pipe of 'Malaga' contains no less than *eleven* gallons of brandy. Secondly, 'Mountain.' This wine is made from the same grape as the other, and, like it, contains colouring matter and brandy; the only difference is that, for 'Mountain,' the grape is allowed to become riper. Thirdly, 'Lagrimas,' the richest and finest of the sweet wines of Malaga; the name of which almost explains the manner in which it is made. It is the droppings of the ripe grape hung up, and is obtained without the application of pressure.

"The dry wine of Malaga is produced from the same grape as the sweet wine, but pressed when greener; in this wine there is an eighth part more of brandy than in the sweet wine; no less than 1-12th part of the dry Malaga being brandy.

"The whole produce of the Malaga vineyards is estimated at from 35,000 to 40,000 pipes; but owing to the increasing stock of old wine in the cellars, it is impossible to be precise in this calculation. The export of all sorts of Malaga wine may be stated at about 27,000 pipes. The principal market is the U. States and S. America; and to these the export is upon the increase. The average price of the wines shipped from Malaga does not exceed 35 dollars per pipe; but wines are occasionally exported at the price of 170 dollars. Many attempts have been made at Malaga to produce sherry, but not with perfect success. The sherry grape has been reared at Malaga upon a soil very similar to that of Xeres; but the merchants of Malaga have not ventured to enter the wine for export. One reason of the very low price of the wines of Malaga is to be found in the cheapness of labour; field labour is only 2½ reals a day (1½*d.*). In the fruit and vintage time it is about double.

"*Fruit.*— Next to its wines, the chief export of Malaga is fruit, consisting of raisins, almonds, grapes, figs, and lemons; but of these, raisins are principally exported. I have before me a note of the exports of Malaga for the months of September and October, 1830,— the chief, though not the sole, exporting months.— and I find that during that time the export of raisins amounted to 268,845 boxes, and 31,916 smaller packages. Of this quantity, 125,334 boxes were entered for the U. States; 45,513 for England; the remaining quantity being for France, the West Indies, the Spanish ports, S. America, and Holland.

"The raisins exported from Malaga are of three kinds, *muscatel*, *bloom* or *sun raisin*, and *lexias*. The muscatel is the finest raisin in the world. In its preparation no art is used; the grape is merely placed in the sun, and frequently turned. The bloom or sun raisin is a different grape from the muscatel; but its preparation is the same. The lexias acquire this name from the liquor, or ley, in which they are dipped, and which is composed of water, ashes, and oil; these, after being dipped, are also dried in the sun. All muscatel raisins are exported in boxes, and also a part of the bloom raisins. In 1829, the exports of muscatel and bloom raisins were 325,000 boxes of 25 lbs. each; in all, 8,125,000 lbs. This quantity is independent of the export of bloom raisins in casks, and of lexias; the latter amounting to about 30,000 arrogas. The export of raisins to England has fallen off, while that to America has considerably increased. In 1824, 75 ships cleared from Malaga, for England, with fruit: in 1830, down to the 1st of November, 34 vessels had cleared out.

"Of the other fruits raised near Malaga, grapes, almonds, and lemons are the most extensively exported. In the months of September and October, 1830, 11,612 jars of grapes were shipped for England; 6,429 for America; and 1,650 for Russia. During the same months, 5,335 arrobas of almonds (133,375 lbs.) were shipped for England, this being nearly the whole export; there were also exported, during the same period, 3,749 boxes of lemons for England; 4,201 ditto for Germany; and 840 ditto for Russia.

"*Oil.*— There is also a large export of oil from Malaga; but the exportation, during the latter part of 1830, would be no criterion of the average; because, the Greenland whale fishery having failed, extensive orders had been received from England.

"*Shipping.*— The trade between England and Malaga is on the decline: that with both the Americas is increasing, especially in wines. The number of British vessels entered at the port of Malaga, in 1827, I find from an official note furnished by the British consul to have been 104; in 1828, 126; in 1829, 105; and in 1830, to the 1st of November, 83, exclusive of small Gibraltar vessels. The number of American vessels entering in 1829, was 55; but the average burden of the Americans being 175 tons, and that of the English vessels not exceeding 100, the whole American is nearly equal to the whole English trade."— (Vol. ii. pp. 190—196.)

Money.— Accounts are kept in reals of 34 maravedis vellon.— (For the coins, and their value, used at Malaga, see CADIZ.)

Weights and Measures.— The weights are the same as those of Cadiz. The arroba, or cantara=4·19 English wine gallons; the regular pipe of Malaga wine contains 35 arrobas, but is reckoned only at 34; a bota of Pedro Ximenes wine=53½ arrobas; a bota of oil is 43, and a pipe 35 arrobas; the latter weighs about 860 lbs. avoirdupois: a carga of raisins is 2 baskets, or 7 arrobas; a cask contains as much, though only called 4 arrobas: as a last for freight are reckoned—4 botas or 5 pipes of wine or oil; 4 bales of orange peel; 5 pipes of Pedro Ximenes wine or oil; 10 casks of almonds (each about 380 lbs. English); 20 chests of lemons and oranges; 22 casks of almonds (of 8 arrobas each); 44 casks of raisins (of 4 arrobas each); 88 half casks of raisins; 50 baskets or 160 jars of raisins.

Port Charges.—The port and harbour dues amount, on an English vessel of 300 tons, to about 21*l.*; on a Spanish vessel, of the same burden, they would be about 11*l.* 10*s.*

Warehousing.— Goods may be warehoused for 12 months, paying 2 per cent. *ad valorem* in lieu of all charges; but, at the end of the year, they must be either entered for consumption or reshipped. The 2 per cent. is charged, whether they lie a day or the whole year.

There is an excellent account of Malaga in *Townsend's Travels in Spain*, vol. iii. pp. 10—42.

MALMSLEY. See WINE.

MALT (Ger. *Maly*; Du. *Mout*; Fr. *Mal*, *Blédgermé*; It. *Malto*; Sp. *Cebada retostada ó entallecida*; Rus. *Solod*; Lat. *Maltum*). The term malt is applied to designate grain which, being steeped in water, is made to germinate to a certain extent, after which the process is checked by the application of heat. This evolves the saccharine principle of the grain, which is the essence of malt. The process followed in the manufacture is very simple. Few changes have been made in it; and it is carried on at this moment very much in the same manner that it was carried on by our ancestors centuries ago. Rice, and almost every species of grain, has been used in malting; but in Europe, and especially in England, malt is prepared almost wholly from barley. It

is the principal ingredient in the manufacture of beer, and is little used except in brewing and the distillation of spirits.

Duties on, and Consumption of, Malt. Influence of the Reduction of the Duty and the Opening of the Trade. — Owing to malt liquor having early become the favourite beverage of the people of England, the manufacture of malt has been carried on amongst us, for a lengthened period, on a very large scale. Instead, however, of increasing with the increasing wealth and population of the country, it was nearly stationary for the hundred years ending with 1816. In proof of this we may mention that the quantity of malt that paid duty in England and Wales, at an average of the 12 years ending with 1720, was 24,191,304 bushels a year; whereas the annual average quantity that paid duty during the 12 years ending with 1816, was only 23,197,754 bushels! This apparently anomalous result is probably in some measure to be accounted for by the increased consumption of tea and coffee, which are now in almost universal use; but there cannot be a question that it is mainly owing to the exorbitant duties with which malt, and the ale or beer manufactured from it, have been loaded, and to the oppressive regulations imposed on the manufacture of malt and the sale of beer. The effect of these duties and regulations was to impose a tax of about 7*s.* on the malt and beer made from a bushel of barley; which, taking the average price of barley at from 4*s.* to 5*s.* a bushel, was equivalent to an *ad valorem* duty of from 140 to 175 per cent.! The exorbitancy of the duty was not, however, its most objectionable feature. It was about equally divided — one half being assessed directly on malt, and the other on beer: but the beer duty affected only beer brewed by public brewers, or for sale, and did not affect that which was brewed for private use; and as rich families brewed all the beer they made use of, the consequence of this distinction was, that the beer duty fell wholly on the lower and middle classes, who did not brew any beer; or, in other words, the poor man was compelled to pay twice the duty on the malt he made use of that was paid by the rich man! That such a distinction should ever have been made, or submitted to for any considerable period, is certainly not a little astonishing. Originally, however, the distinction was not so great as it afterwards became; and being increased by slow degrees, the force of habit reconciled the parliament and the country to the gross inequality and oppressiveness of the tax. But the public attention being at length forcibly attracted to the subject, and the effect of the exorbitant duties on malt and beer in increasing the consumption of ardent spirits having been clearly pointed out — (see *Edinburgh Review*, No. 98. art. 4.), the beer duty was repealed in 1830. This measure of substantial justice and sound policy reflects the greatest credit on the administration of the Duke of Wellington; which is also entitled to the public gratitude for having placed the licensing system on a fair footing, and established, for the first time, a free trade in beer.

The repeal of the duty has materially increased the consumption of malt; and the anticipations of those who contended that its abolition, if combined with a free trade in beer, would be no great loss to the revenue, are in a fair way of being realised. The clamour that was raised against the measure, on account of its supposed influence in increasing drunkenness, was, we firmly believe, wholly without foundation. If the measure increased, as it certainly did, the consumption of beer, the probability is that it would, at the same time, equally diminish the consumption of gin; and it is surely superfluous to add, that this is a most beneficial change. It is true that a number of new public houses were opened for the sale of beer; but it has not hitherto been proved that this circumstance, though it occasioned no common alarm among the clergy and magistrates in different parts of the country, was productive of any public inconvenience. Like all newly opened lines of business, the trade of beer selling was overdone; and a considerable number of beer shops have since been shut up. "It is not," as Dr. Smith sagaciously remarked, "the multiplication of alehouses that occasions a general disposition to drunkenness among the common people; but that disposition, arising from other causes, necessarily gives employment to a multitude of alehouses."— (*Wealth of Nations*, p. 161.) The way to eradicate this disposition is by giving a better education to the poor, and inspiring them with a taste for less grovelling enjoyments. All that the fiscal regulations and police enactments intended to promote sobriety have ever done, is to make bad worse, to irritate and disgust, to make the lower classes more enamoured of that which they conceive is unjustly withheld from them, and to stimulate them to elude and defeat the law.

The duty on malt was first imposed in England in 1697, and in Scotland in 1713; but it was not introduced into Ireland till 1785. The following tables exhibit the progress of the consumption and of the duties directly falling on malt from a remote period. But the principal consumption of malt being in beer, the duties on the latter were, in fact, duties on malt; and must always be taken into account in forming anything like a correct estimate of the influence of the latter. Ample information as to the duties on beer will be found in the art. Ale and Beer.

Prices of Malt, per Winchester Quarter, at Greenwich Hospital, from 1730 to 1842.

Years.	Prices.	Years.	Prices.	Years.	Prices.
1730	20s. 6d.	1800	81s.	1823	59s. 11d.
1740	27s. 3½d.	1805	85s. 7d.	1824	62s. 1d.
1750	24s.	1810	84s. 5d.	1825	71s. 10½d.
1760	24s. 9d.	1815	69s. 7½d.	1830	56s. 1½d.
1770	28s. 3d.	1820	68s. 8½d.	1835	43s. 4½d.
1780	31s. 1d.	1821	61s. 1½d.	1840	68s. 4½d.
1790	35s. 6d.	1822	52s. 8½d.	1842	61s. 7d.

Account of the Quantities of Malt charged with Duty in England and Wales, of the Revenue received thereon, and of the Rates of Duty, in each Year, from 1702.

Years.	Number of Bushels of Malt.	Amount of Duty. £	s.	d.	Rate of Duty per Bushel.
1702	12,166,778	313,907	5	0	$6\frac{16}{21}d.$
1703	26,754,505	691,577	4	11	—
1704	19,765,042	512,735	4	4	—
1705	27,120,982	702,957	11	1	—
1706	23,099,650	599,477	3	7	—
1707	25,002,855	648,846	15	2	—
1708	25,209,966	602,837	5	0	—
1709	20,275,335	527,355	19	10	—
1710	19,671,021	511,954	10	6	—
1711	22,263,126	578,839	19	1	—
1712	22,315,483	580,168	16	7	—
1713	25,060,639	650,932	14	4	—
1714	20,019,767	520,771	7	0	—
1715	21,472,610	635,330	18	6	—
1716	26,643,119	691,293	18	3	—
1717	28,859,926	748,583	19	6	—
1718	26,862,157	697,166	1	3	—
1719	28,228,627	734,535	7	8	—
1720	25,625,814	665,527	1	9	—
1721	28,587,391	741,901	0	6	—
1722	32,999,688	855,860	18	7	—
1723	30,655,498	795,552	8	0	—
1724	24,227,667	629,502	12	2	—
1725	27,265,172	707,467	12	3	—
1726	27,016,303	700,933	19	1	—
1727	25,401,576	659,331	15	3	—
1728	20,951,269	543,457	12	8	—
1729	23,032,216	597,847	5	11	—
1730	28,410,121	736,815	8	0	—
1731	25,853,240	670,180	4	3	—
1732	26,980,568	699,381	8	7	—
1733	29,795,100	772,109	2	9	—
1734	27,087,137	702,291	16	3	—
1735	25,494,686	661,259	17	3	—
1736	23,661,561	613,919	1	0	—
1737	24,191,366	655,278	9	4	—
1738	26,145,413	677,866	0	2	—
1739	26,716,197	692,787	2	0	—
1740	22,214,671	575,959	9	7	—
1741	20,141,254	523,182	5	4	—
1742	25,879,389	671,011	6	3	—
1743	26,298,591	681,740	7	11	—
1744	31,776,789	822,943	12	5	—
1745	24,917,869	645,998	13	5	—
1746	25,955,350	627,040	17	10	—
1747	24,886,567	645,029	4	1	—
1748	26,422,650	684,653	10	8	—
1749	24,966,250	646,946	18	5	—
1750	29,284,786	758,396	18	1	—
1751	26,994,880	699,318	11	8	—
1752	24,280,058	629,314	13	7	—
1753	25,240,816	654,430	16	1	—
1754	27,347,890	708,255	4	1	—
1755	27,916,402	722,732	2	5	—
1756	24,120,284	624,851	4	9	—
1757	17,640,926	457,719	16	8	—
1758	25,052,614	648,703	16	4	—
1759	28,090,252	727,158	15	7	—
1760	27,810,971	999,818	11	11	$6\frac{16}{21}d.$–$9\frac{1}{2}\frac{2}{1}d.$
1761	28,928,960	1,123,010	17	2	$9\frac{1}{2}\frac{2}{1}$
1762	25,951,676	1,007,851	13	11	—
1763	19,557,812	760,388	16	4	—
1764	26,331,702	1,023,551	9	3	—
1765	25,631,086	996,756	19	8	—
1766	20,893,576	810,544	16	10	—
1767	21,894,498	851,618	11	10	—
1768	27,121,938	1,054,188	0	10	—
1769	26,516,052	1,031,799	11	2	—
1770	24,452,960	950,827	12	6	—
1771	21,961,057	854,344	11	6	$9\frac{1}{2}\frac{2}{1}d.$
1772	27,538,150	1,070,125	14	9	—
1773	21,467,926	835,713	9	10	—
1774	23,949,905	931,968	14	2	—
1775	24,967,360	971,085	8	2	$9\frac{1}{2}\frac{2}{1}d.$
1776	23,556,298	1,024,336	2	5	—
1777	25,814,436	1,004,050	9	3	—
1778	26,318,756	1,022,950	9	1	—
1779	26,273,405	1,028,083	1	6	$9\frac{1}{2}\frac{2}{1}d.$–$9\frac{1}{2}\frac{4}{1}d.$
1780	30,805,100	1,534,454	14	5	$9\frac{1}{2}\frac{2}{1}d.$–1s. $4\frac{1}{2}d.$
1781	26,718,048	1,817,556	7	4	1s. $4\frac{1}{2}d.$
1782	27,159,104	1,816,108	11	10	—
1783	16,712,114	1,138,782	16	0	—
1784	25,796,105	1,715,953	19	8	—
1785	26,269,439	1,777,917	15	2	—
1786	22,074,354	1,493,548	2	3	—
1787	26,439,578	1,789,780	3	9	—
1788	26,018,072	1,763,277	17	8	—
1789	23,509,592	1,591,493	15	6	—
1790	21,976,959	1,487,775	6	0	—
1791	27,070,363	2,092,191	15	10	1s. $4\frac{1}{2}d.$–1s. $7\frac{1}{2}d.$
	Stock in hand	46,716	18	3	
1792	27,789,166	2,142,950	12	10	1s. $7\frac{1}{2}d.$–1s. $4\frac{1}{2}d.$
1793	25,706,765	1,604,717	9	9	1s. $4\frac{1}{2}d.$
1794	21,813,341	1,679,422	8	6	—
1795	23,960,822	1,620,515	7	6	—
1796	27,282,953	1,846,819	5	9	—
1797	29,979,110	2,029,349	7	11	—
1798	26,115,432	1,769,476	13	11	—
1799	30,805,822	2,085,701	14	0	—
1800	14,019,749	950,296	18	5	—
1801	18,005,786	1,218,155	16	7	—
1802	20,434,584	2,115,406	18	4	1s. $4\frac{1}{2}d.$–2s. 5d.
	Stock in hand	466,633	8	7	
1803	29,562,038	3,555,906	18	0	2s. 5d.–4s. $5\frac{1}{2}d.$
1804	21,851,111	4,858,056	9	4	4s. $5\frac{1}{2}d.$
	Stock in hand	914,356	0	0	
1805	21,665,401	4,841,066	15	0	—
1806	26,652,425	5,955,716	0	0	—
1807	24,158,843	5,397,635	6	4	—
1808	21,726,415	4,854,698	2	4	—
1809	22,142,771	4,945,277	1	4	—
1810	23,516,316	5,261,362	12	0	—
1811	25,982,749	5,806,251	15	0	—
1812	18,092,965	4,042,716	16	4	—
1813	21,701,356	4,849,419	5	0	—
1814	25,520,615	5,657,228	8	4	—
1815	26,242,306	5,865,606	18	4	—
1816	21,158,318	4,217,259	13	1	4s. 5½d.–2s. 5d.
1817	20,856,566	2,509,817	18	4	2s. 5d.
1818	24,629,838	2,964,024	12	10	—
1819	22,612,290	3,268,881	3	2	2s. 5d.–3s. $7\frac{1}{2}d.$
	Stock in hand	420,263	8	8	
1820	27,884,427	4,311,442	3	7	3s. $7\frac{1}{2}d.$
1821	26,138,437	4,718,360	10	0	—
1822	26,688,512	3,624,242	8	0	3s. 7½d.–2s. 7d.
1823	24,845,152	3,203,502	17	6	2s. 7d.
1824	27,615,383	3,960,693	0	0	—
1825	29,572,741	3,815,074	7	6	—
1826	27,533,711	3,530,895	10	8	—
1827	25,090,537	3,241,610	3	11	—
1828	30,517,819	3,911,884	19	1	—
1829	23,428,135	3,026,133	19	6	—
1830	26,900,902	3,474,699	16	10	—
1831	32,963,470	4,257,781	10	10	—
1832	31,682,714	4,090,678	15	1	—
1833	33,789,010	4,364,413	15	10	—
1834	34,449,646	4,449,745	0	0	—
1835	36,078,855	4,660,185	0	0	—
1836	37,196,998	4,804,612	0	0	—
1837	33,602,356	4,341,029	8	3	—
1838	33,823,985	4,368,951	8	8	—
1839	33,826,016	4,369,193	14	8	—
1840	36,653,442	4,841,229	18	0	2s. 7d.–2s. 7d. and 5 per cent.
1841	30,956,394	4,198,460	18	4	2s. 7d. and 5 per cent.
1842	30,796,262	4,176,742	19	0	—

Regulations as to the Manufacture of Malt.—These are embodied in the acts 7 & 8 Geo. 4. c. 52. and 11 Geo. 4. c. 17. The former act is exceedingly complex; it has no fewer than *eighty-three* clauses; and the regulations embodied in it, though frequently repugnant to common sense, are enforced by 106 penalties, amounting in all to the enormous sum of 13,500*l.*! Under such a statute, it was hardly possible for the most honest and cautious maltster to avoid incurring penalties. Such, indeed, is the nature of this act, that one is almost tempted to believe, in looking into it, that if its framers had any object more than another at heart, it was to condense into it whatever was most contradictory and absurd in the *forty* statutes that had previously been passed for the collection of the malt duty and the oppression of the trade! But it was not in the nature of things that such a law could be allowed to exist for any considerable period. It was not only loudly and universally condemned by the maltsters, but by all the more intelligent officers of excise. In consequence, the 11 Geo. 4. c. 17. was passed. This latter statute is entitled to very considerable praise; it repeals a good many of the penalties, and some of the most vexatious and useless regulations, in the former; so that the business may now be carried on with equal security to the revenue, and with infinitely less risk and annoyance on the part of the manufacturer. The existing regulations principally refer to the gauging of the cisterns, the wetting of the malt, the emptying of the cisterns, the gauging of the malt when in the couch frames, the payment of the duties, &c. But as no one would think of undertaking the business of a maltster without having a copy of both acts in his possession, it would be quite unnecessary for us, even if our limits permitted, to give any abstract of these acts. The licence duty on maltsters, and the number of maltsters who took out licences in 1842, distributed into classes according to the extent of their business, will be found specified in the article Licences (Excise).

Malt may not be imported into the U. Kingdom for home use under pain of forfeiture; but it may be warehoused for exportation.—(6 *Geo.* 4. c. 107. s. 52.)

Account of the Quantities of Malt charged with Duty in Scotland, of the Revenue received thereon and of the Rates of Duty, in each Year, from 1793.

Years.	Number of Bushels of Malt.	Amount of Duty.	Rate of Duty per Bushel.		Years.	Number of Bushels of Malt.	Amount of Duty.	Rate of Duty per Bushel.	
		£					£	From Barley.	From Bigg.
1793	1,715,381	58,164	8½ d.		1817	1,093,678	91,599	1s. 8½d.	—
1794	1,675,741	56,823	—		1818	1,390,515	120,274	—	—
1795	1,692,916	57,419	—		1819	1,454,320	179,266	1s. 8½d.-3s. 7½d.	1s. 8½d.-3s. 7½d.
1796	1,893,025	40,829	—			Stock in hand	17,739		
1797	2,085,672	79,670	—		1820	1,182,208	212,282	3s. 7½d.	3s. 7½d.-3s. 1d.
1798	1,934,396	65,560	—		1821	1,505,659	231,606	—	3s. 1d.-2s. 10d.
1799	2,365,897	80,075	—		1822	1,403,177	183,032	3s. 7½d.-2s. 7d.	2s.10d.-1s.9½d.-2s.
1800	876,598	29,670	—		1823	1,616,590	198,696	2s. 7d.	2s.
1801	607,384	20,560	—		1824	2,788,608	335,505	—	—
1802	1,716,238	70,927	1s. 8½d.		1825	3,925,817	462,144	—	—
	Stock in hand	20,389			1826	2,726,555	335,571	—	—
1803	1,594,284	137,878			1827	2,714,073	335,489	—	—
			Barley.	Bigg.	1828	3,867,169	478,508	—	—
1804	1,091,377	197,587	3s. 9½d.	3s. 1½d.	1829	3,712,563	457,588	—	—
	Stock in hand	34,808	—	—	1830	4,101,946	505,651	—	—
1805	1,136,112	206,955	—	—	1831	4,186,955	515,579	—	—
1806	1,244,104	225,642	—	—	1832	3,711,534	458,096	—	—
1807	1,259,298	226,647	—	—	1833	4,302,036	530,358	—	—
1808	1,048,946	189,934	—	—	1834	4,491,292	553,567	—	—
1809	772,758	139,852	—	—	1835	4,469,553	551,096	—	—
1810	820,294	149,206	—	—	1836	4,903,187	611,910	—	—
1811	1,014,256	184,882	—	—	1837	4,583,015	578,515	—	—
1812	951,452	169,870	—	—	1838	4,419,141	557,013	—	—
1813	685,214	123,705	—	—	1839	4,360,363	552,107	—	—
1814	1,266,852	231,776	—	—	1840	4,397,301	572,511	2s. 7d.-2s. 7d., and 5 per cent.	2s.-2s., and 5 per cent.
1815	1,297,777	236,839	3s. 9½d. to 1s. 8½d.	3s. 1½d. to 1s. 8½d.	1841	4,058,219	539,572	2s. 7d., and 5 per cent.	2s. and 5 per cent.
1816	1,162,024	164,713			1842	3,786,476	505,823	—	—

Account of the Quantities of Malt charged with Duty in Ireland, of the Revenue received thereon, and of the Rates of Duty in each Year, from 1790.

Years.	Number of Bushels of Malt.	Amount of Duty.	Rate of Duty per Bushel.	Years.	Number of Bushels of Malt.	Amount of Duty.	Rate of Duty per Bushel.	
		£				£		
1790	4,607,953	135,496	7d.	1815	2,664,166	482,685	3s. 3½d.-1s. 5d.	
1791	4,775,899	140,112	—		Stock in hand	122,253		
1792	4,676,835	137,522	—	1816	1,879,721	559,809	4s. 5d.-2s. 4½d.	
1793	5,039,899	148,197	—	1817	1,585,486	161,771	2s. 4½d.	
1794	4,875,984	186,315	9½d.	1818	1,783,636	211,030	—	
	Stock in hand	17,672		1819	1,742,141	207,036	—	
1795	4,697,153	290,051	1s. 3d.	1820	1,795,671	371,684	3s. 6½d.	
	Stock in hand	36,761			Stock in hand	43,974	—	
1796	4,956,581	306,070	—	1821	1,949,315	347,424	—	
1797	4,674,989	288,558	—	1822	1,756,591	275,614	3s. 6½d.-2s. 7d.	
1798	4,413,817	313,661	1s. 5d.	1823	1,702,395	217,302	2s. 7d.	
	Stock in hand	19,768		1824	2,107,752	276,255	—	
1799	5,311,463	255,170	1s. 6½d.	1825	3,706,862	556,108	—	
	Stock in hand	12,226		1826	2,406,253	310,808	—	
1800	681,340	52,080	—	1827	1,803,091	232,899	—	
1801	1,030,175	78,760	—	1828	2,409,228	311,192	—	
1802	3,611,579	276,115	—	1829	2,014,079	259,594	—	
1803	3,553,762	285,584	1s. 6½d.-1s. 9½d.				From Barley.	From Bigg.
	Stock in hand	31,162		1830	1,959,606	251,646	2s. 7d.	2s.
1804	2,807,535	270,036	1s. 9½d.-2s. 9½d.	1831	2,101,814	265,508	—	—
	Stock in hand	28,698		1832	2,006,350	260,278	—	—
1805	2,766,867	317,509	2s. 3½d.	1833	1,984,849	245,987	—	—
1805	2,814,418	334,105	2s. 3½d.-2s. 6½d.	1834	2,204,653	272,291	—	—
	Stock in hand	22,720		1835	2,355,645	288,602	—	—
1807	2,372,293	302,284	2s. 6½d.	1836	2,287,655	285,357	—	—
1808	2,597,758	331,010	—	1837	2,275,347	286,470	—	—
1809	3,058,617	376,991	—	1838	2,262,140	284,054	—	—
1810	2,522,543	321,425	—	1839	1,744,550	218,503	—	—
1811	2,681,842	341,725	—	1840	1,406,116	178,703	2s. 7d.-2s. 7d. and 5 per cent.	2s.-2s., and 5 per cent.
1812	2,206,206	281,117	2s. 6½d.	1841	1,149,692	151,210	2s. 7d., and 5 per cent.	2s. and 5 per cent.
1813	2,967,603	428,830	2s. 6½d. 3s. 3½d.	1842	1,268,656	168,009	—	—
	Stock in hand	63,406						
1814	3,156,175	522,813	3s. 3½d.					

MALTA, an island in the Mediterranean, belonging to the British, nearly opposite to the southern extremity of Sicily, from which it is about 54 miles distant.

Valetta, the capital, is situated on the north coast of the island, the light-house in the castle of St. Elmo being in lat. 35° 54′ 6″ N., lon. 14° 31′ 10″ E. Malta is about 20 miles long, and 10 or 12 broad. The island of Gozo, about a fourth part of the size of Malta, lies to the north-west of the latter, at about 4 miles' distance; and in the strait between them is the small island of Cumino. In 1835, the resident population of Malta amounted to 100,154; and, including troops and strangers, the total population amounted to 106,578. The population of Gozo, at the same period, was 16,547. The total population of both islands making 123,125. The entire revenue collected in Malta amounts to about 100,000*l.* a year, of which about 23,000*l.* is derived from the rent of lands; the expenditure, exclusive of that incurred in England on account of the island, amounts to about 88,000*l.*

Valetta, the capital of the island, is defended by almost impregnable fortifications. "These," says Mr. Brydone, "are, indeed, most stupendous works. All the boasted catacombs of Rome and Naples are a trifle to the immense excavations that have been made in this little island. The ditches, of a vast size, are all cut out of the solid rock; these extend for a great many miles; and raise our astonishment to think that so small a state has ever been able to make them."—(*Tour through Sicily and Malta*, Letter 15.) Since the island came into our possession, the fortifications have been considerably improved; so that at present it is a place of very great strength.

After the capture of Rhodes by the Turks, the Emperor Charles V. made a present of Malta to the Knights of St. John of Jerusalem, in whose possession it remained till 1798, when it was taken by the French. It was taken from the latter by the English in 1800; and was definitively ceded to us in 1814.

The island consists mostly of a rock, very thinly covered with soil, a good deal of which has been brought, at an immense expense, from Sicily; but being cultivated with the utmost care, it produces excellent fruits, particularly the celebrated Maltese oranges, corn, cotton, with small quantities of indigo, saffron, and sugar. The principal dependence of the inhabitants is on their cotton; the crop of which, amounting to about 4,000,000 lbs. a year, is partly exported raw, and partly manufactured to the value of from 80,000*l.* to 100,000*l.* The corn raised in the island is not sufficient to feed the inhabitants for more than 5 or 6 months. The trade in corn used to be monopolised by government; and after the monopoly was abandoned, duties on importation, varying, like those in this country, with the price, were imposed. But in 1835, these duties were abolished; and the fixed duties on corn entered for consumption, specified in the subjoined tariff, were substituted in their stead.

Malta presents unusual facilities, which have not hitherto been taken proper advantage of, for becoming the entrepôt of the corn trade of the Mediterranean and Black Sea. Her warehouses for corn are, like those of Sicily and Barbary, excavated in the rock; and are, perhaps, the best fitted of any in Europe for the safe keeping of corn. The wheat lodged in them may be preserved for an indefinite period; and it is affirmed that though it should, on being deposited, be affected by the weevil, it is very soon freed from that destructive insect. It is not often that corn can be brought direct from Odessa, Taganrog, &c. to England, without the risk of being damaged; but were it brought in the first instance to Malta, and bonded there, it might afterwards be conveyed in the best order to London, or any where else. Malta is also admirably well suited for becoming the centre of the corn trade of Egypt, Barbary, Italy, &c.

During the late war, particularly during the period when Napoleon's anti-commercial system was in operation, Malta became a great entrepôt for colonial and other goods, which were thence conveyed, according as opportunities offered, to the adjacent ports. This commerce ceased with the circumstances that gave it birth; and for some years after the return of peace, the trade of the island was depressed below its natural level, by the imposition of various oppressive discriminating duties. In 1819, this vexatious system was partially obviated; but it continued to exert a pernicious influence till 1837, when, pursuant to the recommendation of Messrs. Austin and Lewis, commissioners of inquiry, the then existing tariffs of customs duties and port charges were wholly abolished; and a new tariff (which is subjoined) was issued in their stead. It imposes moderate duties, for the sake of revenue only, on a few articles in general demand, without regard to the country whence they come, at the same time that it equalises the tonnage duties, and reduces the warehouse rent on articles in bond to the lowest level. Every thing has thus been done that was possible to second the natural advantages enjoyed by Malta for becoming the grand entrepôt of the Mediterranean trade; and we have little doubt they will powerfully contribute to bring about that result.

There are some good springs of fresh water. Valetta is partly supplied by water brought by an aqueduct a distance of about 6 miles, and partly by the rain collected in cisterns.

TABLE exhibiting the various Articles, and their Value in Sterling Money, imported into the Island of Malta during each of the Four Years ending with 1837.

Species of Imports.	1834.	1835.	1836.	1837.
	£	£	£	£
Manufactures of all sorts	160,962	121,654	135,968	118,096
Sugar, refined and crushed	25,353	16,603	19,182	16,522
Coffee and cocoa	16,969	12,786	19,895	18,711
Indigo	2,643	1,462	1,190	781
Rum	1,191	1,031	2,150	2,556
Spices	6,960	3,859	10,448	2,740
Raw sugar	27,320	17,461	22,429	17,799
Tea	2,458	2,019	2,922	2,989
Brimstone	1,171	2,970	2,178	1,952
Drugs and articles used in dyeing	2,646	4,437	3,463	2,446
Flax, hemp and tow	2,920	906	3,249	2,340
Hides, salted and dried	4,977	14,888	10,034	5,579
Rosin and tar	545	1,539	1,978	3,007
Seeds in general	4,187	4,093	4,229	4,654
Raw silk	13	1,253	5	946
Tobacco leaf	15,335	21,766	20,445	14,396
Wax	461	221	1,861	2,175
Wood (timber deals, &c.)	8,373	10,457	6,158	8,450
Wool and cotton wool	357	2,586	1,855	2,985
Miscellanies (raw materials)	2,103	2,876	2,664	1,263
Beans, peas, caravances, saggina, &c.	29,065	28,894	42,529	29,858
Biscuit	100	277	1,515	none
Bullocks, pigs, and sheep	24,418	27,729	21,220	11,711
Carob-beans	3,102	5,348	5,192	2,451
Coals and charcoal	10,358	10,511	25,521	18,778
Cheese	4,522	4,474	12,381	12,676
Fish, salted and dried	11,476	12,183	15,501	5,566
Flour	162	619	1,153	293
Fruits, dried	16,860	14,467	34,208	10,756
Grain, viz. — Wheat	93,337	106,577	114,833	87,413
Indian corn	6,978	5,188	621	3,105
Barley	6,380	7,166	6,318	8,749
Meat, salted and dried	6,511	2,329	2,933	496
Mules, horses, and asses	348	527	516	995
Olive and linseed oil	26,720	24,422	36,738	29,545
Olives, salted	1,050	431	736	452
Olive stones and fire-wood	8,518	6,987	5,703	8,319
Paste and maccaroni	700	1,322	992	806
Potatoes	1,314	1,606	2,108	3,140
Rice	2,665	4,143	1,056	1,121
Spirits (brandy and gin)	6,052	17,629	10,041	9,463
Vinegar	1,453	282	1,830	827
Wines	42,691	40,389	67,722	71,983
Miscellanies (provisions)	1,636	2,037	1,827	834
Totals	491,666	570,382	685,581	547,484

Harbour. — The harbour of Valetta is double, and is one of the finest in the world. The city is built on a narrow tongue of land, having the castle and light of St. Elmo at its extremity and an admirable port on each side. That on the south-eastern side, denominated the grand port, is the most frequented. The entrance to it, about 250 fathoms wide, has the formidable batteries of St. Elmo on the one hand, and those of Fort Ricasoli on the other. In entering, it is necessary not to come within 50 or 60 fathoms of the former, on account of a spit which projects from it; but in the rest of the channel there is from 10 to 12 fathoms water. The port, which runs about 1¼ mile inwards, has deep water and excellent anchorage throughout: the largest men-of-war couling close to the quays. Port Marsamuscett, on the north-western side of the city, is also a noble harbour. The entrance to it, which is about the same breadth as that of the grand port, is between St. Elmo and Fort Tiqua. In the centre of the basin is an island, on which are built a castle and a lazaretto, for the convenience of the ships performing quarantine, by which the port is principally used. Owing to the narrowness of the entrance, and the usual variableness of the wind, it is customary for all vessels bound for Valetta to take a pilot on board before entering the harbour.

TARIFF (A). — Duties on Imports, and Dues for Store Rent, which the Collector of Customs is required to levy on the Account of the Government of Malta.

	Import Duties.			Store Rents on Articles lodged in Bond	
	£	s.	d.	£	s. d.
Beer, per Maltese barrel - - -	0	2	0 0	0	1
Cattle: bullocks, and other animals of the kind, per head - - -	0	10	0		
Horses and mules, per head -	1	0	0		
Charcoal, per salm - - -	0	0	6 0	0	1
Grain: —					
Wheat, per salm - - -	0	10	0 0	0	2
Indian corn, per salm - -	0	6	0 0	0	2
Barley, per salm - - -	0	4	0 0	0	2
Saggina, per salm - - -	0	3	0 0	0	2
Other inferior grains - -	0	5	0 0	0	2
Manufactured grain, per cantar -	0	6	0 0	0	2
Wheat, Indian corn, barley, or other inferior grains, if damaged so as to be unfit for the food of man (commonly called *frumentazzo*), per salm	0	2	0 0	0	2
Manufactured grain, if damaged so as to be unfit for the food of man, per cantar - - - - -	0	2	0 0	0	2
Oil, olive, per caffiso - - -	0	0	1 0	0	1
Potatoes, per cantar - - -	0	0	10 0	0	2
Pulse and seeds: —					
Beans, caravances, chick-peas, kidney-beans, lentils, lupins, peas, and vetches, per salm - - -	0	2	0 0	0	2
Carob-beans and cotton seeds, per cantar - - - -	0	0	6 0	0	2
Spirits; viz. for every Maltese barrel of such spirits of any strength not exceeding the strength of proof, by Sykes's hydrometer (namely London proof) and so in proportion for any greater strength than the strength of proof -	1	2	0 0	0	2
Vinegar, per Maltese barrel -	0	2	0 0	0	2
Wines, the value of which shall exceed 15*l.* per pipe of 11 Maltese barrels, per Maltese barrel - -	0	11	0 0	0	2
All other wines, per Maltese barrel -	0	2	0 0	0	2

Observations. — 1. The duties payable by the salm on grain, pulse, and seeds (except large Sicilian beans) to be charged by the strike measure. The duties on large Sicilian beans and on charcoal to be charged by the heaped measure.

2. Every liquid compounded of spirit and any other ingredient or ingredients, and containing more than 25 per cent. of spirit of the strength of proof, to be liable to the duty on spirits which is imposed by the present tariff.

3. The store rents on grain lodged in bond to be payable from the day on which the grain was lodged. The store rents on every other article mentioned in the present tariff to be payable from the tenth day after the day on which such article was lodged.

TARIFF (B). — Tonnage Dues which the Collector of Customs is required to levy on the Account of the Government of Malta.

Vessels discharging merchandise in the island shall, on clearing outwards, pay for every ton or any part thereof - 6*d.*

TARIFF (C). — Fees which the Collector of Customs is required to levy on the Account of the Government of Malta.

	£	s.	d.
For each certificat under the office seal -	0	2	6
For each sheet of printed official forms -	0	0	2

Tariff of Dues authorised to be levied for Account of Government, by the Superintendent of Quarantine, Malta.

Shipping in Quarantine. — 1. Vessels entered upon a quarantine to pay, for each day of their continuance in port, as follows: —

	s.	d.
Vessels not exceeding 25 tons - - -	0	6
— from 26 tons to 50 — - - -	1	0
— from 51 — 100 — - - -	1	6
— from 101 — 150 — - - -	2	0
— from 151 — 200 — - - -	2	6
— from 201 — 250 — - - -	2	9
— from 251 and upwards - - -	3	0

2. Vessels of whatever size, sailing in quarantine, having entered upon the performance thereof, to pay at the above rates, but in no case more than 2*s.* a day for the remainder of the term of quarantine.

3. Vessels liable to quarantine, not having entered upon the performance thereof, to pay 2*s.* for each day of their continuance in port.

4. Vessels compelled by stress of weather to enter the great harbour, to be subject, while they remain there, to the additional charge of 3*s.* a day, for every guard boat which the Superintendent of Quarantine may deem it necessary to place over them.

*** Any vessel in quarantine entering the great harbour without a justifiable cause, incurs the penalty of 200 dollars imposed by the second article of the proclamation, dated 12th October, 1820. (No. xiii.)

5. Vessels having contagious diseases on board to pay an extra rate in proportion to the expense that may be incurred, but in no case to exceed 20*s.* a day, in addition to the usual rate.

Effects received into the lazaret for deputation to be chargeable with a due proportion of the actual expense thereof, which, at present, on ordinary occasions, is at the rate of 2*s.* 6*d.* a day for each guardian, and 1*s.* 8*d.* a day for each labourer, whom it may be necessary to employ.

Cattle landed in the lazaret to be chargeable, for each

	s.	d.
Horse, mule, or ass - - -	3	0
Bullock, or other animal of the kind - -	2	0
Sheep, goat, pig, or other small animal -	1	0

Persons performing quarantine in the lazaret to pay at the rate of 2*s.* 6*d.* a day, for each guardian employed, but no single individual to be chargeable with more than 1*s.* 3*d.* a day.

Documents issued under the office seal, 2*s.* 6*d.* each.

List of Vessels belonging to the Island of Malta, on the 1st of January, 1838.

Vessels.	Sizes.	Tons.
38	under 10 tons each -	215
25	from 10 to 25 tons -	364
5	25 — 50 -	168
18	50 — 100 -	1,402
58	100 — 150 -	4,659
21	150 — 200 -	3,637
10	200 — 250 -	2,265
10	250 — 300 -	2,720
6	300 tons and upw.	2,010
171	of all sizes, making -	17,500

Movement of Shipping at Malta, during each of the Four Years ending with 1837.

The Year and Sizes.	Ships inwards.			Ships outwards.		
	No.	Tons.	Men.	No.	Tons.	Men.
1834.						
Vessels above 40 tons -	935	140,632	10,052	1,025	153,116	10,992
under 40 -	788	11,289	7,586	715	15,682	7,852
Total -	1,723	151,921	17,638	1,740	168,798	18,844
1835.						
Vessels above 40 tons -	1,151	187,159	12,421	1,232	197,673	13,230
under 40 -	916	18,479	8,836	955	18,210	6,071
Total -	2,067	205,638	21,257	2,187	215,883	19,301
1836.						
Vessels above 40 tons -	1,263	186,616	12,891	1,351	202,737	13,863
under 40 -	700	12,884	6,745	732	13,530	7,059
Total -	1,963	199,500	19,636	2,083	216,267	20,922
1837.						
Vessels above 40 tons -	1,129	157,079	11,673	1,198	168,388	12,434
under 40 -	420	8,275	3,924	439	8,624	4,101
Total -	1,549	165,354	15,597	1,637	177,022	16,531

Average Prices of Wheat in Entrepôt at Malta, during each of the Ten Years ending with 1837, per Salma, in Sterling Money.

Year.	Price.		
	£	s.	d.
1828	1	16	1
1829	1	15	10
1830	1	9	2
1831	1	12	3
1832	1	12	3
1833	1	9	1
1834	1	9	10
1835	1	10	9
1836	1	7	1
1837	1	6	9

The central position, excellent port, and great strength of Malta, make it an admirable naval station for the repair and accommodation of the men-of-war and merchant-ships frequenting the Mediterranean, and render its possession of material importance to the British empire. Since Malta-built vessels were admitted into the ports of the U. Kingdom on the same terms as those of British built, the trade of shipbuilding has materially increased in the island. The Maltese shipwrights are diligent expert workmen; and, their wages being moderate, it is a favourable place for careening. Owing to the want of a dry dock, all ships above the size of a sloop of war, that require to have their bottoms examined, have to come to England for that purpose. This, surely, should be obviated. Quarantine is strictly enforced at

Malta; but there is every facility for its performance, and the charges are less than at any other port in the Mediterranean.

Malta is now the centre of a very extensive steam-packet system; the steamers from England for the Ionian Islands, Constantinople, Alexandria, and other ports of the Levant, touching here. The French steamers from these ports usually perform quarantine at Malta.

Money.—In 1825, British silver money was introduced into Malta; the Spanish dollar being made legal tender at the rate of 4*s.* 4*d.*; the Sicilian dollar at 4*s.* 2*d.*; and the scudo of Malta at 1*s.* 8*d.*

Weights and Measures. — The pound or rottolo, commercial weight = 30 oncie = 12·216 English grains. Hence 100 rottoli (the cantaro) = 174½ lbs. avoirdupois, or 79·14 kilog. Merchants usually reckon the cantaro at 175 lbs.

The salma of corn, struck measure = 8·221 Winchester bushels: heaped measure is reckoned 16 per cent. more. The caffiso, or measure for oil, contains 5½ English gallons = 20·818 litres. The barrel is double the caffiso. The Maltese foot = 11 1-6th English inches = ·2836 metres. The canna = 8 palmi = 81·9 English inches = 2·079 metres. Merchants usually convert Malta measure into English in the proportion of 3¼ palmi to a yard, or 2 2-7th yards to 1 canna.

Bills on London are usually drawn at *30 and 60 days' sight.* The deputy commissary general is obliged to grant, at all times, bills on the treasury here for British silver tendered to him, at the rate of 100*l.* bill for every 101*l.* 10*s.* silver, receiving, at the same time, other silver, at a fluctuating rate of exchange.

MAN (ISLE OF) is, as every one knows, situated in the Irish sea, at about an equal distance from England, Scotland, and Ireland. It is about 30 miles long, and 10 or 12 broad. The interior is mountainous, and the soil no where very productive. Population, in 1841, 47,975. This island used to be one of the principal stations of the herring fishery; but for a considerable period it has been comparatively deserted by the herring shoals, — a circumstance which is not to be regretted; for the fishery, by withdrawing the attention of the inhabitants from agriculture and manufactures, and leading them to engage in what has usually been a gambling and unproductive business, has been, on the whole, injurious to the island. The steam packets from Glasgow to Liverpool touch at the Isle of Man; which has, in consequence, begun to be largely frequented by visiters from these cities, and other parts of the empire, whose influx has materially contributed to the improvement of Douglas and other towns.

The feudal sovereignty of Man was formerly vested in the Earls of Derby, and more recently in the Dukes of Athol, a circumstance which accounts for the fact of the duties on most commodities consumed in the island having been, for a lengthened period, much lower than those on the same commodities when consumed in Great Britain. This distinction, which still subsists, has produced a great deal of smuggling, and been in no ordinary degree injurious to the revenue and trade of the empire. During the present century, indeed, the clandestine trade of Man has been confined within comparatively narrow limits; but to accomplish this, a considerable extra force of Custom-house officers and revenue cruisers is required; and the intercourse with the island has to be subjected to various restraints. Nothing, as it appears to us, can be more impolitic than the continuance of such a system. The public has, at a very heavy expense, purchased all the feudal rights of the Athol family; and having done so, it is certainly high time that an end were put to the anomalous absurdity of having a considerable island, lying, as it were, in the very centre of the empire, and in the direct line between some of the principal trading towns, with different duties on many important articles! It might be necessary, perhaps, to make some compensation to the inhabitants for such a change; and this might be done, with advantage to them and without expense to the public, by modifying and improving the internal regulations and policy of the island, which are very much in need of amendment. We do not, indeed, imagine that the island would lose any thing by the proposed alteration; for the temptation which the present system holds out to engage in smuggling enterprises diverts the population from the regular pursuits of industry, and, along with the herring lottery, is the principal cause of that idleness for which the Manx are so notorious. We subjoin an

Abstract of 3 & 4 Will. IV., c. 60., for regulating the Trade of the Isle of Man.

Commencement. — To commence the 1st of September, 1833. — § 1.

Duties payable on the Importation of Goods into the Isle of Man. — There shall be raised, levied, collected, and paid unto his Majesty, his heirs and successors, the several duties of customs respectively set forth in the table herein-after contained, denominated "Table of Duties," upon importation into the Isle of Man of the several goods, wares, and merchandise, according to the quantity or value thereof specified in such table, and so in proportion for any greater or less quantity or value of the same; (that is to say,)

Table of Duties.

A Table of the Duties of Customs payable on Goods, Wares, and Merchandise, imported into the Isle of Man.

	£	s.	d.
Coals, from the U. Kingdom	Free.		
Coffee, the duties of consumption in the U. Kingdom not having been then paid thereon, the lb.	0	0	4
Hemp, the cwt.	0	0	1
Hops, from the U. Kingdom, the lb.	0	0	1½
Iron, from foreign parts, for every 100*l.* of the value thereof	10	0	0
Spirits; viz. —			
Foreign spirits, the gallon	0		
Rum of the British plantations, not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength, the gallon	0	3	0
Sugar, muscovado, the cwt.	0	1	0
Tea; viz. —			
Bohea, the lb.	0	0	6
Green, the lb.	0	1	0
Tobacco, the lb.	0	1	6
Wine; viz. —			
French, the tun of 252 gallons	16	0	0
any other sort, the tun of 252 gallons	12	0	0
Wood, from foreign parts; — viz.			
Deal boards, for every 100*l.* of the value thereof	10	0	0
Timber, for every 100*l.* of the value thereof	10	0	0
Goods, wares, and merchandise, imported from the U. Kingdom, and entitled to any bounty or drawback of excise on exportation from thence, and not herein-before enumerated or charged with duty, for every 100*l.* of the value thereof	5	0	0
Goods, wares, and merchandise imported from the U. Kingdom, and not herein-before charged with duty, for every 100*l.* of the value thereof	2	10	0
Goods, wares, or merchandise imported from any place from whence such goods may be lawfully imported into the Isle of Man, and not herein-before charged with duty, for every 100*l.* of the value thereof	15	0	0

Except the several goods, wares, and merchandise following, and which are to be imported into the Isle of Man duty free; (that is to say,)

Flax, flax seed, raw or brown linen yarn, wood ashes, weed ashes, flesh of all sorts; also corn, grain, or meal of all sorts, when importable; any of which goods, wares, or merchandise may be imported into the said isle from any place in any ship or vessel.

Any sort of white or brown linen cloth, hemp, hemp seed, horses, black cattle, sheep; all utensils and instruments fit and necessary to be employed in manufactories, in fisheries, or in agriculture; bricks, tiles, all sorts of young trees, sea shells, lime, soapers' waste, packthread, small cordage for nets, salt, boards, timber, wood hoops, being the growth, production, or manufacture of the U. Kingdom, and imported from thence in British ships.

Iron in rods or bars, cotton, indigo, naval stores, and any sort of wood commonly called lumber, (viz. deals of all sorts, timber, balks of all sizes, barrel boards, clap boards, pipe boards, or pipe hold, white boards for shoemakers, broom and cant spars, bow staves, capravan, clap holt, ebony wood, headings for pipes and for hogsheads, and for barrels, hoops for coopers, oars, pipe and hogshead staves, barrel staves, firkin staves, trunnels, speckled wood, sweet wood, small spars, oak plank, and wainscot,) being of the growth, production, or manufacture of any British colony or plantation in America or the West Indies, and imported from the U. Kingdom in British ships. — Sect. 2.

British Goods from U. Kingdom to appear upon the Cockets. — No goods shall be entered in the Isle of Man as being the growth, produce, or manufacture of the U. Kingdom, or as being imported from thence, except such goods as shall appear upon the cocket or cockets of the ship or vessel importing the same to have been duly cleared at some port in the United Kingdom, to be exported to the said isle. — § 3.

Goods enumerated in the following Schedule importable only under Licence. — The several sorts of goods enumerated or described in the schedule herein-after contained, denominated "Schedule of Licence Goods," shall not be imported into the Isle of Man, nor exported from any place to be carried to the Isle of Man, without the licence of the commissioners of customs first obtained, nor in greater quantities in the whole, in any one year, than the respective quantities of such goods specified in the said schedule; and such goods shall not be so exported nor so imported, except from the respective places set forth in the said schedule, and according to the rules subjoined thereto; (that is to say,)

Schedule of Licence Goods.

Wine, 110 tuns.
Spirits; viz. —
- Foreign brandy, 10,000 gallons.
- Foreign geneva, 10,000 gallons.
- From the U. Kingdom, or from any place from which the same might be imported into the U. Kingdom, for consumption therein.
- Rum, of the British plantations, 60,000 gallons.
- From Great Britain.

Bohea tea, 70,000 lbs.
Green tea, 5,000 lbs.
Coffee (unless the duties of consumption in the U. Kingdom shall have been then paid thereon), 8,000 lbs.
Tobacco, 60,000 lbs.
Muscovado sugar, of the British possessions, 10,000 cwt.
Playing cards, 4,000 packs.
From England.

Refined sugar, 8000 cwt.
From the port of Liverpool.

And such additional quantities of any of such several sorts of goods as the commissioners of his Majesty's treasury shall from time to time, under any special circumstances of necessity, direct, from such ports respectively; subject to the rules following; (that is to say,)

1. All such goods to be imported into the port of Douglas, and by his Majesty's subjects, and in British ships or vessels of the burden of 50 tons or upwards:
2. Such tobacco to be shipped only in ports in England, where tobacco is allowed to be imported and warehoused without payment of duty:
3. Such wine to be so imported only in casks or packages containing not less than a hogshead each, or in cases containing not less than 3 dozen reputed quart bottles, or 6 dozen reputed pint bottles each:
4. Such brandy and geneva to be imported only in casks containing 100 gallons each, at least:
5. Such brandy and geneva not to be of greater or higher degree of strength than that of 1 to 9 over hydrometer proof:
6. Such goods, when exported from Great Britain, may be so exported from the warehouse in which they may have been secured without payment of duty:
7. If the duties of importation have been paid in the U. Kingdom on such goods, a full drawback of such duties shall be allowed on the exportation:
8. Upon the exportation from Liverpool of such refined sugar, the same bounty shall be allowed as would be allowable on exportation to foreign parts:
9. Upon exportation from the U. Kingdom of any such goods from the warehouse, or for drawback, or for bounty, so much of the form of the bond, or of the declaration, or of any other document, required in the case of exportation of such goods generally to foreign parts, as is intended to prevent the landing of the same in the Isle of Man, shall be omitted:
10. No drawback or bounty to be allowed, nor export bond cancelled, until a certificate of the due landing of the goods at the port of Douglas be produced from the collector and comptroller of the customs of that port.
11. If any goods be laden at any foreign port or place, the species and quantity of such goods, with the marks, numbers, and denominations of the casks or packages containing the same, shall be indorsed on the licence, and signed by the British consul at the port of lading, or, if there be no British consul, by two known British merchants:
12. Upon importation into the port of Douglas of any such goods, the licence for the same shall be delivered up to the collector or comptroller of that port. — Sect. 4.

Application for Licence to be delivered to Officers between May and July. — Every application for licence to import any of the goods aforesaid into the Isle of Man shall be made in writing, and delivered, between the 5th day of May and the 5th day of July in each year, to the collector or comptroller of the port of Douglas in the said isle; and such application shall specify the date thereof, and the name, residence, and occupation of the person applying, and the description and quantity of each article for which such licence is required; and all such applications, with such particulars, shall be entered in a book to be kept at the Custom-house at the port of Douglas, and to be there open for public inspection during the hours of business; and on the 5th day of July in each year such book shall be closed; and within 14 days thereafter the collector and comptroller shall make out and sign a true copy of such entries, specifying the applicants resident, and the applicants not resident in the said isle, and deliver or transmit such copy to the governor or lieutenant-governor of the said isle for the time being. — § 5.

Governor to allot Quantities. — Within 14 days after the receipt of such copy, the governor or lieutenant-governor of the said isle shall allot the whole quantity of each article, in the first place, among the applicants resident in the said island, in case the whole quantity of any article shall not have been applied for by residents; then shall allot the quantity not so applied for among the non-resident applicants, in such proportions in all cases as he shall judge most fair and equitable; and shall cause a report thereon to be drawn up in writing, and sign and transmit the same to the Lords Commissioners of his Majesty's Treasury of the U. Kingdom of Great Britain and Ireland, and shall cause a duplicate of such report, so signed, to be transmitted to the commissioners of customs. — § 6.

Commissioners of Customs to grant Licences. — Upon receipt of such duplicate report the commissioners of customs shall grant licences, to continue in force, for any period until the 5th of July then next ensuing, for the importation into the Isle of Man of the quantities of such goods as are allowed by law to be so imported, with their licence, according to the allotments in such report, and dividing the whole portion allotted to any one applicant into several licences, as they shall be desired and see fit; and such licences shall be transmitted without delay to the collector and comptroller of Douglas, to be by them delivered to the different applicants, after taking bond for the same under the provisions of this act. — § 7.

Before Delivery of Licences, Bond to be given. — Previous to the delivery of any such licences to the persons to whom they are granted, the collector and comptroller of Douglas shall take the bond of such persons to his Majesty, his heirs and successors, with sufficient security, for the importation of the articles for which the said licences are respectively granted, on or before the 5th day of July succeeding the delivery of such licences, with such conditions, and for the forfeiture of such sums, not exceeding the whole amount of duties payable in Great Britain on articles similar to those specified in such licences, as the commissioners of customs shall think fit: provided always, that if any person to whom such licence shall be granted shall not have given such bond prior to the 5th day of January next after the granting such licence, it shall be lawful for the governor or lieutenant-governor of the said isle, if he shall see fit, to transfer any such licence to any other person who shall be desirous to take up the same, and willing and able to give such bond; and such transfer shall be notified by indorsement on the licence, signed by such governor or lieutenant-governor. — § 8.

Counterfeiting or falsifying Licence, Penalty 500l. — If any person or persons shall counterfeit or falsify any licence or other document required for the importation into the Isle of Man of any goods which would otherwise be prohibited to be imported into the said isle, or shall knowingly or wilfully make use of any such licence, or other document so counterfeited or falsified, such person or persons shall, for every such offence, forfeit the sum of 500*l.* — § 9.

Licence Goods not to be re-exported, &c. — It shall not be lawful to re-export from the Isle of Man any goods which have been imported into the said isle with licence of the commissioners of customs as aforesaid; and it shall not be lawful to carry any such goods coastwise from one part of the said isle to another, except in vessels of 50 tons burden at the least, and in the same packages in which such goods were imported into the said isle; and it shall not be lawful to remove any wine from one part of the said isle to another, by and except in such packages or in bottles. — § 10.

Foreign Goods not to be exported to U. Kingdom. — It shall not be lawful to export from the Isle of Man to any part of the U. Kingdom any goods which are of the growth, produce, or manufacture of any foreign country. — § 11.

Goods imported or exported, &c. contrary to Law forfeited, &c. — If any goods shall be imported into or exported from the Isle of Man, or carried coastwise from one part of the said isle to another part of the same, or shall be waterborne, or brought to any wharf or other place with intent to be waterborne, to be so exported or carried, or shall be removed by land within the said isle, contrary to any of the directions or provisions of this act, the same, and the packages containing the same, shall be forfeited, together with all ships, vessels, or boats, and all cattle and carriages used or employed therein; and every person offending therein shall forfeit for every such offence, the sum of 100*l.*, or the full amount of all duties which would be payable in respect of such or similar goods, for home consumption of the same, in the U. Kingdom, at the election of the commissioners of customs. — § 12.

Goods prohibited to be imported into the Isle of Man. — The several sorts of goods enumerated or described in the schedule herein-after contained, denominated "Schedule of Prohibitions," shall not be imported into the Isle of Man; (that is to say,)

Schedule of Prohibitions.

Goods, the produce or manufacture of places within the limits of the United East India Company's charter; except from the U. Kingdom:
Cotton yarn, cotton cloth, linen cloth, glass manufactures, woollen manufactures, unless *bona fide* laden in and imported directly from the U. Kingdom:
Spirits of greater strength than 1 to 9 over hydrometer proof, except spirits the produce of the British possessions in America, or of the Cape of Good Hope:
British distilled spirits:
All goods prohibited to be imported into the U. Kingdom to be used or consumed therein, on account of the sort or description of the same. — Sect. 13.

Limiting the Quantity of Spirits, Tea, and Tobacco for Uses of Seamen. — If any decked vessel, bound from the Isle of Man to any port of Great Britain or Ireland, shall have on board for the use of the seamen, any spirits exceeding the quantity of ¼ gallon for each seaman, or any tobacco exceeding 1 lb. weight for each seaman, or any tea exceeding 2 lbs. weight for the whole of the seaman on board such vessel, or if any open boat, bound from the Isle of Man to any port of Great Britain or Ireland, shall have on board, for the use of the seamen, any spirits exceeding 1 quart for each seaman, or any tobacco exceeding ½ lb. weight for each seaman, or any tea exceeding 1 lb. weight for the whole of the seamen on board such boat, all such foreign spirits, tobacco, and tea respectively, together with the casks or packages containing the same, and also every such vessel or boat, together with all the guns, furniture, ammunition, tackle, and apparel thereof, shall be forfeited. — § 14.

Certificate for Goods the Produce of the Isle of Man. Before any goods shall be shipped in the Isle of Man for exportation to the U. Kingdom, as being the produce or manufacture of that island, proof shall be made by the written declaration of some competent person, to the satisfaction of the collector and comptroller of the customs at the port of shipment, that such goods, describing and identifying the same, are the produce or the manufacture, as the case may be, of the said island, and in such declaration shall be stated the name of the person by whom such goods are intended to be entered and shipped; and such person, at the time of entry (not being more than 1 month after the date of such declaration) shall make and subscribe a declaration before such collector or comptroller, that the goods to be shipped in virtue of the entry are the same as are mentioned in such declaration; and thereupon the collector and comptroller shall, on demand, give to the master of the ship in which the goods are to be exported a certificate of such proof of produce, or of manufacture, having been made in respect of such goods, describing the same, and setting forth the name of the exporter, and of the exporting ship, and of the master thereof, and the destination of the goods; and such certificate shall be received at the port of importation in the U. Kingdom, instead of the certificate of the governor, lieutenant-governor, or commander-in-chief of the said island, heretofore required. — § 15.

Management of Duties. — Section 16. relates to the appropriation of duties, and is of no commercial importance.

MANGANESE (Ger. *Braunstein, Glasseise;* Du. *Bruinsteen;* Fr. *Manganèse, Magalese, Savon du verre;* It. *Manganesia;* Sp. *Manganesia;* Lat. *Magnesia nigra, Manganesium*), a metal which, when pure, is of a greyish white colour, like cast iron, and has a good deal of brilliancy. Its texture is granular; it has neither taste nor smell; it is softer than cast iron, and may be filed; its specific gravity is 8. It is very brittle, and can neither be hammered nor drawn out into wire. Its tenacity is unknown. When exposed to the air, it attracts oxygen with considerable rapidity. It soon loses its lustre, and becomes grey, violet, brown, and at last black. These changes take place still more rapidly if the metal be heated in an open vessel. Ores of manganese are common in Devonshire, Somersetshire, &c. The ore of manganese, known in Derbyshire by the name of *black wadd*, is remarkable for its spontaneous inflammation with oil. Oxide of manganese is of considerable use; it is employed in making oxymuriatic acid for forming bleaching liquor. It is also used in glazing black earthenware, for giving colours to enamels, and in the manufacture of porcelain. It is the substance generally used by chemists for obtaining oxygen gas. — (*Thomson's Chemistry, &c.*)

MANGEL WURZEL, or FIELD BEET (Fr. *Betteraves;* Ger. *Mangold Wurzel;* It. *Biettola*), a mongrel between the red and white beet. It has been a good deal cultivated in France, Germany, and Switzerland, partly as food for cattle, and partly to be used in distillation, and in the extraction of sugar. Its culture in Great Britain is very recent; and Mr. Loudon questions whether it has any advantages over the turnip for general agricultural purposes. The preparation of the soil is exactly the same as for turnips, and immense crops are raised on strong clays. The produce per acre is about the same as that of the Swedish turnip; it is applied almost entirely to the fattening of stock, and the feeding of milch cows. — (*Loudon's Ency. of Agriculture.*)

MANNA (Fr. *Manne;* Ger. *Mannaesche;* It. *Manna*), the concrete juice of the *Fraxinus ornus*, a species of ash growing in the south of Europe. The juice exudes

spontaneously in warm dry weather, and concretes into whitish tears; but the greater part of the manna of commerce is obtained by making incisions in the tree, and gathering the juice in baskets, where it forms irregular masses of a reddish or brownish colour, often full of impurities. Manna is imported in chests, principally from Sicily and Calabria. The best is in oblong pieces or flakes, moderately dry, friable, light, of a whitish or pale yellow colour, and in some degree transparent; the inferior kinds are moist, unctuous, and brown. It has a slight peculiar odour, and a sweet taste, with some degree of bitterness not very pleasant, and leaving a nauseous impression on the tongue. —(*Thomson's Dispensatory.*)

MANIFEST, in commercial navigation, is a document signed by the master, containing the name or names of the places where the goods on board have been laden, and the place or places for which they are respectively destined; the name and tonnage of the vessel, the name of the master, and the name of the place to which the vessel belongs; a particular account and description of all the packages on board, with the marks and numbers thereon, the goods contained in such packages, the names of the respective shippers and consignees, as far as such particulars are known to the master, &c. A separate manifest is required for tobacco. The manifest must be made out, dated, and signed by the captain, at the place or places where the goods, or any part of the goods, are taken on board. —(See IMPORTATION AND EXPORTATION.)

MANILLA, the capital of Luconia, the largest of the Philippine Islands, and the principal settlement of the Spaniards in the East, in lat. 14° 36′ 8″ N., lon. 120° 53½′ E. Population about 100,000, of whom from 4,000 to 5,000 may be Europeans. Manilla is built on the shore of a spacious bay of the same name, at the mouth of a river navigable for small vessels a considerable way into the interior. The smaller class of ships anchor in Manilla roads, in 5 fathoms, the north bastion bearing N. 37° E., the fishery stakes at the river's mouth N. 18° E., distant about a mile; but large ships anchor at Cavita, about 3 leagues to the southward, where there is a good harbour, well sheltered from the W. and S. W. winds. The arsenal is at Cavita, which is defended by Fort St. Philip, the strongest fortress on the islands. The city is surrounded by a wall and towers, and some of the bastions are well furnished with artillery.

Though situated within the tropics, the climate of the Philippines is sufficiently temperate; the only considerable disadvantage under which they labour in this respect being that the principal part of the group comes within the range of the typhoons. The soil is of very different qualities; but for the most part singularly fertile. They are rich in mineral, vegetable, and animal productions. It is stated in a statistical account of the Philippines, published at Manilla in 1818 and 1819, that the entire population of the islands amounted to 2,249,852, of which 1,376,222 belonged to Luconia. There were, at the period referred to, only 2,837 Europeans in the islands, and little more than 6,000 Chinese. The natives are said to be the most active, bold, and energetic, of any belonging to the Eastern Archipelago. "These people," says a most intelligent navigator, "appear in no respect inferior to those of Europe. They cultivate the earth like men of understanding; are carpenters, joiners, smiths, goldsmiths, weavers, masons, &c. I have walked through their villages, and found them kind, hospitable, and communicative; and though the Spaniards speak of and treat them with contempt, I perceived that the vices they attributed to the Indians, ought rather to be imputed to the government they have themselves established."—(*Voyage de M. De la Perouse*, c. 15.)

The principal articles of export consist of sugar, hemp, indigo, cigars, cotton, coffee, rice, sapan wood, mother of pearl, hides, ebony, gold dust, &c. The principal articles of import are stuffs for clothing, iron, hardware, furniture, fire-arms, and ammunition, &c.

Subjoined is a statement of the import trade of Manilla in 1838, procured direct from that city; but it ought to bear in mind that the official accounts from which it has been drawn up are so defective, that the amounts specified can only be considered as rough approximations; and are, no doubt, under the mark.

Account of the Quantities and Values of the principal Articles exported from Manilla in 1838.

		Quantities.	Value.
Iron	piculs	21,874	$87,946
Cottons, grey	yards	4,645,375	580,484
Do. white	—	1,138,532	171,050
Ginghams	—	232,199	65,506
Stripes	—	395,170	86,445
Handkerchiefs	dozen	67,361	134,722
Prints	yards	196,246	24,530
Woollens and worsted	—	157,597	118,197
Muslins	—	551,015	137,754
Umbrellas	No.	22,398	16,798
Glass and earthenware	packs	776	27,740
Sundries			214,803
Total value in Spanish dollars			$1,665,265

Of the above, goods to the value of 1,145,000 dollars were imported, in Spanish vessels, from China, Singapore, and elsewhere. About 130 ships entered the port of Manilla in 1838; of which 46 were Spanish, 36 British, 28 American, and 11 Chinese.

Account of the Quantity and Value of the Produce exported from Manilla in 1837.

Articles.	By Foreign Vessels	By Spanish Vessels	Total.	Price.		Gross Amount.		
				Doll.	*Rls.*	*Doll.*	*Rls.*	
Sugar	195,852 pic.	26,331 pic.	222,183 pic.	4	2	944,277	6	
Sapan wood	14,604 —	9,091 —	23,695 —	1	-	23,695		
Hemp	57,365 —	2,134 —	59,467 —	4	2	252,734	6	
Cotton	2,850 —	2,814 —	5,664 —	15	-	84,960		
Coffee	6,206 —	632 —	6,838½ —	13	-	88,894		
Buffalo	7,531 —	2,124½ —	9,655½ —	3	7	37,415	-	10½
Mother of pearl shells	1,004 —	11 —	1,015 —	14	-	14,210		
Hide cuttings	1,417 —	1,521 —	2,938 —	3	-	8,814		
Hemp, cordage	875 —	300½ —	1,195½ —	9	-	10,759	4	
Streaked ebony	9,421 —	382 —	9,803 —	1	2	12,253	6	
Roots of sapan wood	5,520 —	1,746 —	2,266 —	-	4	1,133		
Pieces of molove (timber)	4,568 —	- -	4,568 —	5	4	24,024		
Indigo	1,653½—99 ctys.	142 —99 ctys.	1,795½—99 ctys.	66	-	118,503		
Leaf tobacco	35 —	- -	35 —	12	-	420		
Tortoiseshell	2,706 ctys.	1,910½ ctys.	4,616½ ctys.	7	4	34,623	6	
Rice	45,007 —	70,996 coys.	126,003 coys.	1	2	157,503	6	
Paddy	16,564 pic.	19,048 pic.	35,613 pic.	-	4	17,806		
Coffee in husk	86 —	- -	86 —	3	6	294	4	
Hats	19,395 in numb.	234 in numb.	19,629 in numb.	1	6	34,350	-	
Cigar cases	5,851 —	70 —	5,921 —	-	4	2,960	4	
Cigars	3,141 boxes	1,457 boxes	4,598 boxes	25	-	114,950		
Manilla hemp cloth	19,050 pieces	10,000 pieces	29,050 pieces	-	3	10,893	6	
Ditto	4,075½—	50 —	4,121 —	-	1½	773	3	10
Cocoa-nut oil	874½ casks	- -	874½ casks	2	6	2,410	3	
Ditto	8,768½ —	- -	8,768½ —	2	2	1,728		
Rum	6,951 gallons	132 gallons	7,083 gallons	3	-	2,656	1	
Canes	1,440 —	- -	1,440 —	-	4	720		
Liquid indigo	- -	230 pic.	230 pic.	4	-	920		
Ditto	- -	606 casks	606 casks	3	4	2,121		
Cotton canvas	- -	560 pieces	560 pieces	12	-	6,720		
Mats	- -	702	702	-	2	190	4	
				Total		2,012,638	65	20½

The port charges on foreign vessels consist of a tonnage duty of 2 reals, or a quarter-dollar, per register ton; and fees, varying from 15 to 20 dollars, according to the size of the vessel, for port-captain's and health officer's visits, passport, &c. The tariff is bottomed on a custom-house valuation, fixed every 5 years. Most foreign commodities, imported in foreign vessels, pay an import duty of 14 per cent. *ad valorem*, except wines and spirits, which mostly pay a duty of from 30 to 60 per cent. unless the produce of Spain. Cotton-twist of certain colours, cutlery, ready-made clothes, European fruits, confectionery, and vinegar, pay 40 per cent. if imported in Spanish vessels, and 50 per cent. if in any other. British and other foreign cotton and silk manufactures made in imitation of native cloth, Madras and Senegal cottons, &c. pay 15 per cent. if imported in Spanish, and 25 per cent. if in other ships. Machinery of all sorts for the promotion of industry, cotton twist of certain colours, gold and silver, plants and seeds, are imported duty free; but tropical products, the same as those of the Philippines, gunpowder, swords, and other warlike stores, &c., are prohibited, unless landed in bond for re-exportation. Exports of nearly all descriptions, by Spanish vessels, pay only from 1½ to 2 per cent. *ad valorem*, and by foreign vessels double this duty; but manufactured tobacco, rope from Manilla, hemp, and gold and silver, coined or uncoined, if exported to Spain, go duty free. The principal currency of Manilla consists of Spanish dollars, of 8 reals and 96 grains; but S. American dollars are also current. The weights in use are the Spanish lb., which is nearly 2 per cent. heavier than the English; the arroba = 25½ Eng. lbs. nearly; the quintal = 102 lbs.; and the picul of 5 arrobas, or 1¼ cwt. Eng. The coyan is a measure for rice, &c., varying from 96 to 135 lbs. According to a recent list, there are in Manilla 47 Spanish merchants and 11 foreign firms. The Spanish merchants have a chamber of commerce, and a joint-stock insurance society. The U. States, France, and Belgium have consuls, and each of the Canton marine insurance companies has an agent here. There are, however, neither fire nor life offices nor agencies; nor is any newspaper, price-current, or other periodical publication issued in Manilla.

Considering the great fertility and varied productions of the Philippines, and their peculiarly favourable situation for carrying on commerce, the limited extent of their trade, even with its late increase, may excite surprise. This, however, is entirely a consequence of the wretched policy of the Spanish government, which persevered until very recently in excluding all foreign ships from the ports of the Philippines, confining the trade between them and Mexico and S. America to a single ship! Even ships and settlers from China were excluded. "Provisions," says La Perouse, "of all kinds are in the greatest abundance here, and extremely cheap; but clothing, European hardware, and furniture bear an excessively high price. The want of competition, together with prohibitions and restraints of every kind laid on commerce, *render the productions and merchandise of India and China at least as dear as in Europe!*" Happily, however, this miserable policy, the effects of which have been admirably depicted by M. de la Pe[illegible] has been materially modified during the last few years. The events of the late war destroyed for ever the old colonial system of Spain; and the ships of all nations are now freely admitted into Manilla and the other ports in the Philippines. An unprecedented stimulus has, in consequence, been given to all sorts of industry; and its progress will no doubt become more rapid, according as a wider experience and acquaintance with foreigners makes the natives better aware of the advantages of commerce and industry, and disabuses them of the prejudices of which they have been so long the slaves.

MARBLE (Ger. Rus. and Lat. *Marmor*; Du. *Marmer*; Fr. *Marbre*; It. *Marmo*; Sp. *Marmol*), a genus of fossils, composed chiefly of lime; being a bright and beautiful stone, moderately hard, not giving fire with steel, fermenting with and soluble in acid menstrua, and calcining in a slight fire.

The colours by which marbles are distinguished are almost innumerable. Some are quite black; others, again, are of a snowy white; some are greenish; others greyish, reddish, bluish, yellowish, &c.; while some are variegated and spotted with many different colours and shades of colour. The finest solid modern marbles are those of Italy, Blankenburg, France, and Flanders. Great quantities of very beau-

tiful marble have been lately discovered at Portsoy in Banffshire, and at Tiree and other places in the Western Isles. Kilkenny, in Ireland, has abundance of beautiful black marble intermixed with white spots, called *Kilkenny marble*. Derbyshire abounds in this mineral. Near Kemlyn-bay, in Anglesea, there is a quarry of beautiful marble called *verde di Corsica*, from its also being found in Corsica. Its colours are green, black, white, and dull purple, irregularly disposed. Italy produces the most valuable marble, and its exportation makes a considerable branch of her foreign commerce. The black and the milk-white marble of Carara, in the duchy of Massa, are particularly esteemed.

The marbles of Germany, Norway, and Sweden are very inferior, being mixed with a sort of scaly limestone.

Marble is of so hard, compact, and fine a texture, as readily to take a beautiful polish. That most esteemed by statuaries is brought from the island of Paros, in the Archipelago; it was employed by Praxiteles and Phidias, both of whom were natives of that island; whence also the famous Arundelian marbles were brought. The marble of Carara is likewise in high repute among sculptors.

The specific gravity of marble is from 2,700 to 2,800. Black marble owes its colour to a slight mixture of iron.

MARITIME LAW. By maritime law is meant the law relating to harbours, ships, and seamen. It forms an important branch of the commercial law of all maritime nations. It is divided into a variety of different departments; such as those with respect to harbours, the property of ships, the duties and rights of masters and seamen, contracts of affreightment, average, salvage, &c. The reader will find those subjects treated of under their respective heads.

Sketch of the Progress of Maritime Law. — The earliest system of maritime law was supplied by the Rhodians, several centuries before the Christian æra. The most celebrated authors of antiquity have spoken in high terms of the wisdom of the Rhodian laws; luckily, however, we are not wholly left, in forming our opinion upon them, to the vague though commendatory statements of Cicero and Strabo. — (*Cicero pro Lege Manilia; Strab.* lib. xiv.) The laws of Rhodes were adopted by Augustus into the legislation of Rome; and such was the estimation in which they were held, that the Emperor Antoninus, being solicited to decide a contested point with respect to shipping, is reported to have answered, that it ought to be decided by the Rhodian laws, which were of paramount authority in such cases, unless they happened to be directly at variance with some regulation of the Roman law. — ("*Ego quidem mundi dominus, lex autem maris legis id Rhodia, qua de rebus nauticis præscripta est, judicetur, quatenus nulla nostrarum legum adversatur. Hoc idem Divus quoque Augustus judicavit.*") The rule of the Rhodian law with respect to average contributions in the event of a sacrifice being made at sea for the safety of the ship and cargo, is expressly laid down in the Digest (lib. xiv. tit. 2.); and the most probable conclusion seems to be, that most of the regulations as to maritime affairs embodied in the compilations of Justinian have been derived from the same source. The regulations as to average adopted by all modern nations, are borrowed, with hardly any alteration, from the Roman, or rather, as we have seen, from the Rhodian law! — a conclusive proof of the sagacity of those by whom they had been originally framed. The only authentic fragments of the Rhodian laws are those in the Digest. The collection entitled *Jus navale Rhodiorum*, published at Bâle in 1561, is now admitted by all critics to be spurious.

The first modern code of maritime law is said to have been compiled at Amalphi, in Italy, a city at present in ruins; but which, besides being early distinguished for its commerce, will be for ever famous for the discovery of the Pandects, and the supposed invention of the mariner's compass. The Amalphitan code is said to have been denominated *Tabula Amalphitana*. But if such a body of law really existed, it is singular that it should never have been published, nor even any extracts from it. M. Pardessus has shown that all the authors who have referred to the Amalphitan code and asserted its existence, have copied the statement of Freccia, in his book *De Subfeudis*. — (*Collection des Loix Maritimes*, tome i. p. 145.) And as Freccia assures us that the Amalphitan code continued to be followed in Naples at the time when he wrote (1570), it is difficult to suppose that it could have entirely disappeared; and it seems most probable, as nothing peculiar to it has ever transpired, that it consisted principally of the regulations laid down in the Roman law, which, it is known, preserved their ascendancy for a longer period in the south of Italy than anywhere else.

But, besides Amalphi, Venice, Marseilles, Pisa, Genoa, Barcelona, Valencia, and other towns of the Mediterranean, were early distinguished for the extent to which they carried commerce and navigation. In the absence of any positive information on the subject, it seems reasonable to suppose that their maritime laws would be principally borrowed from those of Rome, but with such alterations and modifications as might be deemed requisite to accommodate them to the particular views of each state. But whether in this or in some other way, it is certain that various conflicting regulations were established, which led to much confusion and uncertainty; and the experience of the inconveniences thence arising, doubtless contributed to the universal adoption of the *Consolato del Mare* as a code of maritime law. Nothing certain is known as to the origin of this code. Azuni (*Droit Maritime de l'Europe*, tome i. pp. 414–439., or rather Jorio, *Codice Ferdinando*, from whose work a large proportion of Azuni's is literally translated) contends, in a very able dissertation, that the Pisans are entitled to the glory

of having compiled the whole, or at least the greater part, of the *Consolato del Mare*. On the other hand, Don Antonio de Capmany, in his learned and excellent work on the commerce of Barcelona — (*Antiguo Comercio de Barcelona*, tome i. pp. 170—183.), has endeavoured to show that the *Consolato* was compiled at Barcelona; and that it contains the rules according to which the consuls, which the Barcelonese had established in foreign places so early as 1268, were to render their decisions. It is certain that the *Consolato* was printed for the first time at Barcelona, in 1502; and that the early Italian and French editions are translations from the Catalan. Azuni has, indeed, sufficiently proved, that the Pisans had a code of maritime laws at a very early period, and that several of the regulations in it are substantially the same as those in the *Consolato*. But it does not appear that the Barcelonese were aware of the regulations of the Pisans, or that the resemblance between them and those in the *Consolato* is more than accidental; or may not fairly be ascribed to the concurrence that can hardly fail to obtain among well-informed persons legislating upon the same topics, and influenced by principles and practices derived from the civil law.

M. Pardessus, in the second volume of his excellent work already referred to, appears to have been sufficiently disposed, had there been any grounds to go upon, to set up a claim in favour of Marseilles to the honour of being the birthplace of the *Consolato*; but he candidly admits that such a pretension could not be supported, and unwillingly adheres to Capmany's opinion. — "Quoique Français," says he, "quoique portée par des sentimens de reconnoissance, qu'aucun évènement ne sauroit affoiblir, à faire valoir tout ce qui est en faveur de Marseilles, je dois reconnoitre franchement que les probabilités l'emportent en faveur de Barcelone." — (Tome ii. p. 24.)

But to whichever city the honour of compiling the *Consolato* may be due, there can be no doubt that its antiquity has been greatly exaggerated. It is affirmed, in a preface to the different editions, that it was solemnly accepted, subscribed, and promulgated, as a body of maritime law, by the Holy See in 1075, and by the kings of France and other potentates at different periods between 1075 and 1270. But Capmany, Azuni, and Pardessus have shown in the clearest and most satisfactory manner that the circumstances alluded to in this preface could not possibly have taken place, and that it is wholly unworthy of attention. The most probable opinion seems to be, that it was compiled, and began to be introduced, about the end of the 13th or the beginning of the 14th century. And notwithstanding its prolixity, and the want of precision and clearness, the correspondence of the greater number of its rules with the ascertained principles of justice and public utility, gradually led, without the intervention of any agreement, to its adoption as a system of maritime jurisprudence by all the nations contiguous to the Mediterranean. It is still of high authority. Casaregis says of it, though, perhaps, too strongly, "*Consulatus maris, in materiis maritimis, tanquam universalis consuetudo habens vim legis inviolabiliter attenda est apud omnes provincias et nationes.*" — (Disc. 213. n. 12.)

The collection of sea laws next in celebrity, but anterior, perhaps, in point of time, is that denominated the *Roole des Jugements d'Oleron*. There is as much diversity of opinion as to the origin of these laws, as there is with respect to the origin of the *Consolato*. The prevailing opinion in Great Britain has been, that they were compiled by direction of Queen Eleanor, wife of Henry II., in her quality of Duchess of Guienne; and that they were afterwards enlarged and improved by her son Richard I., at his return from the Holy Land: but this statement is now admitted to rest on no good foundation. The most probable theory seems to be, that they are a collection of the rules or practices followed at the principal French ports on the Atlantic, as Bordeaux, Rochelle, St. Malo, &c. They contain, indeed, rules that are essential to all maritime transactions, wherever they may be carried on; but the references in the code sufficiently prove that it is of French origin. The circumstance of our monarch's having large possessions in France at the period when the Rules of Oleron were collected, naturally facilitated their introduction into England; and they have long enjoyed a very high degree of authority in this country. "I call them the Laws of Oleron," said a great civilian — (*Sir Leoline Jenkins, Charge to the Cinque Ports*), "not but that they are peculiarly enough English, being long since incorporated into the customs and statutes of our admiralties; but the equity of them is so great, and the use and reason of them so general, that they are known and received all the world over by that rather than by any other name." Molloy, however, has more correctly, perhaps, said of the laws of Oleron, that "they never obtained any other or greater force than those of Rhodes formerly did; that is, they were esteemed for the reason and equity found in them, and applied to the case emergent." — (*De Jure Maritimo et Navali*, Introd.)

A code of maritime law issued at Wisby, in the island of Gothland, in the Baltic, has long enjoyed a high reputation in the North. The date of its compilation is uncertain; but it is comparatively modern. It is true that some of the northern jurists contend that the laws of Wisby are older than the Rules of Oleron, and that the latter are chiefly

copied from the former! But it has been repeatedly shown that there is not so much as the shadow of a foundation for this statement. — (See *Pardessus, Collection, &c.* tome i. pp. 425—462.; *Foreign Quarterly Review*, No. 13. art. *Hanseatic League.*) The Laws of Wisby are not certainly older than the latter part of the 14th or beginning of the 15th century; and have obviously been compiled from the *Consolato del Mare*, the Rules of Oleron, and other codes that were then in use. Grotius has spoken of these laws in the most laudatory manner: — "*Quæ de maritimis negotiis,*" says he, "*insulæ Gothlandiæ habitatoribus placuerunt, tantum in se habent, tum equitatis, tum prudentiæ, ut omnes oceani accolæ eo, non tanquam proprio, sed velut gentium jure, utantur.*" — (*Prolegomena ad Procopium*, p. 64.)

Besides the codes now mentioned, the ordinances of the Hanse Towns, issued in 1597 and 1614, contain a system of laws relating to navigation that is of great authority. The judgments of Damme, the customs of Amsterdam, &c., are also often quoted.*

But by far the most complete and well digested system of maritime jurisprudence that has ever appeared, is that comprised in the famous *Ordonnance de la Marine* issued by Louis XIV. in 1681. This excellent code was compiled under the direction of M. Colbert, by individuals of great talent and learning, after a careful revision of all the ancient sea laws of France and other countries, and upon consultation with the different parliaments, the courts of admiralty, and the chambers of commerce, of the different towns. It combines whatever experience and the wisdom of ages had shown to be best in the Roman laws, and in the institutions of the modern maritime states of Europe. In the preface to his treatise on the *Law of Shipping*, Lord Tenterden says, — "If the reader should be offended at the frequent references to this ordinance, I must request him to recollect that those references are made to the maritime code of a great commercial nation, which has attributed much of its national prosperity to that code: a code composed in the reign of a politic prince; under the auspices of a wise and enlightened minister; by laborious and learned persons, who selected the most valuable principles of all the maritime laws then existing; and which, in matter, method, and style, is one of the most finished acts of legislation that ever was promulgated."

The ordinance of 1681 was published in 1760, with a detailed and most elaborate commentary by M. Valin, in 2 volumes, 4to. It is impossible which to admire most in this commentary, the learning or the sound good sense of the writer. Lord Mansfield was indebted for no inconsiderable portion of his superior knowledge of the principles of maritime jurisprudence to a careful study of M. Valin's work.

That part of the *Code de Commerce* which treats of maritime affairs, insurance, &c. is copied, with very little alteration, from the ordinance of 1681. The few changes that have been made are not always improvements.

No system or code of maritime law has ever been issued by authority in Great Britain. The laws and practices that now obtain amongst us in reference to maritime affairs have been founded principally on the practices of merchants, the principles laid down in the civil law, the Laws of Oleron and Wisby, the works of distinguished jurisconsults, the judicial decisions of our own and foreign countries, &c. A law so constructed has necessarily been in a progressive state of improvement; and, though still susceptible of amendment, it corresponds, at this moment, more nearly, perhaps, than any other system of maritime law, with those universally recognised principles of justice and general convenience by which the transactions of merchants and navigators ought to be regulated.

The decisions of Lord Mansfield did much to fix the principles, and to improve and perfect the maritime law of England. It is also under great obligations to Lord Stowell. The decisions of the latter chiefly, indeed, respect questions of neutrality, growing out of the conflicting pretensions of belligerents and neutrals during the late war; but the principles and doctrines which he unfolds in treating those questions, throw a strong and steady light on those branches of maritime law. It has occasionally, indeed, been alleged, — and the allegation is probably, in some degree well founded, — that his Lordship has conceded too much to the claims of belligerents. Still, however, his judgments must be regarded, allowing for this excusable bias, as among the noblest monuments of judicial wisdom of which any country can boast. "They will be contemplated," says Mr. Serjeant Marshall, "with applause and veneration, as long as depth of learning, soundness of argument, enlightened wisdom, and the chaste beauties of eloquence, hold any place in the estimation of mankind." — (*On Insurance*, Prelim. Disc.)

The "Treatise of the Law relative to Merchant Ships and Seamen," by the late Chief Justice of the Court of King's Bench, does credit to the talents, erudition, and liberality of its noble and learned author. It gives, within a brief compass, a clear and

* A translation of the Law of Oleron, Wisby, and the Hanse Towns, is given in the 3d edition of Malyne's *Lex Mercatoria*; but the edition of them in the work of M. Pardessus, referred to in the text, is infinitely superior to every other.

admirable exposition of the most important branches of our maritime law; and may be consulted with equal facility and advantage by the merchant, the general scholar, and the lawyer. Mr. Serjeant Marshall has entered very fully into some, and has touched upon most points of maritime law, in his work on *Insurance*; and has discussed them with great learning and sagacity. The works of Mr. Justice Park, Mr. Holt, and a few others, are also valuable. Of the earlier treatises, the *Lex Mercatoria* of Malynes is by far the best; and, considering the period of its publication (1622), is a very extraordinary performance.

Statutes with respect to Importation and Exportation, Navigation, &c. — The preceding remarks refer merely to the principles, or leading doctrines, of our maritime law. These, however, have often been very much modified by statutory enactments; and the excessive multiplication of acts of parliament suspending, repealing, or altering parts of other acts, has often involved our commercial and maritime law in almost inextricable confusion, and been most injurious to the public interests. No one, indeed, who is not pretty conversant with the subject, would readily imagine to what an extent this abuse has sometimes been carried. From the Revolution down to 1786, some hundreds of acts were passed, each enacting some addition, diminution, or change, in the duties, drawbacks, bounties, and regulations previously existing in the customs. In consequence, the customs laws became so intricate and unintelligible, that hardly one merchant in fifty could tell the exact amount of duty affecting any article, or the course to be followed either in entering or clearing out vessels; being obliged to leave it entirely to the clerks of the Custom-house to calculate the amount of duties, and to direct him how to proceed so as to avoid forfeiting the goods and the ship! and yet, so powerful is the influence of habit in procuring toleration for the most pernicious absurdities, that this monstrous abuse was allowed to go on increasing for 50 years after it had been denounced as intolerable. Mr. Pitt has the merit of having introduced something like order into this chaos. Under his auspices, all the separate customs duties existing in 1787 were repealed, and new ones substituted in their stead; consisting, in most instances, of the equivalents, so far at least as they could be ascertained, of the old duties. In carrying this measure into effect, the House of Commons passed no fewer than 3,000 resolutions. The regulations as to entries and clearances were also simplified.

The advantages resulting from this measure were very great; but during the war, so many new duties and regulations were passed, that the necessity for a fresh consolidation became again very urgent, and was effected in 1819. It was not, however, in the customs department only, or in the mere article of duties, that the merchant and ship owners were bewildered by the multiplicity of statutory regulations. There was not a single branch of the law regulating their transactions that escaped the rage for legislation. Previously to 1822, no fewer than 113 statutes had been passed relating to the fisheries; and the makers and buyers of sails and cordage were supposed to be familiar with the various obscure and contradictory regulations embodied in the *twenty-three* acts of parliament relating to these articles! But the enormity of the abuse will be rendered more apparent, by laying before the reader the following extract from the *Report of the Lords' Committee on Foreign Trade in* 1820.

"Before," say their Lordships, "your committee proceed to advert to the points which have been the principal objects of their inquiry, they are anxious to call the attention of the House to the excessive accumulation and complexity of the laws under which the commerce of the country is regulated, with which they were forcibly impressed in the very earliest stage of their proceedings. These laws, passed at different periods, and many of them arising out of temporary circumstances, amount, as stated in a recent computation of them, to upwards of *two thousand*, of which no less than 1,100 were in force in 1815; and many additions have been since made. After such a statement, it will not appear extraordinary that it should be mater of complaint by the British merchant, that, so far from the course in which he is to guide his transactions being plain and simple — so far from being able to undertake his operations, and to avail himself of favourable openings, as they arise, with promptitude and confidence — he is frequently reduced to the necessity of resorting to the services of professional advisers, to ascertain what he may venture to do, and what he must avoid, before he is able to embark in his commercial adventures with the assurance of being secure from the consequences of an infringement of the law. If this be the case (as is stated to your committee) with the most experienced among the merchants, even in England, in how much greater a degree must the same perplexity and apprehension of danger operate in foreign countries and on foreign merchants, whose acquaintance with our statute book must be supposed to be comparatively limited, and who are destitute of the professional authority which the merchant at home may at all times consult for his direction? When it is recollected, besides, that a trivial unintentional deviation from the strict letter of the acts of parliament may expose a ship and cargo to the inconvenience of seizure, which (whether

sustained or abandoned) is attended always with delay and expense, and frequently followed by litigation, it cannot be doubted that such a state of the law must have the most prejudicial influence both upon commercial enterprise in the country, and upon our mercantile relations and intercourse with foreign nations; and perhaps no service more valuable could be rendered to the trade of the empire, nor any measure more effectually contribute to promote the objects contemplated by the House, in the appointment of this committee, than an accurate revision of this vast and confused mass of legislation; and the establishment of some certain, simple, and consistent principles, to which all the regulations of commerce might be referred, and under which the transactions of merchants engaged in the trade of the United Kingdom might be conducted with facility, safety, and confidence."—(p. 4.)

Since this Report was printed, a very considerable progress has been made in simplifying and clearing up the statute law, on the principles laid down in it. The law as to shipping and navigation has been particularly improved. The principles laid down in the famous navigation acts of 1650 and 1660 were, indeed, sufficiently distinct and obvious; but when these acts were passed, there were above 200 statutes in existence, many of them antiquated and contradictory, which they did not repeal, except in so far as the regulations in them might be inconsistent with those in the new acts. But besides these, a number of statutes were passed almost in every session since 1660, explaining, limiting, extending, or modifying in one way or other, some of the provisions of the navigation acts; so that ultimately there were questions perpetually arising, as to which it was very difficult to discover the precise law. On such occasions, recourse was often had to the courts; and the good sense and equity which generally characterised their decisions mitigated the mischievous consequences resulting from the uncertainty of the statute law, and even gave it the appearance of consistency. Latterly, however, this uncertainty has been well nigh removed. One of the bills introduced by Mr. (now Lord) Wallace for the improvement of the navigation laws repealed above *two hundred* statutes! and the new acts substituted in the place of those that were repealed were drawn up with laudable brevity and clearness. But various alterations having been subsequently made in these acts, these have been embodied in new statutes. The principal are—the 3 & 4 Will. 4. c. 54., for the encouragement of British shipping and navigation, which may be called the present navigation law—(see NAVIGATION LAWS); the 3 & 4 Will. 4. c. 55., for the registry of British vessels—(see REGISTRY); the 3 & 4 Will. 4. c. 52., containing the principal regulations with respect to importation and exportation—(see IMPORTATION AND EXPORTATION); and the acts 3 & 4 Will. 4. c. 59., and 5 & 6 Victoria, c. 49., for regulating the trade with the British possessions abroad—(see COLONIES AND COLONY TRADE). Mr. Hume, late of the Customs and the Board of Trade, had the principal share in the compilation of these acts, which do honour to his industry and talent for arrangement.

It may be worth while observing, that hardly a session passes without giving birth to more or fewer acts, making certain changes or modifications in those referred to above. Where these changes apply only to some particular emergency, without affecting the general principles or rules laid down in the statutes, there can be no doubt that they should be embodied in separate acts; but where any modification or alteration is to be made in the principles of the law, the better way, as it appears to us, would be to introduce it directly into the leading act on the subject—re-enacting it in an amended or altered form. In no other way is it possible to preserve that unity and clearness which are so very desirable. The multiplication of statutes is a very great evil, not only from the difficulty of ascertaining the exact degree in which one modifies another, but from its invariably leading to the enactment of contradictory clauses. The property and transactions of merchants ought not to depend upon the subtleties and niceties of forced constructions, but upon plain and obvious rules, about which there can be no mistake. It would, however, be idle to expect that such rules can ever be deduced from the conflicting provisions of a number of statutes: those in the same statute are not always in harmony with each other.

MARK, OR MARC, a weight used in several parts of Europe, for various commodities, especially gold and silver. In France, the mark was divided into 8 oz. = 64 drachms = 192 deniers or pennyweights = 4,608 grains. In Holland, the mark weight was also called Troy weight, and was equal to that of France. When gold and silver are sold by the mark, it is divided into 24 carats.

The pound, or *livre, poids de marc*, the weight most commonly used in retail dealings throughout France, previous to the Revolution, was equal to 2 marcs, and consequently contained 16 oz. = 128 drs. = 384 den. = 9,216 grs. One kilogramme is nearly equal to 2 livres.—Subjoined is a Table of livres, *poids de marc*, from 1 to 10, converted into kilogrammes. Any greater number may be learned by a simple multiplication and addition.

Livres.		*Kilog.*	*Livres.*		*Kilog.*	*Livres.*		*Kilog.*	*Livres.*		*Kilog.*
1	=	0·4895	4	=	1·9580	7	=	3·4265	9	=	4·4056
2	=	0·9790	5	=	2·4475	8	=	3·9160	10	=	4·8951
3	=	1·4685	6	=	2·9370						

MARK, a term sometimes used among us for a money of account, and in some other countries for a coin. The English mark is ⅔ds of a pound sterling, or 13*s.* 4*d.*; and the Scotch mark is ⅔ds of a pound Scotch. The mark Lubs, or Lubeck mark, used at Hamburg, is a money of account, equal to 14⅔*d.* sterling.

MARKET, a public place in a city or town, where provisions are sold. No market is to be kept within 7 miles of the city of London; but all butchers, victuallers, &c. may hire stalls and standings in the flesh-markets there, and sell meat and other provisions. Every person who has a market is entitled to receive toll for the things sold in it; and, by ancient custom, for things standing in the market, though not sold; but those who keep a market in any other manner than it is granted, or extort tolls or fees where none are due, forfeit the same. — (See FAIRS.)

MARSEILLES, a large commercial city and sea-port of France, on the Mediterranean, lat. 43° 17′ 49″ N., lon. 5° 22½′ E. Population, including suburbs, 170,000.

Harbour. — The harbour, the access to which is defended by several strong fortifications, is in the centre of the city, forming a basin 525 fathoms in length, by about 150 do. in breadth. The tide is hardly sensible; but the depth of water at the entrance to the harbour varies from 16 to 18 feet, being lowest when the wind is N.W., and highest when it is S.W. Within the basin the depth of water varies from 12 to 24 feet, being shallowest on the north, and deepest on the south side. Dredging machines are constantly at work to clear out the mud, and to prevent the harbour from filling up. Though not accessible to the largest class of ships, Marseilles is one of the best and safest ports in the world for moderate-sized merchantmen, of which it will accommodate above 1,000. Ships in the basin lie close alongside the quays; and there is every facility for getting them speedily loaded and unloaded. The Isle de Rattoneau, Pomegues, and the strongly fortified islet or rock of If, lie W. S.W. from the port; the latter, which is the nearest to it, being only 1¾ mile distant, and not more than ¾ of a mile from the projecting point of land to the south of the city. There is good anchorage ground for men-of-war and other large ships between the Isles de Rattoneau and Pomegues, to the west of the Isle d'If. When coming from the south, it is usual to make the Isle de Planier, in lat. 43° 11′ 54″ N., lon. 5° 13′ 59″ E. A light-house erected on this island is 131 feet high; the flashes of the light, which is a revolving one, succeed each other every ½ minute, and in clear weather it may be seen 7 leagues off. Ships that have made the Isle de Planier, or that of Le Maire, lying east from it about 4½ miles, steer northerly for the Isle d'If, distant about 7 miles from each, and having got within ¼ or ⅓ mile of it, heave to for a pilot, who carries them into harbour; it is not, however, obligatory on ships to take a pilot on board; but being obliged to pay for one whether they avail themselves of his services or not, they seldom dispense with them. The charge is 4 sous per ton in, and 2 sous per do. out, for French vessels, and the vessels of countries having reciprocity treaties with France. There is a light-house in the fort St. Jean, on the north side of the entrance to the port. The *lazaretto*, which is one of the best in Europe, lies a little to the north of the city; and there is an hospital on Rattoneau Island, for individuals whose health is dubious. With the exception of the above charge for pilotage, and the charges for such vessels as perform quarantine, there are no port charges on ships entering at or clearing out from Marseilles.

Trade, &c. — Marseilles is a city of great antiquity, and has long enjoyed a very extensive commerce. Havre, partly, no doubt, from its being, as it were, the port of Paris, used to enjoy a greater share of the trade of France; but, notwithstanding the increased importance of the former, it has recently been surpassed by Marseilles. The customs duties collected at Havre, in 1841, were 23,000,000 fr., whereas those collected at Marseilles during the same year, amounted to 34,000,000 fr.; and, in 1842, to 34,222,463 fr., having increased to that amount from 25,899,394 fr. in 1830.

This statement shows conclusively, that the trade of Marseilles is not only increasing rapidly, but that it is already very extensive. She is the grand emporium of the South of France, and the centre of 9-10ths of her commerce with the countries on the Mediterranean and the Black Sea. The exports consist principally of silk stuffs, wines, brandies, and liqueurs; woollens and linens; madder, oil, soap, refined sugar, perfumery, stationery, verdigris, and all sorts of colonial products. Among the principal imports are sugar, coffee, and other colonial products; dye stuffs; corn from the Black Sea and the north coast of Africa; cotton from Egypt and America; coal, linen, thread, and various descriptions of manufactured goods from England; with hides, wool, tallow, timber, &c. Marseilles engrosses almost the whole trade between France and Algiers. She is now also the principal seat of the intercourse carried on by steamers with Malta, Alexandria, and Constantinople; and, besides the steamers employed by the government as packets, she has upwards of 20 steamers belonging to private companies. Mr. Maclaren says that in 1839 most part of the latter had English-made engines, and English engineers; and that they burnt English coal, which sold here for about 30*s.* a ton. There belonged to the port, on the 31st of December 1841, 659 sailing vessels of the burden of 58,945 tons; and 21 steamers of the burden of 2,751 tons. A joint-stock bank established here in 1835 is said to have been exceedingly successful.

We regret we are unable to lay before the reader any very recent account of the import and export trade of Marseilles. We believe, however, that the value of the first may at present (1843), be estimated at about 200,000,000 fr. or 8,000,000*l.* sterling, and that of the exports at about as much. For information as to money, weights, measures, duties, &c., the reader is referred to the art. HAVRE, under which head he will find an account of the trade of France. We subjoin an

Account of the Value of the Imports from different Foreign Countries, and of the Value of the Exports to the same, at Marseilles, in 1833.

Countries.	Imports.	Exports.	Countries.	Imports.	Exports.
	Francs.	*Francs.*		*Francs.*	*Francs.*
Great Britain and possessions in the Mediterranean	1,615,239	6,000,650	Greece	1,580,391	1,872,938
Belgium	1,308	331,622	Egypt	5,018,478	5,393,613
Holland	555,173	611,992	States of Barbary	7,522,181	6,151,634
Hanseatic States	413,671	1,541,168	Mauritius	331,500	234,620
Prussia	-	370,104	English India	199,335	391,547
Russia	13,594,485	2,029,494	Dutch do.	643,883	177,975
Sweden	327,086	598,004	French do.	148,970	-
Norway	65,200	11,282	Hayti	521,681	765,135
Denmark	17,564	551,950	Danish possess. in America	56,675	401,945
Germany	-	48,930	Spanish do.	8: 0,905	750,135
Switzerland	-	2,621,554	United States of do.	13,036,073	5,685,916
Austria	6,159,735	4,271,055	Mexico	377,795	-
Sardinia	27,873,480	18,004,359	Columbia	312,498	193,316
Two Sicilies	20,011,278	6,039,053	Brazil	1,060,557	668,578
Other Italian States	8,291,668	10,356,782	Rio de la Plata	1,158,500	446,407
Spain	15,936,242	9,421,122	Peru	141,575	11,812
Portugal	200,150	12,916	Chili	52,180	141,046
Turkey	23,874,830	16,738,035	Total	151,936,486	106,822,590

Summary Account of the Trade of Marseilles in 1833.

	Imports.	Exports.
	Francs.	*Francs.*
Trade with foreign countries	151,936,486	106,822,590
Trade with the colonies	11,511,916	10,407,525
Algiers	2,079,858	10,786,021
Cod fishery	6,000	30,000
Whale fishery	1,263,088	
Small fishery	1,000,000	
Great coasting trade	9,976,483	21,609,601
Little coasting trade	5,000,000	15,000,000
Total	182,775,831	164,655,737

Account of the Arrivals and Departures of Shipping at Marseilles in 1841, specifying the Countries whence the Ships came, and for which they departed, with the Number and Tonnage of those from and for each.

Countries.	Entered.						Total cleared.	
	French.		Foreign.		Total.			
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
Russia (ports on the Baltic)	-	-	38	15,483	38	15,483	18	4,359
— (ports on the Black Sea)	2	346	254	68,868	256	69,214	19	4,291
Sweden	-	-	63	14,194	63	14,194	2	476
Norway	1	174	11	2,027	12	2,201	3	429
Denmark	-	-	-	-	-	-	23	6,645
Hanseatic States	-	-	9	946	9	946	15	2,156
Holland	-	-	18	2,483	18	2,483	20	2,417
Belgium	2	221	8	1,281	10	1,502	23	2,970
England	73	10,723	157	29,358	230	40,081	306	49,149
Portugal	-	-	5	836	5	836	11	1,517
Spain	140	15,159	401	29,052	541	44,211	480	45,088
Austria	11	2,164	136	33,863	147	36,027	87	16,508
Sardinian States	297	24,522	382	24,817	679	49,339	655	45,959
Two Sicilies	78	12,418	275	53,772	353	66,190	407	71,884
Tuscany	58	4,709	123	11,944	181	16,653	220	17,141
Papal States	14	1,335	106	9,881	120	11,216	60	6,944
Lucca	-	-	-	-	-	-	19	786
Greece	6	589	3	774	9	1,363	114	24,220
Turkey	173	40,052	97	18,986	270	59,038	289	71,626
Egypt	35	6,500	41	10,327	76	16,827	83	17,959
Algiers	158	18,333	144	29,353	302	47,686	408	58,410
States of Barbary	29	2,481	46	5,323	75	7,804	53	7,098
Mauritius, and Cape of Good Hope	-	-	-	-	-	-	21	5,581
West Coast of Africa	5	970	-	-	5	970	6	1,282
English India	1	356	1	276	2	632	9	2,675
Dutch India	4	1,335	-	-	4	1,335	2	699
U. States of America	5	1,080	59	16,781	64	17,861	53	14,895
Hayti	8	1,483	-	-	8	1,483	8	1,332
English possessions in America	-	-	1	299	1	299	1	192
Spanish do. do.	28	6,553	48	5,400	76	11,953	9	1,371
Danish do. do.	1	387	1	264	2	651	12	2,531
Brazil	12	1,786	5	907	17	2,693	31	6,547
Mexico	-	-	-	-	-	-	3	405
New Grenada	7	1,569	2	303	9	1,872	3	643
Venezuela	3	392	1	284	4	676	3	546
Chili	-	-	-	-	-	-	3	1,448
Rio de la Plata	5	926	1	120	6	1,046		
Uruguay	5	875	7	1,441	12	2,316	24	4,342
Martinique	37	8,113	-	-	37	8,113	42	9,860
Guadaloupe	41	8,656	-	-	41	8,656	30	7,055
Cayenne	6	980	-	-	6	980	6	980
Senegal	15	1,477	-	-	15	1,477	18	1,808
Bourbon	22	6,237	-	-	22	6,237	27	7,429
French India	1	141	-	-	1	141	3	704
Whale Fishery	56	8,370	-	-	56	8,370	1	133
Total	1,339	191,412	2,443	389,643	3,782	581,055	3,639	534,085

MASTER, in commercial navigation, the person intrusted with the care and navigation of the ship.

No one is qualified to be the master of a British ship, unless he be a natural-born British subject, or naturalised by act of parliament, or a denizen by letters of denization; or have become a subject of his Majesty by conquest, cession, &c., and have taken the oaths of allegiance; or a foreign seaman who has served 3 years, in time of war, on board of his Majesty's ships.

"The master is the confidential servant or agent of the owners; and in conformity to the rules and maxims of the law of England, *the owners are bound to the performance of every lawful contract made by him relative to the usual employment of the ship.*"—(*Abbott* (late Lord Tenterden) *on the Law of Shipping*, part ii. c. 2.)

From this rule of law it follows that the owners are bound to answer for a breach of contract, though committed by the master or mariners against their will, and without their fault.—(*Id.*) Nor can the expediency of this rule be doubted. The owners, by selecting a person as master, hold him forth to the public as worthy of trust and confidence. And in order that this selection may be made with due care, and that all opportunities of fraud and collusion may be obviated, it is indispensable that they should be made responsible for his acts.

The master has power to hypothecate, or pledge, both ship and cargo for *necessary repairs executed in foreign ports* during the course of the voyage; but neither the ship nor cargo can be hypothecated for repairs *executed at home.*

The master has no lien upon the ship for his wages, nor for money advanced by him for stores or repairs. In delivering judgment upon a case of this sort, Lord Mansfield said—"As to wages, there is no particular contract that the ship should be a pledge; there is no usage in trade to that purpose; nor any implication from the nature of the dealing. On the contrary, the law has always considered the captain as contracting personally with the owner; and the case of the captain has, in that respect, been distinguished from that of all other persons belonging to the ship. This rule of law may have its foundation in policy, for the benefit of navigation; for, as ships may be making profit and earning every day, it might be attended with great inconvenience, if, on the change of a captain for misbehaviour, or any other reason, he should be entitled to keep the ship till he is paid. Work done for a ship in England is supposed to be done on the personal credit of the employer: in foreign parts the captain may hypothecate the ship. The defendant might have told the tradesman, that he only acted as an agent, and that they must look to the owner for payment."

The master is bound to employ his whole time and attention in the service of his employers, and is not at liberty to enter into any engagement for his own benefit that may occupy any portion of his time in other concerns; and therefore, if he do so, and the price of such engagement happen to be paid into the hands of his owners, they may retain the money, and he cannot recover from them.—(*Abbott*, part ii. c. 4.)

During war, a master should be particularly attentive to the regulations as to sailing under convoy; for, besides his responsibility to his owners or freighters, he may be prosecuted by the Court of Admiralty, and fined in any sum not exceeding 500*l.*, and imprisoned for any term not exceeding 1 year, if he wilfully disobey the signals, instructions, or lawful commands of the commander of the convoy; or desert it without leave.—(43 *Geo.* 3. c. 160.)

Wilfully destroying or casting away the ship, or procuring the same to be done by the master or mariners, to the prejudice of the owners, freighters, or insurers; running away with the cargo; and turning pirates; are capital offences punishable by death.—(7 & 8 *Geo.* 4. c. 29., and antecedent statutes.)

After the voyage has been commenced, the master must proceed direct to the place of his destination, without unnecessarily stopping at any intermediate port, or deviating from the shortest course. No such deviation will be sanctioned, unless it has been occasioned by stress of weather, the want of necessary repair, avoiding enemies or pirates, succouring of ships in distress, sickness of the master or mariners, or the mutiny of the crew.—(*Marshall on Insurance*, book i. c. 6. § 3.) To justify a deviation, the necessity must be real, inevitable, and imperious; and it must not be prolonged one moment after the necessity has ceased. A deviation without such necessity vitiates all insurances upon the ship and cargo, and exposes the owners to an action on the part of the freighters. If a ship be captured in consequence of deviation, the merchant is entitled to recover from the owners the prime cost of the goods, with shipping charges; but he is not entitled to more, unless he can show that the goods were enhanced in value beyond the sum above mentioned.

If a merchant ship has the misfortune to be attacked by pirates or enemies, the master is bound to do his duty as a man of courage and capacity, and to make the best resistance that the comparative strength of his ship and crew will allow.

By the common law, the master has authority over all the mariners on board the ship,—it being their duty to obey his commands in all lawful matters relating to the navigation of the ship, and the preservation of good order. But the master should, in all cases, use his authority with moderation, so as to be the father, not the tyrant, of his crew. On his return home he may be called upon, by action at law, to answer to a mariner he has either beat or imprisoned during the course of the voyage; and unless he show sufficient cause for chastising the mariner, and also that the chastisement was reasonable and moderate, he will be found liable in damages. Should the master strike a mariner

without cause, or use a deadly weapon as an instrument of correction, and death ensue, he will be found guilty, according to the circumstances of the case, either of manslaughter or murder. — (*Abbott*, part ii. c. 4.)

The master may by force restrain the commission of great crimes; but he has no jurisdiction over the criminal. His business is to secure his person, and to deliver him over to the proper tribunals on his coming to his own country. — (See art. SEAMEN.)

If by shipwreck, capture, or other unavoidable accident, seamen, subjects of Great Britain, be found in foreign parts, his Majesty's governors, ministers, consuls, or two or more British merchants, residing in such parts, may send such seamen home in ships of war, or in merchant ships homeward bound in want of men; and if such ships cannot be found, they may send them home in merchant ships that are fully manned, but no such merchant ship shall be obliged to take on board more than *four* such persons for every 100 tons burden: and the master, upon arrival, and producing to the Navy Board a certificate from the governor, minister, consul, &c. where he shipped the men, and his own affidavit of the time he maintained them, shall receive 1*s.* 6*d. per diem* for all such seamen above his own complement of men. — (53 *Geo.* 3. c. 85.) A subsequent statute (58 Geo. 3. c. 38.) inflicts a penalty of 100*l.* on any master of a merchant vessel who shall refuse to take on board or bring home any seafaring man, a subject of Great Britain, left behind in any foreign country, upon being required to do so by the competent authorities.

The master of a ship forcing any man on shore when abroad, or refusing to bring back such of the men he carried out with him as are in a condition to return, shall, upon conviction of such offence, be punished by fine or imprisonment, or both, as the court shall award. — (5 & 6 *Will.* 4. c. 19.)

A penalty of 25*l.* is imposed on every master of a vessel, who, having, on account of sickness, left any seafaring man at any foreign port or place, shall neglect or refuse to deliver an account of the wages due, and to pay the same. — (5 & 6 *Will.* 4. c. 19.)

The law makes no distinction between carriers by land and carriers by water. The master of a merchant ship is, in the eye of the law, a carrier; and is, as such, bound to take reasonable and proper care of the goods committed to his charge, and to convey them to the place of their destination, *barring only the acts of God and the king's enemies.* Every act which may be provided against by ordinary care renders the master responsible. He would not, for example, be liable for damage done to goods on board in consequence of a leak in the ship occasioned by the violence of the tempest, or other accident; but if the leak were occasioned by rats, he would be liable, for these might have been exterminated by ordinary care, as by putting cats on board, &c. On the same principle, if the master run the ship in fair weather against a rock or shallow known to expert mariners, he is responsible. If any injury be done to the cargo by improper or careless stowage, the master will be liable.

The master must not take on board any contraband goods, by which the ship and other parts of the cargo may be rendered liable to forfeiture or seizure. Neither must he take on board any false or colourable papers, as these might subject the ship to the risk of capture or detention. But it is his duty to procure and keep on board all the papers and documents required for the manifestation of the ship and cargo, by the law of the countries from and to which the ship is bound, as well by the law of nations in general, as by treaties between particular states. These papers and documents cannot be dispensed with at any time, and are quite essential to the safe navigation of neutral ships during war. — (See SHIPS' PAPERS.)

It is customary in bills of lading to insert a clause limiting the responsibility of the master and owners, as follows: — "*The act of God, the king's enemies, fire, and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, save risk of boats, as far as ships are liable thereto, excepted.*" When no bill of lading is signed, the master and owners are bound according to the common law.

The most difficult part of the master's duty is when, through the perils of the sea, the attacks of enemies or pirates, or other unforeseen accidents, he is prevented from completing his voyage. If his own ship have suffered from storms, and cannot be repaired within a reasonable time, and if the cargo be of a *perishable nature*, he is *at liberty* to employ another ship to convey it to the place of destination. He may do the same if the ship have been wrecked and the cargo saved, or if his own ship be in danger of sinking, and he can get the cargo transferred to another *; and in *extreme cases* he is at

* The most celebrated maritime codes, and the opinions of the ablest writers, have differed considerably as to these points. According to the Rhodian law (Pand. l. 10. § 1.) the captain is released from all his engagements, if the ship, by the perils of the sea, and without any fault on his part, become incapable of proceeding on her voyage. The laws of Oleron (art. 4.), and those of Wisby (arts. 16. 37. 55.), say that the captain *may hire another ship*; harmonising in this respect with the present law of England. The famous French ordinance of 1681 (tit. *Du Frêt*, art. 11.), and the *Code du Commerce* (art. 296.), *order the captain to hire another ship*; and if he cannot procure one, freight is to be due only for that part of the voyage which has been performed (*pro ratâ itineris peracti*). Valin has objected to this article, and states that practically it meant only that the captain must hire another ship if he would earn the whole freight.

liberty to dispose of the cargo for the benefit of its owners. But, to use the words of Lord Chief Justice Tenterden, "the disposal of the cargo by the master is a matter that requires the utmost caution on his part. He should always bear in mind that it is his *duty to convey it to the place of destination.* This is the purpose for which he has been intrusted with it, and this purpose he is bound to accomplish by every reasonable and practical method. What, then, is the master to do, if, by any disaster happening in the course of his voyage, he is unable to carry the goods to the place of destination, or to deliver them there? To this, as a general question, I apprehend no answer can be given. Every case must depend upon its own peculiar circumstances. The conduct proper to be adopted with respect to perishable goods will be improper with respect to a cargo not perishable: one thing may be fit to be done with fish or fruit, and another with timber or iron: one method may be proper in distant regions, another in the vicinity of the merchant; one in a frequented navigation, another on unfrequented shores. The wreck of the ship is not necessarily followed by an impossibility of sending forward the goods, and does not of itself make their sale a measure of necessity or expedience: much less can the loss of the season, or of the proper course of the voyage, have this effect. An unexpected interdiction of commerce, or a sudden war, may defeat the adventure, and oblige the ship to stop in her course; but neither of these events doth of itself alone make it necessary to sell the cargo at the place to which it may be proper for the ship to resort. In these and many other cases, the master may be discharged of his obligation to deliver the cargo at the place of destination; but it does not therefore follow that he is authorised to sell it, or ought to do so. What, then, is he to do? In general, it may be said, *he is to do that which a wise and prudent man will think most conducive to the benefit of all concerned.* In so doing, he may expect to be safe, because the merchant will not have reason to be dissatisfied; but what this thing will be, no general rules can teach. Some regard may be allowed to the interest of the ship, and of its owners; but the interest of the cargo must not be sacrificed to it. Transhipment for the place of destination, if it be practicable, is the first object, because that is in furtherance of the original purpose: if that be impracticable, return, or a safe deposit, may be expedient. A disadvantageous sale (and almost every sale by the master will be disadvantageous) is the last thing he should think of, because it can only be justified by that necessity which supersedes all human laws." — (*Law of Shipping*, part iii. c. 3.)

The master of a ship is liable for goods of which she is robbed in part; and the reason, as Lord Mansfield stated, is, lest room should be given for collusion, and the master should get himself robbed on purpose, in order that he might share in the spoil. The master is, however, entitled to indemnify himself out of the seamen's wages for losses occasioned by their neglect.

If any passenger die on board, the master is obliged to take an inventory of his effects; and if no claim be made for them within a year, the master becomes proprietor of the goods, but answerable for them to the deceased's legal representatives. Bedding and furniture become the property of the master and mate; but the clothing must be brought to the deck, and there appraised and distributed among the crew.

If a master die, leaving money on board, and the mate, becoming master, improve the money, he shall, on allowance being made to him for his trouble, account both for interest and profit.

The conditions under which seamen and apprentices are to be taken on board ship, and the obligations of the master with respect to them, are fully set forth in the art. SEAMEN, in this work; and to it also the reader is referred for a statement of the duty of the master with respect to the registry of seamen, and the contributions, &c. due to the corporation for the relief of decayed seamen, their widows, &c.

For the duty of the master, as respects Custom-house regulations, see the articles IMPORTATION AND EXPORTATION, QUARANTINE, SMUGGLING, &c.; and for a further discussion of this important subject, see the excellent work of *Lord Tenterden on the Law of Shipping*, part. iii. c. 3, &c.; *Chitty on Commercial Law*, vol. iii. c. 8, &c.; and the articles CHARTERPARTY, FREIGHT, &c. in this Dictionary.

Qualifications of Masters. Means by which they should be ascertained. — Considering the important nature of the duties which the master of a ship has to perform, it has been customary in some countries to require that all persons, previously to their being nominated to act in that capacity, should undergo an examination by some public board respecting their knowledge of seamanship, and their possession of the various qualifications necessary to act as masters, and that none should be appointed without their being licensed by such board or other competent authority. We are in-

Emerigon (tom. i. p. 428.) holds that the captain, being the agent not only of the owners of the ship, but also of the shippers of the goods on board, is bound, in the absence of both, to use his best endeavours to preserve the goods, and to do whatever, in the circumstances, he thinks will most conduce to the interest of all concerned; or what it may be presumed the shippers would do, were they present. This, which seems to be the best and wisest rule, has been laid down by Lords Mansfield and Tenterden, as stated above, and may be regarded as the law of England on this point.

clined to think that sound policy would approve of this practice, and we have no doubt that were an examination of this sort instituted in this country and properly conducted, it would add to the respectability of the profession, the public security, and be in all respects of material advantage. There can, unhappily, be no doubt that the ignorance and incapacity of the masters and inferior officers of ships has been a copious source of disaster. Officers of the navy have to go through a course of discipline, and are obliged to submit to certain examinations as to their proficiency in seamanship. This, also, was the case with the officers of the East India Company's ships, which were exceedingly well navigated. Indeed the Company trusted entirely for protection to the goodness of their ships, and the skill of their officers and men; it not being their practice ever to insure. But the masters and officers of ordinary merchant ships, even of those engaged in the conveyance of passengers, are not subjected to any specific training, or regular examination. Everything is left to mere individual investigation and selection; and this, as every one knows, depends almost wholly on accident; or, which is nearly equivalent to it, on the skill, industry, liberality, &c. of the ship owner. It is sufficiently clear that masters so chosen cannot fail of being, in many instances, very ill qualified for their business. Few, however, have any notion of the extent of the mischief thence arising; but we have been assured by gentlemen of undoubted information, and extensively connected with the business of insurance, that nearly half the losses at sea may be ascribed to the incapacity and carelessness of the masters and crews. Perhaps there may be some exaggeration in this; but, supposing that only a third part, or that 212 out of the 636 vessels wrecked in 1841, were lost through the circumstances referred to, is not that enough, not merely to justify government interfering to avert so great an evil, but to make such interference an imperative duty?

The interposition of government in a case of this sort is not only absolutely just and necessary, but it is conformable to the highest authority. The famous French ordinance of 1681 has the following article: — "*Aucun ne pourra ci-après être reçu capitaine, maitre, ou patron de navire, qu'il n'ait navigué pendant cinq ans, et n'ait été examiné publiquement sur le fait de la navigation, et trouvé capable par deux anciens maitres, en présence des officiers de l'Amirauté et du Professeur de l'Hydrographie, s'il y en a dans le lieu.*" —(Liv. ii. tit. 1. § 1.) A like article has been inserted in the *Code de Commerce*; and in 1825, the French Government issued an ordinance specifying, in detail, the qualifications that are necessary before any one can obtain a certificate of his fitness to command a ship, either on a foreign or a coasting voyage; the persons who are to examine candidates; and the rules to be observed in the examination. A similar system has been adopted in Prussia; and we cannot entertain a doubt that it would be of the greatest service were it introduced into this country. The authority of the master is so very great, and the trust reposed in him, including not merely the ship and goods of his employers, but the lives of the crew and passengers, so very extensive, that it is the bounden duty of the public to provide, in as far as practicable, that it be not committed to ignorant or incapable hands.

At present the care of the lives of hundreds of passengers may be committed, without check or control of any sort, and without their knowing anything of the matter, to any incapable blockhead who may be able to prevail on an owner to appoint him to a ship. No doubt it is for the interest of the owner to appoint the best captain he can find; but he may be unable to form a correct estimate of the qualifications necessary for such a situation; and, though this were not the case, hundreds of circumstances may conspire to blind his judgment, and to make him select a master who is really unworthy. Hence the advantage of the preliminary examination by competent parties, which, if made efficient, would certainly afford a powerful guarantee against the chance of an unfit person being appointed.

Perhaps it would, at first, be enough to enact, that no ship, which cleared out for an *oversea* voyage, should be deemed a British ship, unless the master and the second in command had received a certificate of fitness from the proper authorities. This would leave it to the owners to take whom they pleased as masters of coasting vessels; but we believe that the better way would be to enact that all masters of vessels above a specified tonnage, and of all vessels employed in the conveyance of passengers, should be selected from among certificated persons.

We rather incline to think, should we have occasion to notice this important subject on any future occasion, that it will be to announce that some such plan as that which we have ventured to recommend has been adopted. It has, we are glad to say, been approved by the Committee appointed by the House of Commons in 1843 to inquire into the causes and prevention of shipwrecks. "Your Committee, after carefully weighing the evidence adduced, consider that, under all the circumstances, it would materially promote science, and prevent the loss of life and property, if a legislative enactment were introduced by government, establishing local boards for the purpose of examining into the abilities, conduct, and character of all who wish to qualify as masters and mates

in the merchant service. And your Committee further recommend the establishment of schools for the purpose of teaching navigation in the different seaports, to be supported by a small tonnage duty to be levied on the vessels belonging to such ports."—(*Report*, p. 4.)

MASTICH, OR MASTIC (Ger. *Mastix*; Du. *Mastik*; Fr. *Mastic*; It. *Mastice*; Sp. *Almastica*, *Almaciga*; Arab. *Arâh*). This resinous substance is the produce of the *Pistacia Lentiscus*, a native of the Levant, and particularly abundant in the island of Chios. It is obtained by making transverse incisions in the trunks and branches of the trees, whence the mastic slowly exudes. About 1,500 cwt. are annually exported from Chios, part of which is brought to this country, packed in chests. The best is in the form of dry, brittle, yellowish, transparent tears; it is nearly inodorous, except when heated, and then it has an agreeable odour; chewed, it is almost insipid, feeling at first gritty, and ultimately soft; its virtues are trifling.—*Ainslie's Materia Indica*; *Thomsons's Dispensatory*.)

MATE, in a merchant ship, the deputy of the master, taking, in his absence, the command. There are sometimes only 1, and sometimes 2, 3, or 4 mates in a merchantman, according to her size; denominated 1st, 2d, 3d, &c. mates. The law, however, recognises only 2 descriptions of persons in a merchantman — the master and mariners; the mates being included in the latter, and the captain being responsible for their proceedings.

In men-of-war, the officers immediately subordinate to the captain are called lieutenants. But the *master*, or officer whose peculiar duty it is to take charge of the navigation of the ship, has certain mates under him selected from the midshipmen. The boatswain, gunner, carpenter, &c. have each their mates or deputies, taken from the crew.

The officers subordinate to the commander in the ships belonging to the East India Company were called 1st, 2d, 3d, &c. officers. East Indiamen had no sailing masters, the commanders performing that duty. —(*Falconer's Marine Dictionary*, &c.)

MATS (Du. *Matten*, Fr. *Nattes*; Ger. *Matten*; It. *Stuoje*, *Stoje*; Port. *Esteiras*; Rus. *Progoshki*; Sp. *Esteras*), textures composed, for the most part, of flags, reeds, the bark of trees, rushes, grass, rattans, old ropes, &c. In this country mats are used for a great variety of purposes. The coarser sort are very largely employed in the packing of furniture and goods; in the stowage of corn and various other articles on board ship; in horticultural operations; in covering the floors of churches and other public buildings, &c.: the finer sorts are principally employed in covering the floors of private houses.

In Europe, mats are principally manufactured for sale in Russia, where their production is a prominent branch of national industry. They consist of the bark of the lime or linden tree, and are known in this country by the name of *bast* mats. The Russian peasants manufacture this sort of material into shoes, cordage, sacks for corn, &c., and employ it in an endless variety of ways. In consequence of the vast quantities of matting that are thus made use of at home and sent abroad, the demand for it is immense. It is principally produced in the governments of Viatka, Kostroma, and those immediately contiguous; and in the months of May and June, the period when the bark is most easily detached from the stem, the villages in the governments in question are almost deserted, the whole population being then in the woods employed in stripping the trees. The academician Köppen, who has carefully investigated this curious subject, estimates the average annual production of mats in European Russia, as follows: —

Government of	Viatka	6,000,000 pieces
Ditto	Kostroma	4,000,000 —
Ditto	Kasan	1,000,000 —
Ditto	Nijni Novgorod	1,000,000 —
Ditto	Vologda, Tamboff, Simbirsk, and Penza	2,000,000 —
	Total	14,000,000

Köppen further estimates that about 1-4th part of this vast quantity, or 3½ millions, are exported, the rest being consumed at home.

It is obvious from these statements that the annual destruction of linden trees must be quite enormous; and it may well excite astonishment that they are not already all but exhausted. But whether it be from the rapid growth of the tree, or the vast extent of the forests in which it is found, the gloomy forebodings of Mr. Tooke, as to its destruction have not hitherto been realised (*View of Russia*, iii. 262.), and mats have not become either scarcer or dearer. It is, however, hardly possible to suppose that such should continue to be the case, seeing the rapid increase of population and of the consumption of matting in most parts of the empire. But in the event of its becoming scarcer, the inhabitants will have no difficulty in finding substitutes; so that we agree in opinion with those who think it would be bad policy to impose any restrictions on this branch of industry, in the view of averting an evil which may never occur; and which, if it do occur, may be easily obviated. — (See a very interesting article in the *Supplement au Journal de l'Interieur de St. Petersburg*, for 1841, p. 113.)

Archangel is the principal port for the shipment of mats; and it appears that at an average of the 6 years ending with 1842, the export of mats from that port amounted to 905,000 pieces a year. (See *antè*, art. ARCHANGEL.) Large quantities are also shipped from Petersburg, Riga, and other ports; and most descriptions of Russian produce sent abroad are packed in mats. Russian mats fetch, in the London market, 3*l.* 10*s.* per 100, duty (5 per cent. *ad valorem*) included.

Various descriptions of reed mats are extensively manufactured in Spain and Portugal; some of them being very beautifully varied. In Spain large quantities of matting are made of the Esparto rush. — (See ESPARTO.)

Rush floor mats, and rattan table mats of a very superior description are brought from China. They should be chosen clean, of a bright clear colour, and should, when packed, be thoroughly dry.

The mats of the Japanese are soft and elastic, serving them both for carpets and beds; they are made of a peculiar species of rush cultivated for the purpose.

The bags in which sugar is imported from the Mauritius consist of matting formed of the leaves of a tree growing in the island interwoven in broad strips. They are very strong and durable, and may be washed and cleaned without sustaining any injury. Being imported in large quantities, they are sold very cheap. — Besides the works already referred to, see *Milburn's Oriental Commerce*, and the valuable little work entitled *Vegetable Substances, Materials of Manufactures*, published by the Society for the Diffusion of Useful Knowledge, pp. 116—123.)

It is probable that mats formed the first sort of wove fabrics produced by man; and it is worthy of remark that but few savage tribes have been discovered that have not attained to considerable eminence in their manufacture. On the coast of Guinea and other places in the west of Africa, pieces of fine mat, about a yard long, and of a pretty uniform texture, were denominated *makkutes*, and formed a sort of money; the value of commodities being rated and estimated in them! — (*Morellet, Prospectus d'un Dictionnaire de Commerce*, p. 122.) They enjoyed this distinction, no doubt, from their utility, and the great care and labour bestowed on their preparation. There is hardly an island in the South Seas in which the natives have not acquired great skill and dexterity in the making of mats. The finer sorts consist, generally, of dyed reeds or grass; and have a very brilliant appearance.

MAULMAIN, OR MOULMEIN, a sea-port town of India beyond the Ganges cap. British prov. Martaban, at the mouth of the great river Than-lueng, having N. the Birmese town of Martaban, on the opposite side of the river, and W. the island of Balu, which serves as a natural breakwater to defend the port from the heavy seas that would otherwise be thrown in from the W., 100 m. S. S. E. Rangoon, 27 m. N. N. E Amherst; lat. 16° 30′ N., long. 97° 38′ E. It was founded in 1825, when the site was selected by Sir A. Campbell as eligible as well for a commercial as a military station. It is about 200 feet above the level of the river, and extensive and fertile plains stretch eastward from it towards the mountains. Its port is good, and, from its extensive command of internal navigation, it promises to become a considerable emporium. The principal articles of export are teak timber and rice; but there is also a considerable export of tobacco, stick-lac, betel-nut, ivory, cutch, cocoa-nut, &c. The imports consist principally of European cotton goods and marine stores. The principal trade of the place has hitherto been carried on with Calcutta, Madras, Rangoon, and Pinang; but, in 1837, a direct trade was commenced with London. Owing to the facility with which supplies of teak timber are obtained, ship-building is carried on very extensively. In 1840, no fewer than 16 vessels, several of which were of from 450 to 750 tons, were built here; and the total burden of the shipping launched at Maulmain between 1830 and 1842 has been stated at 416,324 tons, worth probably, as they came from the hands of the builders, 1,650,000*l.* We have no recent accounts of the population; but, probably, it is not under 8,000 or 10,000. An English newspaper (the *Maulmain Chronicle*), from which we have borrowed the preceding and following details, is published once a week.

"In order to exhibit, at one view, the decided increase of our trade in 1837 over the preceding year, from each port in juxtaposition.

	Imports.				Exports.		
	1836.	1837.	Increase.		1836.	1837.	Increase.
	Rupees.	*Rupees.*	*Rupees.*		*Rupees.*	*Rupees.*	*Rupees.*
Calcutta	5,56,849	9,38,801	5,82,072	Calcutta	94,244	2,08,011	1,13,767
Madras	77,802	1,39,476	61,674	Madras	26,200	1,23,935	97,735
Straits	51,622	91,137	39,515	Straits	49,390	56,998	7,608
Rangoon	1,00,874	1,97,532	95,658	Mauritius	-	84,305	84,305
Tenasserim coast	43,730	52,174	8,444	Rangoon	2,04,457	1,48,081	
Other ports	34,510	41,456	6,945	Tenasserim coast	32,614	18,471	
				Other ports	18,090	28,609	10,519
Total	8,65,357	14,60,665	5,95,308	Total	4,24,995	6,68,410	2,43,419

"From this it will appear, that the imports have increased nearly six lacs of rupees, and the exports two lacs and a half. Among the imports, the increase is found chiefly under the head of marine stores, spirituous liquors, and articles of European and Birmese manufacture. Among the exports, it is found in the staple productions of the country, rice and timber. Under the head of imports, we may notice that five lacs of rupees were received during the year into the government treasury; to which may be added, what does not appear in our statement, about half a lac of rupees, perhaps, from the Mauritius, for the purchase of cargoes of rice and timber. Under the head of exports, also, it would not, we think, be improper to include the estimated value of the vessels built and launched during the year at the several dock-yards. The following is a very rough estimate: —

	No.	Tonnage.	Estimated Value.
Vessels launched	9	2500	250,000
Ditto fitted for sea	-	-	125,090

"We are not aware that the mode in which our statements are drawn up requires any particular explanation. The word 'sundries' may be, perhaps, thought too comprehensive, but we have divided it among articles of European, Indian, Chinese, and Birmese produce or manufacture.

"The following is a statement of the imports into Maulmain from the neighbouring Shan States during 1837: —

	No.	Value.
Elephants	68	13,600
Ponies	146	17,520
Buffaloes	99	990
Cows and bullocks	3480	45,000
Sundries	-	4,500
		Rs. 81,610

"Of the exports to those states, we can procure no detailed statement. Little else, however, is taken to them from hence but piece goods, either European or native, the value of which may, perhaps, be estimated at about 60,000 rupees.

"Taking, then, into consideration the various items above alluded to, and which are not brought into our statements, we shall have the following as the amount of imports and exports for the year 1837: —

Imports	Rs. 20,92,275
Exports	Rs. 11,03,410."

MAURITIUS. See PORT LOUIS.

MEAD, OR METHEGLIN (Ger. *Meht*, *Meth*; Du. *Meede*, *Meedrank*; Fr. *Hydromel*; It. *Idromele*; Rus. *Lipez*), the ancient, and for a long time, the favourite drink of the northern nations. It is a preparation of honey and water. Manufacturers of mead for sale must take out an annual licence.

MEAL (Ger. *Mehl*; Du. *Meel*; Fr. and It. *Farine*; Sp. *Farina*; Rus. *Muka*; Lat. *Farina*), the edible part of wheat, oats, rye, barley, and pulse of different kinds, ground into a species of coarse flour.

MEDALS, are pieces of metal, generally in the form of a coin, and impressed with some peculiar stamp, intended to commemorate some individual or action. Medals are of very different prices — varying according to their rarity and preservation, the fineness of the metal, the beauty of the workmanship, &c.

MEDITERRANEAN PASS. The nature of this sort of instrument has been described by Mr. Reeves, in his *Treatise on the Law of Shipping*, as follows: —

"In the treaties that have been made with the Barbary states, it has been agreed, that the subjects of the King of Great Britain should pass the seas unmolested by the cruisers of those states; and for better ascertaining what ships and vessels belong to British subjects, it is provided that they shall produce *a pass* under the hand and seal of the Lord High Admiral, or the Lords Commissioners of the Admiralty. In pursuance of these treaties, passes are made out at the Admiralty, containing a very few words, written on parchment, with ornaments at the top, through which a scolloped indenture is made; the *scolloped tops* are sent to Barbary; and being put in possession of their cruisers, the commanders are instructed to suffer all persons to pass who have passes that will fit these scolloped tops. The protection afforded by these passes is such, that no ships, which traverse the seas frequented by these rovers, ever fail to furnish themselves with them, whether in the trade to the East Indies, the Levant, Spain, Italy, or any part of the Mediterranean; and from the more particular need of them in the latter, they, no doubt, obtained the name of *Mediterranean passes*. For the accommodation of merchants in distant parts, blank passes, signed by the Lords of the Admiralty, are lodged with the governors abroad, and with the British consuls, to be granted to those who comply with the requisites necessary for obtaining them. As this piece of security is derived wholly from the stipulations made by the crown with a foreign power, the entire regulation and management of it has been under the direction of his Majesty, who, with the advice of his privy council, has prescribed the terms and conditions on which these passes shall be granted. Among others are the following: — They are to be granted for none but British-built ships, or ships made free, navigated with a master and $\frac{3}{4}$ths of the mariners British subjects, or foreign protestants made denizens. Bond is to be given in the sum of 300*l.* if the vessel is under 100 tons, and in 500*l.* if it is of that or more, for delivering up the pass within 12 months, unless in the case of ships trading from one foreign port to another; and such passes need not be returned in less than 3 years.

"It has been found expedient, at the conclusion of a war, and sometimes during a peace, to recal and cancel all passes that have been issued, and to issue others in a new form. This has been done for 2 reasons. 1st, That these useful instruments, by various means, either accidental or fraudulent, came into the hands of foreigners, who, under cover of them, carried on in security a trade which otherwise would belong to British subjects, and which had been purchased by the crown, at the expense of keeping up this sort of alliance. 2dly, That the Barbary states complained, that, adhering to the rule of fitting the other part of the indenture to the passes, they were obliged to suffer ships to pass that did not belong to British subjects."

We have thought it right to give this explanation, though, since the occupation of Algiers by the French, and the disappearance of the corsairs of the other Barbary powers, Mediterranean passes have fallen into disuse.

MEMEL, a commercial town of East Prussia, lat. 55° 41′ 42″ N., lon. 21° 8′ 14″ E. Populaton, in 1838, 9,034. Memel is situated on the north-east side of the great bay, denominated the *Currische Haf*, near its junction with the Baltic. It is, consequently, the principal *entrepôt* of the country traversed by the Niemen, and as such enjoys a pretty extensive commerce.

Harbour. — The harbour of Memel is large and safe; but the bar at the mouth of the Currische Hat has seldom more than 17 feet water, and sometimes not more than 13 or 14 feet; so that ships drawing more than 16 feet water are frequently obliged to load and unload a part of their cargoes in the roads, where the anchorage is but indifferent, particularly when the wind is N. or N.W. A light-house, originally 75, but now 100 feet in height, has been erected on the N.E. side of the entrance to the harbour. The light, which is fixed and powerful, may be distinguished in clear weather at more tnen 20 miles distance. The outer buoy lies in 6 fathoms water, about a mile without the light-house, which bears from it S.E. by E. ½ E. The channel thence to the harbour is marked by white buoys on the north, and red on the south side. Three beacons to the north of the town, when brought into a line, lead directly into the harbour. Inasmuch, however, as the channel is subject to frequent changes, both in depth and direction, it is always prudent, on arriving at the outer buoy, to heave to for a pilot; but this is not obligatory; and the Prussian authorities have issued directions for ships entering without a pilot, which may be found in Mr. Norie's *Sailing Directions for the Cattegat and Baltic*, p. 36.

Trade. — Timber forms the principal article of export; for though that of Dantzic be considered better, it is generally cheaper, and almost always more abundant, at Memel. Here, as at Dantzic, the best quality of all sorts of wood articles is called *khron*, or crown, the 2d *brack*, and the 3d *bracks brack*. Large quantities of hemp and flax are also exported, as are bristles, hides, linseed (the finest for crushing brought to England), wax, pitch and tar, &c. The exports of grain are sometimes very considerable. The wheat of Lithuania is reckoned the best. All flax and hemp shipped from Memel must be *bracked*, or assorted by sworn selectors. — (See FLAX, and HEMP.) The imports consist principally of coffee, sugar, spices, dye-woods, tobacco, rum, cotton stuffs and yarn, cutlery, wine, &c. Merchants at Memel generally send their bills to Königsberg to be sold, charging their correspondents with 1 per cent. for bank commission, postages, &c. The navigation generally closes about the latter end of December, and opens about the middle of March.

Notwithstanding the difficulties which our corn laws and timber duties throw in the way of our commerce with Prussia, we have a pretty extensive intercourse with Memel. Our imports consist principally of fir timber, and the ships that go out are mostly only partially loaded, or in ballast. We subjoin an

Account of the Imports into and Exports from Memel by Sea in 1842.

Imports.					Exports.				
Articles.	From Great Britain.	From all other Countries.	Total.	Estimated Amount Sterling.	Articles.	To Great Britain.	To all other Countries.	Total.	Estimated Amount Sterling.
				£					£
Woollen wares - cwt.	10	1	11	107	Wheat {lasts of about 10½ quarters.}	13	12	25	600
Lead - - —	136	-	136	1,156	Rye - - - qrs.	-	1,266	1,266	15,192
Chemical manufact. —	165	13	178	623	Barley - - —	32	142	174	1,436
White lead - - —	126	-	126	353	Oats - - —	-	23	23	106
Soda - - - —	189	12	201	201	Peas - - —	-	17	17	204
Vitriol - - - —	312	-	312	117	Linseed - - —	1,679	1,583	3,262	58,716
Dyes - - - —	55	538	593	326	Hemp, flax, codilla,				
Iron, raw - - —	6,242	-	6,242	9,362	Hemp, flax, codilla,				
anchors & chains, &c. —	1,036	10	1,046	2,119	&c. - - cwt.	69,079	4,329	73,408	99,101
fine wares - —	72	3	75	338	Hides and skins, calf,				
Tin - - - —	135	-	135	74	hare, goat - pieces	178,081	3,400	181,481	9,075
Copper & brass wares —	34	2	36	648	Cattle bones - cwt.	1,156	-	1,156	218
Sailcloth - - —	103	-	103	510	Feathers - - —	81	79	160	432
Malt liquors - - —	626	-	626	939	Bristles & horse hair —	96	8	104	1,248
Spirits - - - —	38	54	92	593	Oil cake - - —	14,903	-	14,903	13,058
Wine - - - —	59	264	303	909	Old rope - - —	156	-	156	31
Herrings - - barrels	301	2,104	2,405	2,886	Tar and pitch - —	-	3,965	3,965	2,217
Coals - - cwt.	140,207	-	140,207	7,010	Timber, oak - pieces	2,321	8,131	10,102	15,678
Tar - - - —	726	1,067	1,793	448	fir - - —	41,153	7,669	51,802	38,851
Earthenware - —	27	-	27	40	Masts - - —	28	42	70	525
Marble figures - —	59	1	60	30	Spars - - —	205	1,823	2,028	1,517
Salt, lasts of about 4000 lbs.	2,572	320	2,892	62,951	Wainscot logs - —	1,806	934	2,797	6,143
Alum - - cwt.	-	66	66	198	Deals and ends, sleepers, &c. - shock of 60	6,088	11,509	17,597	105,582
Southern fruits of all kinds - - —	-	305	305	3,443	Treenails - - —	811	24	835	376
Spices of all kinds - —	-	232	232	812	Lathwood and fire-				
Coffee - - - —	-	1,477	1,477	67,130	wood, &c. - fathoms	1,352	-	1,352	3,380
Rice - - - —	-	152	152	205	Staves, oak, of all de-				
Tea - - - —	-	76	76	1,140	scriptions - - shock	9,531	7,766	17,297	62,197
Sugar - - - —	-	17,653	17,653	39,719	Clapboards - - —	-	2,236	2,236	6,708
Oil of all kinds - —	-	70	70	116	Bricks - - pieces	-	38,000	38,000	190
Tobacco - - - —	-	77	77	254	Spirits of wine - cwt.	-	2,593	2,593	1,309
Tiles, lasts of about 4000 lbs.	-	546	546	1,365					
Sundries, glass, cheese, paper, &c. - -	11	269	283	849					£444,392
				£205,867					

The *Monies*, *Weights*, and *Measures* of Memel are the same as those of Dantzic; which see.

For further particulars see *Oddy's European Commerce*, pp. 220–224.; *Jacob's First Report on the Agriculture of the North of Europe*; *Geographical Dictionary*, art. MEMEL.

MERCURY, OR QUICKSILVER (Fr. *Vif argent*; Ger. *Quicksilber*; It. *Argento vivo*; Sp. *Azogue*; Rus. *Rtut*; Lat. *Hydrargyrum*; Arab. *Zibākh*; Hind. *Parah*; Sans. *Pārada.*) This metal was known in the remotest ages, and seems to have been employed by the ancients in gilding, and separating gold from other bodies, just as it is by the moderns. Its colour is white, and similar to that of silver; hence the names of *hydrargyrum*, *argentum vivum*, *quicksilver*, by which it has been known in all ages. It has no taste or smell. It possesses a good deal of brilliancy; and when its surface is not tarnished, it makes a very good mirror. Its specific character is 13·568. It differs from all other metals in being always fluid, unless when subjected to a degree of cold

equal to —39°, when it becomes solid. The congelation of mercury was first observed in 1759. — (*Thomson's Chemistry.*)

Mercury is found in various parts of the world. Among the principal mines are those of Almaden, near Cordova, in Spain; Idria, in Carnolia; Wolfstein and Morsfield, in the Palatinate; Guancavelica, in Peru, &c. "Most of the ores of mercury are readily distinguished from those of any other metal; in the 1st variety, globules of the metal are seen attached to or just starting on the surface, which is at once a sufficient criterion, mercury being unlike every other metal; in the 2d, by the fine white colour, and the action of the blow-pipe, which sublimes the mercury and leaves the silver behind; the 3d, by its beautiful deep red tint, varying from cochineal to scarlet red, excepting in those termed hepatic cinnabars, which are generally of a lead grey; the 4th, by its grey colour, its partial solubility in water, and its complete volatilisation by heat, emitting at the same time an arsenical odour. Before the blow-pipe, these varieties burn with a blue flame and sulphurous odour, leaving more or less residue behind them, and which may consist of earthy matter, as silex and alumina, together with the oxides of iron and copper."—(*Joyce's Chem. Min.*)

Mercury is often adulterated by the admixture of lead, bismuth, zinc, and tin. When the metal quickly loses its lustre, is covered with a film, or is less fluid and mobile than usual, or does not readily divide into round globules, there is reason to suspect its purity.

Our supplies of mercury are derived almost wholly from Spain: thus of 2,157,918 lbs. imported in 1840 no fewer than 2,157,823 lbs. were brought direct from that country, being principally the produce of the mines of Almaden. About 300,000 lbs. are retained for home consumption, the surplus being exported to S. America, France, the East Indies, &c.

Quicksilver is produced in several of the provinces of China. During the war, when the intercourse between Europe and America was interrupted, the price of quicksilver rose to such a height in the latter, that it answered to import it from China. But since the peace it has been regularly exported to the latter. In 1838 the English and Americans imported into Canton 2,555 piculs, worth 293,825 dollars.

There are 2 sulphurets of mercury; the black or *ethiops mineral*, and the red or *cinnabar*. When mercury and sulphur are triturated together in a mortar, the former gradually disappears, and the whole assumes the form of a black powder, denominated ethiops mineral. If this powder be heated red-hot, it sublimes; and on a proper vessel being placed to receive it, a cake is obtained, of a fine red colour, which is called cinnabar. This cake, when reduced to powder, is well known in commerce by the name of *vermilion*. Cinnabar may be prepared in various other ways.

Calomel, or protochloride of mercury (*mercurius dulcis*), is the most useful of all the preparations obtained from it. It is in the form of a dull white, semi-transparent mass, having a specific gravity of 7·176. It is more generally employed, and with better effect, than almost any other remedy in the whole range of the materia medica.

Besides its uses in medicine, mercury is extensively employed in the amalgamation of the noble metals, in water-gilding, the making of vermillon, the silvering of looking-glasses, the making of barometers and thermometers, &c.

MILE, the usual measure of roads in England, being 8 furlongs, or 1,760 yards.

MILK (Fr. *Lait*; It. *Latte*; Lat. *Lac*), a fluid secreted by the female of all those animals denominated *mammalia*, and evidently intended for the nourishment of her offspring. The milk of every animal has certain peculiarities which distinguish it from all other milk. But the animal whose milk is most used by man, and with which, consequently, we are best acquainted, is the cow. The external character of all milk is that of a white opaque fluid, having a sweetish taste, and a specific gravity somewhat greater than that of water. When allowed to remain at rest, it separates into 2 parts; a thick whitish fluid called *cream*, collecting in a thin stratum over its surface, and a more dense watery body, remaining below. Milk which has stood for some time after the separation of the cream, becomes acescent, and then coagulates. When the coagulum is pressed gently, a serous fluid is forced out, and there remains the caseous part of the milk, or pure cheese.

Butter, one of the most valuable animal products, is solidified cream, and is obtained artificially by churning. — (See Butter.)

Milk has always been a favourite food of most European nations, and especially of the British. *Lacte et carne vivunt*, says Cæsar of our ancestors; and the same articles still continue to form a large part of our subsistence. Mr. Middleton estimates (*Agricultural Survey of Middlesex*, 2d ed. p. 419.), that, in 1806, no fewer than 8,500 milch cows were kept for the supply of London and its environs with milk and cream; and he estimates the average quantity of milk obtained from each cow at *nine quarts* a day, or 3285 quarts a year, leaving, every deduction being taken into account, 3200 quarts of marketable produce.

But Mr. Youatt, in his valuable work on cattle, their breeds, &c., estimates the number of dairy cows kept, at present (1843), in London and its environs, at 12,000; affording, on Mr. Middleton's hypothesis, an annual supply of 38,400,000 quarts of milk. Now, as milk is sold by the retailers at from 3*d.* to 4*d.* a quart after the cream is separated from it, and as the cream is usually sold at from 2*s.* 6*d.* to 3*s.* a quart, and there is reason to suspect that a good deal of water is intermixed with the milk, we believe we should hardly be warranted in estimating that the milk, as obtained from the cow, is sold at less than 5*d.* a quart, which gives 800,000*l.* as the total price of the milk consumed in the city and its immediate vicinity. If to this sum were added the further sums paid for cheese and butter, the magnitude of the entire sum paid in the metropolis for milk, and the various products derived from it, would appear not a little astonishing.

MILLET (Ger. *Hirse*; Fr. *Millet, Mil*; It. *Miglio, Panicastrello*; Sp. *Mijo*; Lat. *Milium, Panicum miliaceum*). There are 3 distinct species of millet; the Polish millet, the common or German millet, and the Indian millet. It is cultivated as a species of

grain; and is sometimes employed to feed poultry, and as a substitute for rice. The Indian millet grows to a large size; but the autumns in England are seldom dry and warm enough to allow of its being cultivated here. — (*Loudon's Encyc. of Agriculture.*)

MILL-STONES (Ger. *Mühlsteine*; Fr. *Pierres meulières*; It. *Mole macine*; Sp. *Muelas de molino*; Rus. *Schernowoi kamen*), the large circular stones, which, when put in motion by machinery, grind corn and other articles. The diameter of common mill-stones is from 5 to 7 feet, and their thickness varies from 12 to 18 inches. These stones have been principally imported from Rouen and other parts of France; the burr-stones of that country being supposed more durable than our own. Mill-stones are, however, found at Conway, in North Wales, and in some parts of Scotland, which are said to equal any imported from foreign countries. Good mill-stones usually last 35 or 40 years.

The duty on mill-stones formerly depended on their size, or on their being over or under four feet in diameter, but now it is 2*s.* per ton if they be shaped or scalped, and 10*s.* if they be hewn.

MINING COMPANIES. By this designation was formerly meant the associations formed in London, in 1825, for working mines in Mexico and S. America; but at present it comprises all mining projects carried on by joint stock associations.

The *mania* for mining concerns, which raged in London and the empire generally in 1824 and 1825, after the opening of Mexico and other parts of Spanish America to our intercourse, forms a remarkable, and we are sorry to add, disgraceful æra in our commercial history. Now that the delusion is long past, we have difficulty in conceiving how mercantile men could be led to entertain such visionary expectations, and to pay immense premiums for shares in distant and hazardous undertakings of which they knew little or nothing. We may, therefore, be excused for appropriating a page or two to the notice of an infatuation hardly second to that which led to the South Sea and Mississippi schemes.

The American mining companies formed at the outset had some sort of basis for favourable expectations, their directors having made contracts for a number of mines in Mexico, described by Humboldt as having enriched many families. This particularly applies to the Real del Monte Company, whose mines are situated in the mountainous district of that name; to the Anglo-Mexican Company, whose mines are at Guanaxuato, the principal mining quarter in Mexico; and to the United Mexican Company, whose contracts, though too widely spread, comprise several valuable mines at Zacatecas, Sombrerete, Guanaxuato, and other parts.

These associations were formed in London early in 1824, and during the spring and summer of that year their stock or shares bore only a small premium; but towards the winter it began progressively to rise; not because of any favourable intelligence from the mines (for the accounts from Mexico merely reported the arrival of the English agents), but from a blind ardour and spirit of speculation in the public, which really took *omne ignotum pro magnifico*, every rumour of a mine for a certain and inexhaustible source of profit and of wealth! It was supposed that our countrymen were about to reap an immediate harvest; to lay their hands on a treasure hid for ages. This was said, to be the true discovery of America, the effectual access to her resources. Every new contract for a Mexican mine produced a rise in the shares of the other companies, as if this fresh undertaking must necessarily be a source of profit to the whole! And the result was, that in January, 1825, the premium on the shares of most of the companies exceeded cent. per cent,! It must not, however, be imagined that this rise of price was occasioned solely by the competition of individuals who intended to continue to hold stock, and to trust to the dividends made by the companies for a return. That this was the case in the first instance, is, speaking generally, true. But a host of others, actuated by very different views, speedily entered the field. A peculiar combination of circumstances, at the head of which must be placed an almost incredible degree of ignorance and folly on the part of a considerable portion of the public, spread a spirit of gambling among all classes. Many who were most eager in the pursuit of shares, intended only to hold them for a few hours, days, or weeks, to profit by the rise which they anticipated would take place, by selling them to others more credulous or bold than themselves. The confidence of one set of speculators confirmed that of others. Meanwhile the public gullibility, or rather its indiscriminating rapacity, was liberally administered to. Company after company was formed without any previous contract; in other words, without any foundation whatever! The plan was to fix on a district in America, understood to contain mines; to form a company bearing the name of such district; to obtain a first payment from the shareholders, and to send or pretend to send out agents, to survey the district and engage mines. Such was the case of most of those companies having the names of districts in South America; and such, also, was the case of the Hispaniola or St. Domingo Company, formed on the basis of accounts given by Robertson of mines wrought in that island some 3 centuries ago! And yet lawyers, clergymen, and

even the nobles of the land, were candidates for shares in these miserable bubbles, in the hope of finding (in which, luckily, most of them were disappointed) some dupe to buy their shares at a premium.*

As the year 1825 proceeded, the mining mania gradually declined, not from any falling off in the prospects of the companies, for in truth they never had any, but in the supply of money in London. That redundancy of the currency in which the mining mania had partly originated, having brought about an adverse exchange, and a heavy drain for bullion on the Bank of England, the latter was obliged to pull up, and in a moment the bubble burst, and unreasonable suspicion took the place of blind unthinking confidence. Mining projects, from being in the highest favour, fell to the lowest point in the public estimation. The shares of the 3 principal companies, some of which had been at a premium of 500 per cent., fell to par: that is, 100*l.* in money, and no more, could be got for 100*l.* of the company's stock! They maintained this price for a considerable time, because most of the parties interested continued to have a favourable impression of the undertakings. Demands, however, continued to be made for additional sums to meet the expenditure abroad; and in 1826 and 1827 mining shares progressively declined, so that 100*l.* stock fetched only 20*l.* or 25*l.* in money. The bubble companies were entirely destroyed, and the few only remained that were founded by capitalists and had some foundation to stand upon.

Even these would have been relinquished, or have shrunk into very small dimensions, had not the directors been able to enforce further payments, by forfeiting, in default of such, whatever had been previously paid by the subscribers. The usage was, that on becoming a shareholder each person subscribed the deed of the company, engaging to pay, when called on, such instalments or sums to account (generally 10*l.* on each share) as should be required by the directors, until he had completed payment of the 100*l.* And many shareholders who had advanced 50*l.* or 60*l.* unwisely preferred paying 10*l.* from time to time, rather than incur the immediate forfeiture of all they had paid. Those who held only a few shares felt this in a less degree; but to the holders of a number of shares, the grievance was most serious. Numbers of them raised the money with great difficulty; often selling, at a heavy loss, their family property or prevailing on relations to make them advances, to their great inconvenience, and, as far as can be seen, with almost no prospect of a return. Resentment would be excited against the directors, had they not been, in general, the heaviest sufferers: their regulations required them to hold a certain number of shares (perhaps 20 or 30); but in their blind confidence they frequently held 200 or 300, and drew on themselves a proportional sacrifice — in several cases, the loss of their whole property.

The managers of the companies formed in the outset were principally chargeable with ignorance, rashness, and overweening confidence. They had, in fact, but little information to go upon. The monopoly enforced by Old Spain had prevented any considerable communication between this country and her colonies. And of the Spaniards settled in Mexico, and driven from it by the civil wars and consequent emancipation of the country, few or none found their way hither, the great majority having repaired to Cuba, the south of France, and Spain. Nor were the published accounts of the country entitled to much confidence: Humboldt's Travels formed the chief authority; but their illustrious author, though generally cautious, seems, in this instance, to have placed too much confidence in vague, exaggerated statements. Our merchants knew, generally, that silver mines formed a main branch of the productive industry of Mexico, and had enriched very many families originally in humble circumstances; but they had no idea of the injury sustained by the mines during the civil war, nor of the amount of expenditure required to bring them into a working state: nor were they aware how little useful information could be expected from the natives; the working of the mines, like every operation requiring skill and intelligence, having been superintended by natives of Old Spain, who had either fallen in the civil war, or been expelled after the Mexicans succeeded in the contest. Hence, the agents of our companies found on the spot only native Mexicans, without education or experience in business, and, speaking generally, without candour or probity. They urged our countrymen to drain the mines, not by machinery, of which they had no idea, but by animal power, the use of which was of advantage to them, by employing their horses, and creating a great consumption of maize, the principal grain of the country. Then, as to the last and most important stage in the business of mining, — the mode of extracting the silver from the ore, — the Mexicans, wholly unacquainted with the improvements made

* Those who may be desirous of seeing the extent to which the public credulity was practised upon in 1824 and 1825, may consult a pamphlet published by H. English, broker, in 1827, which contains an account of all the joint stock companies formed and projected in these memorable years. It presents a most extraordinary picture. There were in all 74 mining companies formed and projected! The number and quality of the other schemes were similar. It is due to Mr. Baring (now Lord Ashburton) to say that he denounced the evil when in progress; and warned the unthinking multitude of the ruin they were bringing upon themselves; but to no purpose.

in Germany during the last half century, recommended amalgamation, a process conducted by them in a very rude manner, and which, in most qualities of silver ore, fails to extract the whole, or any thing like the whole, of the metal. The object of the Mexicans, in short, was merely to make English capital be circulated among them; thus giving employment to their people for a time, and bringing the mines into an improved state; when they (the Mexicans) might hope to resume them after our countrymen had exhausted their resources, or had become weary of their contracts.

Actuated by these views, the Mexicans pressed one undertaking after another on the agents of the companies, who were but too eager to enter on them without such incitement. All the companies fell into errors of the same kind, having engaged too many mines, and conducted them, for a time, as if their funds were unlimited. They reckoned on finding, as they proceeded, supplies in the produce of the mines; but that produce, though considerable in quantity, seldom yielded the expected result, owing to the very imperfect method of extracting the silver from the ore, as well as to the various disadvantages attendant on the vast distance of the undertakings from this country. These disadvantages were ill supplied by the agents of the companies. Mining in England is not conducted on a scale sufficient to afford any great choice of superintendents for mines abroad; it was necessary, in such appointments, to waive the qualification of mining knowledge, and to be satisfied with men of fair character and reputed ability in their respective professions, however different from mining. Hence the appointment as agents, of *naval and military officers, on the half-pay list*; whose habits, whatever might be their personal merits, were very different from those required for such concerns. This suffices, in part at least, to account for the disappointments of the companies in a very material point — the conduct of their commissioners or agents abroad; for, of the whole number, it would be difficult to point out more than 2 or 3 entitled to the praise of judicious management. The same applied to most of the inferior *employés*, or to the practical miners, clerks, and mechanics.

The expense of conveying the requisite machinery from the coast of Mexico to the mining districts, generally at a great distance in the interior, absorbed much capital. The country has few practicable roads, and these have latterly been allowed to fall into disrepair; draught carriages are almost unknown, and burdens are carried on the backs of mules and horses: add to this, that Mexico being under-peopled, labour is nearly as high in it as in the United States of North America; and the mechanical arts being in a manner unknown, all skilled workmen, such as carpenters, blacksmiths, and working engineers, had to be sent from England at a heavy expense. (For an account of the low state of the arts in Mexico, see the extracts from Chevalier's Letters in the *Geog. Dict.* art. Mexico.)

Such were the chief causes of the failure of the Mexican mining companies; and several of these may be referred to one radical disadvantage — the non-existence of silver-mines in England. We have, in Cornwall, considerable mines of tin and copper, while in the northern counties we have mines of lead; but of silver we have none that deserve the name. How much better had it been had our countrymen set out with a consciousness that Germany is the only country in which the treatment of silver ore is conducted on scientific principles! The Saxons extract a profit from ore of very inferior quality, often worth only a fourth or fifth part of the ore raised by the Mexicans on account of our companies, but which, being wrought by their crude, inefficient, and expensive process, fails to afford any thing like a satisfactory return. There seems no reason to doubt that the German process may be applied to silver ore in Mexico as in Europe: the difficulties arise, not from difference in the quality of the ore, but from the want of experienced smelters, and the general backwardness of the Mexicans in mechanics.

But though the companies had been in all other respects successful, they had a serious drawback to contend with in the unsettled state of the country. No government has as yet been established in Mexico, nor in any other of the newly constituted American states, with power, or perhaps inclination, sufficient to put down disturbances, or to enforce the observance of contracts. So long as the companies were struggling to put their mines into order, they sustained little inconvenience from the circumstances now mentioned; but the moment they had succeeded in bringing them once more into a productive state, and were beginning to have a reasonable prospect of obtaining some return for their enormous outlays, they were annoyed by questions as to title, and by the setting up of claims on the mines, of which they had never heard before. In some instances the claimants have had recourse to violence, and the companies' servants have been forcibly ejected from their works! Chevalier says that it requires an armed force to transport any quantity of ore from the mine to the place of its destination; and he gives an account of a murderous attack made in 1835 on some miners belonging to the Real del Monte company. — (See *Geog. Dict.* art. Mexico.) Probably, however, there has latterly been, in this respect, some improvement. At all events, the produce of the

mines is increasing in Mexico and most parts of South America. — (See art. PRECIOUS METALS.)

Without, however, pretending to anticipate the final result of these remote speculations, we shall conclude with a brief notice of the considerations on both sides of the question. The circumstances adverse to the success of mining companies in America, conducted on account of parties in England or in any part of Europe, are —

1. The various disadvantages of distant management. These are so many and so serious, as to admit of only one corrective, — selling the ore as soon as raised, and transferring to individuals, for their own account, the extraction of the metal, as is done in Cornwall, and, in a somewhat different manner, in Saxony. The ores also ought to be raised by paying the workmen, not fixed wages, but a tribute or portion of the proceeds.

2. The half-civilised state of the inhabitants, their unsettled political condition, and the want of power or disposition on the part of those in power to make contracts be observed; and to hinder the former proprietors of the mines, or those connected with them, from setting up fictitious claims, and enforcing them by violence.

3. The high price of labour; the ignorance of the natives as to mechanics, and still more as to science. Hence the necessity of having artisans and confidential superintendents from Europe at a heavy expense.

On the other hand, the circumstances in favour of such undertakings are —

1. The abundance of silver ore, which is far greater than in any part of Europe

2. The former success of mining in Mexico, under a system extremely rude and expensive, compared to that which is now followed in Germany.

3. The probability of peace in Europe, and of an abundance of monied capital; so that the failure of the present companies may not involve a relinquishment of their enterprises, any more than the failure of the first New River Company, about two centuries ago, implied an abandonment of their project. There is surely, also, some probability that anarchy and disorder will ultimately cease; and that the security of property will, in the end, be established. We confess, however, that these are but problematical and contingent events; and that it may reasonably be doubted whether any considerable future success can be anticipated.

It seems, however, as if there were something in mining speculations that renders them exceedingly unsuitable for joint stock associations. At all events, hardly one of the joint stock associations formed in this country for the working of mines has been successful. The company for working the copper mines near Santiago in Cuba appears to be the only one that has in any degree realised the magnificent prospects that were held out in 1824 and 1825. Anglo-Mexican 100*l.* shares are now selling at 2*l.* 15*s.*, and Bolanos 150*l.* shares at 4*l.* 15*s.*, and so forth. We subjoin

An Account of the principal existing Mining Companies, exhibiting the Number of Shares in each, the Amount of each Share, and its Cost Price, &c., in June 1843.

No. of Shares.	Mining Companies.	Amount of Share.	Average Cost.	Price per Share.	Dividend payable.
		£	£ s. d.	£ s. d.	
4,000	Alten	50	13 10 0 paid	- - -	May.
10,000	Anglo-Mexican (iss. at 5*l.* pm.)	100	100 0 0 —	2 15 0	
	Do., Subscription	-	25 0 0 —	- -	
8,000	Blaenavon Iron and Coal	50	50 0 0 —	- -	April & Sept.
2,000	Bolanos	150	150 0 0 —	- -	March & Sept.
	Do. Scrip	-	- - -	- -	
10,000	Brazilian Imp. (iss. at 5*l.* pm.)	55	21 0 0 —	8 15 0	12th Dec.
6,000	Do. Mocaubas and Cocaes United	25	25 0 0 —		
11,000	Do. St. John del Rey	20	15 0 0 —		
20,000	British Iron	100	75 0 0 —		
10,000	Candonga	20	7 10 0 —	- -	Feb. and Aug.
	Do., Registered	⅜	7 10 0 —		
12,000	Cobre Copper	-	40 0 0 —		
8,500	Copiapó	20	13 0 0 —	- -	1 Sept.
10,000	Columbian (iss. at 5*l.* pm.)	55	55 0 0 —		
1,500	Do., New	11	11 0 0 —		
20,000	General Mining	20	20 0 0 —	6 0 0	
10,000	Hiberian	50	10 10 0 —	2 0 0	
5,051	Mexican	60	59 0 0 —		
20,000	Mining Company of Ireland	25	7 0 0 —	- -	June and Dec.
11,500	Real del Monte, Registered	65	54 0 0 —	4 15 0	June and Dec.
	Do. Loan Notes	-	130 0 0 —		
10,000	Rhymney Iron	50	50 0 0 —	4*l.* to 3*l.* 10*s.*	Jan. and July.
	Santiago de Cuba	25	10 0 0 —	- -	Jan. and July.
30,000	United Mexican (iss. at 2*l.* pm.)	40	40 0 0 —		
	Do. Scrip (New)	-	1 5 0 —		

MINIUM, OR RED OXIDE OF LEAD, a tasteless powder of an intense red colour, often inclining to orange, and very heavy; its specific gravity being 8·94. It is extensively used in the arts.

MOCHA, the principal port in the Red Sea frequented by Europeans, in that part of Arabia called Yemen, about 40 miles to the north of the Strait of Bab-el-mandeb, lat. 13° 19′ 30″ N., lon. 43° 20′ E. Population variously estimated; but may, perhaps, amount to from 5,000 to 7,000. It is encircled with walls, and indifferently fortified. Its appearance from the sea is imposing.

Mocha is situated on the margin of a dry sandy plain. It is built close to the shore, between 2 points of land which project and form a bay. Vessels drawing from 10 to 12 feet water may anchor within this bay at about a mile from the town; but large ships anchor without the bay in the roads, in 5 or 7 fathoms water — the grand mosque bearing E. S. E., and the fort to the south of the town S. by E., distant about two miles from the shore. The great article of export from Mocha is coffee, which is universally admitted to be of the finest quality. It is not possible to form any very accurate estimate of the quantity exported; but we believe it may be taken at 10,000 tons, or per-

haps more. The greater portion is sent to Djidda and Suez; but there is a pretty large export to Bombay, and other parts of India, whence some is sent to Europe: occasionally however, the exports from Mocha and Hodeida, direct from Europe, are very considerable. Besides coffee, the principal articles of export are, dates, adjoue, or paste made of dates, myrrh, gum Arabic, olibanum, senna (*cassia senna*), sharks' fins, tragacanth horns and hides of the rhinoceros, balm of Gilead, ivory, gold dust, civet, aloes, sagapenum, &c. The principal articles of import are, rice, piece goods, iron and hardware &c. The ivory, gold dust, and civet, met with at Mocha, are brought from the opposite coast of Abyssinia, whence are also brought slaves, ghee, &c.

The greater part of the foreign trade of Mocha is transacted by the Banians; and it is much safer to deal with them than with either Turks or Arabs. Europeans pay a duty of 3 per cent. *ad valorem* on all goods imported by them from Europe, India or China; the duty being levied on the amount of the sales. The buyer pays brokerage, cooley, and boat hire. All kinds of foreign goods are sold on credit, and the payment is made in 3 instalments, or at a certain day, according as may have been agreed on. Coffee is always paid for in ready money. On the sale of other goods, the produce of the country, a credit is given or if ready money be paid, a discount is allowed at the rate of 9 per cent. When goods are discharging the master must furnish the Custom-house officer with a manifest, or account of the marks, numbers, and contents of each package. He then opens two or three bales, taken at random; and if they correspond with the account delivered, no further examination is made; but if they do not correspond, the whole bales are opened, and double duty is charged upon the excess. The quantities being thus ascertained their value is learned from the account of sales rendered by the seller, and the duty charged accordingly. In this respect there is nothing to object to at Mocha; but a good deal of extortion is practised in the exaction of port charges, presents, &c., which may, however, be defeated by proper firmness. The port charges on ships, or *three-mast* vessels, may amount to about to 400 Mocha dollars, and those on brigs to about half as much. Provisions are plentiful and cheap; but water is dear: that in the vicinity being brackish and unwholesome, whatever is used for drinking, by all but the poorest persons, is brought from Mosa, about 20 miles off. Fish are abundant and cheap, but not very good.

Money. — The current coins of the country are carats and commasses: 7 carats = 1 commassee; 60 commasses = 1 Spanish dollar; 100 Spanish dollars = 124½ Mocha dollars.

Weights and Measures. — The commercial weights are —

15 Vakias = 1 Rottolo = 1 lb. 2 oz. avoird.
40 Vakias = 1 Maund = 3 lbs. avoird.
10 Maunds = 1 Frazel = 30 lbs. avoird.
15 Frazels = 1 Bahar = 450 lbs. avoird.

There is also a small maund of only 30 vakias: 1 Mocha bahar = 16½ Bombay maunds; 1 Mocha bahar = 13 Surat maunds = 15·123 seers. Grain is measured by the kellah, 40 of which = 1 tonaand, about 170 lbs. avoirdupois. The liquid measures are 16 vakias = 1 nusseah; 8 nusseahs = 1 cuda, about 2 English wine gallons. The long measures are the guz = 25 English inches; the hand covid = 18 inches, and the long iron covid = 27 inches.

In compiling this article, we made use of *Milburn's Oriental Commerce*, and *Kilmore's Directory*. Niebuhr has given a plan of the port of Mocha in his *Voyage en Arabie*, tome i. p. 348 ed. Amst. 1776. He has also given some details as to its trade in his *Description de l'Arabie*, p. 191. But the best account we have seen of Mocha is in *Hamilton's Account of the East Indies* (vol. i. pp. 40—52.), an accurate and valuable work. Burckhardt did not visit Mocha; which is to be regretted.

MOGADORE, a sea-port town on the west coast of Morocco, lat. 31° 50′ N. lon. 9° 20′ W. Population about 10,000. It is indifferently fortified; the country in the immediate vicinity is low, flat, sandy, and unproductive. Water is scarce and rather dear; being either rain water collected and preserved in cisterns, or brought from a river about 1¼ mile distant. The port is formed by a small island lying to the southward of the town; but as there is not more than 10 or 12 feet water in it at ebb tide, large ships anchor without, the long battery bearing E. distant 1¼ mile. The city of Morocco derives its most considerable supplies of European articles from Mogadore, from which it is distant about 4 days' journey (caravan travelling). The principal imports are English woollen and cotton stuffs and hardware, German linens, tin, copper, earthenware, mirrors, glass, sugar, pepper, paper, and a variety of other articles. The exports principally consist of sweet and bitter almonds, gum Arabic, and other gums, bees' wax, cow and calf skins, ivory, ostrich feathers, gold dust, olive oil, dates, &c.

Money. — Accounts are kept in nutkeels of 10 ounces; the ounce being divided into 4 blankeels, and the blankeel into 24 fluce. From their proportion to the Spanish dollar, the blankeel may be valued at 1*d.*, the ounce at 4*d.*, and the nutkeel or ducat at 3*s.* 4*d.*

Weights and Measures. — The commercial pound is generally regulated by the weight of 20 Spanish dollars; and therefore, 100 lbs. Mogadore weight, or the quintal, = 119 lbs. avoirdupois. The market pound for provisions is 50 per cent. heavier, or 1 lb. 12½ oz. avoirdupois.

The corn measures are for the most part similar to those of Spain, but there are considerable discrepancies.

The cubit, or canna, = 21 English inches, is the principal long measure.

The most ample details with respect to the trade of Mogadore, and the trade and productions of Morocco in general, may be found in *Jackson's Account of Morocco*, c. 6, 7 and 13. see also *Kelly's Cambist*.

MOHAIR (Ger. *Mohr*; Fr. *Moire*; It. *Moerro*; Sp. *Mue*, *Muer*), the hair of a variety of the common goat, famous for being soft and fine as silk, and of a silvery whiteness. It is not produced any where but in the vicinity of Angora, in Asia Minor. The exportation of this valuable and beautiful article, unless in the shape of yarn, was formerly prohibited; but it may now be exported unspun. The production, preparation, and sale of mohair have long engrossed the principal attention of the inhabitants of Angora; and it used to form an important article of Venetian commerce. It is manufactured into camlets and other expensive stuffs. Hitherto but little has been imported into England. — (See, for further particulars, *Tournefort, Voyage du Levant*, ii. 463., where there is a figure of the goat; and *Urquhart on Turkey and its Resources*, p. 184.)

MOLASSES or MELASSES (Fr. *Sirop de Sucre*, *Melasses*; Ger. *Syrup*; It. *Melazzo di zucchero*; Sp. *Miel de azucar*, *Chancaca*; Port. *Melasso*, *Assucar liquido*; Rus. *Patoka sacharnaja*), the uncrystallisable part of the juice of the sugar cane, separated from the sugar during its manufacture. It is of a brown or black colour, thick and viscid; has a peculiar odour, and a sweet empyreumatic taste. Molasses imported from the West India colonies and the Mauritius is charged, on being entered for home consumption, with a duty of 9*s.* a cwt., the duty on foreign molasses, which is quite

prohibitory, being 23*s.* 9*d.* a cwt. It is not, however, used in its original state, but is purchased by the sugar-bakers, who, when it is of an ordinary degree of strength, extract from it a coarse, soft species of sugar called bastards, and treacle. But it is obvious, inasmuch as the duty on molasses is fixed, that the duty on the sugar extracted from it will vary indirectly according to the quantity of saccharine matter which it contains; and we understand that, in consequence, molasses is frequently imported so rich as to yield good crystallised sugar. We do not know whether the practice has been carried to such an extent as materially to injure the revenue: but it seems pretty clear that the duty should depend, in part at least, on the quality of the molasses, or on the quantity of saccharine matter which it contains, as well as on the weight. It is difficult — unless advantage has been taken of the way in which the duty is assessed, to elude the sugar duties — to account for the fact of the imports of molasses from the West India islands not having diminished in anything like the same proportion as the imports of sugar. (For an account of the imports of molasses see *antè*, p. 331.)

About 8 gallons of proof spirit may, it is said, be obtained from a cwt. of molasses, such as has recently been imported; but this depends, of course, wholly on the richness of the molasses.

Part of the refuse that remains, after refining muscovado sugar, is a sweet syrup, which, as well as the syrup that remains after boiling molasses to obtain bastards, is called treacle. But the treacle obtained from the former is always preferred to that obtained from the latter, and fetches 2*s.* per cwt. more.

Molasses is sometimes used in preparing the coarser sort of preserves; and on the Continent it is extensively used in the manufacture of tobacco.

An Account of the Quantity of Molasses entered for Consumption in 1840, 1841, and 1842, and of the Produce of the Duty thereon in each of these Years.

Quantities.			Duties.		
1840.	1841.	1842.	1840.	1841.	1842.
Cwts. 423,725	*Cwts.* 402,450	*Cwts.* 535,202	£ 201,380	£ 193,546	£ 256,432

MONEY. When the division of labour was first introduced, commodities were directly bartered for each other. Those, for example, who had a surplus of corn, and were in want of wine, endeavoured to find out those who were in the opposite circumstances, or who had a surplus of wine and wanted corn, and then exchanged the one for the other. It is obvious, however, that the power of changing, and, consequently, of dividing employments, must have been subjected to perpetual interruptions, so long as it was restricted to mere barter. A. carries produce to market, and B. is desirous to purchase it; but the produce belonging to B. is not suitable for A. C., again, would like to buy B.'s produce, but B. is already fully supplied with the equivalent C. has to offer. In such cases — and they must be of a constant occurrence wherever money is not introduced — no direct exchange could take place between the parties; and it might be very difficult to bring it about indirectly. *

The extreme inconvenience attending such situations must early have forced themselves on the attention of every one. Efforts would, in consequence, be made to avoid them; and it would speedily appear that the best or rather the only way in which this could be effected, was to exchange either the whole or a part of one's surplus produce for some commodity of known value, and in general demand; and which, consequently, few persons would be inclined to refuse to accept as an equivalent for whatever they had to dispose of. After this commodity had begun to be employed as a means of exchanging other commodities, individuals would become willing to purchase a greater quantity of it than might be required to pay for the products they were desirous of immediately obtaining; knowing that should they, at any future period, want a further supply either of these or other articles, they would be able readily to procure them in exchange for this universally desired commodity. Though at first circulating slowly and with difficulty, it would, as the advantages arising from its use were better appreciated, begin to pass freely from hand to hand. Its value, as compared with other things, would thus come to be universally known; and it would at last be used, not only as the common medium of exchange, but as a standard by which to measure the value of other things.

Now this commodity, whatever it may be, is *money*.

An infinite variety of commodities have been used as money in different countries and periods. But none can be advantageously used as such, unless it possess several very peculiar qualities. The slightest reflection on the purposes to which it is applied,

* The difficulties that would arise on such occasions, and the devices that would be adopted to overcome them, have been very well illustrated by Colonel Torrens, in his work on the "Production of Wealth," p. 291.

must, indeed, be sufficient to convince every one that it is indispensable, or, at least, exceedingly desirable, that the commodity selected to serve as money should, (1) be divisible into the smallest portions; (2) that it should admit of being kept for an indefinite period without deteriorating; (3) that it should, by possessing great value in small bulk, be capable of being easily transported from place to place; (4) that one piece of money, of a certain denomination, should always be equal, in magnitude and quality, to every other piece of money of the same denomination; and (5) that its value should be comparatively steady, or as little subject to variation as possible. Without the *first* of these qualities, or the capacity of being divided into portions of every different magnitude and value, money, it is evident, would be of almost no use, and could only be exchanged for the few commodities that might happen to be of the same value as its indivisible portions, or as whole multiples of them: without the *second*, or the capacity of being kept or hoarded without deteriorating, no one would choose to exchange commodities for money, except only when he expected to be able speedily to re-exchange that money for something else: without the *third*, or facility of transportation, money could not be conveniently used in transactions between places at any considerable distance: without the *fourth*, or perfect sameness, it would be extremely difficult to appreciate the value of different pieces of money: and without the *fifth* quality, or comparative steadiness of value, money could not serve as a standard by which to measure the value of other commodities; and no one would be disposed to exchange the produce of his industry for an article that might shortly decline considerably in its power of purchasing.

The union of the different qualities of comparative steadiness of value, divisibility, durability, facility of transportation, and perfect sameness, in the precious metals, doubtless, formed the irresistible reason that has induced every civilised community to employ them as money. The value of gold and silver is certainly not invariable, but, generally speaking, it changes only by slow degrees; they are divisible into any number of parts, and have the singular property of being easily reunited, by means of fusion, without loss; they do not deteriorate by being kept; and, from their firm and compact texture, they are very difficult to wear. Their cost of production, especially that of gold, is so considerable, that they possess great value in small bulk, and can, of course, be transported with comparative facility; and an ounce of pure gold or silver, taken from the mines in any quarter of the world, is precisely equal, in point of quality, to an ounce of pure gold or silver dug from the mines in any other quarter. No wonder, therefore, when all the qualities necessary to constitute money are possessed in so eminent a degree by the precious metals, that they have been used as such, in civilised societies, from a very remote æra. "They became universal money," as Turgot has observed, "not in consequence of any arbitrary agreement among men, or of the intervention of any law, but by the nature and force of things."

When first used as money, the precious metals were in an unfashioned state, in bars or ingots. The parties having agreed about the quantity of metal to be given for a commodity, that quantity was then weighed off. But this, it is plain, must have been a tedious and troublesome process. Undoubtedly, however, the greatest obstacle that would be experienced, in early ages, to the use of gold and silver as money, would be found to consist in the difficulty of determining the degree of their purity with sufficient precision; and the discovery of some means by which their weight and fineness might be readily and correctly ascertained, would be felt to be indispensable to their extensive use as money. Fortunately, these means were not long in being discovered. The fabrication of coins, or the practice of impressing pieces of the precious metals with a stamp indicating their weight and purity, belongs to the remotest antiquity.—(*Gouget, De l'Origine des Loix, &c.* tome i. p. 269.) And it may safely be affirmed, that there have been very few inventions of greater utility, or that have done more to accelerate the progress of improvement.

It is material, however, to observe, that the introduction and use of coined money make no change whatever in the *principle* on which exchanges were previously conducted. The coinage saves the trouble of weighing and assaying gold and silver, but it does nothing more. It declares the weight and purity of the metal in a coin; but the *value* of that metal or coin is in all cases determined by precisely the same principles which determine the value of other commodities, and would be as little affected by being recoined with a new denomination, as the burden of a ship by a change of her name.

Inaccurate notions with respect to the influence of coinage seem to have given rise to the opinion, so long entertained, that coins were merely the *signs* of values! But it is clear they have no more claim to this designation than bars of iron or copper, sacks of wheat, or any other commodity. They exchange for other things, because they are desirable articles, and are possessed of real intrinsic value. A draft, check, or bill may not improperly, perhaps, be regarded as the sign of the money to be given for it. But that money is nothing but a commodity; it is not a sign — it is the thing signified.

Money, however, is not merely the universal equivalent, or *marchandise banale*, used by society: it is also the *standard* used to compare the values of all sorts of products; and the stipulations in the great bulk of contracts and deeds, as to the delivery and disposal of property, have all reference to, and are commonly expressed in, quantities of money. It is plainly, therefore, of the utmost importance that its value should be preserved as invariable as possible. Owing, however, to improvements in the arts, the exhaustion of old mines, and the discovery of new ones, the value of the precious metals is necessarily inconstant: though, if we except the effects produced in the 16th century by the discovery of the American mines, it does not appear to have varied so much at other times as might have been anticipated. Great mischief has, however, been repeatedly occasioned by the changes that have been made in most countries in the weight, and sometimes also in the purity, of coins; and since the impolicy of these changes has been recognised, similar, and perhaps still more extensive, disorders have sprung from the improper use of substitutes for coins. It is, indeed, quite obvious, that no change can take place in the value of money, without proportionally affecting the pecuniary conditions in all contracts and agreements. Much, however, of the influence of a change depends on its direction. An increase in the value of money is uniformly more prejudicial in a public point of view than its diminution: the latter, though injurious to individuals, may sometimes be productive of national advantage; but such can never be the case with the former. — (See *Principles of Political Economy*, by the author of this work, 3d ed. pp. 510—515.)

No certain estimate can ever be formed of the quantity of money required to conduct the business of any country; this quantity being, in all cases, determined by the value of money itself, the services it has to perform, and the devices used for economising its employment. Generally, however, it is very considerable; and when it consists wholly of gold and silver, it occasions a very heavy expense. There can, indeed, be no doubt that the wish to lessen this expense has been one of the chief causes that have led all civilised and commercial nations to fabricate a portion of their money of some less valuable material. Of the various substitutes resorted to for this purpose, paper is, in all respects, the most eligible. Its employment seems to have grown naturally out of the circumstances incident to an advancing society. When government becomes sufficiently powerful and intelligent to enforce the observance of contracts, individuals possessed of written promises from others, that they will pay certain sums at certain specified periods, begin to assign them to those to whom they are indebted; and when the subscribers are persons of fortune, and of whose solvency no doubt can be entertained, their obligations are readily accepted in payment of debts. But when the circulation of promises, or bills, in this way, has continued for a while, individuals begin to perceive that they may derive a profit by issuing them in such a form as to fit them for being readily used as a substitute for money in the ordinary transactions of life. Hence the origin of bank notes. An individual in whose wealth and discretion the public have confidence, being applied to for a loan, say of 5,000*l.*, grants the applicant his bill or note, payable on demand, for that sum. Now, as this note passes, in consequence of the confidence placed in the issuer, currently from hand to hand as cash, it is quite as useful to the borrower as if it had been gold; and supposing that the rate of interest is 5 per cent., it will yield, so long as it continues to circulate, a revenue of 250*l.* a year to the issuer. A banker who issues notes, coins, as it were, his credit. He derives the same revenue from the loan of his written promise to pay a certain sum, that he could derive from the loan of the sum itself, or of an equivalent amount of produce! And while he thus increases his own income, he, at the same time, contributes to increase the wealth of the public. The cheapest species of currency being substituted in the place of that which is most expensive, the superfluous coins are either used in the arts, or are exported in exchange for raw materials or manufactured goods, by the use of which both wealth and enjoyments are increased. Ever since the introduction of bills, almost all great commercial transactions have been carried on by means of paper only. Notes are also used to a very great extent in the ordinary business of society; and while they are readily exchangeable at the pleasure of the holder for coins, or for the precise quantities of gold or silver they profess to represent, their value is maintained on a par with the value of these metals; and all injurious fluctuations in the value of money are as effectually avoided as if it consisted wholly of the precious metals.

In common mercantile language, the party who exchanges money for a commodity is said to buy; the party who exchanges a commodity for money being said to sell. Price, unless where the contrary is distinctly mentioned, always means the value of a commodity estimated or rated in money. — (For a further account of metallic money, see the article Coin; and for an account of paper money, see the article Banks.)

MONOPOLY. By this term is usually meant a grant from the Crown, or other competent authority, conveying to some one individual, or number of individuals, the sole right of buying, selling, making, importing, exporting, &c. some one commodity, or

set of commodities. Such grants were very common previously to the accession of the House of Stuart, and were carried to a very oppressive and injurious extent during the reign of Queen Elizabeth. The grievance became at length so insupportable, that, notwithstanding the opposition of government, which looked upon the power of granting monopolies as a very valuable part of the prerogative, they were abolished by the famous act of 1624, the 21 Jac. 1. c. 3. This act declares that all monopolies, grants, letters patent for the sole buying, selling, and making of goods and manufactures, shall be null and void. It excepts patents for *fourteen* years for the sole working or making of any new manufactures within the realm, to the true and first inventors of such manufactures, provided they be not contrary to law, nor mischievous to the state. It also excepts grants by act of parliament to any corporation, company, or society, for the enlargement of trade, and letters patent concerning the making of gunpowder, &c. This act effectually secured the freedom of industry in Great Britain; and has done more, perhaps, to excite the spirit of invention and industry, and to accelerate the progress of wealth, than any other in the statute book.

MONTEVIDEO, a sea-port, and the capital of the republic of Uruguay, on the north bank of the Rio de la Plata, lat. 34° 54′ 11″ S., lon. 56° 13′ 18″ W. The population, which is variously estimated, may probably be about 12,000. The town is built in the form of an amphitheatre, on a regular plan, and is well fortified. It has suffered much from the various revolutions to which it has been subject during the last 30 years.

Montevideo is situated 2° 3′ 33″ W. of Cape St. Mary, the northern limit of the embouchure of the La Plata. Vessels from the north bound to Montevideo generally make this cape, entering the river between it and the small island of Lobos, in from 14 to 17 fathoms. The course is thence nearly W. to the Isle of Flores, on which is a light-house 112 feet above the level of the sea, with a revolving light. From Flores to Montevideo is 16 miles in a direct line, and the course W. by S. by compass. A light-house, 475 feet above the level of the sea, has been erected on the summit of the Montevideo, whence the town has its name. The latter is built on a projecting tongue of land, the port being on its S. side. This, which is the best on the La Plata, is a large circular basin open to the S.W.; generally the water is shallow, not exceeding from 14 to 19 feet, but the bottom being soft mud, vessels are seldom damaged by grounding. It should, however, be observed that the depth of water in the harbour, as well as throughout the whole of the Rio de la Plata, depends very much on the direction and strength of the winds. The S. W. wind, called *pamperos*, blows right into the bay of Montevideo with much force, not unfrequently causing a rise of a fathom or more in the depth of water! But it rarely occasions much damage to vessels properly moored with anchors to the S.W., S.E., and one to the N. — (*Blunt's American Pilot*, pp. 542—555.; *Coulier sur les Phares, &c.*)

Montevideo has a considerable commerce. The great articles of export consist of animal products, or of hides, beef, tallow, hair, bones, grease, wool, &c. The imports principally consist of British cottons, woollens, and hardware, flour, wine and spirits, linens, sugar, tobacco, boots and shoes, salt, &c.

Account specifying the Quantities and Values of the various Articles of Native Produce exported from Montevideo in 1842.

649,281 salted ox and cow hides, at $3 50		$2,272,483	97,033 calf skins, at 3 reals		
703,759 dry ox and cow hides, at $2 50		1,759,397	2,591 dozen sheep skins, at $2 0		
54,243 salted horse hides, at 13 reals		88,161	9,014 quintals hide cuttings, at $2 0		18,088
3,330 dry horse hides, at 10 reals		4,162	4,375 tons bones, at $6 0		26,250
433,810 quintals jerked beef, at $2 0		867,620	2,024 dozen nutria skins, at $2 50		5,060
87,330 arrobas grease, at 13 reals		141,911	2,011 pounds ostrich feathers, at 2 reals		503
25,654 arrobas tallow, at 15 reals		48,101	Deer skins, bone ashes, tallow candles, mules, seal oil and skins		
7,659 quintals horse hair, at $14 0		107,226			
975,966 horns, at $30 0		29,219			
2,535 bales wool, at $ 30 0		76,050			$5,473,218
22,890 colt skins, at 3 reals		8,584			
2,580 arrobas mares' oil, at 9 reals		2,902			

Account of sundry Exports from Buenos Ayres and Montevideo in the following Years.

Years.	Dry and salted Ox and Cow Hides.	Horse Hides.	Horse Hair.		Sheep Skins.	Nutria Skins.	Tallow and Soap.	Horns.
	Number.	*Number.*	*Arrobas.*	*Arrobas.*	*Dozens.*	*Dozens.*	*Arrobas.*	*Number.*
1838	1,218,101	61,596	80,536	199,059	58,965	71,745	314,253	1,030,000
1839	1,262,468	49,798	49,832	75,062	16,804	21,839	407,392	1,199,000
1840	1,318,827	48,804	61,101	96,611	10,351	12,540	375,174	1,142,036
1841	3,552,938	177,508	177,095	950,067	211,694	97,904	1,222,086	2,637,972
1842	2,930,040	140,555	115,811	516,798	102,424	97,523	511,755	2,183,919

DUTIES ON IMPORTS.

In National or Foreign Vessels, at Montevideo.

1.	Machinery, agricultural implements, instruments used in the arts and sciences, books, prints, and maps	free.	
2.	Silk, raw and wrought, laces, blonde, gold, and silver embroidery, watches, jewellery, saltpetre, plaster of Paris, coal, timber, cotton fringe, and woollen hoops	5	per cent.
3.	Powder, pitch, tar, rosin, and naval stores	15	—
4.	All raw materials, and manufactured articles, not included in the preceding enumeration	15	—
5.	Sugar, Paraguay and China teas, cocoa, cassia fignea, and cinnamon, spices, drugs, and provisions in general	20	—
6.	Furniture, pictures, looking glasses, musical instruments, all sorts of carriages, carts, &c., and harness, saddles, horses' furniture (excepting horse cloths of the manufacture of the adjacent provinces, which pay 15 per cent.), ready made clothes, boots and shoes, liqueurs, brandy, wine, vinegar, ale and porter, cider, tobacco, and soap	25	—

Salt, 2 reals the fanega, say 11*d.* per 290 lbs.
Hides of all classes, hair, horns, tallow, silver and gold, in bullion or coin — free.

A small charge is made for warehousing and porterage on passing through the Custom-house. Goods may be bonded for an indefinite period, during which time they are subject to a moderate warehouse rent.

Foreign flour pays as follows: —
8 dollars per barrel, when wheat is worth 2 to 3 dollars per fanega, about 224 lbs.
6 dollars per barrel, when wheat is worth 3 to 5 dollars per fanega.
4 dollars, when wheat is worth 5 to 7 dollars.
2 dollars, when wheat is worth 7 to 9 dollars.
1 dollar, when wheat exceeds 9 dollars.
Wheat: —
3 dollars per fanega, when wheat is worth 2 to 3 dollars per fanega.
2 dollars, when wheat is worth 3 to 6 dollars.
1 dollar, when wheat is worth 6 to 10 dollars.
Nothing, when wheat is worth above 10 dollars per fanega.
Goods transhipped, or shipped out of bond, pay 2 per cent.
Foreign goods, shipped in vessels of less than 150 tons burden, for ports of the Uruguay and Paraguay, pay only 1 per

8. All goods imported, paying duties, are subject to pay an additional 1 per cent. to the consulado; ½ per cent. to the hospital; and, for the extinction of copper money*, 1 per cent. additional on all goods that pay 5 per cent.

On all goods that pay 13, 15, and 20 per cent.	-	3 per cent.
On all goods that pay 25 per cent.	-	5 —
On flour	-	10 —
On wheat	-	3 —

DUTIES ON EXPORTS.

In National or Foreign Vessels.

Ox and cow hides, 2 reals, 25 centesimos, for reconnidor valuations of 1 dollar, and 1 per cent. consulado.

Horse hides, 1 real for reconnidor, on valuations of 5 reals for reconnidor each, and 1 per cent. consulado.

All other produce of the country pays 4 per cent. on the market value, and 1 per cent. consulado.

Jerked and salt beef, pork, &c.; also all foreign goods that have paid the import duty, free.

Gold and silver, coined or in bullion, 1 per cent.

	Vessels. Foreign.	*National.*
Port Charges.—Tonnage from beyond sea, 3 reals.		2 reals.
During loading and unloading both classes, pay 1 dollar per day.		
Pratique, with pilot - - -	- 8 dollars.	4 dollars.
Boat - - - -	- 2 —	2 —
Without pilot - - - -	- 4 —	2 —

National and foreign vessels, that neither discharge nor load cargo, and that do not remain more than six days, pay nothing; those that remain in the harbour more than six days pay one third of the above tonnage dues.

* This has, much to the honour of the authorities and people, been already accomplished; but the duty is maintained for general purposes.

National vessels, and vessels belonging to the provinces of Buenos Ayres, employed within the river Plate, called coasting, pay for a licence for each voyage as follows:—

If 3 to 7 tons,	4 reals.	
8 — 15 —	10 —	or 1 dollar, 2 cents.
16 — 30 —	18 —	or 2 — 2 —
31 — 45 —	26 —	or 3 — 2 —
46 — 60 —	30 —	or 3 — 6 —
61 — 80 —	38 —	or 4 — 6 —
81 — 100 —	46 —	or 5 — 6 —
101 and above	54 —	or 6 — 6 —

Hospital Dues.—National and foreign vessels, sailing for a foreign port beyond sea or in the river Plate, pay 2 dollars for the vessel, 4 reals for the captain, 2 reals for each seaman, 1 dollar for each passenger.

Pilotage from Montevideo to Buenos Ayres to be paid in Montevideo.

If the draught of water do not exceed

9 feet Burgos measure,	50 dollars.
9 to 10 feet	60 —
10 — 11 —	70 —
11 — 12 —	80 —
12 — 13 —	100 —
13 — 14 —	120 —
14 — 15 —	140 —
15 — 16 —	160 —
16 — 17 —	190 —
17 — 18 —	220 —

Monies, Weights, and Measures.—Paper money there is none. Current money, the Brazilian patacon and Spanish dollar; they pass for 960 centesimos.

100 cents make a real.

800 cents, or 8 reals, make a dollar.

960 cents, or 9 reals 60 cents, make 1⅛ current dollar, or 1 hard dollar or patacon.

Weights and measures same as those of Spain; for which see CADIZ, in the *Dict.*

MOROCCO, OR MAROQUIN (Ger. *Saffiam*; Fr. *Maroquin*; It. *Marrocchino*; Sp. *Marroqui*; Rus. *Safian*), a fine kind of leather prepared of the skins of goats, imported from the Levant, Barbary, Spain, Flanders, &c. It is red, black, green, yellow, &c. It is extensively used in the binding of books.

MUNJEET, a species of *Rubia tinctorum*, or madder, produced in Nepaul and in various districts of India. That which is brought to England is imported from Calcutta, and is cultivated in the high lands about Natpore in Purnea. The roots are long and slender, and when broken appear of a red colour. It is used in dyeing; the red which it produces being, though somewhat peculiar, nearly the same as that produced by European madder. Dr. Bancroft says that the colour which it imparts to cotton and linen is not so durable as that of madder: but that upon wool or woollen cloth its colour is brighter and livelier; and, when proper mordants are used, nearly, perhaps quite, as permanent. — (*Permanent Colours*, vol. ii. p. 279.) The best munjeet is in pieces about the bigness of a small quill, clean and firm, breaking short, and not pipy or chaffy. Its smell somewhat resembles liquorice root.

Being a very bulky article, as compared with its value, the freight adds greatly to its cost. This seems to be the principal reason of its being so very little used in Great Britain, that the entire imports, during the 3 years ending with 1840, amounted to only 3,539 cwt. The brokers estimate that 4*l.* per ton of freight is equal to 11*s.* 1*d.* per cwt. on the value of the article; 5*l.* per ton being equal to 13*s.* 10*d.*; 6*l.* to 16*s.* 7*d.*; and 7*l.* to 19*s.* 4*d.*; and as the price of munjeet in bond varies from 12*s.* to 15*s.* a cwt., it is plain it cannot be imported in any considerable quantity, except when freights are very much depressed. It is mostly imported in small packets or bundles of 600 or 800 to the ton; but sometimes it is packed in bales like cotton.

MUSCAT, a city and sea-port situated on the east coast of Arabia, about 96 miles N. W. of Cape Rasselgate (Ras-el-had), in lat. 23° 38′ N., lon. 58° 37½′ E. Population uncertain; but estimated by Lieut. Wellsted at 40,000, which we incline to think beyond the mark. There are more Banians here than in any other city in Arabia. There are amongst them some very extensive merchants, who engross almost the whole pearl trade of the Persian Gulph, and the supply of corn from India. The negro slaves are numerous, and are generally stout, well made, and active.

The harbour, which is the best on this part of the Arabic coast, opens to the north, and is shaped like a horse-shoe. It is bounded on the W. and S. by the lofty projecting shores of the mainland, and on the E. by Muscat Island, a ridge of rocks from 200 to 300 feet high. The town stands on a sandy beach at the south end or bottom of the cove or harbour, about 1¼ mile from its mouth. The depth of water near the town varies from 3 to 4 and 5 fathoms. Ships at anchor are exposed to the north and north-west winds; but as the anchorage is every where good, accidents are of very rare occurrence. The harbour is protected by some pretty strong forts. Vessels are not allowed to enter after dusk, nor to leave before sunrise. If the usual signal be made for a pilot, one will come off, but not otherwise. It is best to make them attend till the vessel be secured, as they have excellent boats for carrying out warp anchors.

Muscat is a place of considerable importance, being at once the key to, and commanding the trade of, the Persian Gulph. The dominions of the imaum, or prince, are extensive, and his government is more liberal and intelligent than any other in Arabia or Persia. The town, situated at the bottom of a high hill, is ill-built and filthy; and, during the months of July and August, is one of the hottest inhabited places in the world. The country in the immediate vicinity of the town is extremely barren; but it improves as it recedes from the shore. Dates and wheat, particularly the first, are the principal articles of produce. The dates of this part of Arabia are held in high estimation, and are largely exported, those of Bushire and Bussorah being imported in their stead. A date tree is valued at from 7 to 10 dollars, and its annual produce at from 1 to 1½ dollar. An estate is said to be worth 2,000, 3,000, or 4,000 date trees, according to the number it possesses.

But the place derives its whole importance from the commerce and navigation of which it is the centre.

The imaum has some large ships of war, and his subjects possess some of the finest trading vessels to be met with in the Indian seas. The part of Arabia adjoining to Muscat is too poor to have any very considerable direct trade; but, owing to its favourable situation, the backward state of the country round the Persian Gulph, and the superiority of its ships and seamen, Muscat has become an important *entrepôt*, and has an extensive transit and carrying trade. Most European ships bound for Bussorah and Bushire touch at it; and more than half the trade of the Persian Gulph is carried on in ships belonging to its merchants. — (See BUSHIRE.) But, exclusive of the ports on the gulph, and the south and west coasts of Arabia, ships under the flag of the imaum trade to all the ports of British India, to Singapore, Java, the Mauritius, the east coast of Africa, &c. The pearl trade of the Persian Gulph is now, also, wholly centred at Muscat. All merchandise passing up the gulph on Arab bottoms pays a duty of ½ per cent. to the imaum. He also rents the islands of Ormuz and Kishmee, the port of Gombroon, and some sulphur mines, from the Persian government.

In the magazines of Muscat may be found every species of produce imported into or exported from the Persian Gulph. Various articles are also imported for the use of the surrounding country, and for the internal consumption of Arabia. Among these, the principal are rice, sugar, coffee from Mocha, cotton and cotton cloth, cocoa nuts, wood for building, slaves from Zanguebar, dates from Bushire and Bussorah, &c. Payment for these is chiefly made in specie and pearls; but they also export drugs of various descriptions, ivory, gums, hides, ostrich feathers, horses, sharks' fins, a sort of earthen jars, called martuban, to Tranquebar, dried fish, an esteemed sweatmeat called *halwah*, and a few other articles.

The markets of Muscat are abundantly supplied with all sorts of provision. Beef, mutton, and vegetables of good quality may be had at all times, and reasonably cheap. The bay literally swarms with the greatest variety of most excellent fish. Water is excellent, and is conveyed to the beach in such a manner that the casks of a vessel may be filled in her boats while afloat. Fire-wood is also abundant, and is cheaper than at Bombay.

A duty of 5 per cent. is laid on imports, all exports being duty free. The entire value of the imports has been estimated at 900,000*l*.

Money, Weights, and Measures. — Accounts here are kept in goz and mamoodies: 20 goz = 1 mamoody; and 20 mamoodies = 1 dollar. All Persian, Turkish, and Indian coins, as well as French and German crowns, and Spanish dollars, are met with; their value fluctuating with the demand; and they are generally sold by weight.

The weights are, the cucha and maund; 24 cuchas = 1 maund = 8 lbs. 12 oz. avoirdupois.

Niebuhr thinks that Muscat occupies the site of the Mosca of Arrian and other Greek writers — (*Voyage en Arabie*, vol. ii. p. 71. ed. Amst. 1780); a conjecture which seems to be confirmed, not merely by the resemblance of the name, but also by the terms applied by Arrian to Mosca being sufficiently descriptive of Muscat; and as the port is bounded on all sides by rocks, it must now present almost the same appearance in antiquity. Dr. Vincent, however, though he speaks doubtfully on the subject, is inclined to place Mosca to the west of Cape Rasselgate. — (*Commerce and Navigation of the Ancients*, vol. ii. pp. 344—347. For further particulars, besides the authorities above referred to, see *Hamilton's New Account of the East Indies*, vol. i. p. 63.; *Frazer's Journey to Khorasan*, pp. 5—19.; *Wellsted's Travels in Arabia*, i. pp. 14—25. The longitude given above is that of *Arrowsmith's Chart of the Persian Gulph*.)

MUSK (Fr. *Musc*; Ger. *Bisam*; Du. *Muskus*; It. *Muschio*; Sp. *Almizele*; Rus. *Muscus*; Arab. and Pers. *Mishk*) is obtained from a species of deer (*Moschus moschiferus*) inhabiting the Alpine mountains of the east of Asia. The musk is found in a small bag under the belly. Musk is in grains concreted together, dry, yet slightly unctuous, and free from grittiness when rubbed between the fingers or chewed. It has a peculiar, aromatic, and extremely powerful and durable odour; the taste is bitterish and heavy; and the colour deep brown, with a shade of red. It is imported into England from China in caddies containing from 60 to 100 oz. each; but an inferior kind is brought from Bengal, and a still baser sort from Russia. The best is that which is in the natural follicle or pod. Being a very high-priced article, it is often adulterated. That which is mixed with the animal's blood may be discovered by the largeness of the lumps or clots. It is sometimes mixed with a dark, highly coloured, friable earth; but this appears to the touch to be of a more crumbling texture, and is harder as well as heavier than genuine musk. 20 cwt. of musk are allowed to a ton. It was not permitted to be brought home in the China ships belonging to the East India Company. — (*Thomson's Dispensatory*; *Milburn's Orient. Com.*) The duty of 6*d.* an oz. on musk produced, in 1840, 53*l.*, showing that 2,120 oz. had been entered for consumption. Previously to 1832 the duty was 5*s.* an oz.

MUSLIN (Ger. *Musselin*, *Nesseltuch*; Du. *Neteldoek*; Fr. *Mousseline*; It. *Mussolina*; Sp. *Moselina*; Rus. *Kissea*), is derived from the word *mousale* or *mouseln*, a name given to it in India, where large quantities are made. It is a fine thin sort of cotton cloth, with a downy nap on the surface. Formerly all muslins were imported from the East; but now they are manufactured in immense quantities at Manchester, Glasgow, &c., of a fineness and durability which rival those of India, at the same time that they are very considerably cheaper. — (See COTTON.)

MUSTARD (Ger. *Mustert*, *Senf*; Fr. *Moutarde*; It. *Mostarda*; Sp. *Mostaza*; Rus. *Gortschiza*; Lat. *Sinapis*; Arab. *Khîrdal*; Hind. *Râi*), a plant (*Sinapis*) of which there are several species, some of them indigenous to Great Britain. It was formerly extensively cultivated in Durham, but it is now seldom seen in that county. At present it is principally raised in the neighbourhood of York, and throughout other parts of the North Riding; and being manufactured in the city of York, is afterwards sold under the name of Durham mustard. Two quarters an acre are reckoned a good crop. Mustard is of considerable importance in the materia medica, and is extensively used as a condiment. It was not, however, known, in its present form, at our tables, till 1720. The seed had previously been merely pounded in a mortar, and in that rude state separated from the integuments and prepared for use. But, at the period referred to, it occurred to a woman of the name of Clements, residing in Durham, to grind the

seed in a mill, and to treat the meal in the same way that flour is treated. Her mustard was, in consequence, very superior; and, being approved by George I., speedily came into general use. Mrs. Clements kept her secret for a considerable time, and acquired a competent fortune. In Bengal, and other Eastern countries, mustard is extensively cultivated, as rape is in Europe, for the purpose of yielding oil. — (*Bailey's Survey of Durham*, p. 147.; *Loudon's Encyc. of Agric.*)

MYROBALANS, are dried fruits of the plum kind, occasionally brought from Bengal and other parts of India. There are said to be 5 different species. They vary from the size of olives to that of gall nuts; have an unpleasant, bitterish, austere taste; produce, with iron, a strong, durable, black dye and ink; and with alum, a very full, though dark, brownish yellow. They are used in calico printing and medicine by the Hindoos. They have also been employed, though to a comparatively trifling extent, in the arts, and in pharmacy, in Europe; but they are now discarded from our Pharmacopœias. — (*Lewis's Mat. Med.*; *Bancroft on Permanent Colours*, vol. i. p. 351.)

MYRRH (Ger. *Myrrhen*; Du. *Mirrhe*; Fr. *Myrrhe*; Ital. and Sp. *Mirra*; Lat. *Myrrha*; Arab. *Murr*), a resinous substance, the produce of an unknown tree growing in Arabia and Abyssinia. It is imported in chests, each containing from 1 to 2 cwt. Abyssinian myrrh comes to us through the East Indies, while that produced in Arabia is brought by the way of Turkey. It has a peculiar, rather fragrant, odour, and a bitter aromatic taste. It is in small irregularly shaped pieces, which can hardly be called tears. Good myrrh is translucent, of a reddish yellow colour, brittle, breaking with a resinous fracture, and easily pulverised. Its specific gravity is 1·36. When it is opaque, mixed with impurities, and either white, or of a dark colour approaching nearly to black, with a disagreeable odour, it should be rejected. — (*Thomson's Dispensatory.*)

N.

NAILS (Ger. *Nägel, Spiker*; Du. *Spykers*; Fr. *Clous*; It. *Chiodi, Chiovi, Aguti*; Sp. *Clavos*; Rus. *Gwosdi*), are small spikes of iron, brass, &c., which, being driven into wood, serve to bind several pieces together, or to fasten something upon them. There is scarcely a town or village in Great Britain in which nails are not forged; but the principal seats of this useful branch of the iron manufacture are at Birmingham, Bilston, Wolverhampton, Dudley, and a small district in Derbyshire. The consumption of nails is immense; and the aggregate value of those annually produced is very large.

NANGASACKI, a sea-port town on the south-west coast of the island of Ximo, one of the Japanese islands, being, according to Krusenstern, in lat. 32° 43′ 40″ N., lon. 130° 11′ 47″ E. The harbour extends N. E. and S. W. about 2½ leagues, being, in most places, less than a mile in width. Ships lie in 5 or 6 fathoms water, within a gunshot of the town, near the middle of the bay, where they are protected from all winds.

The Japanese islands are situated within the temperate zone. They are believed to contain 50,000,000 of people, superior in industry and civilisation to every other Eastern nation, with the exception of the Chinese. But, notwithstanding Japan has some thousand miles of sea-coast, all foreigners are rigidly excluded from it, with the exception of the Dutch and Chinese; and they are only allowed to visit Nangasacki, the former with 2 ships, and the latter with 10 junks.

The Japanese themselves are prohibited by the laws of the empire from quitting their own shores; and, notwithstanding they formerly emigrated freely, and traded extensively with the neighbouring nations, they have resolutely adhered to this anti-social regulation since 1637, or for nearly 200 years. Both Dutch and Chinese are subjected to a rigorous *surveillance* during their residence in Japan. "The ships," (Dutch) says Mr. Crawfurd, "no sooner arrive, than their rudders are unshipped, their guns dismounted, their arms and ammunition removed, a military guard put on board, and row boats appointed to watch them. Their cargoes are landed by, and placed in charge of, the officers of the Japanese government, and the Dutch have neither control over, nor access to them, except through *solicitation*. The island of Desima, to which they are confined, is an artificial structure of stone raised upon the rocks of the harbour, measuring in its greatest length 236 paces, by a breadth of 82. It communicates with the town of Nangasacki by a bridge and a gate, and is palisadoed all round as well as surrounded by a guard. From this imprisonment the Dutch are allowed to peep twice or thrice a year, rather to be exhibited to the great as a curiosity, than out of indulgence. A corps of constables and interpreters are appointed to watch over their minutest actions; and the most degrading servilities are exacted from the highest among them, by the meanest officers of the Japanese government.

The Chinese trade with Japan is understood to be conducted from the port of Ningpo, in the province of Chekiang, which is so conveniently situated, that 2 voyages may be performed in the year, even by the clumsy junks of China. The commodities with which the Chinese furnish the Japanese, consist of raw sugar, cow and buffalo hides, wrought silks, consisting chiefly of satins and damasks, eagle and sandal wood, ginseng, tutenague or zinc, tin, lead, fine teas, and, for more than 100 years back, some European broad cloths and camlets. The exports consist of copper, limited to 15,000 piculs, or about 900 tons; camphor, sabre blades, pearls, some descriptions of paper and porcelain, and some Japan ware, which is either curious or handsome, but not so substantial as that of China.

Japan, could a trade be freely carried on with it, would unquestionably, from its extent, population, and civilisation, afford a great opening for the commerce of Europe. All attempts hitherto made have been baffled by the watchful jealousy of the Japanese government. The only fair prospect of success is to leave the matter entirely to the enterprise and ingenuity of the British merchants, to whom the trade of the neighbouring Chinese empire is now thrown open. After considering Japan, among Eastern nations, as second only in population, extent, and civilisation, to China, and that the whole empire is situated beyond the tropics, and in the same region as Turkey, Italy, Spain, and a part of the south of France, we may easily discover the sort of commodities which Europe or European colonies could

furnish in a trade with it. They would consist of broad cloths and other woollens, cotton fabrics, iron, spelter, tin, lead, glass ware, sugar, drugs, and spiceries. These would be paid for in camphor, raw silk, unwrought copper, gold, and silver. Of the 3 metals now mentioned, there can be no question that Japan contains very rich mines. Down to 1710, when the quantity of copper permitted to be exported was limited, the exports by the Dutch and Chinese amounted to 4,500 tons. With respect to silver, before its exportation was prohibited, the Portuguese brought it away in large quantities, having, in 1626, exported no less than 2,350 chests, equivalent to 2,350,000 taels, or (at 6*s.* the tael) 705,000*l.* sterling. As to gold, it has been always supposed, from its relative abundance in Japan, to bear a smaller proportionate value to silver than in any other country.

The following are the quantities and value of goods exported and imported by the Dutch in their trade with Japan in 1825; the ships employed being one of 600 and one of 700 tons burden. The trade is exclusively carried on with the port of Batavia.

Exports to Nangasacki.		Imports from Nangasacki.	
Articles.	Value.	Articles.	Value.
	Florins.		*Florins.*
Sandal wood, 100 piculs		Camphor, 720 piculs	69,120
Sapan wood, 1,167 do.		Copper*, 10,715 do.	617,862
Buffalo hides, 500 in number		Crape, 426 pieces	17,748
Elephants' teeth, 1,638 lbs.	3,217	Cotton cloth	13,978
Malay camphor, 61 lbs.	3,224	Medicine	2,220
Java mats, 225 in number		Provisions	5,727
Cocoa nut oil, 24 piculs		Sakkie and soy	14,352
Cloves, 113 do.	18,926	Wheat, 207 bags	2,156
Sugar, 6,991 do.	104,968	Silks	31,600
Tin, 338 do.	18,936	Sundries	96,089
Bengal piece goods	20,896		
Hardware and porcelain	2,250		
Jewellery	1,100		
Glass ware	3,748		
Netherlands broad cloths	75,209		
Lead, 117 piculs	2,793		
Netherlands cotton goods	61,332		
Medicine and sundries			
Total value of export cargoes *Fl.*	373,853	Total value of import cargoes *Fl.*	868,482
Or, at 12 *Fl.* per £ £	31,154 8 4	Or, at 12 *Fl.* per £ £	72,373 10 0

We may take this opportunity of stating that the last authentic account we have of any British vessel attempting to carry on an intercourse with Japan, was that of a ship commanded by Captain Gordon, which touched at the entrance of the bay of Jeddo, in 1818, in a voyage from Calcutta to Ochotsk. Captain Gordon remained at anchor 8 days, waiting the receipt of instructions from the capital, Jeddo, at the head of the bay, distant about 100 miles. He requested leave to return next year for the purpose of carrying on trade, which in civil but peremptory terms was refused. During the ship's stay, she was closely watched by an immense police force, but liberal offers were made of supplies. The officers would permit no species of trade to be carried on, for which, however, the people evinced the greatest possible desire, admiring the broad cloths, calicoes, and other European articles which were shown them. The ship was visited by some thousand natives, chiefly from curiosity. Captain Gordon thinks that a contraband trade, similar to that conducted by the European nations off the mouth of the Canton river, may be successfully carried on with Japan. — (*Kæmpfer's History of Japan*, vol. i. p. 310–356.; *Krusenstern's Voyage round the World*, vol. i. p. 261. Eng. trans.; *Crawfurd's Indian Archipelago*, vol. iii. p. 297.; *Evidence of John Deans, Esq., First Report of the Select Committee on the Affairs of the East India Company*, 1830, p. 242.; *Personal communications from Capt. P. Gordon.*)

Money. — Accounts are kept in tacls, mace, and candarines; 10 candarines make 1 mace, and 10 mace 1 tael. The Dutch reckon the Nangasacki tael at 3¾ florins, equal to about 6*s.* 2*d.* The gold coins current are the new and old itjib and cobangs, or copangs; the silver coins are, the nandiogin, itaganne, and kodama. They are in general very simple, struck plain and unadorned, the greater part of them without any rim round the margin, and most of them without any determined value. For this reason they are always weighed by the merchants, who put their chop or stamp upon them, to signify that the coin is standard weight and unadulterated.

The new cobangs are oblong, rounded at the ends, and flat, about 2 inches broad, scarcely thicker than an English farthing, of a pale yellow colour; the die on one side consists of several cross lines stamped; and at both ends there is a rectangular figure, with raised letters on it, and, besides, a moonlike figure, with a flower on it in relief. On the other side is a circular stamp, with raised letters on it; and within the margin, towards one end, two smaller sunk stamps with raised letters, which are different on each cobang; they are valued at 60 mace. There are old cobangs occasionally met with, which are of fine gold, somewhat broader than the new.

The old cobangs weigh 371 Dutch asen, or 275 English grains, and the gold is said to be 22 carats fine, which would give 44*s.* 7*d.* for the value of the old cobang. But the Japanese coins are reckoned at Madras only 87 touch, which is 20 22 25 carats; this reduces the old cobang to 41*s.* 10*d.* The new cobangs weigh 180 grains; the gold is about 16 carats fine, and the value 21*s.* 3*d.* The oban is thrice the value of the nobang.

The itjib is called by the Dutch golden bean, and is made of pale gold, of a parallelogramical figure and flat, rather thicker than a farthing, with many raised letters on one side and two figures or flowers in relief on the other; the value of this is ½ of a cobang. There are old itjibs also to be met with; these are thicker than the new ones, and in value 22 mace 5 candarines.

Nandiogin is a parallelogramical flat silver coin, of twice the thickness of a halfpenny, 1 inch long and ½ inch broad, and formed of fine silver. The edge is stamped with stars, and within the edges are raised dots. One side is marked all over with raised letters; and the other on its lower and larger moiety, is filled with raised letters, and at the same time exhibits a double moonlike figure. Its value is 7 mace

Itaganne and kodama are denominations by which various lumps of silver, without form or fashion, are known, which are neither of the same size, shape, nor value. The former of these, however, are oblong, and the latter roundish, for the most part thick, but sometimes, though seldom, flat. These pass in trade, but are always weighed in payment from one individual to another, and have a dull leaden appearance.

Semi is a denomination applied to pieces of copper, brass, and iron coin, which bear a near resemblance to our old farthings. They differ in size, value, and external appearance, but are always cast, and have a square hole in the middle, by means of which they may be strung together; and likewise have always broad edges. Of these are current, sjumon semi, of the value of 4 common semi, made of brass, and almost as broad as a halfpenny, but thin. The common semi are the size of a farthing, and made of red copper; 60 of them = 1 mace. Doosa semi is a cast iron coin, in appearance like the last, of the same size and value, but is so brittle that it is easily broken by the hand, or breaks in pieces when let fall on the ground.

The semi are strung 100 at a time, or as is most commonly the case, 96 on a rush. The coins in one of these parcels are seldom all of one sort, but generally consist of 2, 3, or more different kinds; in this case, the larger ones are strung on first, and then follow the smaller; the number diminishing in proportion to the number of large pieces in the parcel, which are of greater value than the smaller.

The schuit is a silver piece of 4 oz. 18 dwts. 16 grs. Troy, and is 9 oz. fine, which gives its value 1*l.* 5*s.* 3*d.* The name is Dutch, referring, probably, to its shape, like a boat.

Weights. — These are the candarine, mace, tael, catty, and picul, thus divided: —

10 candarines } = { 1 mace.
10 mace } = { 1 tael.
16 tacls } = { 1 catty.
100 catties } = { 1 picul.

The picul = 125 Dutch pounds, or 133 1/3 lbs. avoirdupois. It is, however, said to weigh only 130 lbs.

Measures. — The revenues of Japan are estimated by two measures of rice, the man and koif; the former contains 10,000 koifs, each 3,000 bales or bags of rice.

The long measure is the inc, which is about 4 Chinese cubits or 6½ feet English nearly; and 2½ Japanese leagues are computed to be about 1 Dutch league. — (*Milburn's Orient. Com.*)

NANKEEN, or NANKIN (Ger. *Nanking*; Du. *Nankings linnen*; Fr. *Toile de Nankin*; It. *Nanquino*; Span. *Nanquina*), a species of cotton cloth in extensive use

* The imports of copper, in 1828, amounted to 11,631 piculs, worth 988,635 florins.

in this country. It takes its name from Nanking, in China, a European corruption of Kyang-ning, the capital of the extensive province of Kyang-nan, where it is principally produced, and which also furnishes the greater part of the green teas. In the East, the manufacture is wholly confined to China.* The cloth is usually of a yellowish, though occasionally it is of a blue colour, and of different degrees of fineness; the broad pieces, called "the Company's nankeens," are generally of a better quality than the narrow ones, and are most esteemed. We produce imitation nankeens at Manchester and other places, but it must be admitted that they are inferior to the Chinese; neither lasting so long, nor holding their colour so well. The colour, whether yellow or blue, is given to the cloth by dyeing; for, though yellow cotton wool be raised in the East, the cloth made from it is too glaring. The nankeens brought to England come under the general denomination of piece goods. They are mostly made into trowsers and waistcoats for gentlemen's wear during summer, ladies' pelisses, &c. In some of the more southern parts of Europe, the warmer parts of Asia and America, and the British settlements in Africa, nankeen is worn by both sexes all the year round, and constitutes the principal article of attire. Latterly, however, they have become unfashionable in this country, and their importation has, in consequence, all but ceased, only 3,300 pieces having been imported in 1842. — (See article CANTON, for an account of the imports of Nankeen.)

NANTES, a large commercial city and sea-port of France, on the Loire, about 34 miles from its mouth, lat. 47° 13′ 6″ N., lon. 1° 32′ 44″ W. Population, in 1836, 75,150. Vessels of 200 tons burden come up to the city; but those of larger size load and unload in the roads of Paimbœuf, about 24 miles lower down the river.

Entrance to the Loire. — There are 3 entrances to the Loire. The first and most generally frequented is between the bank called *Le Four* and Point *Croisic*: there is a second between Le Four and the bank called *La Banche*; and the third, which in southerly winds is much resorted to, between the latter and the rocks called *La Couronne*. The navigation, which is naturally rather difficult, has been much facilitated by the erection of light-houses and beacons. Of the former, one has been recently constructed on the north part of Le Four, about a league from Croisic, in lat. 47° 17′ 53″ N., lon. 2° 38′ 3″ W. It is 56 feet high. The light is a revolving one; the flash, which continues for 7 seconds, being succeeded by a dark interval of 53 seconds. Two light-houses, called the Aiguillon lights, stand on the north side of the river, near its mouth; the lower light, adjoining *Point de Levi*, being in lat. 47° 14′ 33″ N., lon. 2° 15′ 46″ W. The light is fixed, and is 111 feet above the level of the sea. The upper Aiguillon light, situated about a mile N. 31° E. from the lower, is 127 feet high; it also is a fixed light, varied, however, by a flash every 3 minutes. A beacon tower, called the Turk, is erected on the southernmost extremity of La Banche; the course for vessels entering between it and *La Couronne*, is to bring the Aiguillon lights in one. The depth of water on the bar at the mouth of the river varies from 2 to 2¾ fathoms. At springs the rise is 14, and at neaps 7 or 8 feet. High water at full and change 3¾ hours.

Trade, &c. — Her situation renders Nantes the emporium of all the rich and extensive country traversed by the Loire, so that she has a pretty considerable import and export trade, particularly with the West Indies. The exports consist of all sorts of French produce, but principally of brandy, wine and vinegar, silk, woollen and linen goods, refined sugar, wheat, rye, biscuits, &c. The principal imports are sugar, coffee, and other colonial products, cotton, indigo, timber, hemp, &c. Nantes is a considerable *entrepôt* for the commerce of salt, large quantities being made in the dep., principally at Noirmutiers and Croisic. During the time that the slave trade was carried on, Nantes was more extensively engaged in it than any other French port.

The customs duties of Nantes produce, exclusive of those on salt, about 12,000,000 fr. a year, being in this respect inferior only to Marseilles, Havre, and Bordeaux.

Subjoined is a statement of the French and foreign ships that entered and cleared from the port in 1838, specifying the departments in which the French ships were engaged, and the number in each.

Branch of Trade.	Entered.		Cleared.	
	Ships.	Tons.	Ships.	Tons.
French ships in foreign trade - -	201	24,349		18,317
— colonial do. - -	60	15,255		19,291
— coasting do. - -	4,003	135,180	4,503	90,187
— fisheries - - -	13	2,475		
Foreign ships - - -	176	26,385		22,708
Steam-vessels chiefly to and from Bordeaux -	10	736		1,040
	4,463	204,380	4,672	151,543

* Of these, 40 vessels, of 4,615 tons, left in ballast.

Of the vessels engaged in the fisheries, 10 came from the banks of Newfoundland, laden with 15,665 cwt. of cod-fish and 290 cwts. of oil: 3 whalers brought in, during the same year, 13,433 cwts. of whale-oil, and 306 cwts. of whalebone. The pilchard fishery is also carried on with great activity; and employs, in the season, 700 boats, manned by about 3,000 seamen. Nantes has 2 weekly markets, and 12 yearly fairs, one of which, beginning May 25th, lasts 15 days. Living is cheap; and fish of many varieties, as well as the fine fruits of the S. of France, are abundant in the markets.

Monies, Weights, and *Measures* same as in the rest of France. — (See BORDEAUX.)

Taxes. — 2½ per cent. on coffee in bags; real on ditto in hhds., casks, &c.; 6 per cent. on cottons; real on indigo; 17 per cent. on Brazil muscovado sugar, 19 per cent. on Martinique and Guadaloupe ditto, 13 per cent. on ditto clayed.

* It was stated in the first edition of this work, on authority that should not have been trusted to, that the manufacture of nankeen was carried to great perfection in the East Indies: but, in point of fact, the manufacture is wholly unknown every where in the East except China.

NAPLES, a large city and sea-port in the south of Italy, the capital of the kingdom of the same name, the light-house being in lat. 40° 50′ 12″ N., lon. 14° 14′ 15″ E. Population, 350,000. Naples is well situated for commerce; but the perverse policy of the government has been most unfavourable to its growth, and has confined it within comparatively narrow limits.

Harbour. — The bay of Naples is spacious and is celebrated for its picturesque views. The harbour is formed by a mole, built nearly in the form of the letter L, having a light-house on its elbow. Within the mole there is from 3 to 4 fathoms water, the ground being soft. The water in the bay is deep, and there is no bar: it is, however, a good deal exposed to the south-westerly winds; and to guard against their effects, vessels lying in the bay moor with open hawse in that direction. There is no obligation to take a pilot on board, but it is usual to take one the first time that a ship anchors within the mole. The lighthouse has a revolving light. The period of revolution is 2 minutes, during the first of which the full strength of the light is continued, and during the second minute its brilliancy rapidly decreases. The height of the light is 161 feet above the sea, and it is visible at the distance of 18 or 20 miles. At the extremity of the mole is a low fixed light to guide vessels round its head.

Money. — Accounts are kept at Naples in ducati di regno of 100 grani. According to the new monetary system introduced in 1818, the unit of coins is the silver ducat = 3*s.* 5·2*d.* sterling. The ducat = 10 carlini; and there are coins of 1, 2, 5, and 12 carlini in proportion. Coins of a less value than 1 carlino are in copper. The smallest gold piece is the oncetta = 10*s.* 3½*d.* sterling.

Weights and Measures. — The commercial weights are the cantaro and rottolo. The cantaro *grosso* = 100 rottoli = 196½ lbs. avoirdupois = 89·105 kilog. = 184 lbs. of Hamburg = 180·4 lbs. of Amsterdam. The cantaro piccolo = 106 lbs. avoirdupois = 48 kilog.

In dry measure, the carro of corn contains 36 tomoli. The tomolo = 1·45 Winch. bush.

In wine measure, the carro is divided into 2 botti, or 24 barilli, or 1,440 caraffe. The carro = 264 English wine gallons. The regular pipe of wine or brandy = 132 English gallons.

In oil measure, the salma is divided into 16 staja, 256 quarti, or 1,536 misarette. The salma at Naples = 124 English wine gallons; at Gallipoli it is from 3 to 4 per cent. less; at Bari it is a little larger.

In long measure, the canna is divided into 8 palmi, or 96 onzie, and is = 6 feet 11 inches English. Hence the palmo = 10·38 English inches.

Eleven salme are allowed to a ship's last. — (*Nelkenbrecher*; *Kelly.*)

Exports and Imports. — The exports principally consist of the products of the adjacent country. Of these, silk is the most important. Olive oil is also a most important article; but it is principally supplied by Gallipoli, a town in the Terra d'Otranto, whence it is commonly called Gallipoli oil. The entire exports of oil from the kingdom of Naples have been estimated at about 200,000 salme, or 36,333 tuns, a year, which, taking its mean value when exported at 21*l.* per tun, is equivalent to the annual sum of 762,993*l.* — (See OLIVE OIL.) The other articles of export are wool, wine, brandy, dried fruits, red and white argol, tallow, liquorice, gloves, madder, hemp, linseed, cream of tartar, bones, lamb and kid skins, oak and chesnut staves, rags, saffron, &c. There is a great variety in the Neapolitan wines. The most esteemed is the *lacrima Christi*, a red luscious wine, better known in England by name than in reality, the first growths being confined to a small quantity only, which is chiefly reserved for the royal cellars. There are, however, large quantities of second-rate wines produced in the vicinity of Naples, such as those of Pozzuoli, Ischia, Nola, &c., which are sold under the name of *lacrima Christi*, and are largely exported. Several parts of Calabria produce sweet wines of superior quality. — (*Henderson's Ancient and Modern Wines*, p. 239.) The price of wine at Naples depends entirely on the abundance of the vintage; only a small quantity comes to England. The imports consist principally of English cottons and cotton twist, hardware, iron and tin, woollens, sugar, coffee, indigo, spices, &c. Naples is a good market for pilchards, and it requires a large supply of dried and barrelled cod.

Account of the Quantities of Merchandise imported into Naples in 1835, specifying the Countries whence they were imported, and the Quantities brought from each, with the Rate of Duty on each Article, and the Average Price thereof.

Articles.	Countries whence imported.							Total.	Rates of Duty.	Average Prices in 1835, Duty included.
	Great Britain and Newfoundland.	Norway and Russia.	Germany and Trieste.	France.	Spain and Portugal.	Genoa, Leghorn, Civita-Vecchia, &c.	Brazil, &c.			
									£ s. d.	£ s. d.
Alum - - cwt.	-	-	-	-	-	527	-	527	0 5 11½	0 15 10
Blankets - No.	94	-	-	14	-	-	-	108	0 6 11	1 7 8
Brass - - cwt.	19	-	328	7	-	-	-	354	0 11 10½	6 8 7½
wire - - lbs.	-	-	149	6,868	-	-	-	21,855	0 0 11½	0 0 11½
Cloth, broad - yds.	2,510	-	-	11,792	-	39,074	-	53,376	0 6 10	1 2 9½
rough - - —	11,472	-	-	-	-	-	-	11,475	0 1 1½	0 5 3½
Circassia - - —	72,918	-	-	6,422	-	-	-	79,342	0 0 8	various.
casimere - - —	42,879	-	-	9,991	531	1,596	-	54,998	0 0 8	0 8 4½
cassinets - - —	50,365	-	-	843	-	-	-	51,208	0 0 8	0 2 10
woollen stuffs - —	368,721	-	3,818	6,069	-	-	-	378,609	0 0 8	0 3 0½
Cotton twist - - cwt.	20,597	-	-	3	-	-	-	20,600	2 9 5½	9 11 11½ to 13 7 2½
cloth - - yds.	929,649	-	37,063	44,498	-	4,623	-	1,015,835	0 0 3½	various.
long cloth - —	88,762	-	-	-	-	-	-	88,762	0 0 3½	0 0 8½
and thread do. —	21,016	-	-	1,705	-	-	-	22,722	0 0 8	0 2 5½
knitted articles - cwt.	182	-	8	13	-	-	-	203	14 16 10½	various.
handkerchiefs - No.	622,280	-	23,670	10,341	-	5,552	-	661,843	1½d to 5d.	do.
muslin - - yds.	969,540	-	5,529	11,392	-	-	-	986,462	various.	do.
do. figured - —	96,124	-	-	212	-	-	-	96,336	do.	do.
do. embroidered - —	20	-	123	1,559	-	4,628	-	6,330	do.	do.
do. Lins - - —	21,465	-	-	4,208	-	-	-	25,675	do.	do.
velvet - - —	715,495	-	-	1,329	-	-	-	716,824	5½d. to 7½d	0 2 0½
Cassia lignea - - cwt.	273	-	-	13	-	-	-	286	4 18 11½	0 0 7 lb.
Cinnamon - - lbs.	13,725	-	-	-	-	-	-	13,725	0 1 10½	0 0 11
Coffee - - cwt.	2,597	-	-	3,071	-	-	41	5,709	2 9 0	5 4 10½
Cocoa - - —	850	-	-	13	530	-	-	1,393	1 12 8	5 11 5
Copper, cakes or ingots —	1,188	-	401	-	-	-	-	1,590	0 12 10½	5 4 10½
sheets - - —	860	-	217	1	-	-	-	1,081	0 19 9½	0 0 11½ lb.
old - - —	1,339	-	435	2	-	-	-	1,777	0 9 10½	5 0 11½
Cutlery - - —	623	-	1,125	326	-	34	-	2,109	1 19 7	various.
Fish, cod - - —	54,267	-	-	-	-	-	-	54,267	0 10 0½	1 6 8½
stock - - —	-	20,818	-	-	-	-	-	20,818	0 10 0½	1 4 9
herrings - - casks	3,508	-	-	-	-	-	-	3,508	0 8 11½ cwt.	1 3 9
pilchards - —	8,109	-	-	-	324	-	-	8,433	0 4 10½	1 19 7
do. small - —	196	-	-	-	953	-	-	1,149	0 4 10½	1 9 8½

Account of the Quantities of Merchandise imported into Naples, &c. — *continued.*

Articles.	Countries whence imported. Great Britain and Newfoundland.	Norway and Russia.	Germany and Trieste.	France.	Spain and Portugal.	Genoa, Leghorn, Civita-Vecchia, &c.	Brazil, &c.	Total.	Rates of Duty.	Average Prices in 1835, Duty included.
Glass - - cwt.	91	- -	1,061	104	-	3	-	1,260	£ s. d. 0 15 10	£ s. d. various.
Hardwares - - —	1,630	- -	490	707	-	23	-	2,851	1 19 7	do.
Hides, undressed - No.	70,410	- -	- -	18,081	5,555	76,303	4,961	174,301	0 8 11 cwt.	3 9 3½
dressed - - cwt.	- -	- -	- -	1,026	1,346	1,405	-	3,779	1 19 7	4 9 0½
heifer - - —	- -	- -	- -	- -	2	280	-	283	1 19 7	4 9 0½
calf - - —	- -	- -	15	596	2	443	-	1,058	1 19 7	various.
Iron - - - —	65,057	2,562	139	22	-	-	-	67,781	0 8 11	0 16 10
wire - - - —	210	- -	289	436	-	-	-	965	0 11 10½	various.
pig - - - —	2,870	- -	- -	- -	-	-	-	2,870	0 2 11½	0 7 11
sheet - - - —	744	- -	- -	- -	-	-	-	744	0 8 11	1 3 9
Indigo - - - —	1,127	- -	- -	4	-	6	-	1,137	1 11 8	0 4 11½ lb.
Lead - - - —	815	- -	- -	1,999	11,181	-	-	13,996	0 4 11½	unknown.
Linen cloth - - yds.	157,149	- -	23,708	6,416	-	-	-	187,272	0 0 7½	0 3 7
handkerchiefs - No.	- -	- -	- -	792	1,224	30,404	-	32,420	3½d. to 10d.	0 0 11½
Logwood - - cwt.	- -	- -	- -	2,052	-	4,550	-	6,683	0 1 9½	0 7 11
Mahogany - - —	- -	- -	- -	280	-	151	-	431	0 1 11½	various.
yellow - - —	35	- -	- -	1,057	-	1,669	-	2,761	0 1 11½	do.
Molasses - - casks	18	- -	- -	192	-	103	-	303	0 11 10½ cwt.	1 4 9
Pepper - - cwt.	147	- -	- -	217	73	-	-	438	2 9 0	4 7 1
Pitch - - - —	1,334	4,347	- -	500	-	-	-	6,182	0 1 8½	0 10 4½
Rum - - - casks	189	- -	- -	12	-	-	22	223	0 11 10½ cwt.	0 1 9½ gall.
Silk manufactures - lbs.	139	- -	- -	5,745	-	12,379	-	18,263	0 5 11½	various.
Solder, in cakes - cwt.	261	- -	- -	98	-	-	-	359	0 17 9½	unknown.
Steel - - - —	99	- -	2,698	- -	-	-	-	2,797	0 5 11½	1 9 8½
Sugar - - - —	35,998	- -	- -	3 109	778	-	2,537	42,426	0 3 6½	4 5 1½
Tar - - - —	- -	- -	- -	703	-	260	-	963	0 1 11½	0 10 10½
Tin, in sheets - No.	330,585	- -	- -	6,750	-	-	-	337,335	{ 225 sheets { 0 8 11	1 9 8½
Vitriol - - cwt.	4,362	- -	150	123	-	-	-	4,637	0 3 2½	0 9 6½
Wax - - - —	118	- -	112	562	404	-	-	2,143	1 15 7½	0 0 9¾ lb.
Whalebone - - —	84	- -	- -	- -	-	-	-	84	{ 0 7 11 { 0 17 9½ wrt.	

Account of the Quantities of the principal Articles exported from the Port of Naples in 1839, specifying the Quantities shipped for different Countries, and their Average Prices.

Articles.	England and Gibraltar.	France.	Other Countries.	Total in Neapol. Weights and Meas.	English Weight or Measure.	Total in Eng. Weights and Meas.	Average Price in £ sterling Money.
						Tons. Cwt. Qrs.	£ s. d.
Argols - - cantar	1,828	113	1,116	3,057	tons	312 2 2	22l. to 24l. 10s. ton
Almonds - - —	- -	11	211	222	—	19 8 2	53 10 0 ton
Aniseed - - —	- -	- -	44	44	—	3 17 0	19l. to 25l. ton
Bones - - —	- -	5,867	- -	5,867	—	513 7 1	1 5 0 ton
Bone shavings - - —	- -	147	1,867	2,014	—	184 2 0	4 15 0 ton
Brandy - - casks	11,275	2,165	12,723	29,163	{ casks of 132 galls. }	29,163	6 16 0 cask
Casks, used - - number	- -	780	1,090	1,870	number	1,870	0 6 8 each of 130 galls.
Cask staves, 5 palms - —	- -	4,490	1,933	6,423	—	6,423	0 10 8 per 100
4 palms - - —	- -	3,189	510	3,999	—	3,999	0 7 4 per 100
hoops - - bundles	- -	9,685	100	9,785	bundles	9,785	0 1 4 bundle
tops and bottoms - number	- -	1,289	- -	1,289	number	1,289	staves
Cream of tartar - lb. 12 oz.	1,155,703	32,515	100,892	1,289,110	lb. of 16 oz.	966,832½	3½d. to 4½d. lb. of 16 oz.
Coral - - cantar	- -	26	121	147	tons	12 17 1	23l. to 24l. ton
wrought - - —	- -	2	- -	2	—	0 3 2	
Essence of orange - lb. 12 oz.	550	6,563	1,866	8,979	lb. of 16 oz.	6,734½	5 6 8 lb. of 16 oz.
Figs - - - cantar	35	8,721	1,218	10,007	tons	876 9 3	11 10 0 ton
Flax - - - —	82	2	- -	7	—	7 0 1	57l. to 76l. ton
Wheat - - - —	- -	1	1,561	1,562	—	135 15 2	2 1 6 quarter
Indian corn - - —	- -	- -	130	130	—	11 7 2	1 17 7 quarter
Peas - - - —	- -	409	- -	409	—	35 15 3	1 5 2 quarter
Lupins - - tomoli	- -	1,009	19,523	20,532	quarters	380	1 5 2 quarter
Linseed - - cantar	1,926	2,257	400	4,583	tons	401 0 1	1 9 8 quarter
Hay - - bundles	- -	- -	471	471	bundles	471	6 6 per 100
Leaves of Indian corn —	- -	4,056	30	4,086	—	4,086	2 7 6 ton
Hemp - - cantar	1,423	13,646	605	15,674	tons	1,371 9 2	26 15 6 ton
Hoops - - —	- -	87	30	117	—	10 4 3	9l. 10s. to 12l. 5s. ton
Lamb and kid skins - —	470	1,676	4	2,150	—	188 2 2	66 10 0 ton
Leather gloves - pairs	- -	12,456	257,040	269,496	pairs	269,496	7d. to 1s. pair
Leather parings - cantar	- -	33	- -	33	tons	2 17 3	12 0 0 ton
Lemon juice - - casks	- -	363	20	383	{ casks of 132 galls. }	383	{ 3 6 8 cask of 132 gallons
Linseed paste - cantar	1,915	- -	- -	1,915	tons	170 3 3	2 10 0 ton
Liquorice paste - —	4,114	5,113	4,100	13,327	—	1,166 2 1	45 0 0 ton
Macaroni - - —	100	267	724	1,091	—	95 9 1	21 0 0 ton
Madder root - - —	9,959	796	1,776	12,531	—	1,096 9 1	27 15 0 ton
Madder, ground - —	88	261	627	976	—	85 8 0	32 10 0 ton
Nut galls - - —	2	508	168	678	—	59 6 2	49 10 0 ton
Nuts and walnuts - —	110	903	902	1,915	—	167 11 1	19 0 0 ton
Olive oil (from the provinces) - straje	100,595	1,043,833	401,084	1,545,512	gallons	4,153,542	0 2 0 gallon
Pigeons' dung - cantar	- -	- -	49	49	tons	4 5 3	3 10 0 ton
Rags, woollen - —	- -	- -	4,679	4,679	—	409 8 1	5 15 0 ton
Raisins, dried - —	20	384	207	611	—	53 9 1	11 10 0 ton
Silk, raw - - lb. 12 oz.	52,170	167,985	7,811	227,966	lb. of 16 oz.	170,975	0 19 2 lb. of 16 oz.
manufactured - —	- -	10,345	2,034	14,379	—	9,285	2s. 2d. to 3s. 2d. yard
dyed - - —	50	85,542	30,695	116,287	—	87,215	1 3 2 lb. of 16 oz.
waste - - —	3,268	1,390	500	5,158	—	3,869	0 3 6 lb. of 16 oz.
handkerchiefs - number	- -	8	1,380	1,388	number	1,388	3s. 4d. to 5s. each
Soap, soft - - cantar	27 11 r.	5 25 r.	- -	33 24	tons	2 18 1	0 2 0 lb. of 16 oz.
hard - - —	- -	6 50 r.	- -	6 50	—	0 11 44 lbs	42 0 0 ton
Tinder (Esca) - lb. 12 oz.	- -	30,730	46,466	77,196	lb. of 16 oz.	57,897	0 0 6½ lb. of 16 oz.
Tallow - - cantar	1,195	3,673	16	4,884	tons	427 7 0	40 0 0 ton
Wool - - —	1,354	1,930	1,262	4,546	—	397 15 2	76l. to 133l. ton
Wine in casks - casks	264	273	850	1,387	{ casks of 132 galls. }	1,387	
in bottles - bottles	754	530	4,081	5,365	bottles	5,365	
Zaffres - - lb. 12 oz.	290	587	2,219	3,726	lb. of 16 oz.	2,795	{ 16s. to 16s. 10d. lb. of 16 oz.

ount of the Arrivals of British and Foreign Shipping at the Principal Ports within the Consulate of Naples in 1841.

Nations.	Arrivals.			Departures.		
	Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.
NAPLES:—						
British	133	20,948	1,182	118	17,368	1,030
French	67*	13,975	1,509	67	13,975	1,309
Spanish	1	85	8	1	85	8
Sardinian	52†	8,682	868	52	8,682	868
Tuscan	66‡	12,492	1,249	66	12,492	1,249
Roman	3	237	23	3	237	23
Austrian	2	378	21	2	378	21
Swedish	4	1,150	52	4	1,150	52
Dutch	1	154	11	1	154	11
Danish	1	75	7	1	75	7
Russian	4	1,378	62	4	1,378	62
Greek	1	115	10	1	115	10
American	1	367	16	1	367	16
Total	336	59,336	4,818	321	56,456	4,667
GALLIPOLI:—						
British	14	1,685	108	14	1,685	108
Neapolitan	41	6,856	453	41	6,856	453
Total	55	8,541	561	55	8,541	561
BARLETTA:—						
British	20	3,384	169	17	2,865	140
Neapolitan	1	299	16	1	299	16
Total	21	3,683	185	18	3,164	156
CASTEL-A-MARE:—						
British	7	1,546	72	6	1,369	59
Neapolitan	5	1,380	80	5	1,380	80
Total	12	2,926	152	11	2,749	139

* 48 of the 67 vessels were steamers.
† 35 of the 52 vessels were steamers.
‡ 41 of the 66 vessels were steamers.

Shipping, Port Charges, &c. — The charges of a public nature on a *national ship* of 300 tons burden entering and clearing out from the port of Naples, are as under:—

		D.	gr.
On entering. — For expediting		1	60
(Equal to 5*s.* 8*d.* sterling.)			
On clearing out. — Expediting		1	60
Bill of health		1	20
Tonnage duty at 4 grains per ton		12	0
(Equal to about 2*l.* 9*s.* 4*d.* sterling.)	*D.*	14	80

Charges on a *foreign ship* of 300 tons burden:—

		D.	gr.
On entering. — Visa		0	55
Expediting		6	60
Stamp		0	14
(Equal to about 1*l.* 4*s.* 4*d.* sterling.)	*D.*	7	29
On clearing out. — Passport			
Expediting		6	
Stamp		0	
Bill of health		2	
Police		0	
Port officers		0	
Registering papers		0	
Tonnage duty at 40 grains per ton		120	
(Equal to about 21*l.* 17*s.* 2*d.* sterling.)	*D.*	131	14

Custom-house Regulations. — Masters of merchantmen are bound, within 24 hours of their arrival, to furnish the Custom-house with a general manifest of their cargoes, provisions, and stores; and the master, when consignee, or the consignees, are bound, within 48 hours after the arrival of the ship, to send in a declaration or manifest in detail, of all goods on board. Should the consignees omit to render the manifest in detail within 48 hours, they are subjected to a fine of 30 per cent. upon the non-specified articles.

This declaration or manifest cannot be corrected after the 48 hours are elapsed; and the master or consignee is liable to a fine of 30 ducats for every package erroneously declared. This, however, is usually remitted, unless there be suspicion of fraud, upon application to the director-general of the customs. Masters should be particularly careful in manifesting their salt and tobacco, as the slightest error with respect to them subjects the vessel to seizure. All goods, provisions, &c. not manifested, are liable to seizure.

Quarantine Regulations, are rigorously and arbitrarily enforced. The free admission, conditional reception, or absolute refusal of a vessel arriving at the port is determined by the wholesome or unwholesome character of the place from which she comes. The place may be, 1. Infected. 2. Suspicious. 3. Endangered. Or, 4. Secure. In the first case, the vessel is *refused altogether*; in the 2d, she is admitted on a long quarantine; in the 3d, she is received on a short quarantine; in the 4th, she is allowed *free pratique*. If the vessel be a ship of war, her quarantine is performed in the Bay of Naples; the days of her passage being allowed in the calculation: if a merchantman, quarantine is performed at Nisita, an island about 6 miles from Naples. It commences from the day of her arrival, if in ballast, or loaded with unsusceptible merchandise; if otherwise, from the day of the discharge of her cargo. For vessels from endangered ports, the quarantine is not less than 14, nor more than 28 days. For vessels from suspicious places, not less than 24, nor more than 40 days. For vessels from excepted places, not less than 7, nor more than 21 days. No foul lazaretto exists at Naples; but at Nisita there is a lazaretto of expurgation for vessels from suspicious or endangered districts or territories. Vessels from infected places usually go to Leghorn or Genoa, where they may unload in a *lazaretto sporco*. The fees charged on ships performing quarantine are heavy. No distinction is made between national and foreign bottoms. The conduct of the board of health, in frequently declaring places infected or suspicious on mere unfounded reports, is loudly objected to by the merchants; the more especially since, when such declaration is made, it is not revoked till the report be officially contradicted by the government of the country in question.

Brokers, Commission, &c. — No person can legally act as a broker unless authorised by government. All patented brokers are obliged, by way of security, to hold funded property producing 500 ducats of "rente," or a dividend of 83*l.* 6*s.* 8*d.* sterling. Many persons, however, act as brokers without being *patented*, but no contract made by them is admitted in a court of law. Any person may set up as a merchant, by giving due notice to the *Camera di Commercio*.

Rates of Commissi and Charges established by the Merchants at Naples.

Commission on sales of fish	3 per cent.
Do. on manufactures of all kinds	2 —
Do. on all other goods	2 —
Do. on goods purchased	2 —
Do. on receiving and forwarding	½ —
Do. on attempting sales	1 —
Do. on re-sale of goods for the same account on which a purchasing commission has been charged	1½ —
Do. on chartering vessels, or procuring charters	3 —
Do. on collecting freights on chartered ships	2 —
Do. on ships both inwards and outwards	4 —
Do. on advances on letters of credit	1 —
Do. on effecting insurances	½ —
Do. on negotiating bills	½ —
Do. on receiving and paying or remitting	½ —
Del credere on sales	2 —
Do. on purchase of oil, not exceeding 3 months	1 —
Do. do. do., not exceeding 6 do.	2 —
Do. per underwriters	½ —

Tares usually allowed by the Custom-house at Naples on the leading articles of importation:—

Sugar, in hogsheads	12 per cent.
Do. in boxes or barrels	14 —
Do. in Brazil chests	18 to 20 per cent.
Do. in bags	6 rottoli.
Loaves, in casks	real tare.
Do. extra for paper and strings	5 per cent.
Indigo	real tare.
Tin, in barrels, each	12 rottoli.
Alum, in casks	10 per cent.
Wax, real tare and extra	2 to 3 per cent.
Cod and stock-fish	1 per cent.
Coffee, in casks	real tare.
Do. in bags, each	3 rottoli.
Pepper, do.	—
Pimento, do.	—
Cocoa, do.	3 do. 2 ad. 5 per cent.
Cocoa, in casks	for dust, real tare.
Cinnamon, Insingle bale	18 lbs. of Naples.
Do. in double bale	25 lbs. —
Cassia lignea, cochineal, and bark	real tare.

Insurance. — There are 4 or 5 companies for the insurance of ships, and 1 for lives. Their terms are generally higher than those of similar establishments in London. Houses are never insured at Naples, their construction rendering fires very rare. The companies are established by royal authority, the shareholders being only liable for the amount of their shares.

Banking. — The principal merchants of Naples are all, more or less, bankers, inasmuch as they advance money on letters of credit, and deal in foreign exchanges, and other financial operations. But the only banking establishment at present in existence, is the Bank of the Two Sicilies, founded by government, and guaranteed by the possession of landed property. It is not a bank for the issue of notes on credit, like the Bank of England, but for their issue on deposits, somewhat on the principle of the Bank of Hamburg. Government makes all its payments by means of notes or orders on the bank; and they are issued to individuals for whatever sums they desire, on their paying an equivalent sum of money to the bank. These notes or orders form a considerable part of the circulating medium of Naples; they are paid in cash on demand.

Government has also established a discount office, where bills, indorsed by 4 persons of good credit, and not at more than 3 months' date, are discounted at 4 per cent.

Warehousing System. — The whole policy, if we may so term it, of the Neapolitan government, with respect to commerce, is such as would disgrace a nation of Hottentots. We believe that it is entitled to the not very enviable distinction of being the only government that has suppressed, after having established, the warehousing system, or *scala franca*. This was done in 1824. At present all goods imported into Naples may be deposited, on paying rent, in warehouses under the joint locks of the king and the importer, for 2 years. At the end of the 1st year, half the import duty must be paid, and at the end of the 2d year, the other half. Whether sold or not, the goods must then be removed from the warehouses; and in paying the duties no deduction is made on account of damage in the warehouse, unless certain forms be complied with, the observance of which is invariably reckoned more burdensome than

allowed on the exportation of any sort of foreign produce: on the contrary, should it happen to be of the same species as native produce subject to a duty on export, it is charged, in addition to the duty it had paid on importation, with an export duty equal to that laid on the corresponding native product!

The influence of this system is most disastrous. So large a city as Naples, and so advantageously situated for the commerce with the Black Sea, the Levant, Greece, Spain, Northern Italy, Northern Africa, &c., would, had it been allowed to avail itself of its natural advantages, have become a most important *entrepôt*. But, in consequence of the regulations now specified, no goods are carried to it except those destined for home consumption, and these are always supplied sparingly; for, however much the price of an article may be depressed at Naples, it is impossible, owing to the oppressive duties charged on its importation not being drawn back on exportation, for the merchant to send it to Leghorn, Genoa, Trieste, or any other place where it is more in demand. It would really seem as if the government had been exerting its ingenuity to find out the means of driving commerce, and with it enterprise and industry, from its shores; and it is not to be denied that it has been, in so far, eminently successful.

Credit, &c. — Goods are universally sold at long credits, mostly from 4 to 8 months; and for manufactured goods, sometimes longer. On sales of indigo, from 12 to 18 months' credit is given. Discount for ready money is at the rate of 6 per cent. per annum. Merchants are arranged by the Chamber of Commerce into 5 different classes; and a 6 months' credit is given at the Custom-house for duties, to the extent of 60,000, 40,000, 30,000, 20,000, and 15,000 ducats, to individuals, according to the class in which they happen to be enrolled. But this is of little importance. Unless the transactions of a ·hant be very limited indeed, the duties h[illegible]s to pay amount to much more than the credit he is allowed.

Tariff. — The duties on exports and imports are such as might be expected from a government that has suppressed the warehousing system, and allowed no drawbacks. The following are the duties charged on the principal articles of export from Naples: —

Tariff of Duties on the principal Articles of Export in force at Naples in 1842.

	Neapolitan.		English.	
	Weight	Money.	Weights.	Money.
		D. gr.		*£ s. d.*
Cocoons (prohibited).				
Cotton		1 1	per cwt.	0 1 10
Horse hair		5 0	—	0 9 8
Wool		0 50	—	0 0 11
Oil in native vessels		3 38	per tun	3 0 0
Do. in foreign vessels		4 92	—	4 10 0
Pitch, white		2 40	—	0 4 6
Do., black		1 80	—	0 3 4
Liquorice root		1 20	—	0 2 3
Soda seed (prohibited).				
Sponges		3 50	—	0 6 8
Rags, white			—	0 15 2
Do., coloured			—	0 3 8
Cork			—	0 0 11
Argol			—	0 5 8
Saffron			per lb.	0 0 2½
Wheat, and all other sorts of grain, when exported in native vessels, *pay no duty.*				
Do., exported in foreign vessels	per cantaro		per cwt.	0 0 6½

Of these duties, that on oil is by far the most objectionable. Even though Naples enjoyed a monopoly of this valuable product, the imposition of such a duty would be wholly indefensible on any sound principle. But when, instead of having a monopoly of the oil trade, the Neapolitans are exposed to the keen competition of the Tuscans, Genoese, Spaniards, &c., the imposition of a heavy export duty is in the last degree destructive. It depresses that branch of industry which is most suitable for the country, and gives a corresponding encouragement to its extension amongst foreigners. The increased duty of 30*s.* a tun on oil exported in foreign ships is, of course, intended to force the employment of native ships: but it has not had, and could not rationally be expected to have, any such consequence; its only effect being to tempt foreigners to make a corresponding addition to the duties on oil, when imported in Neapolitan ships. Such regulations are never, in fact, productive of any thing except injury to those by whom they are enacted.

The duties on most sorts of imported articles are extremely oppressive, being seldom under 100, and often above 150 per cent. *ad valorem!* On coffee, the duty is no less than 49*s.* per cwt.; on sugar it varies from 41*s.* 10*d.* to 62*s.* 9*d.* per do.; on tea it is 30*s.* per do.; on cotton wool it varies from 19*s.* 8*d.* to 37*s.* 4*d.* per do. The duty on cotton and woollen manufactures is imposed by the piece, and is, in common with all the other duties, most exorbitant. Even the indispensable article iron is charged with 8*s.* 4*d.* per cwt.! These duties have been imposed partly for the sake of revenue, and partly in the view of encouraging domestic manufactures; but they have not accomplished either object. The inordinate extent to which they have been carried has made them advantageous only to the smuggler, and ruinous to every one else. How, indeed, could it be otherwise? The coast of Naples, exclusive of Sicily, stretches from 800 to 1,000 miles; in many places it is uninhabited, while, in a great number of others, the people are not more than half civilised. The facilities for smuggling are, therefore, incalculably great; and, combined with the inadequate remuneration of the customs' officers, and the ease with which they are corrupted, our only wonder is, not that smuggling is in a thriving state, but that there should be any legitimate traffic. The latter, indeed, is principally confined to Naples, where a stricter police is established; for it is not uncommon to find the same articles, in country towns at no great distance from the capital, selling for ½ or ⅓ of their cost in it. In a country subjected to such a commercial code as Naples, the smuggler is a great public benefactor. He is, in fact, the natural enemy of oppressive duties and prohibitions. These bring him into the field, and make him put forth all his enterprise and energy: and it is fortunate for the best interests of society that he is uniformly victorious over penalties, confiscations, racks, and gibbets; and cannot be defeated otherwise than by the adoption of enlarged and liberal principles of commercial policy.

Of the direct taxes, the most productive is the *fondiaria*, or tax on rent, producing about 1,240,000*l.* a year. It was imposed during the French occupation, when it was fixed at 25 per cent. of the sum received by the landlord. It has not been altered since; and as agricultural produce has materially declined in price, while the rents of houses in towns, and particularly in the capital, have very much increased, its unequal pressure is much complained of.

The perverse policy we have thus endeavoured to develope, cannot surely be permitted to exist much longer. The reasonings of Filangieri, and other able native economists, might have forewarned the go-

vernment of the real nature of that system of prohibition and restriction which it has laboured, ever since its restoration, to protect and defend. But facts have now taken the place of theory; and the results of the system are too obvious and too mischievous, not to arrest the attention of every one, and to impress the necessity of some radical alterations. Considering the great natural fertility, varied productions, and advantageous situation of Naples and Sicily, it is plain that nothing more than freedom and security are required to render them among the richest, most industrious, and flourishing countries of Europe. But, instead of this, the fetters laid upon commerce, by depriving the inhabitants of a market for their productions, and, consequently, of the most powerful stimulus to industry and invention, have paralysed all their energies, and immersed them in poverty, sloth, and barbarism. It is surely high time that a different line of policy were adopted. At Naples, a reform may be undertaken without (which is not always the case elsewhere) endangering any thing either useful or valuable. Its political economy is such that no change, be it what it may, can make matters materially worse than they are at this moment. But it would be the easiest thing in the world to lay the foundations of a great and rapid improvement. To effect this, government has only to abolish all duties and restrictions on exportation, to establish the warehousing system, and to reduce the duties on importation to ⅓ or ¼ part of their present amount. If it do this, it will add prodigiously to its own revenue; at the same time that it will do 10 times more to rouse the dormant energies and to augment the wealth of its subjects, than it is possible to do by any other means.

In compiling this article, we have been much indebted to the carefully drawn up, and judicious *Answers* of the former British consul, Mr. Goodwin, now in Palermo, to the *Circular Queries*, to various native works on Naples, and to some valuable *private communications*. We have also looked into the works of a good many English and foreig[illegible] dom with much advantage. They are filled with accounts, a thousand times repeated, of antiquities, Vesuvius, the churches, theatres, lazzaroni, &c.; but few among them communicate any information from which any just ideas can be formed of the state of industry and commerce, the financial system of the country, &c. The statistical works of the Neapolitans are equally defective. They are overlaid with insignificant details, while they neglect altogether, or pass slightly over, the mo[illegible] arise from the jealousy of government; but the English travellers can make no such apology for their defects.

NAVIGATION LAWS. These laws form an important branch of Maritime Law. In this country they are understood to comprise the various acts that have been passed, defining British ships, the way in which such ships are to be manned, the peculiar privileges enjoyed by them, and the conditions under which foreign ships shall be allowed to engage in the trade of the country, either as importers or exporters of commodities, or as carriers of commodities from one part of the country to another.

Sketch of the History and Principles of the Navigation Laws. — The origin of the Navigation Laws of England may be traced to the reign of Richard II., or perhaps to a still more remote period. But, as no intelligible account of the varying and contradictory enactments framed at so distant an epoch could be compressed within any reasonable space, it is sufficient to observe, that, in the reign of Henry VII., two of the leading principles of the navigation law were distinctly recognised, in the prohibition of the importation of certain commodities, unless imported in ships belonging to English owners, and manned by English seamen. In the early part of the reign of Elizabeth (*5 Eliz. c. 5.*), foreign ships were excluded from our fisheries and coasting trade. The republican parliament gave a great extension to the navigation laws, by the act of 1650, which prohibited all ships, of all foreign nations whatever, from trading with the plantations in America, without having previously obtained a licence. These acts were, however, rather intended to regulate the trade between the different ports and dependencies of the empire, than to regulate our intercourse with foreigners. But in the following year (9th of October, 1651) the republican parliament passed the famous *Act of Navigation*. This act had a double object. It was intended not only to promote our own navigation, but also to strike a decisive blow at the naval power of the Dutch, who then engrossed almost the whole *carrying trade* of the world, and against whom various circumstances had conspired to incense the English. The act in question declared, that no goods or commodities whatever, of the growth, production, or manufacture of Asia, Africa, or America, should be imported either into England or Ireland, or any of the plantations, except in ships belonging to English subjects, and of which the master and the greater number of the crew were also English. Having thus secured the import trade of Asia, Africa, and America, to the English ship owners, the act went on to secure to them, as far as that was possible, the import trade of Europe. For this purpose, it further enacted, that no goods of the growth, production, or manufacture of any country in Europe, should be imported into Great Britain, except in British ships, or *in such ships as were the real property of the people of the country or place in which the goods were produced, or from which they could only be, or most usually were, exported.* The latter part of the clause was entirely levelled against the Dutch, who had but little native produce to export, and whose ships were principally employed in carrying the produce of other countries to foreign markets. Such were the leading provisions of this famous act. They were adopted by the regal government which succeeded Cromwell, and form the basis of the act of the 12th Car. 2. c. 18., which continued, to a very recent period, to be the rule by which our naval intercourse with other countries was mainly regulated; and has been pompously designated the *Charta Maritima* of England!

In the statute 12 Car. 2. c. 18., the clause against importing foreign commodities, except in British ships, or in ships belonging to the country or place where the goods were produced, or from which they were exported, was so far modified, that the prohibition was made to apply only to the goods of Russia and Turkey, and to certain articles since well known in commerce by the name of *enumerated* articles, leave being at the same time given to import all other articles in ships of any description. But this modi-

fication was of very little importance; inasmuch as the enumerated articles comprised all those that were of most importance in commerce, as timber, grain, tar, hemp and flax, potashes, wines, spirits, sugar, &c. Parliament seems, however, to have very speedily come round to the opinion that too much had been done in the way of relaxation; and in the 14th of Charles II. a supplemental statute was passed, avowedly with the intention of obviating some evasions of the statute of the preceding year, which it was affirmed had been practised by the Hollanders and Germans. This, however, seems to have been a mere pretence, to excuse the desire to follow up the blow aimed, by the former statute, at the carrying trade of Holland. And such was our jealousy of the naval and commercial greatness of the Dutch, that, in order to cripple it, we did not hesitate totally to proscribe all trade with them; and to prevent the possibility of fraud, or of clandestine or indirect intercourse with Holland, we went so far as to include the commerce with the Netherlands and Germany in the same proscription. The statute of the 14th Car. 2. prohibited all importation from these countries of a long list of enumerated commodities under any circumstances, or in any vessels, whether British or foreign, under the penalty of seizure and confiscation of the ships and goods. So far as it depended on us, Holland, the Netherlands, and Germany were virtually placed without the pale of the commercial world! And though the extreme rigour of this statute was subsequently modified, its principal provisions remained in full force until the late alterations.

The policy, if not the motives, which dictated these statutes, has met with very general eulogy. It has been said, and by no less an authority than Dr. Smith, that national animosity did, in this instance, that which the most deliberate wisdom would have recommended. "When the act of navigation was made," says he, "though England and Holland were not actually at war, the most violent animosity subsisted between the two nations. It had begun during the government of the long parliament, which first framed this act, and it broke out soon after in the Dutch wars during that of the Protector and of Charles II. It is not impossible, therefore, that some of the regulations of this famous act may have proceeded from national animosity. They are as wise, however, as if they had all been dictated by the most deliberate wisdom. National animosity at that particular time aimed at the very same object which the most deliberate wisdom would have recommended, — the diminution of the naval power of Holland, the only naval power which could endanger the security of England. The act of navigation *is not favourable to foreign commerce, or to the growth of that opulence which can arise from it.* The interest of a nation in its commercial relations to foreign nations is, like that of a merchant with regard to the different people with whom he deals, to buy as cheap and to sell as dear as possible. But the act of navigation, by diminishing the number of sellers, must necessarily diminish that of buyers; and we are thus likely not only to buy foreign goods dearer, but to sell our own cheaper, than if there was a more perfect freedom of trade. As defence, however, is of much more importance than opulence, the act of navigation is, perhaps, the wisest of all the commercial regulations of England." — (*Smith's Wealth of Nations*, p. 204.)

It may, however, be very fairly doubted, whether, in point of fact, the navigation law had the effects here ascribed to it, of weakening the naval power of the Dutch, and of increasing that of this kingdom. The Dutch were very powerful at sea for a long period after the passing of this act; and it seems natural to conclude, that the decline of their maritime preponderance was owing rather to the gradual increase of commerce and navigation in other countries, and to the disasters and burdens occasioned by the ruinous contests the Republic had to sustain with Cromwell, Charles II., and Louis XIV., than to the mere exclusion of their merchant vessels from the ports of England. It is not meant to say that this exclusion was altogether without effect. The efforts of the Dutch to procure a repeal of the English navigation law show that, in their apprehension, it operated injuriously on their commerce.* It is certain, however, that its influence in this respect has been greatly over-rated in this country. *Excessive taxation*, and not our navigation law, was the principal cause of the fall of profits, and of the decline of manufactures, commerce, and navigation, in Holland. "Les guerres," says the well-informed author of the *Commerce de la Hollande*, "terminées par les traités de Nimegue, de Ryswick, d'Utrecht, et enfin la dernière par le traité d'Aix-la-Chapelle, ont successivement obligé la République de faire usage d'un grand crédit, et de faire des emprunts énormes pour en soutenir les fraix. Les dettes ont surchargé l'état d'une somme immense d'intérêts, qui ne pouvoient être payés que par *une augmentation excessive d'impôts*, dont il a fallu faire porter la plus forte partie par les consommations dans un pays qui n'a qu'un territoire extrêmement borné, et par conséquent par l'industrie. Il a donc fallu faire enchérir infiniment la main-d'œuvre, Cette cherté de la main-d'œuvre a non seulement restreint presque toute sorte de fabrique et d'industrie à la consommation intérieure,

* In the treaty of Breda, agreed upon in 1667, between the States General and Charles II., the latter undertook to procure the repeal of the navigation law. But the subject was never agitated in either house of parliament.

mais elle a encore porté un coup bien sensible au commerce de frêt, partie accessoire et la plus précieuse du commerce d'economie : car cette cherté a rendu la construction plus chere, et augmenté le prix de tous les ouvrages qui tiennent à la navigation, même de tous les ouvrages des ports et des magasins. Il n'étoit pas possible que l'augmentation du prix de la main-d'œuvre ne donnât, malgré tous les efforts de l'économie Hollandoise, un avantage sensible aux autres nations qui voudroient se livrer au commerce d'économie et à celui de frêt." — (Tome ii. p. 211.)

This extract, which might, were it necessary, be corroborated by others to the same effect from all the best Dutch writers, show that it is not to our navigation law, nor to the restrictive regulations of other foreign powers, but to the abuse of the funding system, and the excess of taxation, that the decline of the commercial greatness and maritime power of Holland was really owing. Neither does it appear that the opinion maintained by Dr. Smith and others, that the navigation law had a powerful influence in augmenting the naval power of this country, rests on any better foundation. The taste of the nation for naval enterprise had been awakened, the navy had become exceedingly formidable, and Blake had achieved his victories, before the enactment of this famous law. So far, indeed, is it from being certain that the navigation act had, in this respect, the effect commonly ascribed to it, that there are good grounds for thinking it had a precisely opposite effect, and that it operated rather to diminish than to increase our mercantile navy. It is stated in Roger Coke's *Treatise on Trade*, published in 1671 (p. 36.), that this act, by lessening the resort of strangers to our ports, had a most injurious effect on our commerce; and he further states that we had lost, within 2 years of the passing of the act of 1650, the greater part of the Baltic and Greenland trades. — (p. 48.) Sir Josiah Child, whose treatise was published in 1691, corroborates Coke's statement: for while he decidedly approves of the navigation law, he admits that the English shipping employed in the Eastland and Baltic trades had decreased at least *two thirds* since its enactment, and that the foreign shipping employed in these trades had proportionally increased. — (*Treatise on Trade*, p. 89. Glasg. edit.) Exclusive of these contemporary authorities, it may be worth while to mention that Sir Matthew Decker, an extensive and extremely well-informed merchant, condemns the whole principle of the navigation act; and contends, that instead of increasing our shipping and seamen, it had diminished them both; and that, by rendering the freight of ships higher than it would otherwise have been, it had entailed a heavy burden on the public, and been one of the main causes that had prevented our carrying on the fishery so successfully as the Dutch. — (*Essay on the Causes of the Decline of Foreign Trade*, p. 60. ed. 1756.)

There does not seem to be any very good grounds on which to question these statements; and they are at all events sufficient to show, that the assertions of those who contend that the navigation laws had a prodigious effect in increasing the number of our ships and sailors, must be received with very great modification. But, suppose that all that has been said by the apologists of these laws were true to the letter; suppose it were conceded, that when first framed, the Act of Navigation was extremely politic and proper; that would afford but a very slender presumption in favour of the policy of supporting it in the present day. Human institutions are not made for immortality: they must be accommodated to the varying circumstances and exigences of society. But the situation of Great Britain and the other countries of Europe has totally changed since 1650. The envied wealth and commercial greatness of Holland have passed away: we have no longer any thing to fear from her hostility: and "he must be, indeed, strangely influenced by antiquated prejudices and by-gone apprehensions, who can entertain any of that jealousy from which the severity of this law principally originated." London has become, what Amsterdam formerly was, the grand emporium of the commercial world — *universi orbis terrarum emporium:* and the real question which now presents itself for our consideration is, not what are the best means by which we may rise to naval greatness? but — what are the best means of preserving that undisputed preeminence in maritime affairs to which we have attained?

Now, it does not really seem that there can be much difficulty in deciding this question. Navigation and naval power are the children, not the parents — the effect, not the cause — of commerce. If the latter be increased, the increase of the former will follow as a matter of course. More ships and more sailors become necessary, according as the commerce between different and distant countries is extended. A country in the condition of Great Britain in the reign of Charles II., when her shipping was comparatively limited, might perhaps be warranted in endeavouring to increase its amount, by excluding foreign ships from her harbours. But it is almost superfluous to add, that it is not by any such regulations, but solely by the aid of a flourishing and widely extended commerce, that the immense mercantile navy we have now accumulated can be supported.

But it is extremely easy to show, that to have continued to enforce the provisions of

the old navigation law, in the present state of the world, would have been among the most efficient means that could have been devised for the destruction of our commerce. The wealth and power to which Britain has attained, has inspired other nations with the same envious feelings that the wealth of Holland formerly generated in our minds. Instead of ascribing our commercial and manufacturing superiority to its true causes,—to the comparative freedom of our constitution, the absence of all oppressive feudal privileges, the security of property, and the fairness of our system of taxation,—our foreign rivals contend that it has been entirely owing to our exclusive system; and appeal to our example to stimulate their respective governments to adopt retaliatory measures, and to protect them against British competition. These representations have had the most injurious operation. In 1787, the American legislature passed an act, copied to the very letter from our navigation law, with the avowed intention of its operating as a retaliatory measure against this country. The Northern powers threatened to act on the same principle; and would have carried their threats into effect but for timely concessions on our part. The same engines by which we laboured to destroy the trade of Holland were thus about to be brought, by what we could not have called an unjust retribution, to operate against ourselves. Nor can there be a doubt, had we continued to maintain our illiberal and exclusive system, and refused to set a better example to others, by recurring to sounder principles, that we should have run a very great risk of falling a victim to the vindictive spirit which such short-sighted and selfish policy would have generated.

For these reasons, it seems difficult to question the policy of the changes that have recently been effected in the navigation laws, partly by the bills introduced by Mr. (now Lord) Wallace in 1821, and Mr. Huskisson in 1825, and partly by the adoption of what has been called the *Reciprocity System*. Under the existing law (6 Geo. 4. c. 109., see *post*) the intercourse with all European countries in amity with Great Britain is placed on the same footing. The memorials of our former animosity, and of our jealousy of the prosperity of certain of our neighbours, have thus been abolished; and the same law is henceforth to regulate our commerce with the Continent. This uniformity, besides giving greater scope to mercantile operations, and extending our traffic with some of our most opulent neighbours, removes a great source of embarrassment and litigation; at the same time that it detracts considerably from that selfish character which had been believed on the Continent, and not without considerable reason, to be the animating principle of our commercial system.

The distinction between enumerated and non-enumerated goods is still kept up under the new regulations; but, instead of confining the importation of the former into the U. Kingdom, either to British ships, or ships belonging to the country or place where the goods were produced, or from which they originally were exported, the new regulations permit that they may be imported either in British ships, in ships of the country of which the goods are the produce, or in ships of the country or place from which they are imported into England. This is a very important alteration. Under the old law, when a number of articles, the products of different countries, but all of them suitable for importation into England, were found in a foreign port, they could not be imported except in a British ship, or separately in ships belonging to the different countries whose produce they were. This was obviously a great hardship on the foreigner, without being of any real advantage to our own ship owners. When the foreign merchant had vessels of his own, it was not very probable he would permit them to remain unoccupied, and freight a British vessel; and there were very few ports of any importance in which foreign bottoms might not be found, in which the articles could be legally imported. The real effect of the old law was not, therefore, to cause the employment of British ships, but to oblige foreigners to assort their cargoes less advantageously than they might otherwise have done, and thus to lessen their intercoure with our markets. The new law obviates this inconvenience; while, by restricting the importation of European goods to ships of the built of the country of which the goods are the growth, or to those of the built of the country or port from which the goods are shipped and which are *wholly owned* by the inhabitants of such country or port, it is rendered very difficult for the people of a particular country to become the carriers of the produce of other countries to our markets.

Another new regulation is of such obvious and unquestionable utility, that it is surprising it was not long ago adopted. By the old law, all articles, the produce of Asia, Africa, or America, could only be imported directly in a British ship from the place of their production. This law had already been repealed in so far as respected the U. States, whose ships were allowed to import their produce directly into this country; but it was maintained with respect to Asia, Africa, and S. America. And hence, although a British ship happened to find in S. American, African, or Asiatic ports, articles, the produce of one or more of the other quarters of the globe, suitable for our markets, and with which it might have been extremely advantageous for her to complete

her cargo, she was prohibited from taking them on board, under penalty of forfeiture and confiscation, not only of the goods, but also of the ship. This regulation has been repealed; and it is now lawful for British ships to take on board all articles, the importation of which is not prohibited, on meeting with them in any Asiatic, African, or American port. Lord Wallace originally intended to extend this principle to European ports, or to make it lawful for British ships to import all non-prohibited articles from *wherever they might find them.* But it was supposed by some, that foreign ships might be more cheaply navigated than ours; and that foreigners, taking advantage of this circumstance, would import the Asiatic, African, and American products required for our consumption into the contiguous continental ports, and would consequently restrict the employment of British ships to their carriage thence. We believe that these apprehensions were, in a great measure, visionary. But the law is so contrived as to avoid even the possibility of danger on this head; such of the products of Asia, Africa, and America, as are required for home consumption, being, with a few trifling exceptions, inadmissible from Europe; and only admissible when they are imported in British ships, or in ships of the country or place of which the goods are the produce, and from which they are brought. The only exceptions to this rule are articles from Asiatic and African Turkey imported from the Levant, and bullion.

Besides the restrictive regulations already alluded to, it had been a part of our policy to encourage the employment of our shipping, by imposing higher duties on commodities imported into our harbours in foreign vessels, than were imposed on them when imported in British vessels; and it had also been customary to charge foreign vessels with higher port and light-house duties, &c. This system was always loudly complained of by foreigners; but we had little difficulty in maintaining it, so long as the state of our manufactures enabled us to disregard the retaliatory measures of other powers. But the extraordinary increase that took place, since the commencement of the late war, in our manufactures for foreign consumption, and the necessity under which we were, in consequence, placed, of conciliating our customers abroad, led to the adoption of the *reciprocity system.* This system was first introduced into the trade with the U. States. After the N. American colonies had succeeded in establishing their independence, they set about framing a code of navigation laws on the model of those of this country. Among other regulations of a restrictive character, it was enacted, that all foreign vessels trading to the U. States should pay $\frac{1}{2}$ a dollar, which was afterwards raised to a dollar, per ton duty, beyond what was paid by American ships; and further, that goods imported in foreign vessels should pay a duty of 10 per cent. over and above what was payable on the same description of goods imported in American vessels.

This law was avowedly directed against the navigation of Great Britain; though, as it was bottomed on the very same principles as our navigation laws, we could not openly complain of its operation. Under these circumstances, it would have been sound policy to have at once proposed an accommodation; and, instead of attempting to meet retaliation by retaliation, to have offered to modify our navigation law, in so far as American shipping was concerned, on condition of the Americans making reciprocal modifications in our favour. A different course was, however, followed. Various devices were fallen upon to counteract the navigation system of the Americans, without in any degree relaxing our own: but they all failed of their object; and at length it became obvious to every one that we had engaged in an unequal struggle, and that the real effect of our policy was to give a bounty on the importation of the manufactured goods of other countries into the U. States, and thus gradually to exclude both our manufactures and ships from the ports of the Republic. In consequence, the conviction of the necessity of making concessions gained ground progressively; and it was ultimately fixed, by the commercial treaty agreed upon between Great Britain and the U. States in 1815, that in future *equal charges* should be imposed on the ships of either country in the ports of the other, and that *equal duties* should be laid upon all articles, the produce of the one country, imported into the other, whether such importation were effected in the ships of the one or the other.

The new States of S. America were naturally anxious to establish a commercial marine; and, to forward their views in this respect, they contemplated enacting navigation laws. But this intention was frustrated by the interference of the British government, who, without stipulating for any peculiar advantage, wisely offered to admit their ships into our ports on a fair footing of reciprocity, or on their paying the same charges as our own ships, on condition that they admitted British ships into their ports on a similar footing. Commercial treaties framed on this sound and liberal principle have since been entered into with most of these States.

The principle of the reciprocity system having been thus conceded in the case of the intercourse with the U. States, whose commercial marine is second only to that of Great Britain, it was not possible to refuse acting on the same principle in the case of such European countries as might choose to admit our ships into their ports on a footing

of equality.* The first demand of this sort was made on the part of the Prussian government, by whom an order in council was issued on the 20th of June, 1822, which made large additions to the port dues charged on all ships belonging to those nations which did not admit Prussian ships on a footing of reciprocity. The real object of this order was to injure the navigation of this country; and it was speedily found that it had the desired effect, and that its operation on British shipping was most pernicious.

Under these circumstances, the British merchants and ship owners applied to our government for relief. "We were assailed," said Mr. Huskisson, "with representations from all quarters connected with the shipping and trade of the country, against the heavy charges imposed upon British ships in the ports of Prussia. In such circumstances, what course did his Majesty's government take? We felt it to be our duty, in the first instance, to communicate with the Prussian minister in this country; and our minister at Berlin was, I believe, also directed to confer with the Prussian government on the subject. I myself had a conference with the Prussian minister at this court, and I well recollect the substance of his reply to me: — 'You have,' he said, 'set us the example, by your port and light charges, and your discriminating duties on Prussian ships; and we have not gone beyond the limits of that example. Hitherto we have confined the increase of our port and tonnage charges to ships only; *but it is the intention of my government next year,*' (and of this he showed me the written proof,) '*to imitate you still more closely, by imposing discriminating duties on the goods imported in your ships.* Our object is a just protection of our own navigation; and so long as the measure of our protection does not exceed that which is afforded in your ports to British ships, we cannot see with what reason you can complain.'

"Against such a reply what remonstrance could we in fairness make to the Prussian government? We might have addressed ourselves, it may be said by some, to the friendly feelings of that government; we might have pleaded long usage in support of our discriminating duties; we might have urged the advantages which Prussia derived from her trade with England. Appeals like these were not forgotten in the discussion; but they were of little avail against the fact stated by the consul at Dantzic, — that 'the Prussian ship owners were all going to ruin.'

"By others it may be said, 'Your duty was to retaliate, by increasing your own port charges and discriminating duties on Prussian shipping.' I have already stated generally my reasons against the policy of this latter course. We were not prepared to begin a system of commercial hostility, which, if followed up on both sides to its legitimate consequences, could only tend to reciprocal prohibition. In this state of things, more prudently, as I contend, we entered upon an amicable negotiation with the Prussian government, upon the principle of our treaty with the United States, — that of abolishing, on both sides, all discriminating duties on the ships and goods of the respective countries in the ports of the other.

"Having concluded an arrangement with Prussia upon this basis, we soon found it necessary to do the same with some other of the Northern states. Similar conventions were accordingly entered into with Denmark and Sweden. Reciprocity is the foundation of all those conventions: but it is only fair to add, that they contain other stipulations for giving facility to trade, and from which the commerce of this country, I am confident, will, in the result, derive considerable advantage." — (*Mr. Huskisson's Speech*, 12th of May, 1826, *on the State of the Shipping Interest.*)

This statement shows, conclusively, that the establishment of the reciprocity system, with respect to which so violent a clamour was raised, was not a measure of choice, but of necessity. In the state in which our manufactures are now placed, we could not afford to hazard their exclusion from countries into which they are annually imported to a very large extent. So long as the Prussians, Swedes, Danes, &c. chose to submit to our system of discriminating duties on foreign ships, and on the goods imported in them, without retaliating, it was no business of ours to tell them that that system was illiberal and oppressive. But when they found this out without our telling them; and when they declared, that unless we modified our restrictions, they would retaliate on our commerce, and either entirely exclude our commodities from their markets, or load those that were imported in British ships with prohibitory duties; should we have been justified, had we refused to come to an accommodation with them? Were we to sacrifice the substance to the shadow? — to turn away some of our best customers, because they chose to stipulate that the intercourse between them and us should be conducted either in their ships or in ours, as the merchants might think best? Our government had only a choice of difficulties; and they wisely preferred adopting a system which has preserved free access for the English manufacturer to the markets of Prussia, and to the

* By the fourth section of the act 6 Geo. 4. c. 1. it is enacted, that his Majesty may, by an order in council, admit the ships of foreign states into our ports, on payment of the like duties that are charged on British vessels, provided that British ships are admitted into the ports of such foreign states, on payment of the like duties that are charged on their vessels.

English ship owners an equal chance with those of Prussia of being employed in the traffic between the two countries, to a system that would eventually, and at no distant period, have put an end to all intercourse between the two countries, and which had already subjected it to great difficulties.

It was said by the ship owners, and others opposed to the late alterations, that the Prussians can build, man, and victual ships at a cheaper rate than we can do; and that the ultimate effect of the reciprocity system would, consequently, be to give them a decided superiority in the trade. But, admitting this statement to be true, still, for the reasons already given, it is pretty evident that the policy we pursued was, under the circumstances of the case, the best. Had we refused to establish the reciprocity system, we must have submitted to be entirely excluded from the markets of the United States, Prussia, &c. In grasping at what was beyond our reach, we should thus have lost what we were already in possession of. We should not only have injured our ship owners, by getting them forcibly excluded from the ports of many great commercial states, but we should have done an irreparable injury to our manufacturers, — a class which, without undervaluing the ship owners, is of incomparably more importance than they. Although, therefore, no doubt could be entertained with respect to the statements of the ship owners as to the comparative cheapness of foreign shipping, that would be no good objection to the measures that have been adopted. But these statements, though probably in some respects true, were certainly much exaggerated. In comparing the cost of British and foreign shipping, it is usual to estimate it by the tonnage: but this is a very false criterion; for while foreign ships are accurately measured, our ships were formerly measured so that a vessel of 150 tons register generally carried 220 tons of a mixed cargo, and a vessel registered at 400 tons seldom carried less than 600. But now that ships are correctly measured, it is found that the Prussians, and other Northern nations, from whom the greatest danger was apprehended, have no considerable advantage in the cheapness of their ships; and it is generally admitted that ships built in the ports on the Baltic will not last the time, nor bear the wear and tear, that ships built in this country or France will do. The wages of American seamen are higher than ours; and it is stated by those engaged in the shipping trade, that while the wages paid by the Northern ship owners are about as high as in England, their crews are larger in proportion to the burden of the ship. The difference in the cost of victualling must be immaterial, for, in all distant voyages, our ships procure provisions and stores of all sorts at the same rate as the foreigner.* On the whole, therefore, it would appear that the alarm with respect to the apprehended decay of our shipping was in a great degree, if not entirely, imaginary. And while the late modifications in the navigation laws were imperiously required by a just regard to our manufacturing and commercial interests, there are no good grounds for thinking that they have been injurious to our shipping.

ABSTRACT OF AN ACT ENTITLED FOR THE ENCOURAGEMENT OF BRITISH SHIPPING AND NAVIGATION. 3 & 4 WILL. 4. c. 54.

This act shall come into and be and continue in full force and operation, from and after the 1st day of September, 1833. — § 1.

Ships in which only enumerated Goods of Europe may be imported. — The several sorts of goods hereinafter enumerated, being the produce of Europe, viz. masts, timber, boards, tar, tallow, hemp, flax, currants, raisins, figs, prunes, olive oil, corn or grain, wine, brandy, tobacco, wool, shumac, madders, madder roots, barilla, brimstone, bark of oak, cork, oranges, lemons, linseed, rape seed, and clover seed, shall not be imported into the U. Kingdom to be used therein, except in British ships, or in ships of the country of which the goods are the produce, or in ships of the country from which the goods are imported. — § 2.

Places from which only goods of Asia, Africa, or America may be imported. — Goods, the produce of Asia, Africa, or America, shall not be imported from Europe into the U. Kingdom, to be used therein, except the goods herein-after mentioned; (that is to say,)

Goods, the produce of the dominions of the Emperor of Morocco, which may be imported from places in Europe within the Straits of Gibraltar:

Goods, the produce of Asia or Africa, which (having been brought into places in Europe within the Straits of Gib- [illegible] those Straits, and not by way of the Atlantic Ocean) may be imported from places in Europe within the Straits of Gibraltar:

Goods, the produce of places within the limits of the East India Company's charter, which (having been imported from those places into Gibraltar or Malta in British ships) may be imported from Gibraltar or Malta:

Goods taken by way of reprisal by British ships: [illegible] emeralds, and other Jewels [illegible]. — Sect. 3.

* See, on this subject, an able pamphlet, entitled "Observations on the Warehousing System and Navigation Laws," by Sir John Hall, Secretary to the St. Katharine's Dock Company. The following extract from the evidence of Mr. Edward Solly, before the Lords' Committee of 1820, seems to be conclusive as to the accuracy of the statements in the text: — "I," said he, "was formerly a considerable owner of Prussian ships, and therefore I had a good deal of experience in Prussian shipping, and I can safely say that Prussian ships cannot compete with English ships in time of peace: the English ships are navigated cheaper than Prussian ships; the Prussian vessels are more heavily masted and rigged, and require a greater complement of men, whilst the English ship is manned mostly by apprentices; the English ships require less ballast; the economy of shipping is better understood and practised in them; there is greater activity of the captain and crew; they are insured in clubs at the average rate of 5 per cent., while the Prussian ships cannot get the same insurance done for 12; and as to the outfit, the provisions, and other necessaries for the ship, both parties have their choice where they will lay in their stock, whether in a Prussian or an English port; if provisions are cheap in the Prussian port, the English captain lays in his stock of provisions there. Generally, I am of opinion that British ships can sail cheaper than those of any other nation." — (*Evidence*, p. 14.)

Ships in which only Goods of Asia, Africa, or America may be imported. — Goods, the produce of Asia, Africa, or America, shall not be imported into the U. Kingdom, to be used therein, in foreign ships, unless they be the ships of the country in Asia, Africa, or America, of which the goods are the produce, and from which they are imported, except the goods herein-after mentioned; (that is to say,)

Goods, the produce of the dominions of the Grand Seignior, in Asia or Africa, which may be imported from his dominions in Europe, in ships of his dominions:	imported from the dominions of the Grand Seignior in the Levant seas, in ships of his dominions:
Raw silk and mohair yarn, the produce of Asia, which may be	Bullion. — Sect. 4.

Manufacture deemed Produce. — All manufactured goods shall be deemed to be the produce of the country of which they are the manufacture. — § 5.

From Guernsey, &c. — No goods shall be imported into the U. Kingdom from the islands of Guernsey, Jersey, Alderney, Sark, or Man, except in British ships. — § 6.

Exports to Asia, &c. and to Guernsey, &c. — No goods shall be exported from the U Kingdom to any British possession in Asia, Africa, or America, nor to the islands of Guernsey, Jersey, Alderney, Sark, or Man, except in British ships. — § 7.

Coastwise. — No goods shall be carried coastwise from one part of the U. Kingdom to another, except in British ships. — § 8.

Between Guernsey, Jersey, &c. — No goods shall be carried from any of the islands of Guernsey, Jersey, Alderney, Sark, or Man, to any other of such islands, nor from one part of any of such islands to another part of the same islands, except in British ships. — § 9.

Between British Possessions in Asia, &c.—No goods shall be carried from any British possession in Asia, Africa, or America, to any other of such possessions, nor from one part of any of such possessions to another part of the same, except in British ships. — § 10.

Imports into British Possessions in Asia, &c.— No goods shall be imported into any British possession in Asia, Africa, or America, in any foreign ships, unless they be ships of the country of which the goods are the produce, and from which the goods are imported. — § 11.

No Ship British, unless registered and navigated as such.— No ship shall be admitted to be a British ship unless duly registered and navigated as such; and every British register ship (so long as the registry of such ship shall be in force, or the certificate of such registry retained for the use of such ship) shall be navigated during the whole of every voyage (whether with a cargo or in ballast), in every part of the world, by a master who is a British subject, and by a crew whereof 3-4ths at least are British seamen; and if such ship be employed in a coasting voyage from one part of the U. Kingdom to another, or in a voyage between the U. Kingdom and the islands of Guernsey, Jersey, Alderney, Sark, or Man, or from one of the said islands to another of them, or from one part of either of them to another of the same, or be employed in fishing on the coasts of the United Kingdom or of any of the said islands, then the whole of the crew shall be British seamen. — § 12.

Exception in favour of Vessels under 15 Tons Burden, &c.—All British-built boats or vessels under 15 tons burden, wholly owned and navigated by British subjects, although not registered as British ships, shall be admitted to be British vessels, in all navigation in the rivers and upon the coasts of the U. Kingdom, or of the British possessions abroad, and not proceeding over sea, except within the limits of the respective colonial governments within which the managing owners of such vessels respectively reside; and all British-built boats or vessels wholly owned and navigated by British subjects, not exceeding the burden of 30 tons, and not having a whole or a fixed deck, and being employed solely in fishing on the banks and shores of Newfoundland and of the parts adjacent, or on the banks and shores of the provinces of Canada, Nova Scotia, or New Brunswick, adjacent to the Gulph of Saint Lawrence, or on the north of Cape Canso or of the islands within the same, or in trading coastwise within the said limits, shall be admitted to be British boats or vessels, although not registered, so long as such boats or vessels shall be solely so employed. — § 13.

Honduras Ships to be as British, in Trade with U. Kingdom and Colonies in America. — All ships built in the British settlements at Honduras, and owned and navigated as British ships, shall be entitled to the privileges of British registered ships in all direct trade between the U. Kingdom or the British possessions in America and the said settlements: provided the master shall produce a certificate under the hand of the superintendent of those settlements, that satisfactory proof has been made before him that such ship (describing the same) was built in the said settlements, and is wholly owned by British subjects: provided also, that the time of the clearance of such ship from the said settlements for every voyage shall be endorsed upon such certificate by such superintendent. — § 14.

Ship of any Foreign Country to be of the Built of, or Prize to, such Country; or British-built, and owned and navigated by Subjects of the Country. — No ship shall be admitted to be a ship of any particular country, unless she be of the built of such country; or have been made prize of war to such country; or have been forfeited to such country under any law of the same, made for the prevention of the slave trade, and condemned as such prize or forfeiture by a competent court of such country; or be British-built (not having been a prize of war from British subjects to any other foreign country); nor unless she be navigated by a master who is a subject of such foreign country, and by a crew of whom 3-4ths at least are subjects of such country; nor unless she be wholly owned by subjects of such country usually residing therein, or under the dominion thereof: provided always, that the country of every ship shall be deemed to include all places which are under the same dominion as the place to which such ship belongs. — § 15.

Master and Seamen not British, unless natural-born, or naturalised, &c. — No person shall be qualified to be a master of a British ship, or to be a British seaman within the meaning of this act, except the natural-born subjects of his Majesty, or persons naturalised by any act of parliament, or made denizens by letters of denization; or except persons who have become British subjects by virtue of conquest or cession of some newly acquired country, and who shall have taken the oath of allegiance to his Majesty, or the oath of fidelity required by the treaty or capitulation by which such newly acquired country came into his Majesty's possession; or persons who shall have served on board any of his Majesty's ships of war in time of war for the space of 3 years: provided always, that the natives of places within the limits of the East India Company's charter, although under British dominion, shall not, upon the ground of being such natives, be deemed to be British seamen: provided always, that every ship (except ships required to be wholly navigated by British seamen) which shall be navigated by 1 British seaman, if a British ship, or 1 seaman of the country of such ship, if a foreign ship, for every 20 tons of the burden of such ship, shall be deemed to be duly navigated, although the number of other seamen shall exceed 1-4th of the whole crew: provided always, that nothing herein contained shall extend to repeal or alter the provisions of an act passed in the 4th year of the reign of his late Majesty King George IV. for consolidating and amending the laws then in force with respect to trade from and to places within the limits of the East India Company's charter. — § 16.

Foreigners having served 2 Years on board H. M. Ships during War.—It shall be lawful for his Majesty, by his royal proclamation during war, to declare that foreigners, having served 2 years on board any of his Majesty's ships of war, in time of such war, shall be British seamen within the meaning of this act. — § 17.

British Ship not to depart British Port unless duly navigated, &c. — No British registered ship shall be suffered to depart from any port in the United Kingdom, or any British possession in any part of the world (whether with a cargo or in ballast), unless duly navigated: provided always, that any British ships trading between places in America may be navigated by British negroes; and that ships trading eastward of the Cape of Good Hope, within the limits of the East India Company's charter, may be navigated by Lascars, or other natives of countries within those limits. — § 18.

If Excess of Foreign Seamen, Penalty 10l. for each, &c. — If any British registered ship shall at any time

have, as part of the crew, in any part of the world, any foreign seaman not allowed by law, the master or owners of such ship shall for every such foreign seaman forfeit the sum of 10*l.*: provided always, that if a due proportion of British seamen cannot be procured in any foreign port, or in any place within the limits of the East India Company's charter, for the navigation of any British ship; or if such proportion be destroyed during the voyage by any unavoidable circumstance, and the master of such ship shall produce a certificate of such facts under the hand of any British consul, or of 2 known British merchants, if there be no consul at the place where such facts can be ascertained, or from the British governor of any place within the limits of the East India Company's charter; or in the want of such certificate, shall make proof of the truth of such facts to the satisfaction of the collector and comptroller of the customs of any British port, or of any person authorised in any other part of the world to inquire into the navigation of such ship; the same shall be deemed to be duly navigated. — § 19.

Proportion of Seamen may be altered by Proclamation. — If his Majesty shall, at any time, by his royal proclamation, declare that the proportion of British seamen necessary to the due navigation of British ships shall be less than the proportion required by this act, every British ship navigated with the proportion of British seamen required by such proclamation shall be deemed to be duly navigated, so long as such proclamation shall remain in force. — § 20.

Goods prohibited only by Navigation Law may be imported for Exportation.—Goods of any sort or the produce of any place, not otherwise prohibited than by the law of navigation herein-before contained, may be imported into the U. Kingdom from any place in a British ship, and from any place not being a British possession in a foreign ship of any country, and however navigated, to be warehoused for exportation only, under the provision of any law in force for the time being, made for the warehousing of goods without payment of duty upon the first entry thereof. — § 21.

Forfeitures, how incurred. — Any goods imported, exported, or carried coastwise, contrary to the law of navigation, shall be forfeited, and the masters of ships carrying the same shall forfeit each the sum of 100*l.* — § 22.

Recovery of Forfeitures. — All penalties and forfeitures incurred under this act shall be sued for, prosecuted, recovered, and disposed of, or shall be mitigated or restored, in like manner as any penalty or forfeiture can be sued for, prosecuted, recovered, and disposed of, or may be mitigated or restored, under an act passed in the present session of parliament for the prevention of smuggling. — § 23.

NEW ORLEANS, the capital of Louisiana, one of the United States, on the eastern bank of the Mississippi, about 105 miles from its mouth, lat. 29° 57′ 45″ N., lon. 90° 9′ W. Population, in 1840, 102,191. The new-built streets are broad, intersecting each other at right angles; and the houses are mostly of brick. It is the grand emporium of all the vast tracts traversed by the Mississippi, the Missouri, and their tributary streams, enjoying a greater command of internal navigation than any other city either of the Old or New World. Civilisation has hitherto struck its roots, and begun to flourish, only in some comparatively small portions of the immense territories of which New Orleans is the sea-port; and yet its progress has been rapid beyond all precedent. It appears, from the accounts printed by order of Congress, that during the year ended the 30th of September, 1841, the value of the native American produce exported from this city amounted to 26,071,660 dollars, while the value of that exported from New York was only 19,660,881. With respect to imports, the case is materially different; the value of those of New Orleans, in the year just mentioned, being 10,256,350 dollars, whereas those of New York amounted to 75,713,426. It is believed by many, seeing how rapidly settlements are forming in the "West," that New Orleans must, at no very distant period, exceed every other city of America, as well in the magnitude of its imports as of its exports; and, considering the boundless extent and extraordinary fertility of the uncultivated and unoccupied basins of the Mississippi and Missouri, the anticipations of those who contend that New Orleans is destined to become the greatest emporium, not of America only, but of the world, will not appear very unreasonable. Steam navigation has been of incalculable service to this port, and, indeed, to the whole of central America. The voyage up the Mississippi, that used formerly to be so difficult and tedious, is now performed in commodious steam packets with ease, celerity, and comfort. "There have been counted," says Mr. Flint, "in the harbour, 1,500 flat boats at a time. Steam boats are arriving and departing every hour; and it is not uncommon to see 50 lying together in the harbour. A forest of masts is constantly seen along the *levées*, except in the sultry months. There are often 5,000 or 6,000 boatmen from the upper country here at a time; and we have known *thirty* vessels advertised together for Liverpool and Havre. The intercourse with the Havannah and Vera Cruz is great, and constantly increasing." — (*Geography and History of the Western States*, vol. i. p. 557.) From 1811, when the first steam boat was launched in the Mississippi, down to the beginning of 1830, no fewer than 336 steam boats had been built for the navigation of this river, the Missouri, Ohio, &c., of which 213 were employed at the latter period, and the number has since been greatly increased. As a shipping port, she now ranks third in the Union; being in this respect inferior only to New York and Boston. Vessels of the largest burden may navigate the river several hundreds of miles above New Orleans. The total of the registered, enrolled, and licensed tonnage belonging to New Orleans on the 30th of September, 1841, amounted to 145,115 tons; of which 85,558 tons were employed in the coasting trade; but of this a large proportion (27,467) consisted of steam ships. The depth of water in the river opposite to New Orleans is, at a medium, about 70 feet; and it maintains soundings of 30 feet till within a mile of its confluence with the sea. Besides 3 or 4 of inferior consequence, the Mississippi has 4 principal passes or outlets. In the south-east, or main pass, at Balize, the water on the bar at ordinary tides does not exceed 12 feet; and as the rise of tides in the Gulph of Mexico is not more

than 2 or 2½ feet, vessels drawing much water cannot make their way from the ocean to New Orleans. — (*Darby's View of the United States*, p. 467.)

The unhealthiness of the climate is the great drawback on New Orleans. This probably arises from the low and marshy situation of the city and surrounding country, which is under the level of the Mississippi, being protected from inundation by an artificial *levée* or mound, varying from 5 to 30 feet in height, and extending along the bank of the river a distance of 100 miles. The unhealthy season includes July, August, and September; during which period the yellow fever often makes dreadful havoc, particularly among the poorer classes of immigrants from the North and from Europe. Latterly, great efforts have been made to improve the health of the city, by supplying it abundantly with water, paving the streets, removing wooden sewers, and replacing them with others of stone, &c. Many places, where water used to stagnate, have been filled up; and large tracts of swampy ground contiguous to the town have been drained. And as such works will no doubt be prosecuted on a still larger scale, according to the increase of commerce and population, it is to be hoped that the ravages of fever may be materially abated, though the situation of the city excludes any very strong expectation of its ever being rendered quite free from this dreadful scourge.

The following Tables give a very complete view of the trade of this great and growing emporium. Its preponderance in the shipment of cotton is quite as decided as the preponderance of Manchester in its manufacture.

Account of the Quantity of the various Articles imported from the Interior to New Orleans during the Seven Years ending with the 31st of August, 1842. These, of course, form also the Articles of Exportation. — (*N.B.* Since 1841, the fiscal year terminates on the 31st of August, instead of the 30th of September, as formerly.)

Articles.	1842.	1841.	1840.	1839.	1838.	1837.	1836.
Apples - - - bbls.	26,143	27,244	21,387	6,721	27,561	18,840	23,515
Bacon, assorted hogsheads, casks or boxes	13,505	11,231	7,350	13,748	11,715	8,731	7,474
Bacon hams - hhds. and boxes	9,220	6,111	4,412	6,219	5,565	6,429	7,665
Bacon, in bulk - - lbs.	1,288,109	2,595,057	1,117,887	1,501,900	985,259	1,192,877	893,188
Bagging, Kentucky - - pieces	60,307	70,976	66,898	49,697	48,364	30,447	55,160
Bale rope, do. - - coils	63,307	65,613	47,970	62,602	61,005	21,256	53,053
Beans - - - bbls.	10,903	14,281	2,026	405	4,015	5,519	1,946
Butter - - kegs and firkins	11,791	14,074	10,429	7,557	11,967	7,369	6,178
bbls.	284	693	790	429	279	199	582
Bees' wax - bbls. and boxes	543	306	254	176	118	219	295
lbs.	3,300	16,070	10,575	4,250	7,963	1,800	20,899
Beef - - - bbls.	17,155	35,262	10,815	10,777	6,153	9,859	9,618
Beef, dried - - lbs.	60,812	70,100	59,120	58,090	44,050	150,646	115,225
Buffalo robes - - packs	3,122	2,587	5,447	4,035	2,929	4,816	5,800
Cotton, viz.: —							
Louisiana and Mississippi bales	583,328	677,343	717,894	469,231	560,466	443,507	555,119
Lake - - - —	8,967	5,163	14,960	12,156	15,856	11,615	11,166
North Alabama and Tennessee —	118,629	118,122	155,466	69,547	121,559	132,080	96,700
Arkansas - - - —	16,734	11,149	13,767	7,005	11,969	7,101	5,758
Mobile - - - —	4,565	5,881	15,649	16,768	23,501	7,655	16,472
Florida - - - —	2,851	731	2,727	1,080	6,437	1,053	6,882
Texas - - - —	5,101	4,481	5,982	2,929	3,232	2,974	3,353
Corn meal - - - bbls.	6,023	2,224	1,447	5,082	3,119	2,992	8,703
Corn, in ears - - bbls.	240,675	168,050	152,965	161,918	270,924	194,015	255,975
Corn, shelled - - sacks	538,709	268,557	278,598	558,795	177,751	369,098	287,182
Cheese - - - casks	2,710	1,852	928	519	510	201	291
Cider - - - bbls.	1,350	541	521	184	1,627	755	1,790
Coals, western - - - —	110,583	221,253	99,915	94,362	99,220	61,118	85,528
Flaxseed - - - —	799	712	725	516	541	1,220	3,581
Flour - - - - —	459,688	496,194	482,525	451,984	520,208	253,500	287,252
Furs - hhds., bundles, or boxes	1,837	1,851	1,343	424	661	583	1,922
Hemp - - - bundles	1,211	450	500	4,044	450	- -	7
Hides - - - -	26,169	25,522	29,962	19,582	12,455	22,287	21,926
Hay - - - bundles	20,166	21,425	7,603	9,915	13,525	20,594	15,982
Iron, pig - - - tons	522	512	1,001	411	1,851	415	1,018
Lard - - - bbls.	18,207	9,672	5,007	8,620	3,757	3,664	1,671
kegs	366,691	311,710	177,803	218,387	224,588	205,825	188,759
Lime, western - - bbls.	850	2,406	1,020	900	500	590	500
Lead, pig - - - pigs	472,556	434,467	507,397	309,528	291,418	260,223	313,705
bar - - kegs and boxes	1,084	601	865	807	1,520	451	760
Oats - - - bbls.	63,281	54,250	42,885	58,708	25,514	32,180	18,132
Onions - - - —	3,538	6,457	2,871	441	1,605	4,612	3,552
Oil, linseed - - - —	305	414	195	180	400	249	156
castor - - - —	3,666	1,115	669	357	561	905	1,220
Potatoes - - - bbls.	26,201	28,468	21,469	9,234	16,565	26,599	14,122
Pork - - - —	244,442	216,974	120,008	166,071	139,463	115,580	79,505
Ditto - - - hhds.	946	765	1,067	1,160	1,523	531	87
Ditto, in bulk - - lbs.	4,051,800	9,744,220	5,099,987	7,192,156	3,474,076	8,939,135	5,416,976
Packing and hempen yarn reels	1,888	505	842	1,040	565	178	
Skins, deer and bear - packs	3,309	1,676	2,221	3,257	2,938	4,025	4,403
Shot - - - kegs	3,416	6,501	1,442	1,345	1,962	1,891	1,513
Tallow - - - bbls.	5,071	937	200	748	135	78	333
Tobacco, leaf - - hhds.	66,855	53,170	45,827	28,153	37,588	28,501	50,555
Tobacco - kegs and boxes	3,618	3,935	912	1,856	4,069	1,427	1,109
bales	3,298	1,226	280	1,586	114	1,533	1,499
Twine - - - bundles	1,175	905	932	896	654	227	354
Whiskey - - - bbls.	63,345	73,873	55,857	29,353	51,580	44,730	31,929
Window glass - - boxes	2,764	760	2,373	2,752	2,859	2,059	2,864
Wheat - - - bbls. and sacks	134,886	2,621	63,015	17,280	2,027	6,422	1,090

Monthly Arrivals of Ships, Barks, Brigs, Schooners, and Steam Boats, for Five Years, from 1st of September to 31st of August.

Months	1841-42.						1840-41.						1839-40.						1838-39.						1837-38.					
	Ships.	Barks.	Brigs.	Schrs.	Total.	Steam Boats.	Ships.	Barks.	Brigs.	Schrs.	Total.	Steam Boats.	Ships.	Barks.	Brigs.	Schrs.	Total.	Steam Boats.	Ships.	Barks.	Brigs.	Schrs.	Total.	Steam Boats.	Ships.	Barks.	Brigs.	Schrs.	Total.	
Sept.	15	8	6	17	46	59	31	7	18	20	76	83	16	2	17	18	52	62	22	3	13	18	56	57	18	7	9	24	58	
Oct.	58	9	34	17	118	150	55	13	15	37	120	186	49	6	21	40	116	135	42	9	23	31	105	50	20	7	19	15	61	
Nov.	110	19	54	41	204	221	68	18	23	27	136	229	54	18	26	58	156	153	81	15	45	56	197	117	77	12	35	33	157	
Dec.	72	27	34	43	178	291	105	30	55	76	266	281	59	22	57	65	203	244	69	17	47	63	196	163	64	11	45	48	168	
Jan.	47	24	35	56	162	265	80	32	43	65	220	241	99	26	53	91	269	196	67	18	59	103	247	161	44	9	51	64	171	
Feb.	51	17	25	58	131	219	57	15	21	50	143	207	58	14	56	61	189	219	53	25	44	84	206	179	53	9	41	59	142	
Mar.	63	26	25	28	140	227	76	25	52	97	250	235	27	13	26	110	176	241	57	18	56	98	229	165	48	4	58	75	185	
Apr.	59	21	21	27	128	195	53	15	32	43	143	219	94	33	51	74	255	207	49	19	37	79	184	186	44	16	37	72	169	
May	71	21	24	18	134	185	40	10	22	31	103	208	30	11	60	69	170	170	52	5	39	62	158	187	53	10	50	55	168	
June	55	18	15	16	84	156	24	10	14	31	79	141	40	13	37	50	140	155	8	6	15	41	70	144	46	11	65	73	195	
July	17	2	17	11	47	105	12	10	16	20	58	92	39	9	50	29	97	103	16	9	19	47	91	76	12	6	27	29	74	
Aug.	10	6	8	13	38	81	14	6	14	35	69	67	18	10	18	34	80	75	15	2	10	34	61	53	12	9	20	23	64	
Total	599	198	279	347	1,403	2,132	595	191	325	552	1,613	2,187	563	177	435	682	1,846	1,957	531	146	407	716	1,800	1,568	471	111	460	570	1,612	

Exports of Cotton and Tobacco from New Orleans during each of the 7 Years from 1835.

Whither exported.			Exports of Cotton for Seven Years.						
			1841-41.	1841-40.	1840-39.	1839-38.	1838-37.	1837-36.	1836-35.
Great Britain	-	bales	421,450	450,310	504,768	509,787	483,204	350,700	237,089
France	-	—	183,272	185,951	240,490	120,767	128,303	133,530	153,140
North of Europe	-	—	21,207	9,856	23,742	1,466	7,560	6,451	17,989
South of Europe	-	—	25,506	56,364	57,754	9,425	13,992	13,172	12,083
Coastwise	-	—	99,832	160,847	122,566	137,734	105,264	85,136	90,194
	Total	-	749,267	821,288	949,320	779,179	738,313	588,969	490,493
			Exports of Tobacco for Seven Years.						
Great Britain	-	hhds.	20,969	20,665	9,159	8,718	9,969	10,158	14,426
France	-	—	6,974	6,812	6,606	1,770	4,878	3,778	1,157
North of Europe	-	—	20,292	8,040	6,065	2,654	2,458	6,760	5,526
South of Europe	-	—	9,053	5,645	5,002	4,806	3,860	3,546	1,594
Coastwise	-	—	10,809	13,505	13,684	12,874	15,410	11,509	18,951
	Total	-	68,057	54,667	40,136	30,852	35,555	35,821	41,654

For *Monies, Weights, and Measures*, see NEW YORK.

New Orleans Levee Dues.—The following ordinance, amendatory of existing ordinances concerning levee dues, in and for the port of New Orleans, was ordained by the general council, and approved by the mayor, May 26th, 1843: —

1. That from and after the 31st day of August next, the levee or wharfage dues on ships and other decked vessels, and on steam vessels arriving from sea, shall be as follows: —

On each vessel under 75 tons	-	-	-	$15
— of 75 and under 100 tons		-	-	20
— 100 — 125 —		-	-	25
— 125 — 150 —		-	-	30
— 150 — 200 —		-	-	40
— 200 — 250 —		-	-	50
— 250 — 300 —		-	-	60
— 300 — 350 —		-	-	70
— 350 — 400 —		-	-	85
— 400 — 450 —		-	-	100
— 450 — 500 —		-	-	115
— 500 — 550 —		-	-	125
— 550 — 600 —		-	-	130
— 600 — 650 —		-	-	135
— 650 — 700 —		-	-	145
— 700 — 750 —		-	-	160
— 750 — 800 —		-	-	175
— 800 — 900 —		-	-	190
— 900 — 1,000 —		-	-	205
— 1,000 — 1,100 —		-	-	220
— 1,100 — 1,200 —		-	-	235
— 1,200 and upwards,		-	-	240

2. That from and after the 31st day of August next, the levee dues on steam vessels navigating on the river, and which shall moor or land in any part of the incorporated limits of the port, shall be as follows: —

On each steamer under 75 tons	-	-	-	$12
— of 75 and under 100 tons		-	-	15
— 100 — 150 —		-	-	22
— 150 — 200 —		-	-	30
— 200 — 250 —		-	-	37
— 250 — 300 —		-	-	45
— 300 — 350 —		-	-	52
— 350 — 400 —		-	-	60
— 400 — 450 —		-	-	67
— 450 — 500 —		-	-	75
— 500 — 550 —		-	-	82
— 550 — 600 —		-	-	90
— 600 — 650 —		-	-	97
— 650 — 700 —		-	-	105
— 700 and over		-	-	120

3. That hereafter it shall not be lawful for any pirogue, flatboat, bargeboat, or keelboat, to remain in port longer than 12 days, as fixed by the 13th article of an ordinance approved the 21st October, 1839, under a penalty of $25; and it shall be the duty of the wharfingers of the several municipalities to cause to be removed beyond the limits of the port any pirogue, flatboat, barge, or other craft, found, in violation of this ordinance, within the limits of their respective municipalities. The fines arising from any violation hereof shall be recoverable before any court of competent jurisdiction, of the owner, agent, or consignee of such pirogue, flatboat, or other craft, for the benefit of the municipality within which the offence may be committed.

4. That hereafter it shall not be lawful for any flatboat, keelboat, barge, or old hull, to remain within the limits of the port for more than 24 hours after the discharge of its cargo, under a penalty of $25, recoverable as aforesaid; and after the expiration of said 24 hours, it shall be the duty of the wharfinger of either of the municipalities to cause to be removed beyond the limits of the beat, or to turn adrift, without delay, any such flatboat, keelboat, or other craft in contravention.

5. That in case any captain, owner, or person in command of any steamboat, flatboat, barge, keelboat, or other craft, shall neglect or refuse to obey the orders of the wharfinger to conform to the ordinances regulating the port, he or they shall be liable to a fine of $25 to $50 for each offence, recoverable as aforesaid.

6. That from and after the 31st day of August next, all ships and other decked vessels, and steam vessels, arriving from sea, which shall have landed or moored in front of one municipality, and shall have paid or be liable to pay the levee dues to such municipality, and which shall afterwards remove from such municipality to one of the other municipalities, shall pay to the municipality to which they remove, the following dues: —

All vessels over 750 tons,	-	-	-	$3 00 per day
— 500 —	and less than 750			2 50 —
— 300 —	—	500		2 00 —
— 100 —	—	300		1 50 —
All vessels under 100	-	-	-	75 —

Such daily levee dues to be collected for every day such vessel may remain in the port of the municipality to which they may have removed, the days of removal and departure excepted.

7. That so much of all existing ordinances as is inconsistent with the provisions of this ordinance, is hereby repealed.

Banks. — The banks in New Orleans differ but little from those in other parts of the Union, and are quite as little entitled to credit or confidence. The stoppage of their payments would seem to be quite an ordinary occurrence, and does not, in fact, seem to be thought of much consequence! We give the following statement as we find it in Hunt's *Commercial Magazine*, but without vouching for its accuracy.

Loans, Specie, Circulation, &c. of the Banks of New Orleans, at the under-mentioned Periods.

Periods.	Loans.	Specie.	Circulation.	Deposits.
	$	$	$	$
1842, October	48,101,210	1,504,661	1,679,039	2,171,859
1843, January	34,628,623	4,586,737	1,216,237	3,420,252
— August	31,695,439	5,858,857	1,248,652	3,965,243

Insurance Companies are quite as numerous here as in the other cities of the Union.

We avail ourselves of this opportunity to lay before the reader the following statements with respect to the trade of Mobile, with which New Orleans is intimately connected.

Account of the Quantity of the various Articles imported from the Interior to Mobile, commencing 1st of September, and ending 31st of August, in each Year.

Articles.	Sept. 1841 to Aug. 31. 1842.	Oct. 1840 to Aug. 31. 1841.	Oct. 1839 to Sept. 30. 1840.	Oct. 1838 to Sept. 30. 1839.	Oct. 1837 to Sept. 30. 1838.
Bagging - - ass. pieces	31,057	24,812	32,250	12,495	28,500
Bale rope - - coils	4,652	20,776	26,450	14,191	24,958
Bacon - - hhds.	2,982	2,592	4,557	2,343	4,905
Coffee - - bags	16,287	16,525	21,451	15,000	16,000
Cotton —					
Alabama - - bales	318,468	317,642	445,725	251,898	308,000
Florida - - —	632	186	1,050	306	937
Texas - - —	153	153	none	76	32
Flour - - bls.	22,571	41,665	34,725	32,110	22,500
Grain corn - - sacks	78,855	68,988	65,134	15,000	43,150
Oats - - —	16,253	10,921	19,211	10,179	16,200
Hay - - bales	11,256	12,224	21,446	9,000	22,518
Lard - - kegs	8,601	6,152	6,282	5,818	9,000
Lime - - bbls.	10,470	5,096	21,714	12,809	16,413
Molasses - - —	7,728	8,598	7,975	5,738	5,599
Potatoes, Irish - -	21,844	31,745	17,864	10,790	20,470
Pork - - bbls.	7,388	4,289	4,222	3,563	9,103
Rice - - tierces	1,145	1,172	1,582	1,085	1,587
Sugar - - hhds.	5,016	4,590	8,273	8,583	4,612
Salt - - sacks	99,802	143,516	124,995	72,000	85,588
Whiskey - - bbls.	15,731	13,640	12,009	5,000	6,830

Exports of Cotton for Five Years from Mobile.

Whither exported.	1841-42.	1840-41.	1839-40.	1838-39.	1837-38.
	Bales.	*Bales.*	*Bales.*	*Bales.*	*Bales.*
Great Britain - - -	185,414	149,854	257,985	125,633	157,114
France - - -	49,514	57,204	80,528	22,304	61,125
Other foreign ports - -	6,919	9,181	16,156	2,008	5,908
Coastwise - - -	77,158	103,637	85,394	91,700	85,876
Totals - -	319,055	319,876	440,102	249,645	310,021

Average Range of Prices of Cotton per lb. in Mobile, for Twelve Years.

Seasons of	October.	November.	December.	January.	February.	March.	April.	May.	June.	Average for Season.
	d. *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*	*d.* *d.*
1830-31	9 to 11	10½ to 12½	9 to 11¾	8½ to 11	8½ to 11½	8½ to 11	9½ to 12½	9½ to 12½	10⅝ to 12	9⅜ to 11¾
1831-32	nominal	6 — 9¾	7 — 10	8 — 10½	8 — 10¼	7⅝ — 11¾	8¼ — 11⅝	8 — 11¼	8¼ — 10	7½ — 10⅜
1832-33	9 —	10¾ —	9 —	8½ —	8½ —	8¾ —	9⅜ —	9½ —	10¾ —	9⅜ —
1833-34	15 — 17	12 — 14	9¾ — 13¾	9 — 11¾	8½ — 11½	8½ — 12	9 — 12½	11 — 13½	11 — 13	10⅜ — 13½
1834-35	11 — 14½	12½ — 16½	13 — 16¾	13⅜ — 17	13¾ — 17¾	13¾ — 18	14½ — 20¼	15¼ — 20½	15 — 20	14½ — 17⅞
1835-36	— 17	15 — 16½	13¾ — 16	13¾ — 16½	14 — 17	15 — 20	15 — 20	13½ — 19	13¾ — 19	14 — 18
1836-37	16 — 20	15 — 19	12½ — 17½	12 — 17½	12 — 17½	11½ — 17½	6 — 13½	5 — 10	6½ — 11	10⅜ — 16
1837-38	7½ — 12	6½ — 11⅜	6 — 12	7½ — 12½	6½ — 12	7⅛ — 12½	8¾ — 13¾	8½ — 13¾	8¾ — 14	7¼ — 12⅞
1838-39	10 — 11	10 — 12	10 — 14⅜	11⅝ — 15⅜	12½ — 16¾	13⅜ — 17½	14 — 17⅜	11¼ — 18	15⅜ — 17	12⅜ — 15⅝
1839-40	12½ — 13	11¼ — 9¾	9¼ — 9¾	8½ — 8¾	7¾ — 7¾	7 — 7¾	7¼ — 7¾	7¾ — 7¾	7¾ — 7⅞	8⅝ — 8⅝
1840-41	7⅜ — 10½	7¾ — 10	8¼ — 10¾	8½ — 11⅜	7 — 12½	9¼ — 12¾	10 — 12⅝	9½ — 12½	9¼ — 11⅜	8¾ — 11⅜
1841-42	nominal	7⅜ — 9¾	7⅞ — 8¾	7⅞ — 10⅜	7⅛ — 10	7 — 10	7 — 10⅜	7 — 10⅜	7½ — 10	7⅜ — 10⅛

NEWSPAPERS. Publications in numbers, consisting commonly of single sheets, and published at short and stated intervals, conveying intelligence of passing events.

Importance and Value of Newspapers in a Commercial Point of View. — It is foreign to the purposes of this work to consider the moral and political effects produced by newspapers: of the extent of their influence there is no doubt, even among those who differ widely as to its effect. Their utility to commerce is, however, unquestionable. The advertisements they circulate, though these announcements are limited in Great Britain by a considerable duty, the variety of facts and information they contain as to the supply and demand of commodities in all quarters of the world, their prices, and the regulations by which they are affected, render newspapers indispensable to commercial men, supersede a great mass of epistolary correspondence, raise merchants in remote places towards an equality, in point of information, with those in the great marts, and wonderfully quicken all the movements of commerce. But Newspapers themselves have become an important commercial article. In 1842 the gross produce of the stamp duty levied on newspapers in the U. Kingdom was 252,003*l.*: the gross produce of the sale may be estimated at 4½ times this sum; so that on this hypothesis the newspapers produced in that year must have cost the public about 1,134,000*l.* sterling, exclusive of the sums paid for advertisements.

Newspapers, in London, are sold by the publishers to newsmen or newsvenders, by whom they are distributed to the purchasers in town and country. The newsmen, who are the retailers, receive, for their business of distribution, a regulated allowance. The papers sold to the public at *5d.*, which form the great mass of London newspapers, are sold to the newsmen in what are technically called quires. Each quire consists of 27 papers, and is sold to the newsmen for *8s. 9d.*; so that the newsman's gross profit on 27 papers is *2s. 6d.* In some instances, where newspapers are sent by the post, ½*d.* additional on each paper is charged by the newsmen to their country customers. Some of the clerks of the post-office, called clerks of the roads, used to be considerable news-agents; but this, we believe, is no longer the case. Previously to 1836 the stamp duty on a newspaper was rather under 3½*d.* (4*d.* — 20 per cent.); but it was then reduced to 1*d.* nett. A single paper being sold to the newsmen at *4d.*, the sum which is received by the newspaper proprietors for paper, printing, and the expenses of their establishments, is 3*d.* for each copy: but this is said to be inadequate to defray the expenses; and as it is not improbable that the selling price of newspapers may be raised to *6d.*, we have constructed the subjoined table to show how papers are disposed of at present to the different classes of dealers, when the price is *5d.*, and how they would be disposed of were the price raised to *6d.*

pers at	Wholesale Newsmen, per 27 Papers.		Retail Newsmen, per 27 Papers.*		Retail Newsmen, per single Copy.	
	Cost.	Profit on Sale.	Cost.	Profit on Sale.	Cost.	Profit on
	s. d.	*s. d.*	*s. d.*	*s. d.*	*d.*	*d.*
5d.	8 9	2 6	9 0	2 3	4	1
6d.	10 9	2 9	11 3	2 3	5	1

Advertisements form a considerable source of profit to newspapers; and without this source, some of those that are most widely circulated could not support their great expenditure. Each advertisement is charged, without distinction of length, with a duty of *1s. 6d.*, and in 1842 this duty produced 117,076*l.* nett in Great Britain, and 9,321*l.* in Ireland. We have no means of ascertaining exactly the portion of this sum derived from newspapers, as distinguished from other publications, but we believe we should under-estimate it by taking it at 4-5ths of the whole. The charges of newspapers for advertisements are proportioned to their length, and to the character of the newspaper itself. The sum received for them may now be taken, inclusive of the duty, at above 300,000*l.*

Newspaper stamps are obtained at the Stamp Office, where the paper is sent by the stationers to be stamped. The stamps are paid for before the paper is returned. The duty on advertisements, which is also under the management of the commissioners of stamps, is paid monthly; and, for securing these payments, the printer and 2 sureties become bound in moderate sums.

The London newspapers have become remarkable for the great mass and variety of matter which they contain, the rapidity with which they are printed and circulated, and the accuracy and copiousness of their reports of debates. These results are obtained by a large expenditure and considerable division of labour. The reports of parliamentary proceedings are obtained by a succession of able and intelligent reporters, who relieve each other at intervals of ¾ of an hour, or occasionally less. A newspaper cannot aim at copious and correct reports with less than 10 reporters for the House of Commons; and the expense of that particular part of a morning newspaper's establishment exceeds 3,000*l.* per annum.

Regulations as to Newspapers. — An important alteration was made in 1836, in the duties on, and in the regulations relating to, newspapers. The act of that year, 6 & 7 Will. 4. cap. 76., has repealed the former duty on newspaper stamps, and imposed in its stead the duties specified in the following schedule: —

For every sheet or other piece of paper whereon any newspaper shall be printed - - - 0 0 1

And where such sheet or piece of paper shall contain, on one side thereof, a superficies, exclusive of the margin of the letter-press, exceeding 1,530 inches, and not exceeding 2,295 inches, the additional duty of - - - - 0 0 0½

And where the same shall contain on one side thereof a superficies, exclusive of the margin of the letter-press, exceeding 2,295 inches, the additional duty of - - - - 0 0 1

Provided always, that any sheet or piece of paper containing on one side thereof a superficies, exclusive of the margin of the letter-press, not exceeding 765 inches, which shall be published with, and as a supplement to, any newspaper chargeable with any of the duties aforesaid, shall be chargeable only with the duty of - - 0 0 0½

And the following shall be deemed and taken to be newspapers chargeable with the said duties; viz.: —

Any paper containing public news, intelligence, or occurrences printed in any part of the U. Kingdom to be dispersed and made public:

Also any paper printed in any part of the U. Kingdom weekly or oftener, or at intervals not exceeding 26 days, containing only or principally advertisements:

And also any paper containing any public news, intelligence, or occurrences, or any remarks or observations thereon, printed in any part of the U. Kingdom for sale, and published periodically or in parts or numbers at intervals not exceeding 26 days between the publication of any 2 such papers, parts, or numbers, where any of the said papers, parts, or numbers respectively shall not exceed 2 sheets of the dimensions herein-after specified (exclusive of any cover or blank leaf, or any other leaf upon which any advertisement or other notice shall be printed), or shall be published for sale for a less sum than *6d.*, exclusive of the duty by this

* Such of the retail newsmen as have a good share of business, purchase direct from the publishers at the wholesale prices.

act imposed thereon: provided always, that no quantity of paper less than a quantity equal to 21 inches in length and 17 inches in breadth, in whatever way or form the same may be made or may be divided into leaves, or in whatever way the same may be printed, shall, with reference to any such paper, part, or number as aforesaid, be deemed or taken to be a sheet of paper:

And provided also, that any of the several papers hereinbefore described shall be liable to the duties by this act imposed thereon, in whatever way or form the same may be printed or folded, or divided into leaves or stitched, and whether the same shall be folded, divided, or stitched, or not.

Exemptions. — Any paper called "Police Gazette, or Hue and Cry," published in Great Britain by authority of the Secretary of State, or in Ireland by the authority of the Lord Lieutenant.

s or bills, of goods imported and exported, or warrants or certificates for the delivery of goods, and the weekly bills of mortality: and also papers containing any list of prices current, or of the state of the markets, or any account of the arrival, sailing, or other circumstances relating to merchant ships or vessels, or any other matter wholly of a commercial nature: provided such bills, contain any other matter than what hath been usually comprised therein.

Regulations, &c. — A discount of 25 per cent. is to be allowed on the above duties on newspapers printed in Ireland. — (§ 2.)

In order to prevent fraud, in the returns as to newspapers, it is enacted, that, from the 31st of December, 1836, a separate or distinctive stamp or die shall be used for each newspaper. — (§ 3.)

No person is to print or publish a newspaper until after a declaration has been made and lodged at the Stamp-Office, containing certain particulars (specified in the act), as to the names and addresses of the printer, and certain of the proprietors of such paper, &c., under a penalty of 50*l.* Persons wilfully making a false or defective declaration are, upon conviction, to be deemed guilty of a misdemeanor. — (§§ 6, 7.)

There are a number of regulations intended to provide for the discovery and liability of the printer and proprietors, the security of the duties, and the prevention of the sale of unstamped papers. A penalty of 20*l.* is imposed on any person printing, publishing, selling, &c. newspapers not duly stamped; and it is declared to be lawful for any officer of stamps, or any person authorised by the commissioners in that behalf, to seize any such offender, and take him before any justice having jurisdiction where the offence is committed, who shall summarily determine the matter, and upon conviction and default of payment, shall commit such offender to prison for some term not exceeding 3, nor less than 1 calendar month. — (§ 17.)

Penalty for sending abroad newspapers not duly stamped, 50*l.* — (§ 18.)

Justices may grant warrants to search for unstamped newspapers, and to seize presses, &c. used in printing the same; and on refusal of admittance, officers may break open doors, &c. Persons resisting officers liable to a penalty of 20*l.* — (§§ 22, 23.)

Influence of the Reduction of the Duty. — The reduction of the price of newspapers from 7*d.* to 5*d.* occasioned a considerable increase in the demand for the old or established papers; and a considerable number of new weekly papers have also started into existence since the reduction of the duty in the metropolis and throughout the country. Hitherto, however, no new daily paper has been established.

Influence of the Tax on Newspapers. — Formerly it used to be impossible, without a violation of the stamp laws, to sell newspapers under 7*d.* or 7½*d.*; so that those poorer persons who could not afford so large a sum, or who had no means of getting a newspaper in company with others, were obliged either to be without one, or to resort to those low-priced journals that were circulated in defiance of the law. This inconvenience has, however, been obviated by reducing the duty to 1*d.* Probably, however, the better plan would have been to have made the duty 1*d.* on all papers sold at or under 4*d.*, and to have made it an *ad valorem* duty of 25 per cent. on all papers published at above that rate. This would have had the same influence as the present plan on the lower priced class of papers, at the same time that it would have subjected the larger and more expensive papers to a proportionally greater charge. But it may, perhaps, be doubted whether the reduction of the duty to 1*d.*, even supposing it had been confined to the cheaper class of papers, was a judicious measure, and whether it would not have been better to have fixed it at 2*d.* on all papers without exception. No doubt, it was contended, at the time that the subject was under discussion, that various advantages would result from the proposed reduction; that the clandestine circulation of cheap journals advocating dangerous doctrines would be suppressed; and that, the stigma attached to low priced journals in the public estimation being removed, men of ability and attainments would find it as much for their advantage to write in them as in the higher priced journals. Probably these anticipations have been in some degree realised; but we much doubt whether the circulation of low priced political journals can ever be of advantage. Such papers are, speaking generally, addressed to the lower and poorer classes of the community; and their writers find it more for their advantage to flatter the prejudices entertained by their readers, and to espouse their peculiar views, how inconsistent soever these may be with the interests of society in general, than to inculcate sounder though less popular principles; — hence the revolutionary character of the greater number of the low priced papers. This, perhaps, may be a necessary evil in a highly advanced country like this; but whether it be so or not, there can be no doubt of its existence, and of its formidable magnitude.

It has sometimes been thought singular that that division of subjects which has been introduced into most other things has not been introduced amongst newspapers. Instead of having all sorts of matter crammed into the same journal, it might be presumed that the better plan would be to have all topics of considerable interest separately treated in papers appropriated to them only, and conducted by persons fully conversant with their principles and details. Under the present omnivorous system, individuals who care nothing for the theatre are, notwithstanding, unable to procure a paper in which it does

not occupy a prominent place; and those who cannot distinguish one tune from another have daily served up to them long dissertations on concerts, operas, oratorios, and so forth. But, how desirable soever in some respects, the plan of appropriating particular papers to particular subjects does not appear to be at all suited to the public taste. In a well conducted daily paper, like *The Times*, ably written articles on all subjects of interest are brought together under the reader's notice, who may read them all, or such only as he pleases. This is incomparably more convenient than to have to hunt for different articles among a variety of journals; and is, in fact, the only plan calculated to meet the wants and exigencies of the public.

Instead of imposing an equal fixed duty or an *ad valorem* duty on newspapers, it has been proposed to repeal the duty entirely, and to substitute in its stead a post-office duty, similar to that charged in the United States. A scheme of this sort would entirely exempt all newspapers printed and sold in large towns from the duty; a result which, we confess, we do not think is in any respect desirable, but the reverse. In our view of the matter, the object ought not to be to relieve newspapers from taxation, or to create differences in their price by charging a duty only on those carried by post, but to assess the duty so that it should fall equally on them all.

Notices of Newspapers. — The history of newspapers, and of periodical literature in general, remains to be written; and were the task executed by an individual of competent ability, and with due care, it would be a most interesting and important work. It appears, from the researches of Mr. Chalmers, that the first newspaper published in modern Europe made its appearance at Venice, in 1536; but the jealousy of the government would not allow of its being printed; so that, for many years, it was circulated in manuscript! It would seem that newspapers were first issued in England by authority, in 1588, during the alarm occasioned by the approach of the *Armada* to our shores; in order, as was stated, by giving real information, to allay the general anxiety, and to hinder the dissemination of false and exaggerated statements. From this æra, newspapers, of one sort or other, have, with a few intermissions, generally appeared in London; sometimes at regular, and sometimes at irregular intervals. During the civil wars, both parties had their newspapers. The earliest newspaper published in Scotland made its appearance under the auspices of Cromwell, in 1652. The Caledonian Mercury was, however, the first of the Scotch newspapers of native manufacture; it made its appearance at Edinburgh, under the title of *Mercurius Caledonius*, in 1660; but its publication was soon afterwards interrupted. In 1715, a newspaper was, for the first time, attempted in Glasgow.

The *Daily Courant*, the first of the daily newspapers published in Great Britain, made its appearance in London in the early part of the reign of Queen Anne. — (See the *Life of Ruddiman*, pp. 102—121.)

From the Stamp Office accounts, it appears that the number of newspapers sold annually in England, during the 3 years ending with 1753, was 7,411,757; in 1760, 9,464,790; in 1790, 14,035,639; in 1792, 15,005,760.

Account of the Aggregate Number of Stamps issued for Newspapers in each of the undermentioned Years; distinguishing the Numbers in England, Scotland, and Ireland.

Years.	England.	Scotland.	Great Britain.	Years.	England.	Scotland.	Great Britain.	Ireland.*
1801	15,090,805	994,280	16,085,085	1817	20,946,252	850,816	21,797,063	2,480,101
1802	14,264,289	967,750	15,232,039	1818	21,015,429	1,018,900	22,061,329	2,651,212
1803	15,888,921	1,060,210	16,949,131	1819	21,901,854	1,143,615	23,018,119	2,782,903
1804	16,921,768	1,156,525	18,078,293	1820	25,177,127	1,256,560	26,113,687	2,974,156
1805	17,610,069	1,172,200	18,782,269	1821	23,699,752	1,162,434	24,862,186	2,931,037
1806	19,218,984	1,313,709	20,532,793	1822	22,709,159	1,223,244	23,932,103	3,088,472
1807	20,097,602	1,337,259	21,131,861	1823	23,422,526	1,247,739	24,670,265	3,339,492
1808	20,714,566	1,343,925	22,058,191	1824	24,556,860	1,017,049	25,573,909	3,364,999
1809	22,536,331	1,470,552	24,006,883	1825	25,185,503	1,465,191	26,950,094	3,500,482
1810	22,519,786	1,459,775	23,979,561	1826	25,681,003	1,296,549	26,980,552	3,473,014
1811	22,977,963	1,143,750	24,424,713	1827	25,863,499	1,795,771	27,659,270	3,545,816
1812	23,719,000	1,573,600	25,292,600	1828	26,632,566	2,162,643	28,795,209	3,790,272
1813	24,839,397	1,503,241	26,342,618	1829	26,337,006	2,699,328	29,036,334	3,953,550
1814	24,931,910	1,376,093	26,308,003	1830	27,370,092	3,133,988	30,504,080	4,035,314
1815	23,075,983	1,309,523	24,385,508	1831	30,170,093	3,280,072	33,450,165	4,361,430
1816	21,055,627	996,727	22,050,354	1832	29,427,580	3,264,851	32,692,431	4,518,260
				1833	27,690,929	3,033,292	30,724,221	3,791,000
				1834	27,552,170	3,112,310	30,664,480	4,084,442
				1835	28,508,569	3,021,454	31,533,023	4,290,836
				1836	31,740,599	3,396,163	35,136,762	4,286,438
				1837	44,114,316	4,521,399	48,635,715	5,262,211
				1838	44,383,675	4,984,973	49,368,648	5,312,232
				1839	47,787,804	5,410,417	53,198,221	5,782,857
				1840	48,896,570	5,663,943	54,560,513	6,057,795
				1841	48,640,070	6,129,289	54,769,359	5,990,033

* Until 1817 no distinct account was kept of the stamps issued for newspapers in Ireland.

An Account of the Gross Produce of the Duties on Newspapers and Advertisements during each of the undermentioned Years, in England, Scotland, and Ireland.

Years ending 5th of Jan.	Newspapers.						Advertisements.					
	England.			Scotland.			Ireland.	England.			Scotland.			Ireland.		
	£	s.	d.	£	s.	d.	£ s. d.	£	s.	d.	£	s.	d.	£	s.	d.
1811	328,413	10	11	21,288	7	8	In those years there was no separate account kept of stamps issued fornewspapers in Ireland.	113,546	19	1	15,041	8	0	15,723	11	7
1812	335,095	6	0	21,054	13	9		114,195	11	5	14,397	9	0	20,479	5	3
1813	345,902	1	8	22,918	6	8		115,875	18	3	14,448	6	0	20,915	5	10
1814	362,241	4	4	21,921	19	7		114,111	12	10	14,623	7	0	21,253	3	11½
1815	363,500	0	0	20,158	7	7		106,575	9	8	13,410	3	0	19,759	17	6
1816	363,414	3	5	20,281	12	10½		110,941	6	6	14,017	7	0	20,475	16	1½
1817	350,893	15	8	16,612	2	4		118,202	3	4	15,353	8	6	18,498	7	5
1818	349,104	4	0	14,180	5	4	18,885	2	2½	116,552	4	11	16,666	13	0	18,191	12	7
1819	350,257	3	0	17,381	13	4	20,210	16	6	119,788	19	4	17,210	6	0	18,535	12	6
1820	365,080	11	4	19,060	5	0	21,187	1	11½	122,227	6	3	16,911	9	6	16,721	1	8½
1821	419,618	15	8	20,609	6	8	22,693	10	10	123,772	15	6	16,416	15	0	15,491	0	0
1822	394,995	17	4	19,373	18	0	22,346	9	7	125,065	17	5	16,095	2	0	15,102	5	0½
1823	378,485	19	8	20,387	8	0	23,556	1	0½	131,288	12	0	17,030	16	6	13,708	7	3½
1824	390,575	8	8	20,795	13	0	25,148	2	5	125,475	5	7	16,020	11	0	14,524	3	8½
1825	409,281	0	0	22,387	9	4	25,633	13	6½	134,533	19	3½	17,825	17	0	16,126	10	9
1826	425,154	10	8	24,419	17	0	26,659	9	3½	144,751	2	6½	18,708	18	0	18,907	15	0
1827	429,662	15	2	22,013	6	4	25,187	11	9½	135,687	7	2	17,779	13	0	15,720	0	0
1828	428,629	9	8	29,929	10	4	25,561	3	11½	133,978	16	11	18,400	14	6	14,379	17	6
1829	439,798	8	0	33,556	2	8	27,330	16	8	136,368	17	10	18,959	12	5	15,532	15	0
1830	438,667	10	8	42,301	6	0	28,578	16	7½	136,052	18	10	17,592	5	7	14,985	6	0
1831	455,972	10	6	49,466	10	0	29,360	18	3½	137,915	19	4	19,566	8	0	16,337	14	0
1832	502,497	19	4	52,090	15	2	31,846	16	3	137,858	12	3	19,060	6	0	15,672	2	2
1833	490,451	6	8	51,465	14	8	32,513	9	4½	137,122	10	0	18,278	6	0	15,248	17	4
1834	461,457	3	0	48,100	14	0	31,591	13	5	114,506	2	2	16,191	4	4	12,240	2	4
1835	458,033	16	5	49,339	19	8	29,782	7	9½	73,308	1	6	10,114	16	2	8,130	14	8
1836	473,910	12	6	47,999	4	8	31,287	6	11	77,853	2	9	10,587	17	0	8,468	12	2
1837	344,413	14	4	37,453	5	0	26,287	16	11	87,985	4	8	10,351	6	0	8,539	6	0
1838	182,998	5	2	18,671	13	3	21,755	14	6½	90,501	0	7	11,438	18	0	8,679	4	8
1839	184,077	1	2	20,539	17	9½	21,975	19	6	98,668	11	5	13,230	16	6	8,910	12	0
1840	198,052	9	8	22,400	5	7	23,818	18	10½	101,356	12	2	13,927	18	0	9,741	12	4
1841	202,737	1	8	22,963	18	7	24,850	19	7½	106,901	1	11	14,518	8	0	10,167	10	4
1842	202,735	6	6	24,130	2	0	21,838	6	9	107,527	5	1	14,217	4	0	9,859	15	10
1843	211,792	18	11	24,027	13	9½	25,340	15	1	103,386	7	2	13,671	15	0	9,520	14	0

A Return of the Number of Stamps issued to each Newspaper in England, Wales, Scotland, and Ireland, during each of the Three Years ending the 5th of January, 1843; specifying also the Amount of Advertisement Duty paid by each Paper in each of the above Three Years.

ENGLAND.

London Papers.	Newspaper Stamps.			Advertisement Duty.								
	1810.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Age	96,000	74,000	64,500	240	7	6	168	10	6	160	19	0
Ditto, at one halfpenny	-	-	2,000									
Atlas	165,000	90,500	125,000	215	12	6	200	2	0	259	13	0
Ditto, at one halfpenny	1,500	5,000	2,000									
Athenæum	70,000	68,900	75,000	333	13	6	317	18	6	384	13	6
Ditto, at one halfpenny	1,500	-	-									
Argus	142,000	50,500	86,800	258	4	6	218	2	0	132	18	6
Bent's Literary Advertiser	18,200	18,000	18,000									
Ditto, at one halfpenny	1,000	1,500	750									
Bell's Life in London	1,075,500	1,029,000	1,014,000									
Ditto, at one halfpenny	-	-	40,000	267	12	0	325	10	0	367	2	6
Bell's New Weekly Messenger	142,500	123,500	117,750									
Ditto, at one halfpenny	3,000	-	-	104	5	0	82	2	6	69	19	6
Bell's Weekly Messenger	906,000	883,000	847,000									
Ditto, at one halfpenny	10,000	11,000	10,000	330	12	0	296	11	0	301	19	0
British Queen	-	93,000	99,000									
Ditto, at one halfpenny	-	-	4,000	227	8	0	136	13	0	207	0	0
Britannia	161,000	199,500	289,000									
Ditto, at one halfpenny	6,000	8,000	23,000	137	2	0	135	4	6	189	3	0
Courier	243,000	209,000	93,500	652	7	0	448	1	0	259	0	6
County Herald	37,000	44,000	40,000	82	7	0	91	2	6	56	17	0
County Chronicle	80,500	79,000	79,500	183	18	0	197	2	6	164	12	0
Court Journal	74,000	76,000	58,500									
Ditto, at one halfpenny	9,500	3,500	9,100	309	1	6	274	2	6	300	0	0
Circular to Bankers	31,000	28,500	27,500									
Ditto, at one halfpenny	2,080	1,536	3,160									
Commercial Daily List	14,500	15,000	17,000	11	12	6	97	13	0	107	15	6
Court Gazette	1,000	37,915	41,400									
Ditto, at one halfpenny	-	-	2,000	182	9	6	323	0	6	296	9	6
Colonial Gazette	55,000	52,000	58,000	108	1	6	60	0	0	45	12	0
Christian Spectator	70,000	61,000	61,500									
Conservative Journal	89,050	69,500	46,000	193	11	6	194	17	0	108	16	6
City Chronicle	40,510	77,141	71,750									
Ditto, at one halfpenny	1,000	1,726	-	39	1	6	60	12	9	106	5	6
Evening Chronicle	219,500	204,000	194,000	32	18	6	23	5	0	18	9	0
Evening Mail	380,000	445,000	475,000	60	4	0	46	7	6	38	14	0
English Chronicle	120,500	116,875	122,500	11	17	0	22	13	0	97	2	6
Examiner	311,825	319,700	318,550	289	11	6	279	16	6	257	11	0
Ecclesiastical Gazette	139,300	143,975	159,050	122	6	6	149	6	6	165	3	0
Era	176,500	215,000	210,500									
Ditto, at one halfpenny	15,000	5,000	-	223	8	6	200	15	6	219	0	0
Globe	997,800	1,069,000	1,010,050	1,147	17	6	1,108	19	0	1,013	5	0
Gardener's Gazette	121,600	112,650	75,600									
Ditto, at one halfpenny	3,000	2,500	-	90	18	0	137	12	6	114	13	6
Gardener's Chronicle	20,000	188,542	208,000	-	-		135	18	0	188	9	6
Illustrated London News	-	-	952,250									
Ditto, at one halfpenny	-	-	42,500	-	-		-	-		53	8	0
John Bull	219,000	204,000	185,000	455	18	6	429	12	0	422	6	6
Jurist	87,500	85,913	85,794									
Ditto, at one halfpenny	13,500	16,752	18,950	20	17	0	22	13	0	29	16	0
Justice of the Peace and Parish Law Recorder	108,400	122,850	115,850									
Ditto, at one halfpenny	-	2,000	2,150	18	13	6	12	9	0	15	7	6
Indian News	11,550	23,500	27,775	12	18	0	28	13	0	31	19	0
London Journal of Commerce	79,800	103,000	92,600	262	4	0	280	19	0	263	8	0
London Mercantile Journal	17,500	15,000	25,483	7	14	6	21	13	6	147	14	6
Literary Gazette	27,550	27,600	28,560	180	18	6	142	8	6	191	11	0

London Papers.	Newspaper Stamps. 1840.	1841.	1842.	Advertisement Duty. 1840. £ s. d.	1841. £ s. d.	1842. £ s. d.
Le Courier de l'Europe	53,250	89,500	92,750	14 15 6	59 14 0	90 12 0
Ditto, at one halfpenny	-	-	1,600			
London Gazette	155,000	200,000	235,000			
London Price Current	6,500	6,000	6,500			
London Mail	22,350	40,000	39,000	- - -	4 10 0	19 8 6
Lumley's Advertiser	39,000	22,525	18,000	5 14 0	3 0 0	1 14 6
Morning Chronicle	2,075,500	2,079,000	1,918,500	4,607 2 0	4,674 9 0	4,313 12 6
Morning Post	1,125,000	1,165,210	1,195,025	3,367 14 0	3,672 11 0	3,622 10 0
Morning Herald	1,938,000	1,630,000	1,659,500	4,115 2 0	4,611 6 0	3,900 12 0
Morning Advertiser	1,550,000	1,470,000	1,445,000	3,822 4 6	3,716 15 6	3,068 8 0
Mining Journal	72,000	74,107	73,500	112 7 0	99 1 6	120 18 0
Ditto, at one halfpenny	1,500	4,250	1,250			
Mark Lane Express	238,000	231,000	218,500	221 14 0	214 10 0	201 3 0
Ditto, at one halfpenny	8,000	8,650	40,000			
Medical Times	14,598	18,524	22,553	6 4 6	- - -	50 5 0
Ditto, at one halfpenny	-	-	800			
Magnet	207,650	213,750	210,500	49 1 0	43 5 6	33 15 0
New Zealand Journal	18,000	20,150	22,100	28 2 6	22 7 0	29 17 0
Naval and Military Gazette	104,665	91,500	96,920			
National Advertiser	2,000	28,000	169,000	- - -	60 10 6	173 11 0
Ditto, at one halfpenny	-	-	2,000			
Nicholson's Price Current	11,500	14,000	12,500			
Observer	210,000	182,500	210,000	346 16 0	313 11 6	281 0 6
Old England	101,000	111,100	11,700	31 8 6	166 11 6	16 4 0
Ditto, at one halfpenny	10,000	3,400	600			
Patriot	302,500	261,000	212,500	360 18 0	347 17 0	360 19 0
Prince's Price Current	15,000	17,500	14,000	0 3 0	0 16 6	0 13 6
Public Ledger	110,000	140,000	130,000	1,115 17 0	1,115 5 0	1,074 15 6
Publishers' Circular	66,500	60,900	57,550	144 19 6	156 7 6	152 9 6
Ditto, at one halfpenny	2,750	-	5,500			
Planet	110,000	102,250	89,500	53 10 6	27 6 0	27 4 6
Ditto, at one halfpenny	1,000	-	-			
Pawnbroker's Gazette	27,850	29,700	31,800	106 8 6	109 14 6	115 0 6
Racing Calendar	36,225	39,225	38,075	66 13 6	71 11 6	68 2 0
Record	325,500	333,000	312,000	576 9 0	588 4 0	582 0 0
Railway Times	151,075	155,075	150,000	139 19 0	152 5 0	141 19 6
Ditto, at one halfpenny	2,000	13,621	5,550			
Railway Magazine	72,500	70,000	75,750	108 3 0	120 15 6	141 6 0
Sunday Times	1,040,000	1,100,000	1,080,000	505 5 6	562 4 0	689 12 6
Ditto, at one halfpenny	156,000	45,000	133,000			
Shipping Gazette	356,000	408,000	585,588	762 0 9	1,081 5 6	955 16 6
Standard	1,040,000	1,025,000	1,000,000	1,156 7 0	1,148 8 0	1,074 9 0
St. James's Chronicle	602,000	670,000	627,000	343 11 6	390 12 6	376 15 6
Sun	1,281,000	1,225,000	1,173,000	1,215 18 6	1,209 13 6	960 15 0
Spectator	182,000	185,000	188,000	251 9 6	229 11 6	251 15 0
Ditto, at one halfpenny	12,000	-	-			
Satirist	194,027	162,000	151,500	241 5 6	165 7 6	189 0 0
Times	5,060,000	5,600,000	6,305,000	13,887 0 0	14,801 5 0	15,223 1 0
Ditto, at one halfpenny	-	-	790,000			
Tablet	57,000	99,700	41,100	33 18 0	95 11 0	82 13 0
Ditto, at one halfpenny	2,000	2,500	1,500			
United Service Gazette	86,500	85,200	88,700	250 7 0	204 13 6	191 18 6
Ditto, at one halfpenny	6,000	-	-			
Weekly Chronicle	1,128,152	1,007,500	925,000	328 8 0	334 5 6	333 0 0
Weekly Dispatch	3,275,000	2,975,000	3,275,000	600 1 6	803 15 6	783 1 6
Watchman	210,000	207,000	209,000	195 9 0	196 5 6	216 7 6
Provincial Papers.						
Aylesbury News	49,000	43,500	27,500	86 15 6	98 0 6	91 8 6
Anti-Bread Tax Circular	172,500	118,700	82,550	54 19 0	21 10 6	13 19 0
Bath Herald	50,000	44,000	48,000	210 15 0	199 19 0	182 17 0
Bath Chronicle	71,950	76,000	79,000	284 3 6	283 10 0	280 17 6
Ditto, at one halfpenny	5,000	-	1,000			
Bath Journal	67,000	67,000	64,000	210 18 0	204 19 6	211 13 0
Bath and Cheltenham Gazette	55,500	57,000	51,000	259 4 0	255 4 6	241 19 0
Berwick Advertiser	38,000	36,000	40,000	111 13 6	111 0 0	106 14 6
Berwick Warder	30,000	35,600	30,500	135 3 0	149 8 0	161 8 0
Brighton Gazette	57,000	60,500	61,000	271 19 0	275 3 6	285 5 6
Brighton Guardian	60,000	66,000	64,000	221 12 6	209 3 6	224 5 6
Brighton Herald	56,000	53,000	51,000	195 9 0	198 7 6	205 18 6
Bristol Mirror	111,000	106,000	152,500	80 18 0	487 13 0	471 6 0
Ditto	-	-	6,000			
Bristol Mercury	168,000	197,000	209,000	452 9 6	504 3 0	531 7 6
Ditto, at one halfpenny	-	-	6,000			
Bristol Standard	49,000	40,500	24,000	213 0 0	195 10 6	64 17 6
Bristol Times	42,000	45,000	35,000	183 12 0	193 10 0	204 6 0
Ditto, at one halfpenny	-	-	1,000			
Bristol Gazette	30,000	33,000	38,000	226 5 6	224 0 6	239 11 0
Bury and Norwich Post	89,000	84,500	94,750	264 6 0	256 16 0	275 14 0
Bury Herald	28,112	28,000	26,500	102 9 0	95 12 6	109 2 6
Bucks Gazette	9,500	9,000	8,200	36 9 0	27 15 0	19 1 0
Bucks Herald	30,000	40,238	32,500	100 19 0	99 16 6	73 8 6
Birmingham Gazette (Aris's)	151,000	148,500	144,000	924 18 0	806 3 6	726 7 6
Birmingham Journal	106,500	106,000	98,000	165 16 0	169 8 6	172 4 0
Birmingham Advertiser	80,000	55,000	65,000	258 7 0	236 12 6	212 14 0
Boston Herald	12,000	9,000	12,050	68 18 6	72 3 0	65 17 0
Bradford Observer	27,879	30,500	36,000	100 8 6	101 0 6	94 8 6
Ditto, at one halfpenny	-	-	3,000			
Berkshire Chronicle	41,000	42,000	42,000	215 8 0	218 3 6	198 6 0
Bedford Mercury	25,000	26,245	27,000	87 18 0	75 9 0	83 11 0
Blackburn Gazette	10,500	10,055	16,500	69 7 6	56 2 0	46 2 6
Blackburn Standard	27,140	30,750	28,100	79 5 6	73 11 6	77 3 6
Bolton Free Press	36,000	43,000	25,100	138 7 6	175 14 6	140 2 6
Bolton Chronicle	42,500	39,000	37,500	159 3 0	159 10 6	140 3 6
Chester Courant	52,000	60,000	53,000	261 1 6	283 10 6	256 10 0
Chester Chronicle	95,500	100,000	96,000	330 13 6	332 8 0	297 18 0
Ditto, at one halfpenny	400	1,200	400			
Chelmsford Chronicle	107,000	112,300	106,000	253 8 6	281 12 6	294 19 6
Coventry Standard	35,000	37,000	39,150	156 1 6	135 18 0	127 11 6
Coventry Herald	51,000	39,000	39,000	156 6 0	139 11 6	134 2 0
Cornwall Royal Gazette	53,500	58,500	54,000	185 17 0	175 14 6	166 18 0
Ditto, at one halfpenny	1,200	4,000	-			
Canterbury Weekly Journal	25,500	18,000	24,000	36 10 6	42 0 0	44 9 6
Cheltenham Journal	30,000	30,000	30,025	153 7 6	148 5 6	144 18 0
Ditto, at one halfpenny	-	2,000	-			
Cheltenham Looker On	24,000	24,000	26,000	42 4 6	51 10 6	62 6 6
Cheltenham Free Press	30,000	30,000	30,000	89 12 6	68 14 0	70 11 6
Cheltenham Examiner	38,000	51,000	61,000	133 17 6	188 8 0	205 16 0
Cheltenham Chronicle	56,000	55,500	50,375	258 7 6	214 17 6	254 14 0
Ditto, at one halfpenny	1,500	-	-			
Cambridge Chronicle	86,100	89,000	4,700	368 11 0	355 1 0	385 13 0
Ditto, at one halfpenny	8,950	-				

Provincial Papers.	Newspaper Stamps.			Advertisement Duty.					
	1840	1841.	1842.	1840.			1841.		1842.
				£	s.	d.	£	s. d.	£ s. d.
Cambridge Advertiser	34,500	37,000	37,000	150	16	6	156	13 6	157 14 9
Ditto, at one halfpenny	5,000	2,000	6,000						
Cambridge Independent Press	121,198	116,000	116,000	367	5	6	370	5 6	371 15 6
Ditto, at one halfpenny	2,000	5,500	2,500						
Cumberland Pacquet	50,000	40,000	37,000	95	12	6	194	9 6	179 11 0
Carlisle Journal	106,565	116,000	112,000	286	4	0	275	6 6	255 19 6
Carlisle Patriot	43,000	50,000	44,000	225	9	0	206	0 6	188 12 6
Durham Chronicle	46,000	68,737	59,175	163	11	6	300	12 0	183 19 6
Durham Advertiser	40,000	40,000	40,000	187	11	6	161	5 0	160 13 0
Ditto, at one halfpenny	2,000	1,780							
Devonport Telegraph	26,000	46,200	30,000	157	11	6	157	1 0	135 9 0
Ditto, at one halfpenny		1,000							
Devonport Independent	41,650	41,440	42,000	146	11	0	145	1 0	126 19 6
Ditto, at one halfpenny	1,000	7,000	200						
Devonshire Chronicle	21,400	25,500	25,000	58	5	6	58	19 0	64 4 0
Dorset County Chronicle	74,000	96,000	72,000	276	18	0	294	9 0	268 17 6
Ditto, at one halfpenny		1,500							
Derby Mercury	71,000	80,000	80,975	299	5	0	293	5 6	288 13 6
Derby Reporter	60,000	60,000	60,000	185	14	0	191	6 6	184 19 0
Ditto, at one halfpenny		1,500	3,000						
Derbyshire Courier	43,000	35,000	40,000	108	1	6	101	2 0	88 7 0
Derbyshire Chronicle	33,000	37,000	35,500	81	15	0	91	14 6	84 16 6
Ditto, at one halfpenny		1,700							
Dover Telegraph	29,000	29,300	28,500	105	10	0	98	17 0	98 18 6
Dover Chronicle	24,000	23,000	27,500	81	0	0	73	5 6	80 11 0
Doncaster Gazette	119,000	117,050	115,000	299	5	0	290	15 6	249 15 0
Doncaster Circle	39,000	57,000	55,000	150	4	6	139	5 6	153 6 0
Ditto, at one halfpenny		2,000							
Devizes and Wiltshire Gazette	48,000	50,000	50,000	172	19	0	183	12 0	183 16 6
Essex Standard	65,100	79,150	72,800	221	9	6	239	3 6	237 7 6
Ditto, at one halfpenny	1,300		1,600						
Essex Herald	61,000	58,000	64,000	107	0	6	124	2 6	119 9 6
Essex, Herts, and Kent Mercury	66,500	43,365	39,900	96	10	6	105	19 6	104 12 6
Ditto, at one halfpenny	2,200								
Exeter Flying Post	72,000	91,000	89,000	272	15	6	278	5 0	253 17 6
Exeter and Plymouth Gazette	111,500	121,500	122,500	393	18	0	388	2 6	365 14 0
Eastern Counties Herald	165,500	156,000	153,000	486	18	0	439	16 0	486 6 0
Falmouth Packet	35,100	32,075	30,200	69	6	0	33	15 0	108 1 6
Felix Farley's Bristol Journal	64,000	77,000	73,500						
Great Northern Advertiser		233,000	99,175				481	7 0	372 15 0
Gloucester Journal	108,000	112,000	112,000	385	5	6	356	18 6	332 2 0
Gloucestershire Chronicle	69,000	67,000	67,000	291	3	0	273	16 6	267 7 6
Gateshead Observer	108,000	108,000	101,000	426	12	0	324	13 6	298 10 0
Ditto, at one halfpenny	3,000	4,300							
General Commercial Intelligencer		25,200	39,500						
Hereford Journal	86,550	89,175	81,046	274	2	6	273	15 0	270 15 0
Ditto, at one halfpenny			2,000						
Hereford Times	101,000	111,788	120,650	257	3	6	314	12 6	308 6 6
Ditto, at one halfpenny	4,800	6,000	9,000						
Hampshire Chronicle	56,000	69,500	76,885	196	5	6	214	7 0	212 17 0
Hampshire Telegraph	168,500	203,000	156,000	375	12	0	348	2 5	401 4 1
Hampshire Advertiser	104,125	100,500	104,000	405	6	0	399	4 6	399 6 0
Ditto, at one halfpenny		12,500							
Hampshire Independent	70,000	75,500	54,250	207	18	6	222	18 0	267 18 0
Ditto, at one halfpenny	3,100	2,000	4,500						
Hertford County Press	31,500	42,025	30,100	113	11	0	121	17 6	117 0 0
Ditto	2,000								
Hampshire & West Sussex Standard		13,500	52,000				7	16 0	91 14 6
Ditto, at one halfpenny			2,000						
Halifax Guardian	33,000	41,000	56,000	153	19	6	167	14 0	182 6 6
Ditto, at one halfpenny	1,000	1,000							
Herts Reformer	46,500	41,000	35,500	143	3	6	130	14 6	128 14 0
Hull Advertiser	214,000	95,000	93,000	407	15	0	311	8 0	261 9 0
Ditto, at one halfpenny	22,650		500						
Hull Packet	37,500	47,000	51,950	167	17	0	165	10 6	169 5 6
Hull Rockingham	35,000	38,000	25,000	110	11	0	97	11 0	96 9 0
Hull Times	40,000	36,200	5,000	144	3	0	152	6 6	60 7 6
Harrogate Advertiser	9,000	9,500	11,000	41	18	6	44	17 0	50 2 6
Ipswich Journal	115,000	104,000	112,000	373	4	0	370	2 6	380 9 6
Ipswich Express	28,000	47,000	54,000	67	19	0	122	12 6	173 6 6
Ditto, at one halfpenny	600								
Kentish Gazette	54,000	56,000	58,000	174	7	6	160	17 6	181 13 0
Kentish Observer	30,000	30,000	28,000	109	8	6	110	12 6	112 7 0
Kentish Mercury	46,960	33,500	12,180	114	15	0	123	19 6	41 11 0
Kent Herald	65,000	51,000	56,380	160	11	6	176	14 0	183 0 0
Kendal Mercury	35,250	41,500	42,700	87	1	6	74	15 6	74 18 6
Kentish Standard			4,900						5 17 0
Lancaster Gazette	32,000	30,500	33,300	113	5	0	94	13 0	81 18 0
Lancaster Guardian	32,000	33,000	26,150	191	14	6	88	14 6	75 16 6
Ditto, at one halfpenny			700						
Leamington Chronicle	22,000	18,000	14,975	124	13	0	123	12 0	102 3 0
Leamington Spa Courier	52,000	52,000	48,000	180	19	6	180	3 6	174 6 0
Leeds Intelligencer	212,500	187,000	188,500	569	5	6	790	1 0	567 7 6
Ditto, at one halfpenny			6,000						
Leeds Wednesday Journal	3,000	3,000					8	2 0	
Leeds Mercury	493,500	517,000	513,000	1,042	4	0	1,038	10 6	947 15 6
Ditto, at one halfpenny		60,878	48,000						
Leeds Times	169,500	182,000	163,000	157	4	0	201	18 0	177 12 0
Ditto, at one halfpenny	13,338	11,000							
Leeds Conservative Journal			33,000						53 7 0
Leicester Journal	79,500	76,250	84,000	349	4	0	335	6 6	285 3 0
Ditto, at one halfpenny	1,000								
Leicestershire Mercury	43,250	47,600	38,000	156	6	0	118	14 6	97 2 6
Leicester Herald	13,500	13,000	9,640	70	7	0	73	19 0	53 0 6
Leicester Chronicle	33,500	37,500	36,000	194	12	6	179	8 0	148 14 6
Lynn Advertiser		3,000	18,000						37 2 6
Lincoln Standard	2,000	10,250	10,000	33	4	6	25	11 6	23 12 6
Lincolnshire Chronicle	81,000	84,000	84,250	358	16	0	355	10 0	332 3 6
Ditto, at one halfpenny		2,000							
Liverpool Albion	162,500	168,500	161,300	646	19	0	673	19 0	675 9 0
Ditto, at one halfpenny	14,500	23,000	4,000						
Liverpool Chronicle	104,000	104,000	104,000	518	8	0	534	6 0	471 12 0
Ditto, at one halfpenny	6,000	10,000							
Liverpool Journal	82,100	85,828	73,000	214	17	6	266	12 6	239 18 6
Ditto, at one halfpenny	17,000	14,000	20,000						
Liverpool Mail	177,000	189,000	151,500	549	12	0	645	12 0	525 19 0
Ditto, at one halfpenny	8,000	9,000							
Liverpool Mercantile Gazette	56,000	55,500	51,500	848	2	0	913	19 0	888 1 0
Liverpool Mercury	400,000	363,000	367,000	1,265	5	0	1,200	3 0	1,156 16 6
Ditto, at one halfpenny	50,000	28,000	33,514						

Provincial Papers.	Newspaper Stamps.			Advertisement Duty.		
	1840.	1841.	1842.	1840.	1841.	1842.
				£ s. d.	£ s. d.	£ s. d.
Liverpool Standard	*101,500*	*115,000*	*126,000*	*457 10 0*	*595 19 0*	*538 4 0*
Ditto, at one halfpenny	*3,000*	*7,000*				
Liverpool Times	*68,000*	*83,000*	*54,000*	*318 10 6*	*414 12 0*	*324 16 6*
Ditto, at one halfpenny		*13,000*				
Liverpool Advertiser	75,000	74,000	74,000	1,085 16 6	1,174 13 0	1,077 6 0
Liverpool Courier	100,000	117,500	117,000	422 5 0	416 12 6	393 1 6
Ditto, at one halfpenny	3,000	9,500	3,000			
Leamington Looker-On			4,500			1 14 6
Macclesfield Chronicle			24,000			24 1 6
Macclesfield Courier and Herald	65,000	68,000	60,000	172 2 6	148 10 0	145 5 6
Ditto, at one halfpenny			5,000			
Manchester and Salford Advertiser	140,000	93,000	97,000	284 16 6	250 8 6	198 10 6
Ditto, at one halfpenny		4,000	2,000			
Manchester Chronicle	143,500	133,750	63,000	494 2 0	495 19 6	282 1 6
Manchester Courier	239,500	276,000	330,500	650 14 0	664 16 0	717 3 0
Manchester Guardian	609,000	657,451	710,700	2,041 4 0	2,096 17 0	2,014 8 6
Ditto, at one halfpenny		9,000	39,450			
Manchester Times	126,250	120,700	139,650	364 13 0	370 2 6	302 14 0
Midland Counties Herald	292,000	287,000	286,000	1,069 7 0	1,065 1 6	993 18 0
Ditto, at one halfpenny	6,000					
Midland Monitor		75,600	48,000		16 10 0	23 6 6
Maidstone Journal	52,100	50,000	58,000	211 11 6	213 18 0	224 6 6
Maidstone Gazette	78,000	76,500	76,000	235 13 0	250 16 0	257 12 6
New Moral World	6,500	15,580	12,500	1 13 0	11 14 0	3 3 0
Northampton Herald	105,500	110,500	110,000	348 16 6	365 2 0	324 18 0
Northampton Mercury	101,800	95,500	96,000	310 5 6	327 0 0	286 7 0
Northern Star	976,500	706,000	651,000	44 18 6	52 11 6	57 0 0
Northern Times	58,000	40,675	42,927	284 0 6	256 5 0	239 5 0
Ditto, at one halfpenny	2,000					
Nottingham Journal	71,000	85,000	100,000	314 17 0	270 12 0	294 15 0
Nottingham Review	101,000	111,000	111,000	278 9 6	248 14 0	250 4 0
Nottingham and Newark Mercury	60,000	56,750	54,000	192 16 6	175 2 6	179 3 6
Ditto, at one halfpenny	4,100		2,000			
Norwich Mercury	132,000	137,000	135,000	484 13 0	487 1 0	480 10 6
Ditto, at one halfpenny	6,000	6,000	6,000			
Norwich Times		20,000	7,500		49 8 6	24 18 0
Norwich Protestant Herald		2,960	2,000		2 2 0	2 14 0
Ditto, at one halfpenny		960				
Norfolk Chronicle	139,000	148,000	153,000	501 9 0	493 17 0	501 4 6
Ditto, at one halfpenny	10,850	29,000	27,000			
North Devon Journal	20,500	25,500	28,350	76 8 6	71 8 0	75 9 0
North Devon Advertiser	18,000	18,000	18,500	74 12 6	70 17 6	64 17 6
Newcastle Journal	49,000	152,500	124,500	470 14 0	533 15 6	398 0 6
Newcastle Courant	198,000	222,500	204,000	663 10 6	645 9 0	548 14 0
Newcastle Chronicle	156,500	154,000	150,000	578 4 6	588 7 0	511 8 0
Norfolk and Norwich Monitor		1,500	1,500		0 3 0	0 7 6
Oxford Journal	109,700	120,000	112,500	409 5 6	399 10 6	389 14 0
Oxford Herald	59,000	60,500	70,000	241 13 0	219 12 0	212 5 0
Ditto, at one halfpenny	4,000	5,000				
Oxford City and County Chronicle	75,000	71,000	86,500	232 13 0	192 16 6	192 7 6
Payne's Advertiser		8,000	100,000	—	—	—
Ditto, at one halfpenny			2,500			
Preston Chronicle	100,000	93,500	90,000	191 18 6	217 19 0	197 2 0
Preston Pilot	30,000	30,000	36,000	155 17 0	153 12 0	150 15 0
Plymouth Herald	49,000	55,000	49,000	185 14 0	198 16 6	184 14 6
Plymouth and Devonport Journal	32,500	29,000	25,000	116 2 0	157 1 0	141 16 6
Ditto, at one halfpenny	1,000					
Penzance Gazette	16,070	19,000	20,050	47 11 0	47 15 6	66 3 0
Ditto, at one halfpenny			2,000			
Port of Tyne Pilot (North Shields)	39,190	40,200	26,500	209 11 0	186 10 6	126 13 6
Plymouth Times			31,000			88 4 0
Reading Mercury	151,700	151,500	164,075	404 3 6	409 10 0	400 5 6
Rochester Gazette	3,000	3,000	2,000	21 10 6	23 15 6	22 10 0
Sherborne Mercury	30,000	24,100	27,500	83 11 0	68 15 6	72 4 6
Sherborne Journal	69,000	64,000	70,000	169 8 6	174 19 6	162 19 6
Ditto, at one halfpenny			1,500			
Stamford Mercury	447,825	483,000	494,000	927 0 0	945 15 0	933 18 0
Somerset County Gazette	57,350	47,000	42,700	156 10 0	196 13 0	161 0 6
Ditto, at one halfpenny		1,100				
Sussex Agricultural Express	120,750	151,500	150,000	373 2 6	385 17 6	415 2 6
Ditto, at one halfpenny			3,000			
Sheffield Independent	118,000	121,000	123,500	240 13 6	256 2 6	267 6 0
Ditto, at one halfpenny	1,000	8,000	4,000			
Sheffield Mercury	90,000	67,500	71,500	320 6 6	248 14 0	298 1 0
Ditto, at one halfpenny		3,000				
Sheffield Iris	39,500	16,500	17,000	184 14 6	183 12 0	193 16 0
Shrewsbury Chronicle	120,000	120,001	132,000	358 11 6	337 8 6	279 10 6
Shrewsbury News	55,000	72,070	63,000	135 12 0	129 4 6	95 11 0
Ditto, at one halfpenny	1,000	5,000				
Staffordshire Examiner	45,000	41,500	28,100	120 9 0	97 1 0	77 14 0
Ditto, at one halfpenny	2,500		800			
Staffordshire Advertiser	216,000	234,000	248,500	449 0 6	436 13 0	424 14 6
Ditto, at one halfpenny			8,000			
Staffordshire Mercury	52,000	50,000	60,304	147 19 6	126 12 0	121 14 6
Ditto, at one halfpenny			7,000			
Staffordshire Gazette	60,000	56,500	7,000	120 7 6	109 8 6	88 9 6
Suffolk Chronicle	130,000	125,000	125,000	384 12 0	376 7 0	370 13 0
Salisbury and Winchester Journal	147,000	145,500	150,000	441 3 0	434 12 6	406 14 6
Salisbury and Wiltshire Herald	34,000	45,000	50,000	211 19 0	224 6 6	178 16 0
Ditto, at one halfpenny		2,000				
Sunderland Herald	49,000	54,000	50,000	247 5 6	233 9 6	269 11 0
Salopian Journal	85,000	71,000	84,500	324 18 0	310 8 6	289 11 6
Shropshire Conservative	18,000	31,500	36,200	27 12 0	125 12 6	111 1 6
Stockport Advertiser	31,000	31,150	29,150	127 13 0	112 16 0	98 3 6
Stockport Chronicle	32,000	32,000	12,000	80 17 0	80 9 6	57 7 6
Scarborough Herald	7,350	10,250	10,200	24 3 0	51 10 6	26 0 6
Sussex Advertiser	51,950	17,000	29,035	146 5 0	135 10 6	141 19 6
Taunton Courier	31,000	32,500	28,000	128 3 6	132 3 0	132 12 0
Tyne Courier			10,000			17 5 0
Tyne Mercury	27,550	24,000	21,000	174 15 0	166 10 0	136 2 6
Ten Town's Messenger	69,000	66,000	52,000	208 16 0	191 3 6	148 17 6
Western Times	113,500	114,000	114,000	285 15 0	288 19 6	288 4 6
Ditto, at one halfpenny	4,000	10,000				
Western Luminary	35,000	36,000	34,070	124 10 0	128 14 0	118 7 0
Wolverhampton Chronicle	63,800	67,900	71,000	210 10 6	218 17 0	201 3 0
Warwick Advertiser	75,000	66,000	77,000	164 17 0	170 11 0	151 2 6
West Kent Guardian	28,900	26,525	26,000	90 1 6		134 3 6
Whitehaven Herald	42,700	38,000	32,135	149 17 0	157 7 0	133 7 0
West Briton and Cornwall Advertiser	88,500	101,000	105,000	258 6 0	242 2 0	216 4 6
Ditto, at one halfpenny	4,000	4,000				

Provincial Papers.	Newspaper Stamps.			Advertisement Duty.								
	1840.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Windsor and Eton Express	40,000	42,000	42,000	125	17	0	110	9	6	115	16	0
Windsor and Eton Journal	15,000	-	-									
Worcester Herald	103,500	96,750	116,000	274	5	6	267	19	6	275	11	0
Ditto, at one halfpenny	-	-	4,790									
Worcester Journal (Berrow's)	85,175	111,000	105,000	278	0	6	258	19	6	282	13	6
Ditto, at one halfpenny	650	2,000	2,000									
Wiltshire Independent	38,500	37,500	37,500	123	10	6	126	18	0	120	12	0
Wilts and Gloucester Standard	23,550	26,900	28,800	62	17	0	110	9	6	115	16	0
West of England Conservative	31,500	42,000	31,000	177	19	6	173	14	0	150	19	6
Ditto, at one halfpenny	-	1,500	-									
Wigan Gazette	25,500	22,000	2,500	66	12	0	59	18	6	26	6	6
Westmorland Gazette	37,500	33,000	23,000	76	19	0	68	15	6	84	9	0
Worcestershire Guardian	45,000	37,000	40,000	155	11	0	142	4	0	127	19	0
Ditto, at one halfpenny	-	-	3,000									
Worcestershire Chronicle	73,450	93,150	100,000	141	12	0	195	7	6	180	10	6
Ditto, at one halfpenny	4,000	4,500	-									
Wakefield Journal	-	1,000	37,000	123	0	0	124	5	6	117	6	0
Western Star	7,500	-	-	2	12	6						
Woolwich Advertiser	8,100											
Yorkshire Gazette	144,000	112,950	147,550	303	7	6	292	14	6	281	0	6
Yorkshire Racing Calendar	4,800	4,200	3,600	7	4	0	8	5	0	11	9	6
York Courant	154,500	116,000	90,000	155	6	6	144	7	6	121	10	0
Ditto, at one halfpenny	-	6,000	-									
York Herald	171,500	162,800	106,000	441	10	6	397	16	0	354	7	6
Ditto, at one halfpenny	-	-	7,000									
Yorkshireman	122,200	120,000	123,000	216	10	6	213	4	6	195	0	0
Ditto, at one halfpenny	-	9,582	-									

WALES.

Welsh Papers.	Newspaper Stamps.			Advertisement Duty.								
	1840.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Carmarthen Journal	48,100	48,000	44,000	164	9	6	161	12	6	144	15	0
Cambrian	91,000	90,000	81,000	256	7	0	246	3	0	218	5	0
Carnarvon and Denbigh Herald	37,650	39,450	41,000	95	18	6	102	13	6	98	5	0
Ditto, at one halfpenny	1,500	1,000	6,000									
Monmouthshire Merlin	74,000	74,000	60,500	228	19	6	211	5	6	178	7	0
Ditto, at one halfpenny	-	3,000	4,830									
Monmouthshire Beacon	23,000	29,000	27,000	101	14	0	103	4	0	91	11	6
Merthyr Guardian	44,500	50,880	58,000	128	9	6	105	15	6	92	0	6
North Wales Chronicle	22,000	24,000	27,000	98	9	6	117	11	0	95	0	6
Silurian	30,000	27,000	29,000	67	19	0	63	18	0	52	19	0
Y Protestant	32,000	18,600	10,500	7	11	6	8	8	0	2	15	6
Welshman	35,200	42,950	46,000	136	16	0	129	1	6	113	15	6
Udgorn Cymru	-	-	10,600									

SCOTLAND.

Scotch Papers.	Newspaper Stamps.			Advertisement Duty.								
	1840.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Aberdeen Journal	135,000	133,800	130,000	586	2	6	608	5	0	596	8	0
Ditto, at one halfpenny	2,500	-	-									
Aberdeen Herald	120,000	112,000	102,000	361	8	6	361	5	6	325	5	6
Aberdeen Constitutional	44,500	38,500	24,000	207	4	6	175	8	6	151	17	6
Aberdeen Banner	44,000	71,700	42,000	65	9	6	115	17	6	98	9	6
Ditto, at one halfpenny	2,000	2,000	-									
Arbroath Journal	15,000	14,790	4,000	93	6	0	55	4	0	31	17	6
Arbroath Guide	-	-	16,980	—			-			42	9	0
Ditto, at one halfpenny	-	-	1,000									
Ayr Advertiser	72,000	70,200	69,500	146	2	0	156	1	6	150	0	0
Ayr Observer	41,000	46,500	38,960	125	6	6	129	10	6	123	13	6
Dingwall Ross Advertiser	-	-	26,600	-			-			74	11	0
Dumfries Times	61,000	52,000	47,300	142	2	6	116	8	0	93	16	6
Dumfries Courier	96,000	103,000	103,800	266	3	6	257	5	0	246	16	6
Ditto, at one halfpenny	6,000	-	-									
Dumfries Herald	42,000	42,500	42,500	126	3	0	141	19	6	139	19	0
Dumfries Galloway Register	30,000	22,500	24,952	66	6	0	61	17	6	59	9	6
Dundee Advertiser	67,725	78,500	72,500	303	15	0	286	8	6	257	11	0
Ditto, at one halfpenny	3,000	5,300	3,000									
Dundee Chronicle	34,195	45,000	23,020	117	19	6	59	3	6	35	3	6
Ditto, at one halfpenny	700	-	-									
Dundee Courier	18,775	26,500	24,000	138	1	6	151	10	0	118	11	6
Dundee Warder	-	51,500	40,000	-			110	3	6	111	19	6
Ditto, at one halfpenny	-	2,350	1,050									
Dundee Herald	-	-	11,475	-			-			5	5	0
Edinburgh Courant	274,150	280,100	280,600	809	15	6	748	14	6	795	4	6
Ditto, at one halfpenny	3,000	3,000	3,100									
Edinburgh Mercury	126,000	126,000	135,000	296	14	0	261	16	6	258	12	0
Ditto, at one halfpenny	2,000	2,000	1,000									
Edinburgh Advertiser	142,000	143,000	147,000	295	1	0	253	16	0	250	10	0
Ditto, at one halfpenny	2,000	3,700	500									
Edinburgh Gazette	11,000	12,000	16,000	59	14	0	62	8	0	62	2	0
Ditto, at one halfpenny	-	-	4,000									
Edinburgh Journal	68,500	67,500	65,000	167	5	0	132	13	6	123	19	6
Ditto, at one halfpenny	-	3,000	3,500									
Edinburgh Chronicle	57,000	32,000	46,650	120	3	0	77	6	6	71	11	0
Edinburgh Scotsman	250,592	268,000	291,500	490	1	0	498	15	0	512	11	0
Edinburgh Observer	65,000	80,000	60,000	186	19	6	156	3	0	153	3	0
Ditto, at one halfpenny	-	3,000	-									
Edinburgh North British Advertiser	481,500	481,000	512,000	1,707	16	6	1,815	0	0	1,834	1	0
Ditto, at one halfpenny	257,500	477,500	386,500									
Edinburgh Saturday Post	44,000	80,000	73,000	123	12	0	175	11	6	174	15	0
Edinburgh Scottish Pilot	35,240	27,450	13,860	101	2	0	65	2	0	42	1	6
Edinburgh True Scotsman	43,500	6,700	17,050	39	9	0	8	0	6	5	9	6
Edinburgh Missionary Record	23,390	40,780	37,960	107	0	0	132	0	0	157	0	0
Ditto, at one halfpenny	-	400	5,600									
Edinburgh Witness	155,500	195,000	251,137	170	9	6	193	14	6	208	2	6
Ditto, at one halfpenny	6,000	14,000	-									

Scotch Papers.	Newspaper Stamps.			Advertisement Duty.					
	1840.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Elgin Courant	25,000	31,000	29,000	105	12	0	97	7	0	89	5	0
Fife Herald	38,000	41,500	39,500	124	16	0	118	13	0	104	12	6
Fife Journal	28,000	30,900	28,000	119	0	6	112	4	0	98	9	6
Ditto, at one halfpenny	-	600	-									
Fife Advertiser	-	500	78,885	-		-	22	10	0	27	7	6
Forres Gazette	8,000	5,500	4,900	17	5	0	17	12	6	14	0	6
Glasgow Courier	150,000	150,000	150,000	758	3	6	738	12	0	611	18	6
Glasgow Journal	14,100	14,500	14,000	9	1	6	8	3	6	7	17	6
Glasgow Chronicle	68,750	59,500	78,500	241	10	0	211	16	0	196	11	6
Glasgow Herald	333,000	319,600	348,620	1,334	9	6	1,343	8	0	1,286	14	0
Ditto, at one halfpenny	-	6,500	-									
Glasgow Saturday Evening Post	74,000	105,500	176,000	93	10	6	86	3	6	108	1	6
Ditto, at one halfpenny	-	-	5,000									
Glasgow Scottish Guardian	124,000	120,000	90,000	199	1	0	184	13	0	172	4	0
Glasgow Argus	97,000	104,000	104,025	383	19	0	385	10	0	359	3	6
Ditto, at one halfpenny	-	-	3,000									
Glasgow Constitutional	99,000	120,739	110,000	337	19	0	353	8	0	346	19	0
Glasgow Scotch Reformer's Gazette	123,960	144,840	203,850	266	18	6	283	17	6	285	19	0
Ditto, at one halfpenny	-	-	21,000									
Glasgow Mail	26,000	24,000	18,000	46	7	0	32	14	0	23	12	6
Ditto, at one halfpenny	-	1,000	-									
Greenock Advertiser	67,325	73,500	65,000	294	12	0	309	6	0	240	18	0
Greenock Observer	14,500	16,050	16,000	28	19	0	41	18	6	28	1	0
Inverness Courier	61,500	68,187	58,750	166	13	0	174	6	0	171	4	6
Ditto, at one halfpenny	1,500	-	1,500									
Inverness Herald	26,000	29,000	24,500	95	9	6	85	11	6	66	15	0
Inverness Journal	31,000	26,000	26,000	105	13	6	119	2	0	112	7	0
Kelso Mail	52,000	50,000	44,000	217	19	0	214	14	6	220	1	0
Kelso Chronicle	28,000	30,000	30,000	100	13	0	107	0	6	105	18	0
Kilmarnock Journal	23,000	25,000	22,000	84	16	6	82	11	6	75	19	6
Leith Commercial List	-	8,000	14,000	-		-	3	3	0	8	5	0
Montrose Review	62,000	65,100	65,000	198	0	0	232	16	0	192	4	6
Ditto, at one halfpenny	-	-	3,800									
Montrose Standard	16,000	18,000	18,500	88	19	0	118	8	6	105	7	6
Paisley Advertiser	30,000	30,000	27,000	134	8	0	137	12	6	107	17	0
Perthshire Courier	18,000	21,072	18,000	124	16	0	103	17	6	99	6	0
Perthshire Advertiser	61,200	60,000	55,000	192	15	0	216	19	6	151	4	0
Perthshire Constitutional	29,100	32,000	24,000	150	19	6	134	5	0	146	8	0
Perthshire Chronicle	22,000	18,000	3,500	58	12	6	51	0	0	13	11	6
Stirling Journal	42,000	38,000	34,000	115	5	6	101	5	0	105	7	6
Stirling Observer	48,150	44,000	31,299	114	12	0	101	2	0	86	17	0
Wick John-o'-Groat Journal	37,500	37,000	35,000	76	5	6	78	13	6	66	1	6

IRELAND.

Dublin Papers.	Newspaper Stamps.			Advertisement Duty.								
	1840.	1841.	1842.	1840.			1841.			1842.		
				£	s.	d.	£	s.	d.	£	s.	d.
Saunders's News Letter	636,000	642,000	708,000	2,098	0	0	2,084	12	0	2,109	10	0
Ditto, at one halfpenny	12,000	-	-									
Morning Register	118,000	111,125	101,500	247	4	0	221	17	0	222	16	0
Ditto, at one halfpenny	1,500	-	-									
Freeman's Journal	201,075	193,500	229,000	249	3	0	266	12	0	247	2	0
Evening Mail	438,000	450,000	456,000	527	13	0	524	5	0	502	19	0
Ditto, at one halfpenny	16,000	10,000	10,000									
Evening Post	237,000	248,000	224,000	270	14	0	257	2	0	211	3	0
Ditto, at one halfpenny	2,000	-	-									
Evening Freeman	38,550	40,000	40,000	15	9	0	16	7	0	17	18	0
Evening Packet	244,000	262,000	268,000	244	7	0	265	8	0	252	14	0
Ditto, at one halfpenny	-	-	3,000									
Pilot	114,475	124,500	101,219	62	3	0	61	18	0	56	9	0
Ditto, at one halfpenny	4,275	2,500	1,000									
Monitor	110,650	117,700	102,500	113	12	0	125	14	0	100	4	0
Ditto, at one halfpenny	1,000	-	-									
Statesman	78,150	61,050	59,500	81	5	0	57	10	0	35	1	0
Ditto, at one halfpenny	2,450	-	1,000									
Gazette	20,000	11,000	7,500	36	19	0	32	15	0	29	2	0
Weekly Register	113,500	125,500	100,000	61	17	0	45	10	0	41	14	0
Ditto, at one halfpenny	49,000	9,000	-									
Weekly Freeman	145,000	196,475	185,500	78	13	0	80	9	0	82	12	0
Ditto, at one halfpenny	65,000	15,000	-									
Weekly Warder	99,425	111,550	116,500	145	3	0	129	15	0	111	13	0
Ditto, at one halfpenny	5,550	-	8,500									
General Advertiser	334,000	343,950	348,650	600	7	0	593	15	0	567	14	0
Ditto, at one halfpenny	2,500	5,000	4,000									
Medical Press	40,100	38,500	36,750	12	19	0	12	7	0	8	2	0
Ditto, at one halfpenny	5,200	2,800	800									
World	66,250	54,825	58,275	54	2	0	163	5	0	78	4	0
Farmer's Gazette	-	-	48,375	-		-	-		-	26	7	0
Nation	-	-	55,000	-		-	-		-	11	2	0
Christian Journal	17,300	14,000	7,100	9	15	0	5	7	0	2	5	0
Christian Examiner	16,900	15,000	11,100	2	0	0	1	14	0	1	5	0
Irish Ecclesiastical Journal	13,550	20,000	22,000	6	10	0	16	1	0			
Ditto, at one halfpenny	2,500	3,250	-									
Weekly Herald	36,920	13,639	5,674	36	14	0	13	1	0	2	0	0
Irishman	73,325	52,775	28,900	24	7	0	15	0	0	10	17	0
Ditto, at one halfpenny	5,200	1,550	-									
Mercantile Advertiser	17,500	15,000	15,000	43	10	0	46	1	0	43	12	0
Country Papers.												
Belfast Commercial Chronicle	115,000	111,000	122,500	279	19	0	247	15	0	236	14	0
Belfast Mercantile Register	17,500	18,750	17,500	76	1	0	66	13	0	69	11	0
Belfast News Letter	100,000	105,000	84,000	188	10	0	161	17	0	147	12	0
Ditto, at one halfpenny	-	-	2,000									
Belfast Vindicator	86,500	87,500	99,500	111	2	0	118	13	0	94	5	0
Belfast Irish Friend	20,910	21,000	17,500	2	8	0	4	11	0	7	7	0
Belfast Northern Whig	174,500	195,950	207,000	343	7	0	285	12	0	292	6	0
Ditto, at one halfpenny	-	1,250	4,500									
Belfast Ulster Missionary	3,360	3,360	-	0	7	0	0	3	0			
Belfast Ulster Times	120,000	104,500	101,000	242	6	0	215	1	0	182	4	0
Ditto, at one halfpenny	-	2,850	-									
Belfast Banner of Ulster	-	-	72,000	-		-	-		-	48	19	0
Athlone Sentinel	4,000	4,500	5,500	11	7	0	11	15	0	8	2	0
Athlone Westmeath Guardian	11,090	13,000	12,717	19	9	0	21	15	0	19	11	0
Cork Constitution	204,000	204,000	216,000	427	13	0	449	1	0	468	2	0
Cork Southern Reporter	200,000	185,000	195,000	424	17	0	411	14	0	412	9	0

Irish Newspapers.	Newspaper Stamps.			Advertisement Duty.								
	1840.	1841.	1842.	1840.			1841.			1842		
				£	s.	d.	£	s.	d.	£	s.	d.
Cork Examiner	-	41,000	134,000	-	-		56	6	0	264	11	0
Ballyshannon Herald	5,300	10,500	12,000	12	0	0	19	12	0	11	5	0
Newry Telegraph	115,000	118,500	123,000	201	19	0	207	5	0	177	5	0
Newry Examiner	60,000	50,500	44,000	114	7	0	90	11	0	64	15	0
Downpatrick Recorder	30,000	25,000	30,000	44	10	0	50	2	0	41	9	0
Ditto, at one halfpenny	-	-	-									
Drogheda Conservative	20,500	20,000	21,500	44	14	0	49	2	0	52	4	0
Drogheda Argus	32,500	37,500	40,000	78	16	0	69	16	0	54	0	0
Drogheda Journal	4,900	10,500	20,000	10	1	0	13	9	0	31	0	0
Fermanagh Impartial Reporter	12,500	17,500	22,500	16	17	0	22	12	0	29	7	0
Ditto, at one halfpenny	1,750	175	-									
Enniskillen Chronicle	16,000	19,000	16,000	29	14	0	35	5	0	26	16	0
Ditto, at one halfpenny	-	500	-									
Galway Weekly Advertiser	9,500	13,000	7,500	23	4	0	44	6	0	11	11	0
Galway Connaught Journal	10,500	-	-	41	18	0						
Galway Tuam Herald	13,000	13,000	15,000	34	18	0	32	11	0	30	2	0
Galway Vindicator	-	19,000	31,500	-	-		19	9	0	56	2	0
Galway Standard	-	-	6,000	-	-		-	-		1	17	0
Kerry Evening Post	25,000	23,000	17,500	57	6	0	41	2	0	37	5	0
Kerry Examiner	7,500	27,250	28,500	4	6	0	25	19	0	31	0	0
Leinster Express	38,615	34,750	32,700	71	0	0	82	5	0	73	11	0
Ditto, at one halfpenny	1,350	5,199	-									
Kilkenny Journal	25,000	27,500	27,500	56	11	0	58	19	0	48	15	0
Kilkenny Moderator	25,000	20,500	25,000	60	9	0	46	16	0	52	0	0
Carlow Sentinel	15,000	17,500	15,000	35	12	0	34	10	0	28	0	0
Ditto, at one halfpenny	-	-	500									
Limerick Chronicle	200,000	197,500	198,000	221	2	0	223	9	0	210	1	0
Limerick Reporter	[illegible]000	62,500	55,500	96	11	0	97	5	0	104	12	0
Limerick Standard	57,500	54,750	2,430	117	14	0	96	8	0	22	4	0
Clare Journal	20,000	16,500	15,000	35	1	0	32	0	0	25	12	0
Londonderry Journal	41,500	35,500	40,000	94	0	0	101	5	0	71	6	0
Londonderry Sentinel	59,500	58,500	64,500	117	6	0	118	19	0	98	2	0
Londonderry Standard	61,500	65,500	67,500	79	3	0	101	9	0	82	16	0
Roscommon Gazette	7,500	10,000	6,500	12	19	0	16	19	0	7	14	0
Roscommon Journal	10,519	5,037	4,993	19	17	0	22	2	0	9	3	0
Longford Journal	8,500	11,000	9,000	11	14	0	11	5	0	11	9	0
Mayo Constitution	17,500	18,000	19,500	32	18	0	30	9	0	32	14	0
Mayo Telegraph	22,500	20,000	20,500	31	17	0	30	11	0	28	19	0
Mayo Ballina Advertiser	8,500	7,500	8,500	18	13	0	23	6	0	17	6	0
Mayo Achil Missionary Herald	27,000	64,000	30,500	7	0	0	3	12	0	3	10	0
Mayo Ægis	-	11,000	12,500	-	-		6	2	0	7	17	0
Northern Standard	15,500	15,000	17,500	28	11	0	26	9	0	21	8	0
Ditto, at one halfpenny	500	-	-									
Nenagh Guardian	24,000	23,000	22,500	44	11	0	39	10	0	33	6	0
Sligo Journal	12,500	10,000	10,500	42	0	0	29	9	0	31	7	0
Sligo Champion	12,000	13,250	10,250	35	8	0	25	18	0	25	13	0
Tipperary Free Press	37,000	40,500	35,500	57	3	0	71	17	0	53	14	0
Tipperary Constitution	30,000	29,000	30,000	51	6	0	57	1	0	38	7	0
Waterford Chronicle	44,750	44,500	45,500	102	16	0	95	16	0	67	19	0
Waterford Weekly Chronicle												
Ditto, at one halfpenny	7,750	8,100	8,450									
Waterford Mirror	27,500	30,000	25,000	49	11	0	55	1	0	40	6	0
Waterford Mail	27,500	38,000	16,500	81	8	0	50	9	0	59	12	0
Waterford Commercial News Letter	9,700	9,600	9,600	-	-		0	6	0	2	11	0
Wexford Independent	35,000	43,500	39,000	76	5	0	71	15	0	66	16	0
Wexford Conservative	25,000	27,500	25,000	75	16	0	65	6	0	59	0	0

American Newspapers. — The increase of newspapers in the U. States has been a good deal more rapid than in England; a consequence, partly, no doubt, of the greater increase of population in the Union, but more, probably, of their freedom from taxation, and of the violence of party contests. The total number of newspapers annually issued in the Union may be estimated at from 65,000,000 to 75,000,000, while the total number issued in Great Britain and Ireland, in 1841, was only 60,759,392; so that, making allowance for the difference of population, every individual in America has, at an average, nearly twice the supply of newspapers enjoyed by individuals in England. "From this exuberant supply of daily and weekly papers, and the low price charged, as compared with the English and French newspapers, they are liberally patronised by all classes, and are found in almost every dwelling and counting house, and in all hotels, taverns, and shops; and attract a large share of the public attention. As the paths of honour and promotion are alike open to every one, it follows that public discussion forms the principal staple of the newspapers. There is no country where the press has a more powerful influence over public opinion."—(*Picture of New York*, p. 391.)

We are not, however, to estimate the influence of newspaper literature by its quantity only, but must have regard also to its *quality*. The latter is, indeed, the principal thing to be attended to; and in whatever degree the Americans may exceed us in the number, they certainly are immeasurably below us in the quality, of their newspapers. Speaking generally, we do not hesitate to say that the newspaper press is a disgrace to the union. The journals indulge, with few exceptions, in the most offensive personalities. Instead of examining the principles of the measures brought forward, they assail the character and misrepresent the motives of those by whom they are introduced. It is impossible, we believe, to name an individual, who has attained to any high office in the U. States, or to consideration in Congress, who has not been libelled, traduced, and calumniated by a large portion of the press, to a degree that can hardly be imagined. The magnitude of the evil will, probably, lead to its cure. No people, with any pretensions to instruction and morality, can continue to patronise a press whose principal features are misrepresentation, exaggeration, and abuse.

NEW YORK, the capital of the state of that name, and the commercial metropolis

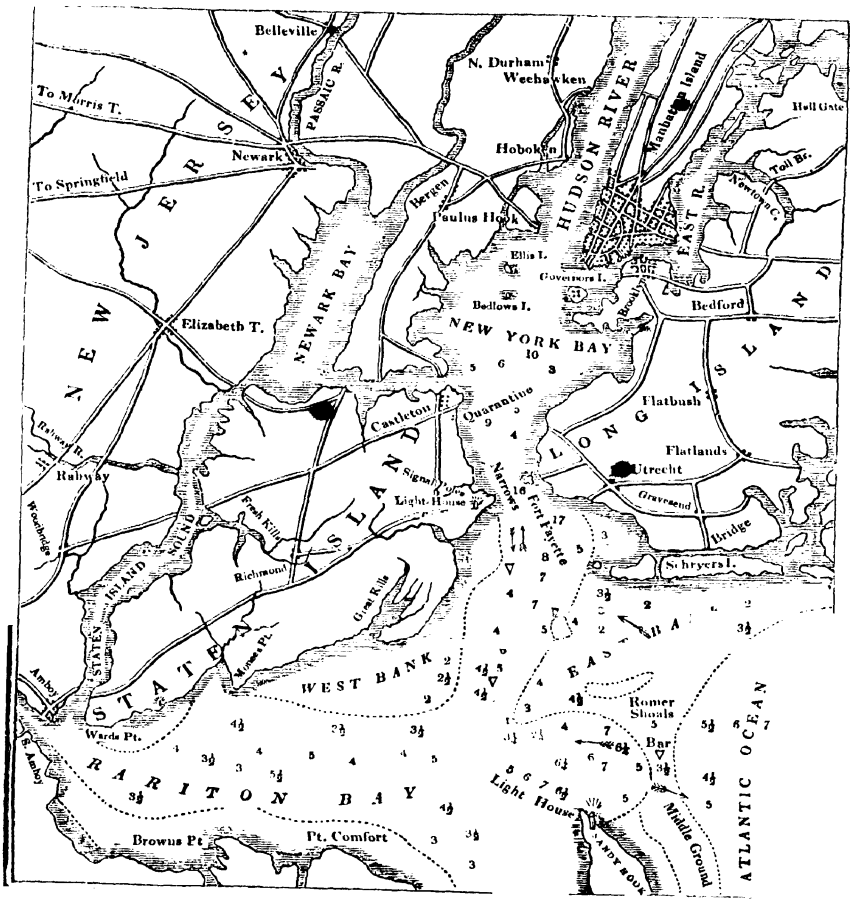
of the U. States, on the southern extremity of Manhattan Island, at the point of confluence of the Hudson River, which separates Manhattan from New Jersey, with East River, which separates it from Long Island, lat. 40° 42′ N., lon., 74° 8′ W. New York bay, or inner harbour, is one of the most capacious and finest in the world; it is completely land locked, and affords the best anchorage. The entrance to the bay through the Narrows is extremely beautiful. On each side, the shore, though wooded down to the water's edge, is thickly studded with farms, villages, and country seats. At the upper end are seen the spires of the city; and in the distance the bold precipitous banks of the Hudson. From New York to the bar between Sandy Hook Point and Schryer's Island (the division between the outer bay or harbour and the Atlantic) is about 17 miles. Fortifications have been erected at the Narrows, Governor's Island, and other places, for the defence of the city and shipping. The wood-cut on the opposite page represents the city and bay of New York, and the surrounding country.

The Hudson river was first explored in 1609, by the famous English navigator whose name it bears, then in the service of the West India Company of Holland. In 1612, New Amsterdam, now New York, was founded by the Dutch, as a convenient station for the fur trade. In 1664, it was taken by the English. The Dutch again recovered possession of it in 1673; but it was retaken by the English in the following year, and continued in their occupation till the termination of the revolutionary war.

New York has increased faster than any other city of the United States. In 1699 it contained 6,000 inhabitants. In 1774, previously to the commencement of the war of independence, the population amounted to 22,750. During the war the population continued stationary; but since 1783, its increase has been quite extraordinary. In 1790, the population amounted to 33,131; in 1800, to 60,489; in 1820, to 123,706; in 1830, to above 213,000, and in 1840, to 312,710. Originally the houses were mostly of wood, and the streets narrow and confined. In these particulars, however, a great improvement has taken place during the last half century; most of the old houses having been pulled down and rebuilt with brick. The new streets, which are broad, and intersect each other at right angles, are well paved and lighted. Broadway, the principal street, is one of the largest and finest in the world. Many of the public buildings are commodious and elegant. The pools, that were formerly abundant in the city and its vicinity, have been completely filled up; a measure that has done much to improve the health of the population. In respect of cleanliness, however, New York is not to be compared with an English town. There is hardly such a thing as a sink or common sewer in the whole city; the night-soil and filth are collected in pits, of which there is one in every house, and, being conveyed to the nearest quay, are thrown into the water; but as these quays are made of timber, with many projections, a great deal of filth is retained about them, producing, in hot weather, an abominable stench. The yellow fever, by which New York is sometimes visited, uniformly breaks out in the lower and dirtiest part of the town; and seldom, indeed, extends to the new and more elevated streets. It is now much less prevalent than formerly; and the general opinion seems to be, that if stones were substituted for timber in the quays, sewers constructed, and proper regulations enforced as to cleanliness, the scourge would entirely disappear.

New York is indebted, for her wonderful increase, to her admirable situation, which has rendered her the greatest emporium of the New World. The rise of the tide is about 6 feet; and even at ebb, there is 21 feet water on the bar; and the water in the outer and inner bays, and in the river, is so deep, that ships of the largest burden lie close to the quays, and may proceed to a great distance up the river. The navigation of the bay is rarely impeded by ice. The great strength of the tide, and the vicinity of the ocean, keep it generally open, even when the Chesapeake and Delaware bays are frozen over. The influence of the tides is felt in the Hudson as far as Troy, 160 miles above New York, affording very peculiar facilities for its navigation. These natural advantages have been vastly extended by a system of canals, which has connected the Hudson not merely with Lake Ontario and Lake Erie, but with the Ohio river, and consequently with the Mississippi and the Gulph of Mexico! So prodigious a command of internal navigation is not enjoyed by any other city, with the exception of New Orleans; but the readier access to the port of New York, the greater salubrity of the climate, and her situation in the most industrious part of the Union, where slavery is abolished, give her advantages over her southern rival, which, it is most probable, will secure her continued preponderance.

Entrance to Harbour, Light-houses, &c. — The course in entering the harbour of New York is nearly due W. from the outermost white buoy on the bar, till the buoy on the S. W. point of the east bank be passed, and then nearly due N. The navigation is extremely easy. Pilots generally board vessels without the bar; for, otherwise, they are only entitled to half fees. Were it not for fear of vitiating insurances, their services would seldom be required. — (See *Rates of Pilotage, post.*) The light-house near the extremity of the long, low, narrow tongue of land, projecting from the New Jersey shore, called Sandy Hook, is in lat. 40° 28′ N., lon. 74° 8′ W. It is fitted up with a very powerful fixed light, which, in clear weather, may be seen by vessels coming from the westward 10 leagues off. But, from its



position, it is not readily discovered by ships coming from the S. till too near. To obviate this inconvenience, a floating light was moored about 7 miles E. from Sandy Hook Point. In 1828, however, 2 light-houses were erected on Neversink hills, nearly 4 miles S. by E. from Sandy Hook. They are 300 feet apart; the most northerly being furnished with a fixed, and the other with a revolving light, both of great power. The lights are elevated 250 feet above the level of the sea; and may be seen, in clear weather, in all directions, from 40 to 50 miles. Since they were fitted up, the floating light has been discontinued. Vessels load and unload at the wharfs on both sides the city.

Trade, &c. — The commerce of New York is very extensive. The value of the merchandise annually loaded and unloaded in the port may be respectively estimated at from 100,000,000 to 120,000,000 dollars. The number of vessels in the port in the busy season varies from 500 to 750, exclusive of about 50 steam packets. The number of arrivals from foreign ports amounted in 1841 to 2,118; and the coasting arrivals are between 4,000 and 5,000. The total value of the imports into the U. States in the year ending the 30th of September, 1841, was 127,946,177 dollars; of which no less than 75,713,426, or nearly 2-3ds, were imported into New York! The imports comprise an infinite variety of articles. The principal are cottons, woollens, linens, hardware, and cutlery; with earthenware, brass and copper manufactures, &c. from Great Britain; silk, wine, brandy, &c. from France and Spain; sugar and coffee from the Havannah and Brazil; with tea, spices, cochineal, indigo, dyewoods, &c. The value of the exports to foreign countries from New York in the year ending the 30th of September 1841, amounted to 33,139,838 dollars, being between ⅓ and ¼ part of the total exports from the U. States. The exports principally consist of wheat flour, corn, rice, and cotton; beef, pork, butter, dried fish, and all sorts of provisions; furs, tobacco, coarse

manufactured goods, lumber, &c. The great excess of the imports into New York over the exports is accounted for by the fact, that, while mostly all articles of export from the Western States are shipped at New Orleans, the greater part of the more valuable articles brought from abroad, and destined for the consumption of Ohio, Indiana, Illinois, and, in some degree, even Kentucky, are principally imported into New York.

The tonnage of New York is greater than that of Liverpool, or any other city, with the single exception of London. The registered tonnage belonging to the port on the last day of December, 1841, amounted to 225,174 tons, and the enrolled and licensed tonnage to 212,840 tons; making a grand total of 438,014 tons, being more than one-fifth part of the whole tonnage of the U. States.

Account of the Quantities of some of the principal Articles of Native American Produce inspected in New York in 1842.

Articles.	Inspected.	Value.	Articles.	Inspected.	Value.
Beef - - bbls.	28,447	$153,702 0	Hops - - lbs.	1,307,863	$134,996 86
Flour and meal - —	1,910,580	10,033,553 36	Stone - - yards	1,100	1,125 11
Pork - - —	155,129	990,671 25	Sole leather - lbs.	12,530,374½	1,983,215 65
Pot ashes - - lbs.	15,165,030	801,695 9	Domestic distilled spirits,		
Pearl ashes - - —	3,806,940	223,693 42	galls.	2,514,056	477,671 45
Grain - - bush.	2,735,319	1,529,851 17	Staves and headings pcs.	3,892,818	114,601 8
Green hides and skins lbs.	4,845,893	216,515 0	Wood - - cords	6,151	12,411 90
Flax seed - bush.	26,416	36,363 25	Lumber - - ft.	30,447,487	271,527 60
Fish - - - bbls.	1,005	4,375 50			
Fish or liver oil - —	1,064	13,747 9	Total value of articles inspected in 1842		$17,931,660 78
Leaf tobacco - hhds.	8,919	800,514 0			

Account showing the Quantities of the principal Articles of Native American Produce exported from the Port of New York during the Year 1842.

Articles.	Quantities.	Articles.	Quantities.	Articles.	Quantities.
Apples - - bbls.	8,361	Fish—*continued.*		Naval stores—*continued.*	
Ashes, pot - - —	31,778	mackerel - - bbls.	4,649	spirits of turpentine, bbls.	1,175
pearl - - —	3,879	herrings - - —	4,517	tar - - - —	27,465
Beef, pickled - —	21,195	Flaxseed - - tierces	3,066	turpentine - - —	188,206
dried - - cwts.	2,002	Flour, wheat - bbls.	325,869	Oils, olive baskets & cases	962
Bees' wax - - —	4,151	rye - - —	10,617	linseed - - galls.	14,800
Butter - - firkins	26,939	Gunpowder - kegs	4,405	whale - - —	2,445,806
Candles, sperm - boxes	11,384	Hams and bacon - cwts.	5,627	sperm - - —	275,227
tallow - - —	9,234	Hides - - No.	31,286	Pork - - bbls.	78,947
Cheese - - casks	5,217	Hops - - bales	5,296	Rice - - tierces	19,307
boxes	20,688	Lard - - kegs	155,085	Saltpetre - - bags	6,100
Clover seed - tierces	4,312	Lumber, shocks, hhds. and		Soap - - boxes	21,810
Corn - - bush.	155,795	pipe - - No.	26,535	Tobacco, leaf - hhds.	7,701
Corn meal - - hhds.	6,814	boards and planks, m. feet	4,831	bales, &c.	12,863
bbls.	25,806	staves and headings m.	4,155	manufactured - kegs	11,702
Cordage - - coils	1,725	hoops - - —	859	Whalebone - cwts.	11,013
Domestic cotton goods,		shingles - - —	1,169	Wheat - - bush.	100,323
packages	19,729	Nails - - —	6,344	Whiskey - - bbls.	1,159
Fish, dry cod - cwts.	33,941	Naval stores, rosin bbls.	58,181	Wool - - bales	1,000

Arrivals in 1842 *from Foreign Ports.*

Steamers - - - -	18
Ships - - - -	518
Barques - - - -	269
Brigs - - - -	823
Galliots - - - -	10
Schooners - - - -	320
Sloops - - - -	2
	1,960

Of these were —

	Ships.	Barques.	Brigs.	Schooners.	Steamers.	Galliots.	Sloops.
American - -	452	141	544	246	-	-	2
English - -	40	64	208	63	14		
Bremen - -	15	15	12	1			
Swedish - -	4	15	20				
Hamburg - -	4	10	4				
Belgian - -	-	6	3	-	3	2	
French - -	1	4	4	-	1		
Norwegian - -	-	4	4				
Sicilian - -	-	1	6				
Danish - -	1	1	3	1			
Dutch - -	-	1	-	2	-	8	
Colombian - -	-	-	7	2			
Italian - -	-	2	3				
Russian - -	-	4					
Neapolitan - -	-	-	2				
Venezuelian - -	-	-	1	2			
Tuscan - -	1						
Sardinian - -	-	1					
Lubec - -	-	-	1				
New-Grenadian - -	-	-	1				
Prussian - -	-	-	-	1			
Spanish - -	-	-	-	1			
Venetian - -	-	-	-	1			

Foreign Arrivals. — In 1838, 1,790; in 1839, 2,159; in 1840, 1,953; in 1841, 2,118; and in 1842, 1960.

Arrival of British Vessels (included in the above). — In 1838, 230; in 1839, 307; in 1840, 307; in 1841, 334; and in 1842, 389.

Coastwise Arrivals in 1842.

	Ships.	Barques.	Brigs.	Schooners.	Total.
January - -	29	7	46	167	249
February - -	18	5	51	127	201
March - -	21	9	42	182	254
April - -	30	10	75	249	364
May - -	16	9	49	252	326
June - -	23	8	65	276	372
July - -	11	4	46	330	391
August - -	12	5	37	266	318
September - -	6	3	36	304	349
October - -	10	10	39	350	409
November - -	15	6	43	205	269
December - -	14	8	46	235	303
Whole number as above -				-	3,805
Which added to the foreign -				-	1,960
Makes a total for the year of -				-	5,765
Whole number last year -				-	5,653
Increase -				-	112

Note. — In the above there are no sloops included, which, if added to the many schooners from Philadelphia and Virginia with wood and coal, which are never boarded (owing to the remoteness of the points at which they come in), would make the number much greater.

The following statement shows the number of foreign arrivals and passengers in different years: —

Years.	Arrivals.	Passengers.	Years.	Arrivals.	Passengers.
1835	2,094	35,303	1839	2,159	48,152
1836	2,293	60,541	1840	1,953	62,797
1837	2,071	57,975	1841	2,118	57,337
1838	1,790	25,581	1842	1,960	74,949

Statement of the Number of Arrivals and Tonnage of Vessels at the Port of New York, from 1810 to 1840, inclusive, from Official Authority.

Years.	Arrivals.	Tonnage.	Increase of Tonnage since 1820.	Years.	Arrivals.	Tonnage.	Increase of Tonnage since 1820.
1810	2,341	274,943½		1826	2,964	40[illegible]	56 62-100ths
1811	2,098	249,010½		1827	2,911	442,406½	72 18-100ths
1812	1,795	194,301½		1828	2,656	412,937½	60 71-100ths
1813	1,519	143,729½		1829	2,716	417,961½	62 66-100ths
1814	788	48,631½		1830	1,986	405,507	57 74-100ths
1815	2,120	291,072½		1831	2,080	427,601½	66 41-100ths
1816	2,224	331,076½		1832	2,292	492,310	91 6-10ths
1817	2,097	288,547½		1833	2,437	521,510	102 96-100ths
1818	2,273	297,196½		1834	2,427	535,497½	106 4-10ths
1819	1,675	266,840		1835	2,450	555,056	116 2-100ths
1820	1,947	256,951½		1836	2,719	647,322	151 92-100ths
1821	2,061	274,314½	6 76-100ths	1837	2,508	629,965	145 17-100ths
1822	2,242	319,940½	24 51-100ths	1838	1,969	559,483	117 74-100ths
1823	2,423	350,785	36 52-100ths	1839	2,573	655,927½	155 27-100ths
1824	2,612	372,576	45	1840	2,479	618,186	140 58-100ths
1825	2,778	420,814½	63 73-100ths				

In addition to these arrivals, which are from foreign and coastwise ports, there are about 1,050 schooners, sloops, &c., employed in coasting inland, not included in the above, averaging about 75 tons, making 78,750 tons. These vessels are here probably every week during the season of navigation, and about 75 steamboats, which probably are here about every other day; tonnage, 30,760.

Account of the Value of the Imports and Exports of New York from 1832.

Years.	Imports.	Exports.	Years.	Imports.	Exports.
	Dollars.	*Dollars.*		*Dollars.*	*Dollars.*
1833	55,918,419	25,395,017	1838	68,453,206	23,008,471
1834	73,188,594	25,512,014	1839	99,882,438	33,268,099
1835	88,191,305	30,345,264	1840	60,410,750	34,264,080
1836	118,253,416	28,920,438	1841	75,713,426	33,139,838
1837	79,501,722	27,338,419			

Regulations as to Passengers arriving at New York. — On the arrival of passengers, an entry must be made at the Custom-house, of their names, clothes, implements of trade or profession (all of which are exempt from duty), and an oath taken respecting them; the form of which, and the entry, may be had at the office gratis. Cabin passengers make this entry themselves, and pay 20 cents each for a permit; on exhibiting which to the officer on board, they are allowed to remove their baggage after it has been inspected. Only 1 entry and permit is necessary for a *family*, and only 20 cents demanded, whatever may be the number of the family. Remains of sea stores, such as tea, sugar, foreign spirits and wines, are liable to pay duties; but unless these are of great bulk or quantity, they are generally allowed to pass free.

An entry is usually made by the master of the vessel, of steerage passengers and their baggage: they pay each 20 cents for a permit. When entry is made by any person not the owner, he gives bond for payment of the duties, if any; and if, after entry is made at the Custom-house, and the oath taken, any article is found belonging to a passenger, liable to pay duty, *not specified in the entry*, it is forfeited, and the person in whose baggage the article is found subjected in treble the value.

Besides making entry at the Custom-house, it is provided by a law of the State, that every master of a vessel arriving from a foreign country, or from any other port of the U. States, "shall within 24 hours after entering his vessel at the Custom-house, make a report in writing, on oath, to the mayor, and in case of his sickness or absence, to the recorder of the said city, of the name, age, and occupation of every person who shall have been brought as passenger in such ship or vessel on her last voyage, upon pain of forfeiting, for every neglect or omission to make such report, the sum of 75 dollars for every alien, and the sum of 50 dollars for every other person neglected to be so reported as aforesaid."

Masters of ships bringing passengers to New York must also pay a dollar on account of each passenger to the corporation, as commutation money, or give bond that none of them shall become chargeable on the city poor rates for the space of 2 years. They almost uniformly prefer paying the commutation.

Lines of Packets. — The establishment of regular lines of packets from New York to foreign ports, and also to every principal port in the U. States, produced a new æra in the commerce of the city, and has redounded equally to the benefit of the enterprising individuals by whom they were projected, and the public. The principal intercourse is carried on with Liverpool; there being about 24 packet ships, distributed in 5 lines, employed at present (1843), in maintaining a regular communication with that port. A dozen packet ships are also employed in the trade between New York and London; and 15 in the trade between New York and Havre. These ships vary in size from 600 tons to above 1,000 tons. Their tonnage has latterly been increasing; and, at an average, it may now be estimated at about 1,000 tons. These ships are all American property, and built chiefly in New York. They are probably the finest and fastest sailing merchant vessels in the world; being beautifully modelled, of the best workmanship, and fitted up with every convenience for passengers, and in the most expensive style. The safety, regularity, and expedition with which they perform their voyages is quite astonishing. The average length of a voyage from Liverpool and Portsmouth to New York, may be estimated at about 34 days, and, from the latter to the former, at about 20 days. And it is material to observe, that these voyages are not reckoned from land to land, but from *port to port*.

The packet ships for New York sail from London on the 7th, 17th, and 27th; and from Portsmouth, or rather Cowes, at which place they touch, on the 1st, 10th, and 20th of each month.

Those bound for New York from Liverpool sail on the 1st, 7th, 13th, 19th, and 25th of each month; and they sail on the same days from New York for Liverpool. Those bound for New York from Havre sail on the same days as those from Liverpool.

Cabin passage to New York from London and Liverpool, 25 guineas; from New York to London and Liverpool, 75 dollars. This includes provisions, beds, &c.; but neither wines nor liquors of any kind.

Each ship has a separate cabin for ladies; each state-room, in the respective cabins, will accommodate *two* passengers; but a *whole* state room may be secured for 1 individual by paying at the rate of 1½ passage, that is, 37½ guineas to New York.

Packets for *Philadelphia* sail from Liverpool on the 8th of every month throughout the year; and 4 of these ships sail *from* Philadelphia for Liverpool on the 20th of each month; the others do not always return *direct* for Liverpool, but sometimes go to Charleston, Savannah, &c., to bring cargoes of produce to Liverpool.

Cabin passage same as that to and from New York.

These ships are all American built and owned, being from 500 to 800 tons burden: some of them are as splendid as the New York packets, and all are fitted up with every regard to comfort.

The rate of *steerage* passage varies, in the course of the year, considerably; depending on the number of ships and the number of passengers going at the time. By the packet ships it fluctuates from 3 to 4 guineas for each full-grown person; and children under 14 years are taken at half price. By other ships

the rate of steerage passage varies, at Liverpool, from 1*l.* 10*s.* to 3*l.* 10*s.*; but the *average* rate may be taken at 2*l.* 10*s.* For these rates, the ship provides nothing but berths, fire, and water; the passengers provide their own provisions, bedding, &c. The expense of provisions for a poor person, who might wish to be as economical as possible, for the voyage out to the U. States, would not be more than from 40*s.* to 50*s.*

The *cabin* passage by the common traders (and many of them are quite equal to the packets in equipment and safety) varies from 12*l.* to 25*l.*; no wines being provided by the ships at these rates, but provisions, bedding, and malt liquor.

List of Banks existing in New York in 1843, with the Amount of their Capitals, Shares, Deposits, &c. in 1842.

Banks.	Capitals.	Amount of Shares.	Depo-its.	Circu-lation.	Specie.	Loans and Discounts.	Divi-dends.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Bank of New York	1,000,000	500	1,373,659	448,238	421,353	1,125,802	80,000
Manhattan	2,050,000	50	549,879	286,594	488,003	1,130,909	
Merchants'	1,190,000	50	1,238,040	241,942	506,687	1,960,923	120,781
Mechanics'	2,000,000	25	481,122	289,368	353,534	1,709,425	
Union	1,000,000	50	928,021	341,356	473,535	1,929,283	80,000
Bank of America	2,001,200	100	1,451,629	321,565	944,582	3,058,149	130,085
City	720,000	45	565,732	187,644	218,418	1,106,248	57,600
Phœnix	1,200,000	20	437,009	253,060	325,619	1,171,387	78,000
North River	500,000	50	377,386	111,905	79,517	734,739	
Tradesmen's	400,000	40	368,557	107,411	64,227	716,940	40,000
Chemical	500,000	25	456,695	249,010	102,739	833,810	
Fulton	600,000	30	380,172	194,159	200,549	886,886	
Merchants' Exchange	750,000	50	348,920	150,064	108,374	1,148,966	56,250
Greenwich	200,000	25	86,877	44,360	33,551	209,521	
Butchers' and Drovers'	500,000	25	404,663	197,913	133,114	958,660	17,500
Mechanics' and Traders'	200,000	25	194,152	101,027	54,986	322,223	14,000
National	750,000	50	472,987	181,686	256,699	1,044,963	52,500
Leather manufacturers'	600,000	50	468,901	187,211	132,574	1,003,107	42,000
Seventh Ward	500,000	50	196,289	120,141	55,102	713,201	15,000
Bank of the State of New York	2,000,000	100	1,432,247	210,101	786,110	2,905,598	60,000
Mechanics' Banking Association	632,000	25	177,798	87,574	66,805	359,298	
Bank of Commerce	5,000,000 may be increased to 20,000,000	100	2,119,742	204,150	1,109,823	2,777,997	193,306
American Exchange	1,154,000	100	523,367	113,024	276,490	1,458,004	57,770
Clinton	400,000	50	8,434	1,547	4,831	57,836	

List of Insurance Companies existing in New York in 1843, with the Amount of their Capitals and Shares.

Companies.	Capitals.	Shares.
Life.	*Dollars.*	*Dollars.*
Life Insurance and Trust Company	1,000,000	100
Farmers' Loan and Trust Company	2,000,000	100
Mutual Life Insurance Company of New York		
Mutual Marine Insurance Company of New York		
New York Insurance Company	5,000,000	50
American Insurance Company	1,500,000	50
Atlantic Insurance Company	350,000	50
Neptune Insurance Company	250,000	50
Jackson Insurance Company	300,000	37-50
Washington Mutual Insurance Company	300,000	50
Mutual Safety Insurance Company		
Sun Mutual Insurance Company		
Atlantic Mutual Insurance Company	450,000	50
Fire.		
Mutual Insurance Company	350,000	50
Eagle Fire Company	500,000	100
Merchants' Insurance Company	500,000	100
Manhattan Insurance Company		50

Companies.	Capitals.	Shares.
Fire — *continued.*	*Dollars.*	*Dollars.*
North River Insurance Company	350,000	25
New York Equitable Insurance Company	300,000	50
New York Contributionship Insurance Company	300,000	50
Jefferson Insurance Company	200,000	30
U. States Fire Insurance Company	250,000	25
Ætna Fire Insurance Company	200,000	50
Firemen's Insurance Company	300,000	25
Howard Insurance Company	300,000	50
New York Fire Insurance Company	200,000	100
City Fire Insurance Company	210,000	
New York Bowery Fire Insurance Company	300,000	25
Greenwich Insurance Company	200,000	25
East River Fire Insurance Company	250,000	25
North American Fire Insurance Company	250,000	50
Trust Fire Insurance Company	200,000	100
Williamsburg Fire Insurance Company	150,000	20
New York Guardian Insurance Company	300,000	100
National Fire Insurance Company	150,000	
Hudson Insurance Company	200,000	25

Rules observed by the New York Banks. — The banks are open every day in the year from ten to three in the afternoon, except Sundays, Christmas Day, New Year's Day, the 4th of July, and general holidays appointed by legal authority, and the bank of New York on Good Fridays.

The interest for discount in the banks in this city is fixed at six per cent. per annum, upon notes or bills not having 60 days to run. Three days of grace are allowed, and the discount taken for the same. Upon notes or bills having more than 60 days to run, 7 per cent. is taken.

Every bill or note offered for discount, must be delivered into the office on the day preceding the day of discount, inclosed in a sealed cover, directed to the cashier, advising the name of the person upon whose account it is offered, &c.

Bills or notes lodged at the banks for collection, are collected free of expense, except when protested for non-payment: the person lodging the same pays the charge of protest.

Deposits of money, or notes for collection, must be entered in the dealer's book at the time such deposit is made.

Gold coins of France, Great Britain, and Spain, are received and paid at the banks at the following rates, according to an act of Congress, passed 1834, viz.: France, 93 1-10 cents the pennyweight. Great Britain, Portugal and Brazil, 94 8-10 cents. do. Spain, 89 9-10 cents do.

Silver coins are received at the banks as follows. — 1 crown, 109 cents.; 1 dollar, 100 cents.; 5 francs, 93 2-100 cents.; pastareens, 18 cents.

Remarks on Banking in New York. — The reader will find in the article Banks, Foreign (*antè*, p. 111.), some details as to the banking system of the U. States. It seems to be quite as defective in New York as in any other part of the Union. Several banks in that State have failed, and some of those that still exist, obtained their charters by resorting to the most disgraceful practices. In the summer of 1826, the grand jury of the city entered upon an investigation of certain circumstances connected with the formation of some of these establishments, which ended in the conviction, as conspirators to defraud the public, of not a few citizens, and even of some members of the legislature, who had previously been deemed highly respectable! The Court of Errors afterwards decided, by a small majority, that these convictions were illegal; but the fact of the most scandalous abuses having prevailed was established beyond all question. We may mention, by way of example, that the United States Lombard Association, incorporated in 1825, was sworn to as having a paid-up capital of 300,000 dollars; but the association having failed in 1826, it was ascertained that not more than 30,000 dollars had ever been paid up! There were, we are sorry to say, several other cases quite as bad, or, if possible, even worse than this. — (*Report and Observations on the Banks, &c. of the State of New York*, p. 10.)

In order to protect the public from the mischief resulting from the failure of banks, the legislature of

the State of New York enacted a law, in 1829, compelling all banks chartered in future, or getting their charters renewed, to pay from ½ to 1 per cent of their capital stock to the treasurer of the State, by whom it is invested and accumulated as a guarantee fund. When a bank fails, its debts, under certain restrictions, are to be paid from this fund. Commissioners have also been appointed, having authority to examine upon oath, and to inquire into any particulars as to the management of the different banks subjected to this regulation.

When the last edition of this work was published, we observed of this system, that "it has not been established for a sufficient length of time to enable a conclusive opinion to be formed as to its practical operation. We believe, however, that it will be found quite inadequate to eradicate the evils complained of. Even were it otherwise successful, what can be more unjust than to tax the capital of solid and well-managed concerns, to create a fund to pay the debts of those set on foot for the purpose of swindling? The interference of the commissioners, by lessening the responsibility of the directors, must be a good deal worse than useless; and can have no effect other than the multiplication of abuses."

These anticipations have been more than realised; and, with but few exceptions, the banks of New York are about in the same rotten and disgraceful state as those in most other parts of the Union. In 1838, the State passed what was called a "general banking law," which it was supposed would have considerable influence, and under which several banks have been established. But this law, like its predecessor, left untouched all the radical vices of the system, and has been quite as ineffectual for any good purpose. In proof of this, it is sufficient to state that the New York Register for 1843 (p. 177.) has a list of no fewer than 26 banks established under the law of 1838 that have since failed and been shut up.

The truth is, that the business of banking in New York, as in other parts of the Union, is, as now carried on, an unmixed and scandalous nuisance. And it is worse than idle to expect that it should ever be improved without abolishing the system of limited responsibility, and making the partners in the banks liable to the utmost extent of their means for the debts of the banks. Even this would leave much untouched that is objectionable; but it would go far to prevent banks from degenerating into mere swindling engines; and, were it coupled with the obligation on the part of those who issue notes to give security for their payment, it would do all that legislation can do to obviate the abuse of private banking. The devices that the legislatures of New York and other American States have adopted in this view, are not of the slightest use; while, by teaching the public to depend on them, they facilitate the fraud and misconduct inseparable from the system.

Forgery is extremely prevalent in the State of New York, and, indeed, throughout the Union; a consequence of the low value at which notes are issued, and of their employment even in the smallest transactions.

Sales by Auction. — The practice of selling goods, particularly those imported from abroad, by auction, is of long standing in New York, and is carried to a very great extent. Auctioneers are appointed by the senate, on the nomination of the governor.

Statement of Sales at Auction in the State of New York, from 1833 to 1842 inclusive, from Returns made by the Auctioneers to the Comptroller.

Years.	Duties.	Amount of Sales dutiable.	Amount of Sales not dutiable.
1833	$238,719	$21,985,506	$12,406,813
1834	193,470	14,403,152	13,291,594
1835	273,977	19,627,355	14,684,253
1836	258,311	18,180,703	35,072,589
1837	214,458	12,711,937	6,683,746
1838	142,102	8,125,508	15,238,264
1839	225,401	13,564,603	15,314,430
1842	199,507	12,360,468	

Abstract of the principal Provisions of the Law, concerning Auctions.

The duties are —

1. On wines and ardent spirits, foreign or domestic, 2 per cent.
2. On goods imported from beyond the Cape of Good Hope, and sold in packages, bales, &c., as imported, 1 per cent.
3. On all other articles, subject to duties, 1½ per cent.

The following articles are not subject to duties: —

1. Ships and vessels.
2. Utensils of husbandry, horses, neat cattle, hogs, and sheep.
3. Articles grown, produced, or manufactured in this state, except distilled spirits.
4. All fabrics of cotton, wool, hemp, and flax, manufactured within the jurisdiction of the United States.

Goods are exempted from auction duties, —

1. When they belong to the United States or this State.
2. When sold by the authority of a court, or when seized by a public officer on account of any forfeiture or penalty, or under a distress for rent.
3. The effects of a deceased person sold by executors or administrators, or by a person authorised by a surrogate.
4. The effects of a bankrupt or insolvent sold by his assignees, appointed pursuant to law, or by a general assignment for the benefit of all his creditors.
5. Goods damaged at sea and sold within 20 days after being landed, for the owners or insurers.

Any citizen of this State may sell at auction (except in the city of New York) all such goods as are not subject to duties. But in the city of New York, or where the goods pay duties, the sale must be by an authorised auctioneer, his partner, or clerk. And any person selling contrary to the said provisions is guilty of a misdemeanour.

When an auctioneer cannot attend an auction by *sickness*, by *duty as a fireman*, by *military orders*, or *necessary attendance in a court of justice*, or when he is *temporarily* absent from the place for which he is appointed, he may employ a partner to attend in his behalf.

He must give bond to the people of this State, with 2 freehold sureties, conditioned in the penalty of 5,000 dollars, for the payment of the duties imposed by law and accruing on the sales. The penalty of selling without the bond, is 125 dollars for each article offered for sale.

No auctioneer in any city shall at the same time have more than 1 house or store for holding his auctions, and shall, before entering on his office, designate in a writing, to be filed with the clerk of the city, such house or store, and his partner or partners. But goods sold in the packages in which they were imported, furniture, and such bulky articles as have usually been sold in warehouses, in the streets, or on the wharfs, need not be sold in the house or store designated in such writing, if such sales be advertised at least 2 days previously, in 1 or more newspapers.

Auctioneers are to receive 2½ per cent. on the amount of all sales, unless by previous agreement in writing; and for *demanding* and receiving an unlawful commission, shall forfeit 250 dollars, and refund the monies so received.

No auctioneer, on the same day and at the same place where his public auction shall be held, nor any other person at the same time and place, shall sell at private sale any goods liable to auction duties, under penalty of forfeiting their price.

Every auctioneer shall make out in writing a quarterly account, dated on the 1st days of April, July, October, and January in the year for which he is appointed, stating minutely —

1. The sum for which any goods shall have been sold at every auction held by or for him, from the time of his giving bond, or from the date of his last quarterly account.
2. The days on which sales were so made, and the amount of each day's sale, designating the sales made by himself, or in his presence, and those made in his absence, by his partner or clerk, and the causes of his absence.
3. The amount of all private sales made by himself or his partner, and the times thereof.
4. The amount of duties chargeable on all sales made.

Every such account shall, within 20 days after its date, be exhibited, by auctioneers for a city, to the mayor or recorder; and if by an auctioneer for a county, to a county judge, and be verified by oath. Every partner of an auctioneer, and every clerk who has made any sales, shall also swear to his belief in the truth and justice of every particular of such account.

The State duties (together with the addition of 2½ per cent. on the whole amount of them) are to be paid within 10 days after exhibiting such account.

Any deceit or fraud in violating any provision of the law respecting auctioneers, is made a misdemeanour, and subjects the offending party to the payment of *treble* damages to the party injured.

Coins.

Gold eagle. — This, with its subdivisions, is the only American gold coin. By the mint regulations of the United States, the eagle, which is the equivalent of 10 dollars, contained, previously to the 31st of July, 1834, 270 grains of standard gold, viz. 246 grains pure, and 24 grains alloy. But, by an act of Congress, which came into operation at the above date, the weight of the eagle was reduced to 258 grains, of which 232 are pure, and 26 grains alloy. In consequence of this alteration, the sovereign, that was formerly worth 4 dollars 57 cents, is now worth 4 dollars 87 cents, and is received by the Americans at this rate.

We do not know whether it was the object of the American government, in enacting this law, to substitute a gold in the place of a silver currency; but it will, perhaps, have that effect. Under the former system, silver was over-valued in the American mint as compared with gold; and, as it consequently became everybody's interest to pay his debts in silver rather than in gold, the latter was nearly banished from circulation, precisely in the same way that the over-valuation of gold in the

British mint banished all silver coins of full weight from this country, and that the over-valuation of silver in the French mint banished gold. — (*Ante*, p. 304.) Under the present American system, it is said that gold is over-valued from 1¼ to 1¾ per cent., so that an individual who has to pay a debt of 100*l.*, and who employs metallic money for that purpose, will save from 25*s.* to 30*s.* by using gold rather than silver.

Value of Foreign Gold Coins in the Currency of the U. States.— It was ordered by an act of Congress, passed at the same time with the New Mint Act, that there "shall pass current as money, and be receivable in all payments, by weight, for the payment of all debts and demands, from and after the 31st day of July, 1834," viz.: 1. The gold coins of Great Britain, Portugal, and Brazil, of not less than 22 carats fine, at the rate of 93 8-10 cents per pennyweight; 2. The gold coins of France, 9-10ths fine, at the rate of 93 1-10 cents per pennyweight; and 3. The gold coins of Spain, of the fineness of 20 carats 3 7-16 grains, at the rate of 89 9-10 cents per pennyweight. On this principle the following table has been calculated.

Gold Coins of Great Britain, Portugal & Brazil, 22 Carats fine.

	Weight.		Contents in pure gold.	Value in U. S. currency, at 94 8-10 cts. per dwt.			Value in U. S. currency, estimated by the quantity of pure gold compared with that in the new eagle of 232 grains		
GREAT BRITAIN.	*dwt.*	*gr.*	*grains*	*d.*	*c.*	*m.*	*d.*	*c.*	*m.*
Guinea, (half and 7*s.* piece in proportion)	5	9 39-89	118·6	5	11	0	5	11	2
Sovereign (half in proportion) -	5	3 171-623	113	4	86	9	4	87*	
PORTUGAL.									
Dobraon of 21,000 rees (half in proportion)	34	12	759	32	70	6	32	71	9
Dobra of 12,800 rees -	18	6	401·5	17	30	1	17	30	6
Moidore - -	6	22	152·2	6	55	7	6	64	2
Milree, 1755 - -		19 3-4	18·1	0	78	0	0	78	0
BRAZIL.									
Dobraon - -	34	12	759	32	70	6	32	71	9
Dobra - - -	18	6	401·5	17	30	1	17	30	6
Moidore - -	6	22	152·2	6	55	7	6	64	2

Gold Coins of France, 9-10ths fine.

	Weight.		Contents in pure gold.	Value in U. S. currency, at 93 1-10 cts. per dwt.			Value in U. S. currency, estimated by the quantity of pure gold compared with that in the new eagle of 232 grains		
	dwt.	*gr.*	*grains*	*d.*	*c.*	*m.*	*d.*	*c.*	*m.*
Double louis, coined since 1786, (single in proportion) -	9	0	212·6	9	15	4	9	16	3
Double napoleon, (single in proportion) -	8	7	179	7	71	8	7	71	5
New louis - -	4	3 1-2	82·5	3	85	9	3	85	7

NOTE. — The double louis, louis, and demi-louis, coined before 1786, not being 9-10ths fine, are not included in the table, because they are not legal tenders. Neither are the double and single napoleon, or the new louis, exactly 9-10ths fine, but the deficiency is so very small that it is believed it is covered by what is called the remedy of the mint.

Gold Coins of Spain, 20 Carats 3 7-16 Grains fine.

	Weight.		Contents in pure gold.	Value in U. S. currency at 89 9-10 cts. per dwt.			Value in U. S. currency, estimated by the quantity of pure gold, &c.		
	dwt.	*gr.*	*grains*	*d.*	*c.*	*m.*	*d.*	*c.*	*m.*
Quadruple pistole or doubloon, coined before 1772, (double, single, and half in proportion) - -	17	8 1-2	375·3	15	59	0	16	17	6
Quarter pistole, or gold dollar, coined before 1772 - -	1	3	24·2	1	01	1	1	04	3
Doubloon of 1772 (double and single in proportion) -	17	8 1-2	372	15	59	0	16	03	4
Half pistole of 1772 -	2	4	46·3	1	94	7	1	99	5
Quarter pistole of 1772	1	3	23·9	1	01	1	1	03	0

N. B. — There are several gold coins of Portugal and Brazil, the joannese, the pieces of 16, 12, and 8 festoons, and the old and new crusado, which are not included in the above table, because they are not 22 carats fine, and of course are not legal tenders, the words of the act being express. — "The gold coins of Great Britain, Portugal, and Brazil, *of not less than 22 carats fine.*"

* In the above table the coins are all presumed to be of full weight, but fractional parts of a mill have been disregarded in the calculation of their value. It will be found to be a sufficient approximation to the truth for all ordinary purposes. To those who wish perfect accuracy, it may be observed that the quantity of pure gold in the sovereign is 113 18-11, 214 grains, and that the true value of the sovereign, compared with the new eagle of 232 grains, is 4 87·7 100. This is also the true par of exchange between the United States and London, and is equal to a premium of 9 7-10 per cent., as near as can be calculated, on the nominal par of 4 44 or 109 7-10 for 100.

Silver Coins.

				£	*s.*	*d.*
Dollar, val. 10 dimes, wt. 416 grs. stand. silver			=	4	3·75	ster.
Half dollar	5 do.	208 do.	—	=	2	4·87 —
Quarter,	2½ do.	104 do.	—	=	1	0·93 —
Dime,	10 cents,	41 3-5ths	—	=	0	5·46 —
Half-dime,	5 do.	20 4-5ths				

Standard silver is 1,485 parts pure, and 179 alloy.

Coins of the United States decimally divided. — 10 mills make 1 cent, 10 cents 1 dime, 10 dimes 1 dollar, 10 dollars 1 eagle.

Rules for reducing the Currencies of the different States into each other.

To reduce the currencies of New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, into those of New York and North Carolina, — to the given sum add 1-3d part thereof. Of Pennsylvania, New Jersey, Delaware, and Maryland, — to the given sum add 1-4th thereof. Of South Carolina and Georgia, — from the given sum subtract 12·98th thereof.

To reduce New York and North Carolina into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — from the given sum deduct 1-4th thereof. Into Pennsylvania, New Jersey, Delaware, and Maryland, — from the given sum deduct 1-6th thereof. Into South Carolina, — to the sum given add 1-16th, then take ⅛ of the whole.

To reduce Pennsylvania, New Jersey, Delaware, and Maryland, into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — from the sum given deduct 1-5th thereof. Into New York and North Carolina, — to the sum given add 1-5th thereof. Into South Carolina and Georgia, — multiply by 3 and 1-9th and divide the product by 5; or multiply by 28, and divide by 45.

To reduce South Carolina and Georgia into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — to the given sum add 2-7ths thereof. Into Pennsylvania, New Jersey, Delaware, and Maryland, — multiply the given sum by 45, and divide by 28. Into New York and North Carolina, — from the given sum subtract 1-7th, and double the remainder.

CUSTOM-HOUSE REGULATIONS. — Vessels must be reported to the collector by the master 24 hours after arrival; must come to a full entry 48 hours after arrival, at which time the commander swears to a detailed account of his cargo, stores, and passengers, and that he has deposited all letters in the post-office, except such as are for his ship's husband, at which time he must also deposit the register, clearance, and cockets in the Custom-house.

Warehousing. — There is no warehousing system, but goods are received into the public stores, where they are allowed to remain 9 months at the risk and expense (for fees of cartage, labourage and storage, as fixed by the Chamber of Commerce, see *post*) of the owner, without any duties being demandable. Woollens are the only exception to this rule: since 1835, interest is charged upon the amount of duty payable on their account from the time of their importation.

Port Charges. — For American vessels, or those of States having reciprocity treaties: —

		Doll. cts.	£	*s.*	*d.*
Fees on entering	-	5 70 or 1	5		7½
Fees on clearing	-	2 700 — 0	12		1½

CUSTOM-HOUSE FEES. — 1. *Fees payable to Collector.* — Entry of a vessel of 100 tons or upwards, 2 dollars and 50 cents; clearance of a vessel of 100 tons or upwards, 2 dollars and 50 cents; entry of a vessel under 100 tons 1 dollar and 50 cents; clearance of a vessel under 100 tons, 1 dollar and 50 cents; every post entry, 2 dollars; permit to land goods, 20 cents; every bond taken officially, 40 cents; permit to land goods, for the exportation, for drawback, 30 cents; debenture or other official certificate, 20 cents; official document (register excepted), required by any person, 20 cents.

2. *Fees payable to the Surveyor.* — Admeasuring and certifying the same, of every ship or vessel of 100 tons and under, per ton, 1 cent; admeasurement of every ship or vessel above 100 tons, and not exceeding 200 tons, 1 dollar and 50 cents; above 200 tons, 2 dollars; for all other services on board any ship or vessel of 100 tons and upwards, having on board goods, wares, or merchandise subject to duty, 3 dollars; for like services on board any ship or vessel of less than 100 tons, 1 dollar and 50 cents; on all vessels not having on board goods, wares, or merchandise subject to duty, 66 2-3d cents. Certificate of registry of vessels, 2 dollars. Endorsement on registry or record, 1 dollar. Every bond required by this act, 25 cents; every bond for a Mediterranean passport, 40 cents; every seaman's protection, 25 cents.

Under the Coasting Act. — Admeasuring every vessel in order to the registering, enrolment, licensing, or recording the same, of 5 tons or upwards, and less than 20, 50 cents; 20 and not exceeding 70, 75 cents; 70, 1 dollar; above 100, 150 cents. For every certificate of enrolment, 50 cents; every endorsement of ditto, 20 cents; every license, including the bond, not exceeding 20 tons, 25 cents; above 20 tons, and not more than 100, 50 cents; more than 100, 1 dollar. Recording certificate, manifest, and granting permit, of less than 20 tons, 25 cents; above 50 tons, 50 cents. For certifying a manifest, and granting permit for registered vessels, 150 cents. For receiving certified manifest and granting permit for registered vessels, 150 cents. Granting permit for a vessel not belonging

to a citizen, on arrival, to proceed from district to district, and receiving a manifest, 2 dollars; receiving manifest and granting permit to unload, as above, 2 dollars. Granting permit for a vessel to carry on fishery in a foreign port, 25 cents. For report and entry of any foreign goods imported in such last-mentioned vessel, 25 cents.

	Dolls.	£	s.	d.
Expense of loading a vessel of 300 tons, in the port of New York, with the usual cargo exported from thence -	160	36	0	0
Ditto of discharging - -	80	18	0	0
	Cents.			
For discharging —				
Coals, per chaldron -	25	0	1	1
For loading —				
Tobacco, per hhd. - - -	25	0	1	1
Cotton, per bale - - -	25	0	1	1
Flour, per barrel - - -	3½	0	0	1½
Flax-seed, do. - - -	7	0	0	3½

Rates of Wharfage.—Vessels under 50 tons, 50 cents per day = 2*s.* 5*d.*; and for every 50 tons more, 12½ cents additional = 7*d.*

N.B.—Wharfs are all private property.

RATES OF COMMISSION, *recommended for general Adoption, and allowed by the New York Chamber of Commerce, when no Agreement subsists to the contrary.*

On Foreign Business.—On the sale of merchandise, 5 per cent. Sale or purchase of stocks, 1 per cent.—Specie, ½ per cent. Purchase and shipment of merchandise, with fund in hand, *on the aggregate amount of costs and charges*, 2½ per cent. — Drawing or indorsing bills, in all cases, 2½ per cent. — Vessels, selling or purchasing, 2½ per cent. — Procuring freight, 5 per cent.—Collecting freight on general average, 2½ per cent. — Outfits or disbursements, with funds in hand, 2½ per cent. — Effecting marine insurance, in all cases, when the premium does not exceed 10 per cent., *on the amount insured*, ½ per cent. — When the premium exceeds 10 per cent., *on the amount of premium*, 5 per cent. — Collecting dividends on stock, ½ per cent. — Collecting delayed or litigated accounts, 5 per cent. — Adjusting and collecting insurance losses, 2½ per cent. — Receiving and paying monies, from which no other commission is derived, 1 per cent.—Remittances in bills, in all cases, ½ per cent.—Landing and reshipping goods from vessels in distress, *on the value*, 2½ per cent. — Receiving and forwarding goods entered at the Custom-house, *on the value*, 1 per cent. — and 2½ per cent. on responsibilities incurred.

On Inland Business.—On the sale of merchandise, 2½ per cent. — Purchase and shipment of merchandise, or accepting for purchase, without funds or property in hand, 2½ per cent.—Sale or purchase of stocks, 1 per cent.—Sale or purchase of specie, ½ per cent. — Sale of bills of exchange with indorsement, ½ per cent. — Sale of bank notes or drafts not current, ½ per cent. — Selling or indorsing bills of exchange, 2½ per cent. — Selling or purchasing vessels, 2½ per cent. — Chartering to proceed to other ports to load, 5 per cent. — Procuring or collecting freight, 2½ per cent. — Outfits or disbursements, 2½ per cent.—Collecting general average, 2½ per cent.—Effecting marine insurances, in all cases when the premium does not exceed 10 per cent., *on the amount insured*, ½ per cent. When the premium exceeds 10 per cent., *on the amount of premium*, 5 per cent. — Adjusting and collecting insurance losses, 2½ per cent. — Collecting dividends on stocks, ½ per cent.—Collecting bills, and paying over the amount, or receiving and paying monies from which no other commission is derived, 1 per cent. — Receiving and forwarding goods, *on the value*, ½ per cent. — The same when entered for duty or debenture, 1 per cent.—Remittances in bills, in all cases, ½ per cent.

The above commissions to be exclusive of the guarantee of debts for sales on credit, storage, brokerage, and every other charge actually incurred. The risk of loss by fire, unless insurance be ordered, and of robbery, theft, and other unavoidable occurrences, if the usual care be taken to secure the property, is in all cases to be borne by the proprietor of the goods. When bills are remitted for collection, and are returned under protest for non-acceptance or non-payment, the same commission to be charged as though they were duly honoured. On consignments of merchandise withdrawn or reshipped, full commission to be charged to the extent of advances or responsibilities incurred, and half commission on the residue of the value.

RATES OF STORAGE, *chargeable per month, as established by the New York Chamber of Commerce.*

	Cents.
Almonds, in frails or packages, cwt. -	6
Alum, in casks or bags, per ton -	40
Ashes, pot and pearl, bbl. -	8
Beef, bbl. - - -	6
Bottles, quart, in mats, cr. or hmp. gr. -	8
Bark, quercitron, in casks, ton -	60
Bagging, cotton, loose or in bales, pc. -	3
Butter in firkins of 60 lbs., per fir. -	2
Brandy. *See* Liquors.	
Candles, in boxes of 50 or 60 lbs., box -	2
Chocolate, in boxes of 50 lbs., box -	2
Cocoa, in bags, per cwt. -	2½
in casks, ditto -	3
Coffee, in casks, ditto -	2½
in bags, ditto -	2
Copperas, in casks, per ton -	40
Copper, in pigs, ditto -	20
in sheets or bolts, ton -	50
braziers' bottoms, ton -	75
Cordage, per ton - -	50
Cassia, in mats or boxes, per cwt. -	10
Cotton, American, in square bales, 300 lbs. -	12½
ditto in round bales, ditto -	16
West Indian, in proportion to round.	
East Indian, in bales, per 300 lbs. -	90
Cheese, casks, boxes, or loose, cwt. -	3
Duck, heavy, per bolt -	1½
Ravens or Russia sheeting, piece -	0½
Dry goods, in boxes or bales, 40 cubic feet -	40
Fish, pickled, per bbl. - - -	6
dry, in casks or boxes, cwt. -	4
in bulk, per cwt. -	2½
Figs, in frails, boxes, or drums, cwt. -	2½
Flax, per ton - - - -	60
Flax-seed, or other dry articles, in tierces of 7 bushels per tierce - - - - -	10
Flour, or other dry articles, in bbls. - -	4
Earthenware, in crates of 25 to 30 feet -	15
in hhds. of 40 to 50 feet -	30
Grain, in bulk, per bushel - - -	1
Ginger, in bags, per cwt. - - -	2
Glass, window, in boxes of 50 feet - -	1½
Gin. *See* Liquors.	
Hemp, per ton - - - -	75
Hides, dried or salted, per hide - -	1½
Hardware, in casks of 40 cubic feet -	40
Indigo, in serons or boxes, per cwt. -	4
Iron, in bars or bolts, per ton - -	20
in hoops, sheets, or nailrods, ton -	30
Liquors, in puncheons of 120 gallons, per puncheon -	30
in ½ casks - - -	6½
in pipes or casks, 120 gallons -	30
bottled, in casks, or boxes, doz. bottles -	1½
Leather, per side - - - -	1
Lard, in firkins of 60 lbs. - - -	2
Lead, pig or sheet, per ton - - -	20
dry or gr. in oil, ditto -	20
Molasses, per hhd. of 110 gallons (other casks in proportion) - - - -	30
Nails, in casks, per cwt. - - - -	2
Oil, in hhds. or casks, 110 gallons - -	30
in chests of 30 flasks, per chest - -	4
bottled, in boxes or baskets, doz. - -	1½
Paints, in casks or kegs, per ton - -	40
Pork, per bbl. - - - -	6
Porter. *See* Liquors.	
Pepper, in bags, per cwt. - - -	2½
Pimento, in casks or bags, cwt. - - -	2½
Rice, in tierces, per tierce - - -	12
in ½ ditto, per ½ ditto - - -	8
Rags, in bales, per cwt. - - - -	6
Raisins, Malaga, in casks - - -	3
ditto, in boxes - - - -	1
in other packages, per cwt. - -	2
Rum. *See* Liquors.	
Saltpetre, in bags, per cwt. - - -	2
in casks, ditto - - -	2½
Salt, in bags, or bulk, per bushel - -	1
Shot, in casks, per ton - - -	37
Soap, in boxes of 50 to 60 lbs. - - -	2
Steel, in bars or bundles, per ton - -	30
in boxes or tubs, ditto - -	40
Sugar, raw, in bags or boxes, per cwt. -	2
ditto, in casks, ditto - -	2½
refined, in casks or packages - -	3
Tallow, in casks or serons, cwt. - -	2
Tea, bohea, in whole chests - - -	15
ditto, in ½ chests - - -	8
green or black, in ½ chests - - -	4½
in boxes, in proportion to ½ chests.	
Tin, block, per ton - - - -	20
in boxes of usual size, per box - -	1½
Tobacco, in hhds., per hhd. - - -	37½
in bales or serons, per cwt. - -	4
manufactured, in kegs of 100 lbs. - -	2
Wines. *See* Liquors.	
Woods, for dyeing, under cover, per ton -	50
ditto, in yards - - - -	25
Whiting, in hhds., per ton - - -	37½

On articles on which the rate is fixed by weight, it is understood to be on the gross weight; and on liquors, oil, &c. on which the rate refers to gallons, it is understood to be on the whole capacity of the casks, whether full or not. The proprietor of goods to be at the expense of putting them in store, stowing away, and turning out of store.—All goods taken on storage to be subject to 1 month's storage; if taken out within 15 days after the expiration of the month, to pay ½ a month's storage; if after 15 days, a whole month's storage.

RATES OF CARTAGE.

	s.	d.
Ale or beer, per hhd. - - -	2	0
hhd. from 60 to 90 gallons -	2	0
Alum or copperas, from 12 to 15 cwt., per hhd. -	2	6
from 15 to 20 cwt. - - -	3	0
over 1 ton - - -	4	6
Bar iron, per load - - -	2	0
Boards and plank, per load - -	2	0
Brandy, pipe over 100 gallons - -	3	0
Bread, 4 tierces - - -	2	0
Bricks, per load - - -	2	0
handled and piled -	2	6
Building or paving stones, load - -	2	0
Calves, sheep, and lambs - -	2	6
Cider, cheese, and cocoa - -	2	0
Clay and sand, 12 bushels - -	2	0
Coal, half chaldron, per load - -	2	6
Cocoa, per load - - -	2	0
Coffee, in bags or bbls. - -	2	0
above 10 cwt., per hhd. -	2	6
Cordage, small, per load - -	2	0
Cotton, per load of 3 bales - -	2	0
Cut stone, per load - - -	2	6
Dried fish, loose, load - - -	2	6
Dye wood, per load - - -	2	0
Earthenware, loose, per load - -	2	6
European goods, per load - -	2	0
Flax, in bales and bundles, load - -	2	6
Flax-seed, 3 tierces - - -	2	0
Firewood, per load - - -	2	0
Flour, in bags, 12 per load - -	2	0
7 bbls. per load - -	2	0
Gammons or hams, per load - -	2	0
Gin, pipe over 100 gallons - -	3	0
Hay, in trusses, bundles, bales, per load -	2	6
loose - - - -	6	0
Heading or staves, per load - -	2	0
Hides, 50 per load - - -	2	6
Hemp, in bales or bundles, per load - -	2	6
loose, not over 12 cwt. - -	3	6

	s.	d.
Hoops, in bundles	2	0
Hoop-poles, per load	2	6
Hollow ware, per load	2	6
Household furniture	4	0
Molasses, from 60 to 90 gallons	2	6
from 90 to 140 gallons	3	0
Oil, per load of 3 bbls.	2	0
Oysters, ditto shells, &c., load	2	6
Potashes, per load of 3 bbls.	2	0
Paints, common, load	2	0
per hhd., from 12 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6
Pantiles, per load	2	6
Plaster of Paris, ton	4	0
Pork, beef, tar, pitch, and turpentine, 5 bbls.	2	0
Rum, per hhd.	3	0
Salt, 20 bushels	2	0
Shingles, long cedar, pine, in bundles	2	0
Cyprus, 2,000 (22 inch)	3	0
Stone, paving or building	2	0
Sugar, Havannah, 3 boxes	2	6
from 9 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6
Scantling or timber, per load	2	0
Tea, per load	2	6
Tiles or slate, per load	2	6
Tobacco, in hhds., from 9 to 15 cwt. per hhd.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6
Wheat, or other grain, per load	2	0
Wine, pipe, over 100 gallons	3	0
in 4 quarter-casks	3	0
Whiting, common load	2	0
per hhd., 12 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6

Cables.

For every cable, whole shot of 5 inches in circumference to 7 inches	5	0
Do. half shot of like dimensions	2	6
Do. whole shot of 7 to 10 inches	12	0
Do. half shot of like dimensions	6	0
Do. whole shot of 10, and not exceeding 12 inches in circumference	14	0
Do. whole shot of 12, and not exceeding 14 inches in circumference	20	0
Do. half shot of the dimensions of the two last mentioned	10	0
Do. whole shot of 14 and not exceeding 15 inches	24	0
Do. half shot of like dimensions	12	0
Do. whole shot of 15 inches	32	0
Do. half shot of like dimensions	16	0
*** *Goods, wares, merchandise, or other articles not herein enumerated, per load*	2	0

In all cases where the distance exceeds ½ a mile, and not 2 miles, ½ in addition to be allowed.

Rates of Porterage. — For any distance not exceeding ½ a mile, 12½ cents; over ½ a mile, and not exceeding a mile, 25 cents; and in that proportion for any greater distance. For carrying a load upon a hand-barrow, for any distance not exceeding ½ a mile, 25 cents; over ½ a mile, and not exceeding a mile, 44 cents; and in that proportion for any greater distance.

Hand-cartmen. — For any distance not exceeding ½ a mile, 18¾ cents; over ½ a mile and not exceeding a mile, 37½ cents; and in that proportion for any greater distance.

Harbour Master.

The office of harbour master was created in 1808, by legislative enactment, with power to regulate and station all vessels in the harbour, or at the wharfs, to accommodate vessels wishing to discharge their cargoes, and to decide promptly all disputes connected with the foregoing subjects. Resisting his authority subjects to a fine of 50 dollars and costs, for the benefit of the New York hospital.

Fees. — On vessels unloading 1½ cent per ton. Vessels paying foreign duties and tonnage, *double*; which must be paid within 48 hours after arrival. Schooners and sloops in the coasting trade, 2 dollars. For adjusting any difference respecting situation, 2 dollars.

Pilots must register their vessels, names and places of abode, in his office; and are obliged to put to sea whenever ordered by him. The penalty for refusing is 5 dollars and loss of licence.

Pilotage.

There are 9 branch and 9 deputy pilots, and as many registered boats.

Pilot Law, New York.

§ 2. All pilots' bills shall be certified, before collected, by one or more of the said commissioners or their secretary, except where a pilot receives his pilotage outward bound from the master of the vessel at Sandy Hook, in which case the pilot shall report to the said commissioners according to law.

§ 4. The said commissioners shall fix and determine the compensation of pilotage to be received by the pilots; 1st, for piloting vessels from the Quarantine to New York; 2dly, for transporting a vessel from one river to the other; 3dly, for hauling a vessel into the stream from the wharf to her anchorage or from her anchorage to a wharf.

§ 5. The pilotage on vessels outward shall be as follows; for every vessel drawing less than 14 feet water one dollar and 50 cents per foot; for every vessel drawing 14 feet and less than 18, 1 dollar and 75 cents per foot; for every vessel drawing 18 feet and upwards, 2 dollars and 25 cents per foot, and on foreign merchant vessels not entitled by the laws of the United States to enter on the same terms as ships or vessels of the U. States, shall be increased by adding one-fourth to the above rates.

Inward. — For piloting any merchant vessel bound to New York, and not exempted from pilotage by virtue of this act, from the southward or eastward of the white buoy on the eastern edge of the outer middle near the bar, to her anchorage, moorings, or to a wharf, for every vessel drawing less than 14 feet of water, 2 dollars per foot; drawing 14 and less than 18, 2 dollars and 50 cents per foot; drawing 18 feet and upwards, three dollars per foot.

Fees. — For piloting between the eastward or southward of the white buoy and the ports of Jersey city, Newark, Perth, Amboy, or within Sandy Hook —

Vessels drawing less than 14 feet	per foot	$2 00
— between 14 and 18 feet	—	2 50
— more than 18 feet	—	3 00
of war	—	5 00

Do. foreign, not entering as U. State vessels, one fourth addition.

Do. taken charge of to the westward of the white buoy, half pilotage.

Between the 1st days of November and April, in addition to the above, for vessels drawing 10 feet and upwards, 4 dollars, less than 10 feet, 2 dollars; and one half of these additional sums for half pilotage. Commissioners' fees not charged.

Hell Gate Pilots

Fees.	Per foot.
From or to Sand's Point, for schooners or sloops	$1 50
— square-rigged vessels	1 75
From or to Hell Gate, for schooners or sloops	1 00
square rigged vessels	1 25
From the 1st day of November to the 1st day of April, in addition to the above, for every ship, bark, or brig,	2 00
— schooner or sloop	1 00

Wardens of the Port.

Vessels and goods arriving in a damaged state, and required to be sold by auction for the benefit of underwriters out of the city of New York, must be under the inspection of the wardens, who may be required to certify the cause of the damage, and amount of sale and charges.

Fees. — 1½ per cent. on gross amount of sales; and for each survey on board of any vessel, at any store, or along the docks or wharfs, 3 dols. on damaged goods; each survey on hull, spars, rigging, &c., 5 dols.; each certificate, 1 dol. 25 cts.; ditto of distress of said vessel, 2 dols. 50 cts.; same services for vessels paying foreign duties and tonnage, *double*.

QUANTITY OF GOODS TO COMPOSE A TON.

Extract from the By-Laws of the New York Chamber of Commerce.

Resolved. — That when vessels are freighted by the ton, and no special agreement is made between the owner of the vessel and freighter of the goods, respecting the proportion of tonnage which each particular article shall be computed at, the following regulation shall be the standard of computation: —

That the articles, the bulk of which shall compose a ton, to equal a ton of heavy materials, shall be in weight as follows: — 1,568 lbs. of coffee in casks, 1,830 ditto in bags; 1,120 lbs. of cocoa in casks, 1,307 ditto in bags.

952 lbs. of pimento in casks, 1,110 ditto in bags.

8 barrels of flour of 196 lbs. each.

6 barrels of beef, pork, tallow, pickled fish, pitch, tar, and turpentine.

20 cwt. of pig and bar iron, potashes, sugar, logwood, fustic, Nicaragua wood, and all heavy dye woods, rice, honey, copper ore, and all other heavy goods.

16 cwt. of coffee, cocoa, and dried codfish, in bulk, and 12 cwt. of dried codfish in casks of any size.

6 cwt. of ship bread in casks, 7 cwt. in bags, and 8 cwt. in bulk.

200 gallons (wine measure) reckoning the full contents of the casks, of oil, wine, brandy, or any kind of liquors.

22 bushels of grain, peas, or beans, in casks.

36 bushels of ditto in bulk.

36 bushels of European salt.

31 bushels of salt from the West Indies.

29 bushels of sea coal.

40 feet (cubic measure) of mahogany, square timber, oak plank, pine and other boards, beaver, furs, peltry, bees' wax, cotton, wool, and the goods of all kinds.

1 hogshead of tobacco, and 10 cwt. of dry hides.

8 cwt. of China raw silk, 10 cwt. nett bohea, and 8 cwt. green tea.

Tares allowed by Custom.

Alum in bags,	5 lbs.
in casks	10 per cent.
Almonds, in cases	8 —
in bales	8 lbs.
double bales	16 —
in bags	4 per cent.
Cheese, in casks or tubs	15 —
Cocoa, in serons	8 —
Copperas, in casks	10 —
Cassia, in boxes	actual
in mats	6 per cent.
Cinnamon, in boxes	actual
in bales	6 per cent.
Cloves, in casks	12 —
in bags	4 —
Currants, in casks	12 —
in boxes	10 —
Figs, in boxes	10 —
in mats or frails	4 —
in drums	8 —
in casks	12 —
Glue, in casks	20 —
in boxes	15 —
Hemp, in bales	5 —
Indigo, in cases	15 —
Lead (white, in oil), in kegs	8 —
do. if the kegs are packed in hogsheads, extra allowed for the hogshead is	100 lbs.
(white, dry), in casks	6 per cent.
(red, dry), do.	5 —
(red, in oil), do.	10 —
in casks	3 —
Nails, in bags	3 —
Nutmegs, in casks	12 —
in bags	4 —
Ochre (in oil), in casks	12 —
(dry), do.	10 —
Powder, gun, in ¼ casks	5 lbs.

Powder, gun, in ½ casks	9 lbs.
whole do.	23 —
Plums, in boxes	8 per cent.
Prunes, in do.	8 —
Paris, white in casks	10 —
Raisins, in jar	18 lbs.
in boxes	15 per cent.
in casks	12 —
in frails	4 —
in drums	10 —
Rice	10 —
Snuff, in boxes	15 —
Sugar-candy, in tubs	15 —
Sugar, in loaves	1¼ lbs.
Steel, per bundle	3 —
Shumac, no tare: sometimes 1 lb. per bag is allowed.	
Sheet iron, in casks	15 per cent.
Steel, in cases and casks	8 —
Spikes, in casks	8 —
in bags	3 —
Tallow, in bales	8 —
in casks	12 —
in serons	8 —
in tubs	15 —
Twine, in boxes	12 —
in casks	12 —
in bales	3 —
Tobacco, in boxes	15 —
Wire, in casks	8 per cent.
Whiting, in do.	10 —

Actual tare is allowed on fruit if required.

Tares allowed by law.

On candles in boxes	8 —
Cheese, in hampers or baskets	10 per cent.
in boxes	20 —
Chocolate, in boxes	10 —
Coffee in bags	2 —
in bales	3 —
in casks	12 —
Cocoa, in bags	1 —
in casks	4 —
Cotton, in bales	2 —
in serons	6 —
Indigo, in do.	10 —
Nails, in casks	8 —
Pimento, in bags	3 —
Pepper, in bags	2 —
Sugar, other than loaf sugar, in casks	12 —
in boxes	15 —
in mats or bags	5 —
Salts, Glauber	8 —
Sugar-candy, in boxes	10 —
Soap, in boxes	10 —
shot, in casks	3 —
Every whole chest of bohea tea	70 lbs.
½ do. do.	36 —
¼ do. do.	20 —
Every chest of hyson or other green tea of 70 lbs. or upwards	20 —
Every box of other tea between 50 and 70 lbs.	18 —
do. do. if 80 lbs.	20 —
do. do. from 80 lbs. and upwards	22 —

The above to include ropes, canvass, and other coverings. On all other boxes of teas, according to the invoices or actual weight thereof.

We have derived these statements from the *New York Annual Register* for 1843; *The Picture of New York; Hunt's Commercial Magazine;* and valuable *private communications.*

Trade and Navigation of the United States.

Trade and Navigation of the United States, for the Year ending the 30th *of September*, 1841. — (*From the Official Accounts, printed by order of Congress.*)

Statement of the Commerce of each State and Territory, commencing, on the 1st of October, 1840, and ending the 30th of September, 1841.

States and Territories.	Value of Imports.			Value of Exports.						
				Domestic Produce.			Foreign Produce.			
	In American Vessels.	In Foreign Vessels.	Total.	In American Vessels.	In Foreign Vessels.	Total.	In American Vessels.	In Foreign Vessels.	Total.	Total of Domestic and Foreign Produce.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Maine	574,664	126,297	700,961	1,029,905	48,728	1,078,633	1,649	11,283	12,932	1,091,565
New Hampshire	61,585	12,116	73,701	7,476	2,785	10,261	45	45	87	10,348
Vermont	246,739	- -	246,739	264,005	- -	264,005	13,982	- -	13,982	277,987
Massachusetts	18,835,492	1,482,511	20,318,003	6,469,302	928,390	7,397,692	3,665,945	425,706	4,089,651	11,487,343
Rhode Island	333,929	5,663	339,592	264,799	1,477	266,276	12,189	- -	12,189	278,465
Connecticut	293,221	2,768	295,989	580,210	19,138	599,348	- -	- -	- -	599,348
New York	66,688,750	9,024,676	75,713,426	19,660,881	4,618,727	24,279,608	6,668,917	2,191,308	8,860,225	33,139,833
New Jersey	1,919	396	2,315	19,166	- -	19,166	- -	- -	- -	19,166
Pennsylvania	9,810,354	506,344	10,346,698	3,990,504	411,359	4,404,863	723,782	23,856	747,638	5,152,501
Delaware	1,188	2,088	3,276	38,585	- -	38,585	- -	- -	- -	38,585
Maryland	5,318,866	782,447	6,101,313	3,536,202	1,252,958	4,789,160	111,089	46,917	158,006	4,947,166
District of Columbia	53,863	23,400	77,263	616,044	148,791	764,835	2,819	1,677	4,496	769,331
Virginia	351,917	25,320	377,237	5,155,618	473,292	5,628,910	1,328	48	1,376	5,630,286
North Carolina	214,731	5,629	220,360	318,410	31,646	383,056	- -	- -	- -	383,056
South Carolina	1,217,955	339,576	1,557,531	5,579,971	2,431,421	8,011,392	24,051	7,841	31,892	8,043,284
Georgia	299,977	149,030	449,007	1,802,850	1,803,167	3,696,017	196	300	496	3,696,513
Alabama	410,358	120,461	530,819	6,317,512	4,652,311	10,969,826	2,981	8,464	11,144	10,981,271
Mississippi										
Louisiana	8,141,088	2,115,262	10,256,350	26,071,660	6,793,958	32,865,618	1,012,054	509,811	1521,865	34,387,483
Ohio	9,563	1,755	11,318	708,367	84,747	793,114	- -	- -	- -	793,114
Kentucky										
Tennessee	7,523	- -	7,523							
Michigan	137,608	192	137,800	88,529	- -	88,529	- -	- -	- -	88,529
Missouri	33,857	- -	33,875							
Florida	116,712	28,469	145,181	19,303	14,490	33,828	225	2,576	2,801	36,629
Total	113,221,877	14,721,300	127,946,177	82,569,389	23,813,333	106,382,722	12,239,249	3,229,832	15,469,081	121,851,803

Account of the registered, enrolled, and licensed Tonnage of the United States, from 1815.

Years.	Registered Tonnage.	Enrolled and licensed Tonnage.	Total Tonnage.	Years.	Registered Tonnage.	Enrolled and licensed Tonnage.	Total Tonnage.
	Tons. 95*ths.*	*Tons.* 95*ths.*	*Tons.* 95*ths.*		*Tons.* 95*ths.*	*Tons.* 95*ths.*	*Tons.* 95*ths.*
1815	853,294 74	513,833 4	1,368,127 78	1829	650,142 88	610,654 88	1,260,977 81*
1816	800,759 63	571,458 85	1,372,218 53	1830	576,475 33	615,301 10	1,191,776 43
1817	809,721 70	590,186 66	1,399,911 41	1831	620,451 92	617,304 32	1,237,816 24
1818	606,088 64	609,095 51	1,225,184 20	1831	686,989 77	752,460 39	1,439,450 21
1819	612,930 44	647,821 17	1,260,751 61	1833	750,026 72	856,123 22	1,601,149 94
1820	619,047 53	661,118 66	1,280,166 24	1834	857,438 42	901,468 67	1,758,907 14
1821	619,096 40	679,062 30	1,298,958 70	1835	885,821 60	939,118 49	1,824,940 14
1822	628,150 41	696,548 71	1,324,699 17	1836	897,774 51	984,328 14	1,882,102 65
1823	639,920 76	696,644 37	1,336,565 68	1837	810,447 29	1,086,238 40	1,896,685 69
1824	669,972 60	719,190 87	1,389,163 2	1838	822,591 86	1,173,047 89	1,995,639 80
1825	700,787 8	722,323 69	1,423,111 77	1839	834,244 54	1,262,234 27	2,096,478 81
1826	737,978 15	796,212 68	1,534,190 83	1840	899,764 76	1,280,999 35	2,180,764 16
1827	747,170 44	873,437 34	1,620,607 78	1841	945,803 42	1,184,940 90	2,130,744 37
1828	812,619 37	928,772 50	1,741,391 87				

* The decrease of shipping in 1829 is apparent only. From 1790 down to that year, the returns were made up from the registries, without making any allowance for vessels worn out, lost, sold, or captured! This glaring defect was, if noticed at all, not obviated till 1829. No dependence can, therefore, be placed on any previous statement as to the amount of American tonnage.

Abstract of the Tonnage of the several Districts of the U. States on the last Day of September, 1841; showing of what it consisted, and how it was employed.

Districts.	Registered.		Enrolled and licensed.		Licensed, under 20 Tons.		Aggregate of each District.	Registered Tonnage employed in the		Proportion of the enrolled and licensed Tonnage employed in the				
	Permanent.	Temporary.	Permanent.	Temporary.	Coasting Trade.	Cod Fishery.		Whale Fishery.	Steam Navigation.	Coasting Trade.	Cod Fishery.	Mackarel Fishery.	Whale Fishery.	Steam Navigation.
	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.
Passamaqueddy, Maine	1,338 94	581 45	8,476 80	-	66 71	124 36	10,588 41	-	-	6,834 10	1,089 50	553 20		
Machias - -	1,049 52	345 87	12,586 58	-	54 94	110 75	14,147 81	-	-	12,134 87	452 31			
Frenchman's Bay -	1,491 20	840 30	12,743 70	-	84 80	267 60	15,427 70	-	-	10,742 08	2,001 62			
Penobscot - -	5,475 79	624 34	28,749 54	-	573 30	702 70	36,125 77	-	-	23,006 98	5,618 94	93 58		
Belfast - -	6,799 80	1,128 01	31,475 90	-	88 90	121 10	39,613 81	-	-	30,269 44	1,206 46			
Waldoborough -	11,080 36	1,262 72	37,062 73	-	108 46	1,742 89	51,257 31	-	-	34,247 80	2,814 88			
Wiscasset - -	3,344 88	1,169 67	8,759 45	-	-	141 34	13,415 44	388 18	-	2,095 29	6,575 17	88 94		
Bath - -	34,403 25	409 86	22,661 10	-	107 10	409 12	58,050 48	-	-	21,359 53	1,246 68	54 79	-	1,103 69
Portland - -	32,670 04	4,845 22	17,001 66	-	149 24	345 65	55,009 86	-	-	13,191 26	2,808 90	498 45		
Saco - -	435 27	224 66	2,133 16	-	109 01	-	2,902 18	-	-	1,882 45	250 66			
Kennebunk - -	5,618 44	180 31	1,826 03	-	84 25	-	7,709 08	-	-	1,103 46	722 52			
York - -	-	-	1,0[illegible] 03	-	38 59	-	1,042 62	-	-	690 33	313 65			
Portsmouth, New Hampshire -	15,320 64	2,051 42	8,189 03	50 27	96 44	-	25,707 85	318 36	-	4,344 25	3,895 05			
Newburyport, Massachusetts -	12,714 76	1,571 63	8,839 46	-	27 49	64 30	23,217 74	-	-	4,407 57	2,656 68	1,775 16		
Ipswich - -	-	-	2,455 10	-	59 35	-	2,514 45	-	-	685 90	1,491 20	278 65		
Gloucester - -	2,118 38	184 59	13,514 83	-	-	878 28	16,696 18	-	-	6,839 15	4,216 64	2,459 04		
Salem - -	21,290 87	1,582 10	13,706 51	-	-	-	36,579 53	-	-	8,997 19	4,657 47	51 80		
Marblehead - -	2,538 16	-	8,882 78	-	142 03	-	11,563 02	-	-	7,193 29	1,575 71	113 73		
Boston - -	127,850 62	30,952 83	68,336 67	-	200 23	267 49	227,607 94	-	-	60,758 53	4,182 78	3,395 31	-	1,864 38
Plymouth - -	13,781 00	195 08	12,811 84	-	93 17	79 63	26,960 77	976 20	-	6,296 36	4,614 61	1,900 82		
Dighton - -	2,048 70	585 07	5,573 66	-	115 13	-	8,322 61	2,043 73	-	5,554 47	31 19			
New Bedford - -	63,832 89	1,380 70	31,118 87	-	164 04	226 24	96,752 81	78,056 89	-	30,935 53	156 03	57 31	-	57 81
Barnstable - -	2,992 82	944 59	51,370 55	-	228 56	233 20	55,069 82	3,197 51	-	47,343 32	4,027 23			
Edgartown - -	3,428 29	1,579 34	2,234 07	-	66 18	-	7,307 88	4,897 25	-	2,134 65	99 37			
Nantucket - -	25,118 09	540 00	7,571 22	-	29 30	48 79	33,307 45	31,002 59	-	7,498 15	73 07	-	-	171 20
Providence, Rhode Island - -	12,114 09	536 72	5,869 72	-	50 32	-	18,000 90	1,383 20	-	5,249 72	20 00	-	-	412 08
Bristol - -	7,685 29	506 24	4,737 67	-	-	-	12,929 25	-	-	4,737 67				
Newport - -	4,584 92	706 73	5,525 76	-	180 45	156 20	11,154 21	2,052 77	-	5,180 74	345 02	-	-	415 64
Middletown, Connecticut	518 11	408 47	9,632 33	-	142 63	-	10,701 59	-	-	9,573 08	59 25	-	-	536 43
New London - -	19,997 68	721 13	13,827 10	-	890 69	-	35,436 65	17,558 27	-	10,717 25	3,109 80	-	-	1,392 07
New Haven - -	3,764 49	99 87	6,114 15	-	212 62	17 75	10,209 03	-	-	6,114 15	-	-	-	1,495 23
Fairfield - -	912 52	-	7,911 02	-	108 48	-	8,932 07	-	-	7,698 06	212 91	-	-	291 00
Vermont, Vermont	-	-	4,343 30	-	-	-	4,343 30	-	-	4,343 30	-	-	-	1,362 24
Champlain, New York	-	-	1,633 02	-	-	-	1,633 02	-	-	1,633 02				
Sackett's Harbour	-	-	2,059 72	-	-	-	2,059 72	-	-	2,059 72	-	-	-	312 72
Oswego - -	-	-	6,872 38	-	-	-	6,872 38	-	-	6,872 38	-	-	-	906 52
Niagara - -	-	-	231 89	-	-	-	231 89	-	-	231 89				
Genesee - -	-		442 48	-	-	-	442 48	-	-	442 48	-	-	-	139 34
Oswegatchie -	-	-	855 15	-	-	-	855 15	-	-	855 15	-	-	-	356 70
Buffalo Creek -	-	-	14,993 75	-	-	-	14,993 75	-	-	14,993 75	-	-	-	7,642 55
Sag Harbour - -	12,547 28	236 00	5,991 72	-	245 67	-	19,020 72	13,438 69	-	5,991 72				
New York - -	193,104 81	32,069 50	203,052 19	-	9,787 78	-	438,014 38	1,761 83	-	203,052 19	-	-	-	31,727 21
Cape Vincent - -	-	-	2,529 83	-	-	-	2,529 83	-	-	2,529 83				

Perth Amboy, New Jersey	-	-	-	-	14,769	04	-	425	08	-	15,194	12	-	-	14,769	04								
Burlington	-	-	-	-	3,888	85	-	47	54	-	3,936	44	-	-	3,888	85	-	-	-	1,187	53			
Bridgetown	-	294	29	-	9,459	70	-	562	55	-	10,116	69	-	-	9,459	70								
Camden	-	-	-	-	4,239	63	-	118	76	-	4,358	39	-	-	4,239	63	-	-	-	932	22			
Newark	-	276	34	272	04	5,497	48	-	279	37	-	6,325	28	-	-	5,497	48	-	-	-	315	27			
Little Egg Harbour	-	-		-		4,852	26	-	168	70	-	5,021	01	-	-	4,852	26								
Great Egg Harbour	-	-		-		8,525	22	-	127	10	-	8,652	32	-	-	8,525	22								
Philadelphia, Pennsylvania	-	40,223	54	7,156	37	55,322	92	-	3,102	53	-	105,805	46	-	-	55,322	92	-	-	-	5,377	09			
Presque Isle	-	-		-		2,819	84	-	-		-	2,819	84	-	-	2,819	84	-	-	-	2,315	76			
Pittsburg	-	-		-		10,342	77	-	-		-	10,342	77	-	-	10,342	77	-	-	-	10,342	77			
Wilmington, Delaware	-	644	34	262	03	3,978	14	-	70	17	-	4,954	68	-	-	3,978	14	-	-	-	95	19			
New Castle	-	-		-		5,054	66	-	46	64	-	5,101	35	-	-	5,054	66	-	-	-	142	55			
Baltimore, Maryland	-	30,553	04	7,199	28	45,082	51	-	803	53	-	83,638	41	-	-	45,082	51	-	-	-	10,177	07			
Oxford	-	-		-		7,757	89	-	69	87	-	7,827	81	-	-	7,757	89								
Vienna	-	832	31	-		10,032	14	-	409	25	-	11,273	70	-	-	10,032	14								
Snow Hill	-	-		-		5,622	30	-	170	32	-	5,792	62	-	-	5,622	30								
St. Mary's	-	-		-		1,114	55	-	234	46	-	1,349	06	-	-	1,114	55								
Annapolis	-	-		-		3,801	09	-	83	82	-	3,884	91	-	-	3,801	09	-	-	-	336	42			
Georgetown, District of Columbia	-	456	94	1,111	59	4,334	02	-	56	37	-	5,959	02	-	-	4,334	02	-	-	-	1,161	73			
Alexandria	-	5,363	30	1,501	40	3,414	93	-	108	50	-	10,390	03	-	-	3,416	93	-	-	-	374	53			
Norfolk, Virginia	-	2,891	85	3,666	63	10,534	54	-	1,037	15	-	18,130	25	-	-	10,534	54	-	-	-	1,015	58			
Petersburg	-	1,931	76	742	70	1,545	74	-	47	12	-	4,267	42	-	-	1,545	74	-	-	-	176	20			
Richmond	-	2,591	55	1,331	09	3,098	16	-	-		-	7,020	80	-	-	3,098	16	-	-	-	396	10			
Yorktown	-	-		-		2,310	85	-	115	28	-	2,426	18	-	-	2,310	85								
East River	-	-		-		1,786	44	-	120	66	-	1,907	15	-	-	1,786	44								
Tappahannock	-	-		-		1,931	93	-	176	57	-	2,108	55	-	-	1,931	93								
Yeocomico	-	-		-		2,790	85	-	44	75	-	2,835	65	-	-	2,790	85								
Folly, Landing	-	-		-		3,436	41	-	335	20	-	3,771	61	-	-	3,436	41								
Cherrystone	-	-		-		1,367	43	-	105	84	-	1,473	32	-	-	1,367	43								
Wheeling	-	-		-		1,417	81	-	-		-	1,417	81	-	-	1,417	81	-	-	-	1,417	81			
Wilmington, North Carolina	-	581	75	6,029	18	2,363	48	-	41	44	-	9,015	90	-	-	2,363	48	-	-	-	1,834	63			
Newbern	-	1,303	34	520	52	1,718	16	-	151	03	-	3,693	19	-	-	1,718	16								
Washington	-	695	62	388	18	1,477	15	-	511	44	-	3,072	44	-	-	1,477	15								
Edenton	-	-		104	13	857	17		74	76	-	1,036	11	-	-	857	17								
Camden	-	349	72	298	05	6,382	43	-	1,001	19	-	8,031	44	-	-	6,382	43								
Beaufort	-	-		-		711	20	-	358	94	-	1,070	19	-	-	711	20								
Plymouth	-	102	39	551	47	1,007	50	-	12	05	-	1,673	46	-	-	1,007	50	-	-	-	217	65			
Ocracoke	-	-		-		913	59	-	40	47	-	954	11	-	-	913	59								
Charleston, South Carolina	-	6,240	42	6,713	32	6,666	36	1,721	47	19	56	-	21,361	23	-	745	87	8,387	83	-	-	-	2,956	64	
Georgetown	-	-		-		2,786	42	-	-		-	2,786	42	-	-			2,786	42						
Beaufort	-	-		-		232	36	-	13	92	-	246	33	-	-			232	56	-	-	-	209	45	
Savannah, Georgia	-	3,365	50	5,178	26	5,461	86	-	55	47	-	14,061	19	-	-			5,461	86	-	-	-	3,972	17	
Brunswick	-	-		1,266	05	750	65	-	69	47	-	2,086	22	-	-			750	65	-	-	-	448	93	
St. Mary's, Ohio	-	-		-		136	46	-	12	86	-	149	37	-	-			136	46						
Cuyahoga	-	-		-		8,853	88	-	-		-	8,859	88	-	-			8,853	88	-	-	-	2,695	38	
Sandusky	-	-		-		3,423	54	-	23	21	-	3,446	75	-	-			3,423	54	-	-	-	1,627	32	
Cincinnati	-	-		-		10,188	76	-	-		-	10,188	76	-	-			10,188	76	-	-	-	10,188	76	
Miami	-	-		-		2,472	55	-	-		-	2,472	55	-	-			2,472	55	-	-	-	1,229	85	
St. Louis, Missouri	-	-		-		11,370	00	-	-		-	11,370	00	-	-			11,370	00	-	-	-	11,370	00	
Nashville, Tennessee	-	-		-		3,521	65	-	-		-	3,521	65	-	-			3,521	65	-	-	-	3,521	65	
Louisville, Kentucky	-	-		-		8,359	73	-	-		-	8,357	73	-	-			8,359	73	-	-	-	8,359	73	
Detroit, Michigan	-			-		11,451	71	-	68	40	-	11,520	16	-	-			11,451	71	-	-	-	3,509	71	
Mobile, Alabama	-	533	46	5,056	21	9,886	29	-	238	57	-	15,714	58	-	-			9,886	29	-	-	-	6,778	40	
Pearl River, Mississippi	-	-		-		646	38	-	254	73	-	901	16	-	-			646	38	-	-	-	170	84	
New Orleans, Louisiana	-	19,666	86	35,126	14	85,558	14	-	4,763	44	-	145,114	63	-	-			85,558	14	-	-	-	27,467	00	
Teche	-	-		-		551	48	-	133	23	-	684	71	-	-			551	48	-	-	-	132	84	
Pensacola, Florida	-	146	03	-		796	13	-	157	80	-	1,100	01	-	-			796	13	-	-	-	241	88	
Apalachicola	-	645	66			1,820	84	-			-	2,466	55	-	-			1,820	84	-	-	-	1,587	68	
Key West	-	783	55	1,086	47	502	55	-	55	10	-	2,427	72	-	-			502	55						
Total	-	771,776	84	174,026	53	1,146,141	57	1,771	74	31,031	70	5,995	79	2,130,714	37	157,405	17	745	87	1,076,036	18	60,556	05	11,321	13	-	174,342	44

S. T.

Account of the Value of the Exports and Imports of the United States, for the following Years, ending respectively on the 30th of September, with a Column showing the Population, as ascertained at the different Periods when a Census was taken.

Years.	Articles, the Growth, Produce, or Manufacture of the United States.	Articles, the Growth, Produce, or Manufacture of Foreign Countries re-exported.	Total Value of Exports from the United States.	Total Value of Imports into the United States from Foreign Countries.	Population of the United States, according to the Official Census.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	
1790	- -	- -	20,903,136		
1791	- -	- -	19,019,041	- -	3,921,496
1792			20,753,098		
1793	[Previously to 1796, the returns do not discriminate between domestic and foreign productions.]		26,109,572		
1794			33,026,233		
1795			47,989,472		
1796	40,764,097	26,300,000	67,064,097		
1797	29,850,908	17,000,000	56,480,308		
1798	28,347,070	33,040,000	61,387,097		
1799	33,148,592	45,943,000	78,665,521		
1800	31,840,305	39,130,877	70,971,780	- -	5,319,762
1801	47,083,904	46,648,781	94,115,945		
1802	36,708,189	35,776,971	72,485,160		
1803	42,805,961	13,580,078	65,891,353		
1804	41,467,477	36,231,597	77,699,074		
1805	42,387,192	53,179,019	95,566,021		
1806	41,253,727	60,243,236	101,536,963		
1807	48,699,592	59,643,558	108,343,150		
1808	9,433,546	12,997,414	22,430,960		
1809	31,405,709	30,797,531	57,203,233		
1810	42,366,675	24,991,995	66,757,970	Period embracing the embargo, non-importation, and non-intercourse laws and the war.	7,230,903
1811	45,294,043	16,727,790	61,316,833		
1812	30,032,109	8,493,147	38,527,256		
1813	25,008,152	2,847,845	27,855,997		
1814	6,782,272	145,169	6,927,441		
1815	45,974,403	6,581,350	52,555,753		
1816	64,781,486	12,138,546	81,920,032		
1817	68,313,500	19,558,069	87,871,569	[Previous to Oct. 1, 1820, the returns do not show the value of imports.]	
1818	73,854,437	19,446,696	93,281,133		
1819	50,976,854	19,165,683	70,142,537		9,637,999
1820	51,683,640	14,498,020	66,091,859		
1821	43,671,994	21,394,494	64,674,282		
1822	49,874,979	22,396,802	72,161,781		
1823	47,155,409	27,543,644	74,699,050		
1824	50,649,500	25,337,157	75,986,657		
1825	66,914,745	28,569,643	99,535,388		
1826	53,035,710	24,359,618	77,395,328		
1827	58,921,691	21,913,256	80,834,947		
1828	50,869,069	21,595,017	72,464,086		
1829	55,700,193	16,258,478	71,958,671		
1830	59,462,029	14,337,179	73,799,208		12,798,742
1831	61,272,057	20,033,556	81,305,613		
1832	68,137,470	21,079,453	89,216,923		
1833	70,317,699	19,877,735	90,195,433		
1834	81,924,162	23,316,811	105,240,973		
1835	101,189,082	20,248,495	121,093,577		
1836	108,486,580	21,746,360	129,683,040		
1837	95,564,414	21,858,964	117,423,378		
1838	96,033,941	18,158,585	104,486,616		
1839	107,335,591	17,194,525	124,529,116		
1840	113,895,634	14,100,312	132,852,946		17,062,566
1841	106,382,722	15,109,981	121,851,903		

Summary Statement of the Value of the Exports of the Growth, Produce, and Manufacture of the U. States, during the Year commencing the 1st October, 1840, and ending the 30th September, 1841.

The Sea.	*Dollars.*	*Dollars.*	*Dollars.*		*Dollars.*	*Dollars.*	*Dollars.*
Fisheries —				Hats - - -	- -	100,740	
Dried fish, or cod fisheries	- -	602,810		Saddlery - -	- -	22,456	
Pickled fish, or river fisheries (herring, shad, salmon, mackarel) - -	- -	148,973		War - - -	- -	74,188	
Whale and other fish oil	- -	1,260,660		Beer, porter, and cider	- -	99,135	
Spermaceti oil - -	- -	343,589		Spirits from grain -	- -	87,158	
Whalebone - -	- -	259,138		Snuff and tobacco -	- -	875,877	
Spermaceti candles -	- -	231,000		Lead - - -	- -	96,748	
			2,846,851	Linseed oil and sp. of turp.	- -	32,182	
The Forest.				Cordage - -	- -	51,582	
Skins and furs - -	- -	903,262		Iron, pig, bar, and nails	- -	138,537	
Ginseng - -	- -	457,415		cuttings	- -	99,981	
Products of wood —				all manufactures of	- -	800,859	
staves, shingles, boards, hewn timber -	2,540,812			Spirits from molasses	- -	371,216	
Other lumber - -	996,177			Sugar, refined -	- -	1,368,974	
Masts and spars -	58,991			Chocolate - -	- -	7,869	
Oak bark and other dye	133,510			Gunpowder - -	- -	146,958	
All manufactures of wood	549,398			Copper and brass	- -	29,934	
Naval stores, tar, pitch, resin, and turpentine	684,514			Medicinal drugs -	- -	136,869	
Ashes, pot and pearl	55,000			Cotton, piece goods —			5,501,117
		4,831,345		Printed and coloured	450,503		
Agriculture.			6,264,852	White - -	2,344,852		
Product of animals —				Twist, yarn, and thread	45,918		
Beef, tallow, hides, horned cattle - -	901,918			All manufactures of	503,701		
Butter and cheese -	500,815			Flax and hemp —		3,122,546	
Pork (pickled), bacon, lard, live hogs -	2,421,537			Cloth and thread -	- -	2,764	
Horses and mules -	245,143			Bags, and all manufact. of	- -	10,636	
Sheep - -	35,767			Wearing apparel -	- -	27,907	
Vegetable food —		4,360,180		Combs and buttons -	- -	67,598	
Wheat - -	872,841			Brushes - -	- -	29,908	
Flour - -	7,259,646			Billiard tables and apparatus	- -	996	
Indian corn -	314,994			Umbrellas and parasols	- -	7,899	
Indian meal -	682,457			Leather and Morocco skins, not sold per pound -	- -	88,649	
Rye meal - -	156,505			Printing presses and type	- -	561	
Rice, oats, and other small grain, and peas -	170,833			Fire engines and apparatus	- -	22,439	
Biscuit or ship bread	378,011			Musical instruments	- -	14,119	
Potatoes - -	61,402			Books and maps -	- -	40,899	
Apples - -	48,396			Paper and stationery -	- -	83,133	
Rice - -	2,010,107			Paints and varnish -	- -	60,574	
		12,377,392		Vinegar - -	- -	12,957	
Tobacco - -	- -	- -	16,737,462	Earthen and stone ware	- -	6,737	
Cotton - -	- -	- -	12,576,703	Manufactures of glass	- -	63,888	
All other agric. products —			54,330,341	tin - - -	- -	3,751	
Flax seed - -	- -	50,741		pewter and lead -	- -	291,546	
Hops - - -	- -	28,963		marble and stone -	- -	25,646	
Brown sugar -	- -	23,837		gold and silver, and gold leaf - -	- -	9,478	
			103,441	Gold and silver coin -	- -	2,744,486	
Manufactures.				Artificial flowers & jewellery	- -	10,015	
Soap and tallow candles	- -	404,577		Molasses - -	- -	7,999	
Leather, boots and shoes	- -	195,583		Trunks - -	- -	1,918	
				Brick and lime -	- -	14,004	
				Domestic salt - -	- -	64,765	
				Articles not enumerated —			6,481,509
				Manufactured -	- -	6,857	
				Other articles -	- -	823,566	
							1,480,423

Statistical View of the Commerce of the United States, exhibiting the Value of the Imports from, and of the Exports to, each Foreign Country: also the Tonnage of American and Foreign Vessels arriving from, and departing to, each Foreign Country, during the Year ending the 30th of September, 1841.

Countries.	Commerce.				Navigation.			
	Value of Imports.	Value of Exports.			American Tonnage.		Foreign Tonnage.	
		Domestic Produce.	Foreign Produce.	Total.	Entered the U. S.	Cleared from the U. S.	Entered the U. S.	Cleared fromthe U. S.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Russia	2,817,448	146,118	879,611	1,025,729	18,370	7,405	674	808
Prussia	36,119	149,211	26,765	175,976	357	547	- -	3,342
Sweden	1,209,881	563,766	38,553	602,319	7,407	2,215	11,774	3,816
Swedish West Indies	19,760	165,184	3,707	168,891	1,082	3,455	-	95
Denmark	8,791	110,424	24,364	134,788	- -	889	114	1,955
Danish West Indies	1,075,530	769,908	82,587	852,495	23,667	29,464	2,957	427
Holland	1,638,022	2,237,444	277,478	2,514,922	26,591	24,398	3,592	10,334
Dutch East Indies	266,425	178,876	224,150	403,026	507	5,324		
West Indies	500,197	298,699	34,194	332,893	12,588	6,666	939	20
Guiana	35,793	37,900	- -	37,900	4,756	5,496	-	17
Belgium	374,853	1,673,726	150,156	1,823,882	10,421	14,027	441	5,56
Hanse Towns	2,449,964	4,110,655	450,061	4,560,716	15,593	14,183	35,481	46,147
England	45,730,007	44,181,357	3,371,220	47,552,577	307,988	272,631	124,899	130,768
Scotland	850,887	1,920,906	15,318	1,936,824	8,049	7,414	23,118	8,717
Ireland	81,921	60,872	- -	60,872	741	1,391	17,882	880
Gibraltar	21,079	1,089,931	98,989	1,119,920	2,377	17,868	- -	794
Malta	1,461	27,869	21,070	48,939	- -	360	- -	574
Cape of Good Hope	17,155	51,324	- -	51,324	219	958	- -	152
British East Indies	1,236,641	532,334	430,667	963,201	6,408	12,647		
West Indies	855,122	3,191,683	40,311	3,231,994	68,442	91,587	39,369	18,632
Honduras	232,214	141,864	51,582	193,246	4,355	6,409	1,030	1,010
Guiana	18,228	381,532	1,069	382,601	2,755	8,827	13,174	1,613
American colonies	1,968,187	6,292,297	364,273	6,656,565	408,755	401,474	392,611	447,356
Australia	86,706	63,784	112,557	176,341	1,830	3,457	- -	346
British African ports	- -	- -	- -	- -	324	189	- -	117
France	23,933,812	18,410,567	3,356,388	21,766,755	121,734	137,361	18,858	16,079
French West Indies	198,216	381,556	40,966	422,522	12,732	22,151	3,594	467
Guiana	55,116	43,701	340	44,041	1,713	1,657		
Miquelon and French fisheries	- -	2,257	- -	2,257	- -	- -		
French African ports	- -	- -	- -	- -	- -	- -	203	264
Hayti	1,800,684	1,093,634	61,923	1,155,557	35,899	26,901	748	763
Spain	1,310,696	386,001	27,819	413,820	26,765	12,100	3,551	1,474
Teneriffe and the other Canaries	141,654	12,290	5,498	17,789	2,161	1,290	1,428	
Manilla and Philippine Islands	733,906	75,450	187,886	263,336	4,566	3,794		
Cuba	11,567,027	5,107,011	632,071	5,739,082	199,685	194,001	11,920	14,168
Other Spanish West Indies	2,760,040	721,845	28,087	749,932	51,074	50,129	443	750
Portugal	286,568	114,443	7,321	121,764	13,100	4,901	2,485	728
Madeira	229,519	107,905	20,370	128,275	2,504	4,626	148	527
Fayal and the other Azores	16,093	13,157	5,785	18,942	1,614	1,068		
Cape de Verd Islands	44,661	66,926	13,226	80,152	926	1,996		
Italy	1,151,256	731,411	180,907	912,318	13,753	6,289	2,098	1,267
Sicily	588,057	471,470	11,592	486,062	12,789	1,913	3,756	3,566
Sardinia	- -	47,000	- -	47,000				
Greece	- -	- -	- -	- -	215	197	274	
Trieste	418,606	1,258,776	52,980	1,311,756	5,259	10,340	1,961	1,201
Turkey	614,872	200,934	179,612	380,546	3,953	2,819	430	
Morocco	38,114	- -	- -	- -	280	- -	168	
Texas	395,026	516,955	292,041	808,996	30,805	32,858	429	13
Mexico	3,284,957	886,513	1,150,107	2,036,620	17,981	14,018	5,040	4,935
Venezuela	2,012,089	539,269	230,083	769,352	14,964	9,530	1,658	1,284
New Grenada	144,117	50,562	59,873	110,435	287	533	742	742
Central America	186,911	78,616	71,207	149,913	2,223	1,178	145	145
Brazil	6,302,654	2,941,991	575,282	3,517,273	41,084	47,634	4,903	3,101
Argentine Republic	1,612,513	509,007	152,039	661,046	13,726	6,564	2,319	
Cisplatine Republic	345,234	140,031	16,153	156,224	4,127	10,107	540	
Chili	1,230,986	846,110	256,578	1,102,688	3,022	5,962	300	991
Peru	524,376	- -	- -	- -	129			
Patagonia	27,769							
South America generally	- -	78,981	- -	78,981	756	399		
China	3,985,788	715,392	485,194	1,200,816	11,986	4,876		
Europe generally	- -	41,938	- -	41,938				
Asia generally	167,318	253,209	506,819	759,028	2,279	4,468		
Africa generally	408,955	582,441	54,327	636,768	5,841	7,382	868	814
West Indies generally	- -	255,222	9,013	264,235	88	11,435	- -	1,252
South Seas	38,440	394,634	99,931	494,565	32,347	55,304		
Sandwich Islands	47,630	- -	- -	- -	693	1,250		
Atlantic Ocean	- -	- -	- -	- -	4,485	13,940		
Uncertain places	845	- -	- -	- -	- -	157		
Total	127,946,177	106,382,722	15,469,081	121,851,803	1,631,909	1,634,156	736,444	736,849

Bills of Exchange. — By a revised law of the State of New York, the following damages on bills drawn or negotiated in this State, and protested for non-payment, are allowed, viz. —

Bills drawn on the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Pennsylvania, Ohio, Delaware, Maryland, Virginia, or district of Columbia, 3 per cent.

North Carolina, South Carolina, Georgia, Kentucky, or Tennessee, 5 per cent.

Any other state or territory of the United States, or any other place, on or adjacent to this continent, and north of the equator, or any British or other foreign possessions in the West Indies, or elsewhere on the Western Atlantic Ocean, or any port or place in Europe, 10 per cent.

Such damages shall be in lieu of interest, charges of protest, and all other charges incurred previous to and at the time of giving notice of non-payment, but the holder of such bill shall be entitled to demand and recover lawful interest upon the aggregate amount of the principal sum specified in such bill, and of the damages thereon, from the time at which notice of protest for non-payment shall have been given, and payment of such principal sum shall have been demanded. — Sect. 19.

If the contents of such bill be expressed in the money of account of the United States, the amount due thereon and of the damages therein allowed for the non-payment thereof, shall be ascertained and determined without any reference to the rate of exchange existing between this State and the place on which such bill shall have been drawn, at the time of the demand of payment or of notice of non-payment. — Sect. 20.

If the contents of such bill be expressed in the money of account or currency of any foreign country, then the amount due, exclusive of the damages payable thereof, shall be ascertained and determined by the rate of exchange or the value of such foreign currency, at the time of the demand of payment. — Sect. 21.

TARIFF OF THE UNITED STATES. — Notwithstanding the unprecedented progress of the United States in wealth and population, their foreign trade was nearly stationary for the 10 years ending with 1830. And yet, considering the spirit of commercial enterprise by which the people, particularly in the New England States and New York, are animated, and their skill in navigation, it might have been fairly presumed that the growth of their foreign trade would, at least, have kept pace with the development of the inter-

nal resources of the country. That it did not do so, is wholly owing to the policy of government. Not satisfied with the extraordinary advances their constituents had made in numbers and wealth, Congress seems to have believed that their career might be accelerated by means of Custom-house regulations!—by giving an artificial direction to a portion of the public capital and industry, and turning it into channels into which it would not naturally flow!

No one who has the slightest acquaintance with the condition of America—who knows that she is possessed of boundless tracts of fertile and unappropriated land—that her population is comparatively thin, and wages high—can doubt for a moment that agriculture *must*, for a long series of years, be the most profitable species of employment in which her citizens can engage. There can be no question, indeed, that such branches of manufacture as are naturally adapted to her peculiar situation, will gradually grow up and flourish in America, without any artificial encouragement, according as her population becomes denser, and as the advantage which now exists on the side of agriculture becomes less decided. And the imposition of moderate duties on foreign articles for the sake of revenue would certainly give these branches all the protection to which they are justly entitled, or more. But to force, by means of duties and prohibitions, imposed not for the sake of revenue, but of protection, the premature growth of manufactures, is plainly to force a portion of the industry and capital of the country into businesses in which it will be *least* productive.

Such, however, has been, for a lengthened period, the policy of the American legislature. The exploded sophisms of the mercantile system, though renounced by every statesman in Europe, have acquired a noxious influence in congress, and have been put forth with as much confidence, as if their soundness neither had been, nor could be, questioned! From 1816 down to the present time (1843), the object of the American legislature has, for the most part, been to bolster up a manufacturing interest, by imposing oppressive duties on most manufactured articles imported from abroad. Now, it is obvious, even had the articles produced in America through the agency of this plan been nearly as cheap as those they superseded, that nothing would have been gained by it; for, to whatever extent the importation of foreign articles may be diminished, there must be a corresponding diminution in the exportation of native American products; so that the only result would have been the raising up of one species of industry at the expense of some other species entitled to an equality of protection. But the "American system" was not so innocuous. Instead of the goods manufactured in the States being as cheap as similar ones manufactured in Europe, they were admitted to be, at an average, from 30 to 50 or 60 per cent. dearer! The extent of the pecuniary sacrifice that was thus imposed on the Union by the tariff modified in 1832 has been variously estimated by American writers; and we have been assured by those who have the best means of knowing, that it may be taken as amounting to from 50,000,000 to 60,000,000 dollars, or from about 11,000,000*l.* to 13,000,000*l.*! And this immense burden—a burden nearly *three* times as great as the whole public expenditure of the republic—was incurred for no purpose of public utility, and was productive of nothing but mischief. The whole effect of the scheme was to divert a certain amount of the national capital from the production of cotton, wheat, rice, tobacco, &c., the equivalents sent to foreigners in payment of manufactured goods, to the direct production of these goods themselves! And as the latter species of industry is less suitable for America, a tax of 13,000,000*l.* a year was imposed on the Union, that the manufacturers might be enabled to continue a losing business. We leave it to others to determine whether the absurdity of the system, or its costliness, be its more prominent feature. That its influence was not more injurious is solely owing to the smuggling it occasioned. With a frontier like that of America, it would be worse than absurd to suppose that the old tariff could be carried into effect. But it had enough of influence to render it highly prejudicial—to occasion a great rise in the price of many important articles—to cripple the trade and navigation of the country—and to throw a considerable part of it into the hands of smugglers, who carried it on in defiance of the law.

It is difficult, however, to say how long the system of imposing high duties on most foreign products might have been maintained without so much as a check, but for its political effects. It was principally patronised by the Northern States; and though it would be difficult to show that they derived any benefit from it, it is, at all events, pretty certain that it was most injurious to the Southern States. Their staple products are cotton, tobacco, and rice, of which by far the largest portion is exported to foreign countries; and the planters speedily found that every restriction on importation from abroad occasioned a corresponding difficulty of exportation. This led to a disunion of interests, and to strong remonstrances against the tariff by the Southern States. These, however, were disregarded. Provoked by this treatment, South Carolina took the decisive step of refusing to enforce the customs acts; and threatened, if coercion were attempted, to repel force by force, and to recede from the Union! This was a death-blow to the tariff.

Congress now saw, what all sensible men had seen long before, that it was necessary to recede; that, in fact, either the tariff must be modified, or the integrity of the Union be brought into jeopardy. A law, commonly called the "Compromise Act," was in consequence passed on the 14th of July, 1832, which provided that certain reductions should be progressively made on the then existing duties on most descriptions of foreign goods, at certain specified periods between 1833 and 1842, when they were, in most instances, to be reduced to 20 per cent., *ad valorem*.

This act was allowed to take effect for a few years; but as the reductions specified in it began to come into practical operation, the manufacturers, also, began to set up fresh claims for additional protection. Probably, however, the latter might not have been able to carry their point had not the Southern States been apprehensive that if they made any resolute stand against the proposal to increase the duties, and still more if they threatened to secede from the Union in the event of its being carried, they might be brought into serious difficulties by the agitation of the question as to the emancipation of their slaves. The latter, therefore, having to choose between two evils, preferred, of course, that which they believed to be least: and purchased a truce for the emancipation question by agreeing to the tariff act passed in 1842, by which high duties are again imposed on most descriptions of imported articles.—(See below.)

It is, of course, impossible to foretell whether this new tariff be destined to be maintained for any considerable period. We incline, however, to think that it will be maintained. So long, at all events, as the Northern States continue favourable to the protective system, the Southern States will not, for the reasons given above, be very likely to insist strongly on its modification.

Tariff of Duties,

On Articles imported into the U. States: being an Abstract of the Bill passed by Congress, and approved by the President, in August, 1842.

Acids.

Acids, benzoic, citric, muriatic, nitric, oxalic, pyroligneous, and tartaric	20 per ct.
Boracic acid	5 per ct.
Horax	25 per ct.
Sulphate of quinine, per oz.	40 cents
Amber, ambergris, ammonia, arrowroot, annatto, aniseed, vanilla beans, French chalk, red chalk, juniper berries, manganese, nitrate of lead, all chemical salts not enumerated, and all carbonates of soda, except soda ash, barilla, and kelp	20 per ct.
Soda ash	5 per ct.

Books.

Books, in English, bound, per lb.	30 cents
— — in boards or sheets, per lb.	20 cents
But if published abroad more than one year, and not republished in this country; or if published abroad more than five years, the books shall pay but one half the rates above specified. But these terms of one and five years shall not commence before the passing of this act.	
Books, Latin or Greek, bound, per lb.	15 cents
— — unbound, per lb.	13 cents
— Hebrew, bound, per lb.	10 cents
— — unbound, per lb.	8 cents
— in other foreign languages, if bound or in boards, per vol.	5 cents
— if in sheets or pamphlets, per lb.	15 cents
Any books printed 40 years before importation, and reports to foreign legislatures, per vol.	5 cents
Polyglots, dictionaries, &c., per lb.	5 cents
Books of engravings and maps	20 per ct.

Cotton.

Cotton, unmanufactured, per lb.	3 cents
Cotton manufactures, not otherwise specified	30 per ct.
Provided, that cottons not printed and worth not more than 20 cents per square yard, shall be valued at 20 cents; printed cottons, worth not more than 30 cents, shall be valued at 30 cents; velvets, moleskins, fustians, &c., worth not more than 35 cents, shall be valued at 35 cents.	
Cotton twist, yarn, and thread	25 per ct.
Provided, that twist, &c., uncoloured, and worth less than 60 cents per lb., shall be valued at 60 cents; if coloured, and worth less than 75 cents, it shall be valued at 75 cents. All other cotton twist, &c. shall pay a duty of	30 per ct.

Copper, Lead, Tin, &c.

Copper bottoms, plates, and sheets	30 per ct.
— rods, bolts, nails, &c., per lb.	4 cents
Copper patent sheathing metal, per lb.	2 cents
Lead, in pigs and bars, per lb.	3 cents
— old and scrap, per lb.	1½ cents
— pipes, shot, and sheets, per lbs.	4 cents
Type metal and stereotype plates	25 per ct.
Types, new or old	25 per ct.
Tin, pigs, bars, or blocks	1 per ct.
— plates, sheets, and foil	2½ per ct.
Silver plated metal, and German silver, in sheets	30 per ct.
German silver, bell mesal, zinc, and bronze manufactures	30 per ct.
Zinc, in sheets	10 per ct.
Old bells, fit only to be re-manufactured, shall be free of duty.	
Bronze, powder and liquor, iron and red liquor and seppia	20 per ct.

Fish.

Fish, dried or smoked, per 112 lbs.	$1·00
Mackerel and herrings, salted, per barrel	1·50
Pickled salmon, per barrel	2·00
Other pickled fish, per barrel	1·00
— not in barrels	20 per ct.
Sardines, &c., preserved in oil	20 per ct.
Fish from the domestic fisheries, and all fresh caught fish	free
Fish glue, or isinglass	20 per ct.

Furs.

Furs, undressed, on the skin	5 per ct.
— dressed, on the skin, all hatters' furs, not on the skin	25 per ct.
Fur hats, caps, muffs, &c.	35 per ct.
Fur for hat bodies, not trimmed	25 per ct.

Glass.

Cut glass vessels, if the cutting be not one-third the height or length, per lb.	25 cents
If the cutting exceeds one-third, per lb.	35 cents
If the cutting exceeds half, per lb.	45 cents
Cut glass chandeliers, lustres, drops, icicles, ornaments, &c., per lb.	45 cents
Plain, moulded, or pressed glass articles, weighing over 8 oz., per lb.	10 cents
weighing 8 oz. or under, per lb.	12 cents
Plain, moulded, or pressed tumblers, per lb.	10 cents
If stoppered, or the bottoms ground, 4 cents per lb. additional.	
Articles partly cut or polished, to pay duty as if finished.	
Vials and bottles, holding not more than 6 oz. each, per gross	$1·75
Vials and bottles over 6 oz. but not over 16 oz., per gross	$2·25
Vials and bottles, perfumery and fancy, uncut, not over 4 oz. each, per gross	$2·50
The same, when over 4 oz., and not over 16 oz., per gross	$3·00
Bottles and jars, black or gravel, over 8 oz., but not over 1 quart each, per gross	$3·00
Bottles and jars, if over 1 quart each, per gross	$4·00
Demijohns and carboys, 5 gal. or less, each	15 cents
— — over 5 and not over 3 gal. each	30 cents
— over 3 gallons each	50 cents
Glass, cylinder or broad window, not over 8 by 10 inches, per square foot	2 cents
not over 10 by 12 inches, per square foot	2½ cents
— 11 by 10 inches, per square foot	3½ cents
— 16 by 11 inches, per square foot	4 cents
— 18 by 12 inches, per square foot	5 cents
above 18 by 12 inches, per square foot	6 cents
Crown window glass, not over 10 by 8 inches, per square foot	3½ cents
not over 10 by 12 inches, per square foot	5 cents
— 14 by 10 inches, per square foot	6 cents
— 16 by 11 inches, per square foot	7 cents
— 18 by 12 inches, per square foot	8 cents
above 18 by 12 inches, per square foot	10 cents
Glass in sheets or tables, to pay the highest duties imposed on window glass.	
Plate glass, polished, not silvered, and not over 12 by 8 inches, per square foot	5 cents
not over 14 by 10 inches, per square foot	7 cents
— 16 by 11 inches, per square foot	8 cents
— 18 by 12 inches, per square foot	10 cents
— 24 by 14 inches, per square foot	12 cents

Plate glass, above 22 by 14 inches, per square foot - 30 per ct.
if silvered, 30 per cent. additional.
if framed - - - - 30 per ct.
On all cylinder or broad glass, weighing over 100 lbs., and all crown glass, over 160 lbs., to the 100 square feet, another duty on the excess, at the same rate as above.
Glass, coloured, porcelain, paintings on - - 30 per ct.
Glass, manufactures of, not specified - - 25 per ct.

Grain.

Wheat, per bushel - - - 25 cents
Barley, per bushel - - - 20 cents
Rye, per bushel - - - 15 cents
Oats and Indian corn, per bushel - - 10 cents
Wheat flour, per 112 lbs. - - - 70 cents
Indian meal, per 112 lbs. - - - 30 cents
Potatoes, per bushel - - - 10 cents

Hemp.

Hemp, unmanufactured, per ton - - $40
Hemp, Manilla, and other Indian, per ton - 25
Codilla, or tow of hemp and flax, per ton - 25
Cables and cordage, tarred, per lb. - - 5 cents
— — untarred, per lb. - - 4½ cents
Yarns, twine, and packthread, per lb. - - 6 cents
Seines, per lb. - - - - 7 cents
Cotton bagging, per square yard - - 4 cents
Other manufactures, for same use as cotton bagging, gunny cloth, &c., per square yard - 5 cents
Sail duck, per square yard - - 7 cents
Russia and other sheetings - - - 25 per ct.
All other hemp manufactures - - - 30 per ct.
Linens and flax manufactures - - - 25 per ct.
Grass cloth - - - - 25 per ct.
Unmanufactured flax, per ton - - - $20
Oil cloth, printed or painted, per square yard - 35 cents
Oil cloth furniture, of cotton flannel, per sq. yard 10 cents
Oil cloth, other, per square yard - - 10 cents
Oil cloth, for hat covers, &c., per square yard - 12½ cents
Floor matting and mats - - - 25 per ct.

Iron.

Iron bars and bolts, not rolled, per ton - - $17
— rolled, per ton - - 25
Provided, that iron in-ore finished than pig iron, except castings, shall be rated as iron bars and bolts; and iron imported for railways, if actually laid down for use before March 3d, 1845, shall be free of duty.
Iron, in pigs, per ton - - - - $9
Cast iron vessels, per lb. - - - 1½ cents
All other castings, per lb. - - - 1 cent
Smoothing and pressing irons, hollow ware, and hinges, per lb. - - - - 2½ cents
Iron and steel wire, not over No. 14, per lb. - 3 cents
— — over No. 14 and not over No. 23, per lb. - 4 cents
— — over No. 23, per lb. - - 11 cents
Wire, silvered or plated - - - 30 per ct.
— brass or copper - - - 25 per ct.
— bonnet, silk covered, per lb. - - 12 cents
— — cotton covered, per lb. - - 8 cents
Round or square iron, braziers' rods from 5 to 10-16ths of an inch, nail rods or nail plates, sheet, hoop, band, or scroll iron, and iron cables, per lb. - - - - 2½ cents
Other iron chains - - - 3 per ct.
Anchors, anvils, hammers, per lb. - - 2½ cents
Cut or wrought iron spikes, per lb. - - 3 cents
Cut iron nails, per lb. - - - 3 cents
Wrought iron, mill irons, iron for ships, locomotives and steam engines, and malleable irons or castings, per lb. - - - 1 cents
Iron tubes or pipes, per lb. - - - 5 cents
Saws, mill, cross cut and jet, each - - $1
Tacks, brads, &c., less than 16 oz. to a 1,000, per 1,000 - - - - 5 cents
Tacks, brads, &c., more than 16 oz. to a 1,000, per lb. - - - - - 5 cents
Taggers' iron - - - - 5 per ct.
Provided, that all articles partly manufactured shall pay as if wholly manufactured; and no article shall pay less than the material of which it is made, when paying its highest duty, and, in addition, a duty of - - - - 15 per ct.
Old iron, fit only to be re-manufactured, and scrap iron, not 6 inches in length, per ton - $10·00
Muskets, per stand - - - - 1·50
Rifles, each - - - - - 2·50
Axes, hatchets, planes, chisels, drawing and cutting knives, sickles, scythes, shovels, steel and brass medal ery, coach and harness furniture, steel yards, and scale beams, fire-arms other than muskets and rifles, and side arms - - - 30 per ct.
Square wire for umbrellas - - - 12½ per ct.
Screws of iron, called wood screws, per lb. - 12 cents
Screws of iron, all others - - - 30 per ct.
— of brass, per lb. - - - 30 cents
Sheet and rolled brass - - - 30 per ct.
Brass battery, or hammered kettles, per lb. - 12 cents
Steel, cast, shear, and German, in bars, per cwt. - $1·50
Steel, all other, in bars, per cwt. - - 2·50
Pins, not over 5,000 to the pack, per pack - 40 cents
Pins, per lb. - - - - 30 per ct.
Needles - - - - - 30 per ct.
Saddlery, common, tinned, &c - - - 30 per ct.
Ware, japanned, of papier mache, plated, and gilt; all cutlery, and all manufactures, not otherwise specified, of brass, iron, steel, lead, copper, pewter, or tin - - - - 30 per ct.

Leather.

Leather, tanned, sole or bend, per lb. - - 6 cents
upper, not specified, per lb. - - 8 cents
Calf and seal skins, tanned and dressed, per dozen $5·00
Sheep skins, tanned and dressed, per dozen - 2·00
Goat skins or morocco, tanned and dressed, per dozen - $2·50
Kid skins or morocco, tanned and dressed, per doz. 1·50
Goat or sheep, tanned and not dressed, per dozen - 1·00
Kid or lamb, tanned and not dressed, per dozen - 75
Skins, tanned and dressed, but not in colour, to wit: — fawn, kid, and lamb, called chamois, per dozen - - - - - $1·00
Men's boots and bootees, per pair - - 1·25
Men's shoes and pumps, per pair - - 50
Women's boots and bootees, per pair - - 50
Children's boots and bootees, per pair - - 15
Women's double soled pumps and welts, per pair - 40
— shoes or slippers, per pair - - 25
Raw hides, dried or salted - - - 5 per ct.
Skins, pickled and in casks - - - 30 per ct.
Men's leather gloves, per dozen - - $1·25
Women's leather habit gloves, per dozen - 1·00
Children's leather habit gloves, per dozen - 50
Women's leather extra and demi length - 1·50
Children's leather extra and demi length, per doz. 75
Leather caps, hats, suspenders, and all other suspenders of any material except India rubber, leather bottles, patent leather, and other leather manufactures - - - - 35 per ct.

Oil, &c.

Oil, olive, in casks, per gallon - - 30 cents
— — salad, in bottles - - 30 per ct.
— — all other - - - 20 per ct.
— spermaceti, foreign fisheries, per gallon - 35 cents
Oil, whale or other fish, foreign fisheries, per gall. 15 cents
Whalebone, foreign fisheries - - 12½ per ct.
Spermaceti or wax candles - - - 8 cents
Wax tapers - - - - 30 per ct.
Tallow candles, per lb. - - - 4 cents
Tallow - - - - - 1 cent
Bees' wax and shoemakers' wax - - 15 per ct.

Paper, &c.

Paper, bank, folio, quarto post, letter and bank note, per lb. - - - - - 17 cents
Paper, antiquarian, demy, drawing, elephant, foolscap, imperial, medium, pot, pith, royal, and writing, per lb. - - - - 15 cents
Paper, copperplate, blotting, coloured for labels and needles, marble or fancy, glass, morocco, sand, tissue, gold or silver, pasteboard and pressing board, per lb. - - - - 12½ cents
Paper, coloured copper plate, printing, and stainers', per lb. - - - - 10 cents
Binders' and paper makers' boards, box and mill boards, sheathing, wrapping and cartridge paper, per lb. - - - - - 3 cents
Paper envelopes and fancy note - - - 30 per ct.
Music paper, gilt and metal paper, fancy paper hangings - - - - 25 per ct.
Paper hangings - - - - 35 per ct.
Blank or visiting cards, per lb. - - - 12 cents
Playing cards, per pack - - - 25 cents
Blank books, when bound, per lb. - - 20 cents
— unbound, per lb. - - - 15 cents
Parchment, vellum, &c., and imitation, wafers, sealing wax, black lead pencils, crayons, metallic pens, ink, ink powder, and manufactured quills 25 per ct.
Quills unmanufactured - - - 15 per ct.
Paper not enumerated, per lb. - - - 15 cents
Rags, waste, or shaddy, per lb. - - ½ cent

Silks.

Silk, bolting cloths - - - - 20 per ct.
All other silk manufactures, not otherwise specified, per lb. of 16 ounces - - - - $2·50
Sewing silk, silk twist, &c., per lb. - - 2·00
Twopenny and plain white silks, per lb. - - 1·50
Raw silk, per lb. - - - - 0·50
Floss and similar silks, ready for manufacture - 25 per ct.
Silk umbrellas, parasols, &c. - - - 30 per ct.
Silk shirts and drawers - - - 40 per ct.
Silk caps and articles of apparel, made up wholly or in part by hand - - - 30 per ct.
Silk or satin shoes and slippers, per pair - - 50 cents
Silk or satin shoes for children, per pair - - 15 cents
Silk or satin boots and bootees, per pair - - 75 cents
Silk or satin boots for children, per pair - - 25 cents
Men's silk hats, each - - - - $1·00
Women's silk hats or bonnets - - - $1·00

Spirits, Wine, &c.

Brandy, per gallon - - - - - $1·00
Other spirits, 1st & 2d proof, per gallon - - 60
— 3d proof, per gallon - - 65
— 4th proof, per gallon - - 70
— 5th proof, per gallon - - 75
— above 5th proof, per gallon - 80
Ale, porter, beer, in bottles, per gallon - - 30
— — not in bottles, per gallon - 15
Wine, Madeira, Sherry, San Lucar, and Canary, per gallon - - - - - 60 cents
Wine, Champagne, per gallon - - - 60 cents
— bottled pert, Burgundy, claret, per gallon - 85 cents
Wine, port and Burgundy, in casks, per gallon - 15 cents
Wine, Teneriffe, per gallon - - - 30 cents
— claret in casks, per gallon - - 6 cents
— white of France, Austria, Prussia, Sardinia, Portugal, and its possessions, —
in casks, per gallon - - - 7½ cents
in bottles, per gallon - - - 30 cents
Red wines from those countries, —
in casks, per gallon - - - 6 cents
in bottles, per gallon - - - 30 cents
Wines of Spain, Germany, and the Mediterranean, —
in casks, per gallon - - - 12½ cents
in bottles, per gallon - - - 30 cents
Sicily, Madeira and Marsala wines, in casks or bottles, per gallon - - - - 25 cents
Other wines of Sicily, per gallon - - - 15 cents

Wines not specified, —	
in casks, per gallon	25 cents
in bottles, per gallon	65 cents
Provided, that these duties do not interfere with subsisting treaties.	
All imitations of spirits and wines, shall pay the highest duty imposed on the similar article, and when wine is imported in bottles, a separate duty shall be paid on the bottles.	
Cordials and liqueurs, arrack, ratafia, and similar articles, per gallon	60 cents

Sugar.

Sugar, raw or brown clayed, and sirup of sugar, per lb.	2½ cents
Sugar, not raw nor yet refined, per lb	4 cents
Sugar, refined, and sugar candy, per lb.	6 cents
Molasses, per lb.	4½ mills
Sirups of sugar, &c., entered as molasses, shall be forfeited.	
Comfits, sweetmeats, preserved fruits and confectionery	25 per ct.

Tobacco.

Tobacco, unmanufactured	20 per ct.
Segars, per lb.	40 cents
Snuff, per lb.	12 cents
Other manufactured tobacco, per lb.	10 cents

Wood.

Wood manufactures, not specified	30 per ct.
Boards, staves, scantlings, unwrought spars, and other wood wrought into shape, shall be deemed manufactured wood.	
Timber for wharves, firewood, rough boards, staves, &c.	20 per ct.
Rose, satin, mahogany, and cedar wood	15 per ct.
Walking canes, frames and sticks, for umbrellas, &c., household furniture not specified, musical instruments, carriages and parts thereof	30 per ct.

Wool.

Wool, coarse, unmanufactured, worth 7 cts. or under at place of exportation	5 per ct.
Wool, all other, manufactured	3 cents
per pound, and 30 per cent. *ad valorem*.	
If wool is mixed, it shall all be appraised at the value of the finest kind.	
Carpeting, Wilton, Saxony, and Aubusson, per sq. yard	65 cents
— Brussels and Turkey, per yard	55 cents
— Venetian and ingrain, per sq. yard	30 cents
— all other	30 per ct.
Woollen blankets, worth not more than 75 cents each, and not larger than 72 by 52, nor less than 45 by 60 inches	15 per ct.
Other woollen blankets	25 per ct.
Hearth rugs	40 per ct.
Woollen and worsted yarn	30 per ct.
— and worsted gloves, caps and hosiery	30 per ct.
Woollen flannels, bockings, and baizes, per square yard	14 cents
Goat's hair or mohair, unmanufactured, per lb.	1 cent
— manufactures	20 per ct.
Coach laces	35 per ct.
Ready-made clothing	50 per ct.
Other articles worn by persons, except those otherwise specified	40 per ct.
Laces, thread	15 per ct.
— cotton, or trimming	20 per ct.
— tassels, knots, &c., of gold or silver	15 per ct.
Articles embroidered in gold or silver	20 per ct.
Articles made up as clothes	50 per ct.
Combed wool or worsted manufactures, not otherwise specified, and combined worsted and silk	30 per ct.
Woollen manufactures not mentioned above	40 per ct.

Miscellaneous Articles.

Coal, per ton	$1·75
Coke, or culm of coal, per bushel	5
Ware, china, earthen, stone, &c.	30 per ct.
Hats of wool, hat bodies, &c. each	18 cents
Hats and bonnets, Manilla, Leghorn, &c. made of straw, grass, palm, or any material not specified	35 per ct.
But all flats, braids, &c., used for making hats, shall pay the same duty as manufactured hats.	
Ornamental feathers and artificial flowers, hair bracelets, chains, curls, &c., human hair prepared for use, and all fans	25 per ct.
Hair unmanufactured	10 per ct.
— cloth, belts, and gloves	25 per ct.
— curled, and moss, for beds	10 per ct.
Feathers, and down	25 per ct.
India rubber cloth, shoes, suspenders, and other articles	30 per ct.
Provided, that India rubber suspenders, worth not more than $2 per dozen, shall be valued at	$2
Clocks and glaziers' diamonds	25 per ct.
Ship chronometers	20 per ct.
Watches and watch materials	7½ per ct.
Diamonds	7½ per ct.
Watch crystals and spectacle glasses, per gross	$2
Gems, pearls, &c.	7 per ct.
— imitation and mosaics	7½ per ct.
Jewellery, of gold, silver, &c.	20 per ct.
— imitation	25 per ct.
Table tops, Scagliola, mosaic, inlaid, &c., and alabaster and spar ornaments	30 per ct.
Silver and gold vessels and wares, not otherwise specified	30 per ct.
Strings for musical instruments	15 per ct.
Marble, unmanufactured	25 per ct.
— busts, statuary, and other articles not otherwise specified	30 per ct.
Slates, tiles, and bricks	25 per ct.
Baskets and other articles of grass, willow, palm leaf, &c.	25 per ct.
Beads of wax, amber, &c., fancy boxes, and combs for the hair	25 per ct.
Brushes and brooms	30 per ct.
Bristles, per lb.	1 cent
Dolls, toys, metal buttons	30 per ct.
But all such buttons, worth not more than $1 per gross, shall be valued at $1.	
Other buttons, and button moulds	25 per ct.
But lastings, prunellas, &c., in size fit only for buttons and shoes, and mohair, linen canvass, figured satin, and brocaded velvet, in size and shape suited only for buttons, and tortoise shell, ivory, horns, and teeth, unmanufactured, and horn and bone tips	5 per ct.
White or red lead, litharge, &c., per lb.	4 cents
Whiting and ochres, when dry, per lb.	1 cent
— when ground in oil, per lb.	1½ cents
Sulphate of barytes, per lb.	½ cent
Oil, linseed, hempseed, &c, per gall.	25 cents
Putty, per lb.	1½ cents
Cocoa, dates, nuts, wood or pastel, and sulphuric acid, per lb.	1 cent
Ivory, or bone black, per lb.	½ cent
Alum, per lb.	1½ cent
Ginger in the root, figs, raisins, not specified, and copperas, per lb.	2 cents
Almonds, prunes, currants, muscatel and bloom raisins, per lb.	3 cents
Chocolate, ground ginger, and sulphate of copper, per lb.	4 cents
Chinese cassia, pimento, black pepper, crude camphor, indigo, glue, per lb.	5 cents
Cloves, gunpowder, per lb.	8 cents
Sweet oil of almonds, per lb.	9 cents
Cayenne, African, Chili pepper, per lb.	10 cents
Refined camphor, per lb.	20 cents
Cinnamon, per lb.	25 cents
Nutmegs, and oil of cloves, per lb.	30 cents
Mace, per lb.	50 cents
Opium, per lb.	75 cents
Mustard seed, linseed, quicksilver	5 per ct.
Mustard, roll brimstone, calomel, and other mercurial preparations	25 per ct.
Olives	30 per ct.
Soap, Windsor, shaving, and fancy	30 per ct.
— all other hard, per lb.	4 cents
— all soft, per barrel	50 cents
Grease and soap stuffs	10 per ct.
Starch and pearl barley, per lb.	2 cents
Corks	30 per ct.
Manufactures of cork	25 per ct.
Sponges and spunk	20 per ct.
Oranges, lemons, and grapes	20 per ct.
Salt, per bushel of 56 lbs.	8 cents.
Saltpetre, partly refined, per lb.	½ cent
— wholly refined, per lb.	2 cents
Chloride of lime, per lb.	1 cent
Vinegar, per gallon	8 cents
Spirits of turpentine, per gallon	10 cents
Beef and pork, per lb.	2 cents
Hams and bacon, per lb.	3 cents
Prepared meat, poultry and game, and Bologna sausages	25 per ct.
Cheese, per lb.	9 cents
Butter, per lb.	5 cents
Lard, per lb.	3 cents
Macaroni, jellies, &c.	30 per ct.
Pickles, capers, and sauces	30 per ct.
Castor oil, per gallon	40 cents
Oil, neatsfoot, animal and volatile	20 per ct.
Gums, &c., crude	15 per ct.
— if not crude, and pastes, essences, balsams, perfumes, &c. not enumerated	25 per ct.

The following Articles are exempt from Duty.

1. Articles imported for the use of the U. States.

2. Merchandise, the growth or manufacture of the U. States, exported to a foreign country and brought back again; and personal effects, not merchandise, of citizens of the U. States dying abroad.

3. Paintings and statuary by American artists.

4. Wearing apparel and personal effects, not merchandise, of persons arriving in the U. States.

5. Apparatus, instruments, books, maps, statuary, cabinets of coins, antiquities, &c., imported for the use of any philosophical or literary society, or any college, academy, or school.

6. Anatomical preparations, models of machinery and inventions; specimens in natural history, trees, shrubs, plants, bulbs or roots, and garden seeds not otherwise specified; berries, nuts, and vegetables, used principally in dyeing or compositing dyes; all dye woods in sticks; whale and other fish oils, and all other articles the produce of American fisheries; animals imported for breed; fruit, green or ripe, from the West Indies, in bulk; tea and coffee, when imported in American vessels from the places of their growth or production.

7. Adhesive felt for sheathing vessels, alcornoque, aloes, antimony crude, argol, assafœtida, ava root, barilla, bark of cork tree, unmanufactured; bells or bell metal, only fit to be remanufactured, and chimes of bells; brass in pigs or bars, and old brass fit only to be re-manufactured; Brazil wood, crude brimstone, and flour of sulphur, bullion, burr stones unwrought; cantharides, chalk, clay unwrought; cochineal, coins of gold and silver, copper for the use of the mint, copper in pigs or bars, and copper ore; plates or sheets of copper for sheathing vessels, but none is to be so considered except that which is 14 inches wide and 48 inches long, and weighing from 14 to 84 oz. per square foot; old copper fit only to be re-manufactured; cream of tartar, emery, flints, gold and flint, gold bullion, gold epaulets and wings, grindstones, gum Arabic, gum Senegal, gum tragacanth, India rubber, in bottles or sheets, or otherwise, unmanufactured, and old junk, oakum, kelp, kermes, lac dye, leeches, madder root, mother of pearl, nickle, nux vomica, palm leaf unmanufactured, palm oil; Peruvian bark, pewter when old and only fit to be remanufactured; platina unmanufactured, ivory un-

manufactured; plaster of Paris unground, rattans and reeds unmanufactured, rhubarb, saltpetre when crude, sarsaparilla, shellac, silver bullion, silver spangles and wings, stones called polishing stones, stone called rotten stone, sumac, tartar when crude, turmeric, weld, woods of all kinds, when unmanufactured, not herein enumerated.

§ 10. On all articles not enumerated above, a duty shall be levied of 20 per cent.

§ 11. Where a specific discrimination is not herein made between goods imported in American or in foreign vessels, an additional duty of 10 per cent is imposed on all merchandise brought in vessels not of the U. States; and a further addition of 10 per cent. on goods brought in foreign vessels from any place east of the Cape of Good Hope. *Provided*, that existing treaties and former acts of Congress be not infringed.

§ 12. All duties are to be paid in cash, and goods are to be sold after 30 days' detention.

§ 14. On foreign sugar refined in the U. States, a drawback shall be allowed equal to the duty paid; on spirits distilled from foreign molasses, a drawback of 5 cents per gallon, till January 1st, 1843; at and after that time, the drawback shall be reduced 1 cent per gallon, on the 1st of January of each year, till it be extinguished.

§ 15. No drawback shall be allowed but on goods exported within three years from their importation. Ten per cent. of the drawback on refined sugar shall be retained, and 2½ per cent. on all other drawbacks.

The provisions of this act shall not apply to goods shipped in any port beyond the Cape of Good Hope or Cape Horn, prior to September 1st, 1842.

Trade of the United Kingdom with the United States.

Account of the declared Value of the Total Exports of British Produce and Manufactures to the United States of America, during each of the Ten Years ending with 1842.

Years.	Declared Value.	Years.	Declared Value.	Years.	Declared Value.
	£		£		£
1833	7,579,698	1837	4,695,235	1840	5,353,090
1834	6,844,999	1838	7,385,740	1841	7,098,642
1835	10,568,475	1839	8,839,904	1842	3,528,907
1836	12,475,935				

Account of the Number of British and American Ships, specifying their Tonnage, that cleared outwards from the U. Kingdom for the U. States, during each of the 12 Years ending with 1842.

Years.	British.		American.		Years.	British.		American.	
	Ships.	Tonnage.	Ships.	Tonnage.		Ships.	Tonnage.	Ships.	Tonnage.
1831	358	114,240	651	231,280	1837	360	110,475	624	224,818
1832	458	147,092	471	176,774	1838	439	149,251	830	323,810
1833	475	154,457	447	160,258	1839	298	134,792	580	226,334
1834	387	133,734	546	220,917	1840	360	149,041	839	409,980
1835	534	179,963	604	253,994	1841	318	150,597	580	3 3,340
1836	559	189,856	579	239,918	1842	353	195,745	616	310,852

Account of the Quantities and declared Value of the principal Articles of British Produce and Manufacture exported from the United Kingdom to the United States during each of the Five Years ending with 1841

Principal Articles.		1837.		1838.		1839.		1840.		1841.	
		Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Dec V
			£		£		£		£		
Apparel, slops, &c.	£	-	75,065	-	164,151	-	180,019	-	109,541	-	
Arms and ammunition	—	-	27,744	-	13,850	-	22,813	-	7,272	-	
Beer and ale	tuns	306	10,240	934	17,015	927	20,958	3,817	11,020	3,582	
Books printed	cwts.	1,019	22,340	1,383	31,520	1,712	35,157	955	20,215	1,230	
Brass and copper manufactures	—	84,520	115,783	93,016	140,547	92,040	120,226	81,866	102,173	89,995	
Cards, cyder, and cinders	tons	46,574	97,174	57,253	99,550	57,940	77,559	60,915	58,173	58,173	
Cotton manufs. entd. by the yd.	yds.	17,451,855	578,922	26,495,113	1,707,364	37,256,054	1,144,710	32,075,804	898,169	40,289,936	1,1
hosiery, lace, and small wares	£	-	112,572	-	264,541	-	314,573	-	211,609	-	
twist and yarn	lbs.	219,712	15,350	110,255	7,241	112,105	7,260	964,954	13,361	555,252	
Earthenware of all sorts	pcs.	16,725,905	212,832	21,718,950	313,740	37,070,126	400,164	15,341,592	179,933	18,807,080	2,
Glass entered by weight	cwts.	65,341	65,614	86,699	89,033	58,571	51,999	41,815	35,198	18,501	
Hardware and cutlery	—	98,259	574,876	136,744	661,204	202,985	847,849	134,454	534,784	141,144	5
Iron and steel, wrt. and unwrt.	tons	49,204	1,271,393	51,255	634,395	61,278	961,196	34,643	355,534	29,186	6
Leather, wrought and unwrt.	lbs.	74,007	10,274	254,000	27,210	350,000	34,851	164,183	13,815	301,533	
Linen manufs. entd. by the yd.	yds.	13,195,645	562,279	21,108,607	888,150	26,342,078	1,098,638	25,587,274	943,901	31,990,067	1,1
thread, tapes and small wares	£	-	21,818	-	53,131	-	57,370	-	31,783	-	
Machinery and mill work	—	-	13,962	-	30,515	-	7,185	-	13,150	-	
Painters' colours	—	-	24,747	-	30,085	-	42,093	-	25,362	-	
Plate, pistol ware, jewellery, and watches	—	-	24,856	-	55,077	-	88,904	-	54,021	-	
Salt	bush.	3,686,904	72,161	4,612,920	94,419	3,319,990	67,519	4,861,138	89,828	3,012,7	
Silk manufactures	£	-	109,629	-	318,306	-	410,095	-	274,159	-	
Stationery of all sorts	—	-	13,094	-	24,709	-	29,881	-	16,495	-	
Tin and pewter wares, and tin plates	—	-	139,984	-	240,540	-	197,834	-	168,988	-	
Woollen and worsted yarn	lbs.	166,984	17,659	328,035	37,017	324,720	36,293	79,848	8,107	297,754	
manufs. entered by the piece	pcs.	270,192	863,567	588,364	1,640,727	653,189	1,751,178	324,965	854,331	544,194	1,2
by the yard	yds.	1,792,961	156,113	2,455,017	154,167	5,503,536	357,218	2,483,999	161,936	3,446,461	
hosiery and small wares	£	-	25,599	-	50,316	-	153,932	-	53,454	-	
All other articles	—	-	237,140	-	364,070	-	528,913	-	281,731	-	
Total declared value		-	4,695,235	-	7,385,740	-	8,839,904	-	5,483,090	-	7,0

Account of the Quantities of the principal Articles imported into the United Kingdom from the United States during each of the Ten Years ending with 1842.

Principal Articles.		1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	
Bark	cwts.	14,459	12,708	24,410	22,999	22,431	22,437	44,764	37,776	60,014	
Wheat	qrs.	-	-	-	-	-	-	5,766	23,535	10,553	
Wheat flour	cwts.	85,649	34,775	6,809	1,143	130	19,551	436,749	944,447	369,715	
Hides, untanned	—	25,760	25,311	8,970	18,334	22,644	18,299	4,587	5,872	1,699	
Rice (rough and in the husk)	qrs.	24,116	33,716	32,416	30,452	20,231	25,35	42,882	41,428	40,313	
Tar	lasts	1,251	1,747	1,249	1,467	1,051	870	1,668	1,243	1,775	
Tobacco (unmanufactured)	lbs.	29,749,317	37,804,871	34,965,6	51,308,756	26,353,973	29,186,763	33,879,316	34,628,896	42,132,969	3
Tobacco, manufactured, or cigars	—	219,576	655,916	177,794	73,602	409,566	939,671	931,861	1,163,858	1,435,898	
Turpentine	cwts.	322,486	309,337	293,837	370,363	417,296	429,811	318,131	349,136	361,022	
Wool, cotton	lbs.	237,508,738	269,803,073	284,456,812	280,615,492	320,631,216	431,457,888	311,307,799	387,856,304	388,960,981	41
sheep's	—	334,879	2,048,398	437,306	632,890	937,390	57,785	149,168	115,095	58,791	

It appears from the previous statement that the trade between the U. States and this country has lately undergone the most extraordinary vicissitudes; the exports to the U. States having declined from 12,425,605*l.* in 1836, to 3,528,807*l.* in 1842! This remarkable decline has been mainly occasioned by the bankruptcy and disorder that grew out of the abuse of banking and the over issue of paper money in the U. States in 1836, 1837, and 1838. The facility with which discounts and loans were then obtained occasioned a vast deal of overtrading among individuals, and also led to the contracting of loans with which to undertake extensive public works by the different States. But no sooner had the banks, which, for the most part, were without any solid foundation, been entangled in the difficulties consequent to such over issue, than a severe shock was given to credit, and bankruptcy became prevalent from one end of the Union to the other. Had the general government had the power, or the state governments the wish, to mitigate the severity of the crisis, there were abundant means at their disposal; but the former would appear to be nearly impotent for either good or bad purposes, and (with a few distinguished exceptions) the state governments, instead of providing by a small increase of taxation for the payment of their creditors, and the completion of the works in which they had engaged, were impolitic enough to abandon the latter, and dishonest and shameless enough to repudiate the former! Discredit and bankruptcy have, therefore, been all but universal in America, and hence the limited amount of her imports. In so far, however, as we are concerned, the decline of the latter is of little importance. It is better we should export nothing than that the exports should not be paid for. After the experience they have purchased at an expense of many millions, our countrymen will, it is to be hoped, be cautious in the extreme how they deal with the Americans in future.

NICARAGUA OR PEACH WOOD (Ger. *Nicaragaholz*, *Blutholtz*; Du. *Bloedhaut*; Fr. *Bois de sang*, *Bois de Nicaragne*; It. *Legno sanguigno*; Sp. *Palo de sangre*; Port. *Pao sanguinho*), a tree of the same genus (*Cæsalpinia*) as the Brazil and sapan wood; but the species has not been exactly ascertained. It grows principally in the vicinity of the lake of Nicaragua, whence its name. It is said by Dr. Bancroft to be almost as red and heavy as the true Brazil wood, but it does not commonly afford more than a third part, in quantity, of the colour of the latter; and even this is rather less durable and less beautiful, though dyed with the same mordants. Nicaragua or peach woods differ greatly in their quality as well as price; one sort being so deficient in colouring matter, that 6 pounds of it will only dye as much wool or cloth as 1 pound of Brazil wood; while another variety of it will produce nearly half the effect of an equal quantity of Brazil wood, and will sell proportionally dear. — (*Bancroft on Colours*, vol. ii. p. 332.)

The London dealers distinguish Nicaragua wood into 3 sorts, viz. *large*, *middling*, and *small*; the price of the 1st sort (duty included) being from 14*l.* to 20*l.* per ton; of the 2d, from 8*l.* to 10*l.* per do.; and of the 3d, from 7*l.* to 8*l.* per do. The entries of Nicaragua wood for home consumption amounted, in 1840, to 2,614 tons, and in 1841, to 1,899 tons. The duty was reduced in 1831 from 15*s.* to 5*s.* a ton, and in 1842 it was farther reduced to 2*s.* per ton.

NICKEL, a scarce metal, which occurs always in combination with other metals, from which it is exceedingly difficult to separate it. When pure, it is of a fine white colour resembling silver. It is rather softer than iron: its specific gravity, when cast, is 8·279; when hammered, 8·932. It is malleable, and may without difficulty be hammered into plates not exceeding $\frac{1}{100}$th part of an inch in thickness. It is attracted by the magnet; and is not altered by exposure to the air, nor by being kept under water. It is employed in potteries, and in the manufacture of porcelain. — (*Thomson's Chemistry.*)

NITRE. See SALTPETRE.

NOTE, PROMISSORY. See BANKING, and BANKS.

NUT, OR HAZEL NUT (Ger. *Haselnüsse*; Fr. *Noisettes*, *Avelines*; It. *Naccinole*, *Avelane*; Sp. *Avellanas*; Port. *Avellãas*; Lat. *Avellanæ*), the fruit of different species of *Coryli*, or hazels. The kernels have a mild, farinaceous, oily taste, agreeable to most palates. A kind of chocolate has been prepared from them; and they have sometimes been made into bread. The expressed oil of hazel nuts is little inferior to that of almonds. Besides those raised at home, we import nuts from different parts of France, Portugal, and Spain, but principally from the latter. The Spanish nuts in the highest estimation, though sold under the name of Barcelona nuts, are not really shipped at that city, but at Tarragona, a little more to the south. Mr. Inglis says that the annual average export of nuts from Tarragona is from 25,000 to 30,000 bags, of 4 to the ton. They cost, free on board, in autumn, in 1830, 17*s.* 6*d.* per bag. — (*Spain in* 1830, vol. ii. p. 362.) In 1841, 149,845 bushels of hazel nuts were retained for consumption. The duty is 2*s.* a bushel.

NUTMEG (Ger. *Muskatennüsse*; Du. *Muskaät*; Fr. *Muscades*, *Noix muscades*; It. *Noce muscada*; Sp. *Moscada*; Arab. *Jowzalteib*; Sans. *Jatiphala*; Malay, *Buah-pala*),

the fruit of the genuine nutmeg tree (*Myristica Moschata*), a native of the Moluccas, but which has been transplanted to Sumatra, Penang, &c. An inferior and long-shaped nutmeg is common in Borneo; but the fruit nowhere attains to the same perfection as in the Moluccas. Of the several varieties of the tree, that denominated the Queen Nutmeg, which bears a small round fruit, is the best. The kernel, or proper nutmeg, is of a roundish oval form, marked on the outside with many vermicular furrows, within of a fleshy farinaceous substance, variegated whitish and bay. Nutmegs are frequently punctured and boiled, in order to obtain the essential oil; the orifice being afterwards closed; but the fraud is easily detected by the lightness of the nutmeg. — (*Thomson's Dispensatory; Ainslie's Materia Indica.*)

Nutmegs should be chosen large, round, heavy, and firm, of a lightish grey colour on the outside, and the inside beautifully marbled, of a strong fragrant smell, warm aromatic taste, and a fat oily body. They are very subject to be worm eaten. The best manner of packing them is in dry chunam. The oblong kind, and the smaller ones, should be rejected. 15 cwt. are allowed to a ton. — (*Milburn's Orient Com.*)

The dried produce of a nutmeg tree consists of nutmeg, mace (which see), and shell. Supposing the whole produce to be divided into 100 parts, there are 13½ of mace, 33½ of shell, and 53½ of nutmeg. In the ancient commerce, and down to the establishment of the Dutch monopoly, nutmegs were always sold and exported in the shell. The natives, whenever the commerce is left to their management, continue the practice, which is strongly recommended by Mr. Crawfurd. — (*Eastern Archipelago*, vol. iii. p. 396.)

The jealous policy of the Dutch has reduced the trade in nutmegs to a mere trifle, compared to what it would otherwise have been. They have, in so far at least as it was possible, exerted themselves to exterminate the nutmeg plants every where except in Banda. They bribe the native princes of the surrounding islands to root out the trees; and annually send a fleet to see that the work of destruction has been effected, and that the bribes have not been bestowed in vain. To engage in an illicit trade in spices is *death* to an inferior person, and *banishment* to a noble; and yet, notwithstanding these tremendous penalties, it is supposed that about 60,000 lbs. of nutmegs, and 15,000 lbs. of mace, are clandestinely exported each year! In Banda, the aboriginal inhabitants have been expatriated, and their island parcelled among settlers from Holland, under the name of *park keepers*. These persons, who may be turned out of their farms on the most trifling pretext, have about 2,000 slaves, who cultivate and prepare the nutmegs. The prices paid to the cultivator are all fixed by government; and it deserves to be mentioned, as affording one of the most striking illustrations of the ruinous effects of monopoly, that the fixed price which the government is now obliged to pay for nutmegs is FIVE *times greater than the price at which they bought them when the trade was free!* Such is a rough outline of that system, which has reduced what used to be one of the most important branches of Eastern commerce so low, that it is unable to afford employment for the capital of a single wealthy merchant. We cannot conceive how so enlightened and liberal a government as that of Holland should continue to tolerate such scandalous abuses — abuses destructive alike of the rights of those subjected to its authority in the East, and the commerce and wealth of its subjects at home. — (*Modern Universal History*, vol. x. p. 457—467. 8vo. ed.; and *Crawfurd's Eastern Archipelago*, vol iii. p. 394—413.)

Mr. Crawfurd estimates the produce of the Banda Islands at about 600,000 lbs. of nutmegs, and 150,000 lbs. of mace.

During the period that the English had possession of the Spice Islands, nutmeg plants were carried to Penang, Bencoolen, and some of the West India islands. In the latter they have altogether failed, at least as far as respects any *useful purpose*; but very good nutmegs, and in considerable quantities, are now raised at Penang and Bencoolen. Mr. Crawfurd, however, alleges that the cost of bringing them to market is there so high, that the restoration of a free culture in the native country of the nutmeg would instantly destroy this unstable and factitious branch of industry. — (*Eastern Archipelago*, vol. iii. p. 409.)

The duty on nutmegs was reduced, in 1819, from 5*s.* 5*d.* to 2*s.* 6*d.* per lb.; and the quantities entered for home consumption have since rapidly increased. We subjoin

An Account of the Quantities of Nutmegs entered for Home Consumption in the United Kingdom, in 1840, 1841, and 1842, and of the Amount of Duty received thereon.

Quantities.			Duties.					
			1840.		1841.		1842.	
Lbs.	*Lbs.*	*Lbs.*	£	*s.*	£	*s.*	£	*s.*
119,561	113,431	170,064	15,011	9	14,851	10	22,018	12

In 1842 the duties were fixed at 3*s.* 6*d.* per lb. on those from a foreign, and at 2*s.* 6*d.* per lb. on those from a British possession. The duty on wild nutmegs in the shell was then also fixed at 3*d.* without regard to origin.

NUTRIA, or NEUTRIA, the commercial name for the skins of *Myopotamus Bonariensis* (Commerson), the *Coypou* of Molina, and the *Quoiya* of D'Azara. In France, the skins were, and perhaps still are, sold under the name of *raconda*; but in England they are imported as *nutria* skins — deriving their appellation, most probably, from some supposed similarity of the animal which produces them, in appearance and habits, to the otter, the Spanish name for which is nutria. Indeed, Molina speaks of the *coypou* as a species of water rat, of the size and colour of the otter.

Nutria fur is largely used in the hat manufacture; and has become, within the last 15 or 20 years, an article of very considerable commercial importance. The imports fluctuate considerably. In 1841 they amounted to 1,125,212 skins; but in some years they are much less; and, in 1840, amounted to only 242,733. Those entered for home consumption pay a duty of 1*s.* per 100 skins. They are principally brought from the Rio de la Plata. — (See FUR TRADE.)

The *coypou* or *quoiya* is a native of S. America, very common in the provinces of Chili, Buenos Ayres, and Tucuman, but more rare in Paraguay. In size it is less than the beaver, which it resembles in many points. The head is large and depressed, the ears small and rounded, the neck stout and short, the muzzle sharper than that of the beaver, and the whiskers very long and stiff. There are, as in the beaver, 2 incisor teeth, and 18 molar, above and below — 20 teeth in all. The limbs are short. The fore feet have each 5 fingers not webbed, the thumb being very small: the hind feet have the same number of toes; the great toe and 3 next toes being joined by a web which extends to their ends, and the little toe being free, but edged with a membrane on its inner side. The nails are compressed, long, crooked, and sharp. The tail, unlike that of the beaver, is long, round, and hairy; but the hairs are not numerous,

and permit the scaly texture of the skin in this part to be seen. The back is of a brownish red, which becomes redder on the flanks: the belly is of a dirty red. The edges of the lips and extremity of the muzzle are white.

Like the beaver, the coypou is furnished with 2 kinds of fur; viz. the long ruddy hair which gives the tone of colour, and the brownish ash-coloured fur at its base, which, like the down of the beaver, is of much importance in hat making, and the cause of the animal's commercial value.

The habits of the coypou are much like those of most of the other aquatic rodent animals. Its principal food, in a state of nature, is vegetable. It affects the neighbourhood of water, swims perfectly well, and burrows in the ground. The female brings forth from 5 to 7 at a time; and the young always accompany her.

The coypou is easily domesticated, and its manners in captivity are very mild.

*** We are indebted for this account of nutria — the first, we believe, that appeared in any English work — to W. J. Broderip, Esq., F.R.S., &c.

NUX VOMICA (Fr. *Noix Vomique*; Hind. *Kaachla*), the fruit of a species of *Strychnos*, growing in various places in the East Indies. The fruit is about the size of an orange, covered with a smooth crustaceous yellow bark, and filled with a fleshy pulp, in which are imbedded several orbicular flatted seeds, about ¾ of an inch in diameter. Nux vomica is inodorous, and has a very bitter, acrid taste, which remains long on the palate. It is known as a very virulent poison. A suspicion has, however, been entertained, that it has been used in porter breweries; but its introduction into them is prohibited under heavy penalties. — (*Thomson's Dispensatory, &c.*)

O.

OAK (Ger. *Eiche*; Du. *Eik*; Da. *Eeg*; Sw. *Ek*; Fr. *Chêne*; It. *Quercia*; Sp. *Roble*, *Carballo*; Port. *Roble*, *Carbalho*; Rus. *Dub*; Pol. *Dab*; Lat. *Quercus*; Arab. *Baalut*). There are several varieties of this valuable tree; but the common English oak (*Quercus robur*) claims precedence of every other. The oak timber imported from America is very inferior to that of this country: the oak from the central parts of Europe is also inferior, especially in compactness and resistance of cleavage. The knotty oak of England, the "unwedgeable and gnarled oak," as Shakespeare called it, when cut down at a proper age (from 50 to 70 years), is the best timber known. Some timber is harder, some more difficult to rend, and some less capable of being broken across; but none contains all the three qualities in so great and equal proportions; and thus, for at once supporting a weight, resisting a strain, and not splintering by a canon shot, the timber of the oak is superior to every other.

A fine oak is one of the most picturesque of trees; it conveys to the mind associations of great strength, and of all but endless duration. It stands up against the blast, and does not take, like other trees, a twisted form from the action of the winds. Except the cedar of Lebanon, no tree is so remarkable for the stoutness of its limbs; they do not exactly spring from the trunk, but divide from it; and thus it is sometimes difficult to know which is stem and which is branch. The twisted branches of the oak, too, add greatly to its beauty; and the horizontal direction of its boughs, spreading over a large surface, completes the idea of its sovereignty over all the trees of the forest. Even a decayed oak, such as that described by Spenser, —

> - dry and dead,
> Still clad with reliques of its trophies old,
> Lifting to heaven its aged, hoary head,
> Whose foot on earth has got but feeble hold," —

is strikingly beautiful. To such an oak Lucan compared Pompey in his decline: —

> "Qualis frugifero quercus sublimis in agro
> Exuvius veteres populi, sacrataque gestans
> Dona ducum; nec jam validis radicibus hærens,
> Pondere fixa suo est; nudosque per aëra ramos
> Effundens, trunco, non frondibus, efficit umbram.
> At quamvis primo nutet casura sub Euro,
> Tot circum silvæ firmo se robore tollant,
> Sola tamen colitur." — (Lib. i. lin. 136.)

The oak is raised from acorns, sown either where the oak is to stand, or in a nursery, whence the young trees are transplanted.

The colour of oak wood is a fine brown, and is familiar to every one; it is of different shades; that inclined to red is the most inferior. The larger transverse septa are in general very distinct, producing beautiful flowers when cut obliquely. Where the septa are small, and not very distinct, the wood is much the strongest. The texture is alternately compact and porous; the compact part of the annual ring being of the darkest colour, and in irregular dots surrounded by open pores, producing beautiful dark veins in some kinds, particularly pollard oaks. Oak timber has a particular smell, and the taste is slightly astringent. It contains gallic acid, and is blackened by contact with iron when it is damp. The young wood of English oak is very tough, often cross-grained, and difficult to work. Foreign wood, and that of old trees, is more brittle and workable. Oak warps and twists much in drying; and, in seasoning, shrinks about $\frac{1}{16}$d of its width.

Oak of a good quality is more durable than any other wood that attains a like size. Vitruvius says it is of eternal duration when driven into the earth: it is extremely durable in water; and in a dry state it has been known to last nearly 1,000 years. The more compact it is, and the smaller the pores are, the longer it will last; but the open, porous, and foxy coloured oak, which grows in Lincolnshire and some other places, is not near so durable.

Besides the common British oak (*Quercus robur*), the sessile-fruited bay oak (*Quercus sessiliflora*) is pretty abundant in several parts of England, particularly in the north. The wood of this species is said by Tredgold to be darker, heavier, harder, and more elastic than the common oak; tough, and difficult to work; and very subject to warp and split in seasoning. Mr. Tredgold seems disposed to regard this species as superior to the common oak for ship building. But other, and also very high authorities, are opposed to him on this point; and, on the whole, we should think that it is sufficiently well established, that for all the great practical purposes to which oak timber is applied, and especially for ship building, the wood of the common oak deserves to be preferred to every other species. A well-informed writer in the *Quarterly Review* has the following remarks on the point in question: —

"We may here notice a fact long known to botanists, but of which our planters and purveyors of timber appear to have had no suspicion, — that there are two distinct species of oak in England — the *Quercus robur*, and the *Quercus sessiliflora*; the former of which affords a close-grained, firm, solid timber, rarely subject to rot; the other more loose and sappy, very liable to rot, and not half so durable. This difference was noted so early as the time of Ray; and Martyn in his *Flora Rustica*, and Sir James Smith in his *Flora Britannica*, have added their testimonies to the fact. The second species is supposed to have been introduced some 2 or 3 ages ago, from the Continent, where the oaks are chiefly of this latter species, especially in the German forests, the timber of which is known to be very worthless. But what is of more importance to us is, that *de facto* the imposture abounds, and is propagated vigorously in the New Forest and other parts of Hampshire; in Norfolk, and the northern counties, and about London; and there is but too much reason to believe that the numerous complaints that were heard about our ships being infected with what was called, improperly enough, *dry rot*, were owing to the introduction of this species of oak into the naval dock-yards, where, we understand, the distinction was not even suspected. It may thus be discriminated from the true old English oak: — The acorn stalks of the *robur* are *long*, and its leaves *short*; whereas the *sessiliflora* has the acorn stalks *short*, and the leaves *long*: the acorns of the former grow singly, or seldom two on the same footstalk; those of the latter, in clusters of 2 or 3 close to the stem of the branch. We believe the Russian ships of the Baltic, that are not of larch or fir, are built of this species of oak; but if this were not the case, their exposure on the stocks, without cover, to the heat of summer, which, though short, is excessive, and the rifts and chinks which fill up with ice and snow in the long winter, are enough to destroy the stoutest oak, and quite sufficient to account for their short-lived duration."

A great deal of inquiry and discussion has taken place at different periods as to the supply and consumption of oak timber; but the results have not been very satisfactory. In a *Report of the Commissioners of Land Revenue*, printed in 1812, it is stated that, taking the tonnage of the navy in 1806 at 776,087 tons, it would require, at 1¼ load to a ton, 1,164,085 loads to build such a navy; and supposing the average duration of a ship to be 14 years, the annual quantity of timber required would be 83,149 loads, exclusive of repairs, which they calculate would be about 27,000 loads; making the whole about 110,000 loads: of which, however, the commissioners reckon may be furnished 21,341 loads as the annual average of the prizes; and of the remaining 88,659 loads, they think it not unreasonable to calculate on 28,659 from other sources than British oak. "This," they observe, "leaves 60,000 loads of such oak, as the quantity which would be sufficient annually to support, at its present unexampled magnitude, the whole British navy, including ships of war of all sorts; but which may be taken as equivalent together to 20 14-gun ships, each of which, one with another, contains about 2,000 tons, or would require, at the rate of 7½ load to the ton, 3,000 loads; making just 60,000 loads for 20 such ships."

Now, it has been supposed that not more than 40 oak trees can stand on an acre of ground, so as to grow to a full size fit for ships of the line, or to contain each 1½ load of timber; 50 acres, therefore, would be required to produce a sufficient quantity of timber to build a 74-gun ship, and 1,000 acres, for 20 such ships; and as the oak requires at least 100 years to arrive at maturity, 100,000 acres would be required to keep up a successive supply, for maintaining a navy of 700,000 or 800,000 tons. The commissioners further observe, that as there are 20,000,000 acres of waste lands in the kingdom, a 200th part set aside for planting would at once furnish the whole quantity wanted for the use of the navy.

According to Mr. Barrow, this calculation is over-rated by about a half. "In the first place," says he, "it supposed a state of perpetual war, during which the tonnage of the whole navy is considered as more than double of what it now actually is: and, in the second place, it reckons the average duration of the navy at 14 years only; which, from the improvements that have taken place in the construction and preservation of ships of war, with the resources of teak ships built in India, we should not hesitate in assuming at an average of twice that number of years; and if so, the quantity of oak required for the navy will be nothing like that which the commissioners have stated.

"The fact, however, is certain, that long before the conclusion of the late war, a scarcity begun to be felt, especially of the larger kind of timber fit for ships of the line; and so great was this scarcity, that if Sir Robert Seppings had not contrived the means of substituting straight timber for that of different forms and dimensions, before considered to be indispensable, the building of new ships must entirely have ceased.

"If, however, the growth of oak for ship timber was greatly diminished during the war, so as to threaten an alarming scarcity, there is little doubt that, from the increased attention paid by individuals to their young plantations, and their great extension, as well as from the measure of allotting off portions of the royal forests to those who had claims on them, and inclosing the remainder for the use of the public, this country will, in future times, be fully adequate to the production of oak timber equal to the demand for the naval and mercantile marine." — (*Ency. Brit.* art. *Navy.*)

The bark of the oak tree is very valuable. It is preferred to all other substances for the purpose of tanning, and brings a high price. — (See BARK.)

The foreign oak timber imported into Great Britain is principally derived from Canada and Prussia. The latter is the most valuable — its price being to the former in the proportion of about 9 to 6; that is, if a load of Prussian oak timber brought 9*l.*, a load of Canada ditto would not bring more than about 6*l.* The quantity imported varies; but may, at an average, amount to about 10,000 loads, of 50 cubic feet each; the greater part from Quebec. Oak plank is almost wholly imported from Prussia. The quantities imported during the 6 years ending the 5th of January, 1842, were —

Years.	Loads.	Years.	Loads.	Years.	Loads.
1836	2,870	1838	3,888	1840	6,467
1837	2,198	1839	3,489	1841	2,577

For further details with respect to the importation of oak, its price, duty on, &c., see WOOD. — See, also, *Tredgold's Principles of Carpentry*; art. *Navy. Supplement to Ency. Brit.*; the very interesting work on *Timber Trees and Fruits*, in the *Library of Entertaining Knowledge*; *Rees's Cyclopædia*, &c.

OATS (Ger. *Hafer*; Du. *Haver*; Da. *Havre*; Sw. *Hafre*; Fr. *Avoine*; It. *Vena, Avena*; Sp. *Avena*; Port. *Avea*; Russ. *Owes*; Pol. *Owies*), a species of grain, the *Avena sativa* of botanists. There are innumerable varieties of this grain, some of which are said to be indigenous to Britain. It is the hardiest of all the cereal grasses, growing luxuriantly in cold northern climates, and in coarse mountainous districts, where neither wheat nor barley can be advantageously cultivated. It thrives best, and is, indeed, chiefly raised, in latitudes north of Paris; being but little known in the south of France, Spain, or Portugal. It is, however, cultivated in Bengal, so low as the 25th degree of latitude, and, it is said, with considerable success. In Scotland, where it has long formed a principal part of the food of the people, it is far more generally cultivated than any other species of grain. It is also very extensively cultivated in Ireland. In England it is grown principally in the northern counties, and in the fens of Lincoln, Huntingdon, Cambridge, and Norfolk; but the oats of Northumberland and Scotland are reckoned superior to those raised farther south.

There are 4 leading varieties of this grain cultivated in England, viz. white, black, grey, and brown or red oats. The sub varieties of the white are numerous. That denominated the potato oat is at present almost the only one raised on land in a good state of cultivation in the north of England and the south of Scotland, and usually brings a higher price in the London market than any other variety. It was accidentally discovered growing in a field of potatoes in Cumberland in 1788; and from the produce of that single stalk has been produced the stock now in general cultivation. Black and grey oats are little cultivated, except in some places in the north of Scotland. The red oat is chiefly confined to Cheshire, Derbyshire, and Staffordshire. A species of naked oats, provincially called *pillar*, is raised in Cornwall. — (*Loudon's Encyc. of Agriculture*; *Brown's Rural Economy*, vol. ii. pp. 47—52.)

In 1765, Mr. Charles Smith estimated the number of consumers of oats in England and Wales at 623,000. — (*Tracts on the Corn Trade*, 2d edit. p. 140.), but at present we believe they are very considerably fewer. The feeding of horses has at all times occasioned the greatest consumption of oats in this part of the kingdom; and as the number of horses kept for business and pleasure has been vastly increased within the last 30 or 40 years, the culture of oats has been considerably extended, notwithstanding the increasing imports from Ireland. Perhaps the produce of no species of grain varies more than that of oats. Where the ground is foul and exhausted, not more than 20 bushels an acre are obtained; but on rich soils, well managed, 64, 72, and sometimes 80 bushels and upwards have been reaped. Oats weigh from 35 to 45 lbs. a bushel, yielding at an average, 8 lbs. meal for 14 lbs. corn: but the proportion of meal increases as the oats become heavier.

For information as to the laws regulating the importation and exportation of oats, their prices, the quantities imported and exported, &c., see CORN LAWS AND CORN TRADE.

ODESSA, a flourishing sea-port of Southern Russia, on the north-west coast of the Black Sea, between the rivers Dneister and Bug, in lat. 46° 28′ 54″ N., lon. 30° 43′ 22″ E. Population, in 1838, 69,023. The foundations of Odessa were laid so lately as 1792, by order of the Empress Catharine, after the peace of Jassy. It was intended to serve as an *entrepôt* for the commerce of the Russian dominions on the Black Sea and the Sea of Azoff, and has in a great measure answered the expectations of its founders. By an Imperial ukase, dated the 7th of February, 1817, it was declared a free port, and the inhabitants exempted from taxation for 30 years; since which period its increase has been extremely rapid. The bay or roadstead of Odessa is extensive, the water deep, and the anchorage good, the bottom being fine sand and gravel; it is, however, exposed to the south-easterly wind, which renders it less safe in winter. The port, which is artificial, being formed by 2 moles, one of which projects to a considerable distance into the sea, is fitted to contain about 300 ships. It has also the advantage of deep water. There is a convenient lazaretto, on the model of that of Marseilles. The want of fresh water used to be the greatest disadvantage under which the inhabitants laboured; but this has been obviated by the construction of a canal which conveys an abundant supply of water into the town. There are no trees in the vicinity, which has, in consequence, a bleak and arid appearance.

Light-houses. — A light-house has been erected on Cape Fontan, about 6¼ nautical miles S. of Odessa. The light, which formerly revolved, is now *fixed*, and is about 203 (Russian) feet above the level of the sea. At the distance of 11 leagues E.S.E. ½ S. from Odessa, on the north end of the long, narrow, low island of Tendra, a light-house has been erected, of great use to ships approaching Odessa from the S.

or W. The lantern is elevated 92½ (Russian) feet above the level of the sea. It consists of 3 reflecting lights, suspended in the form of a triangle, revolving in the space of 4 minutes, so that each lamp arrives at its maximum of brilliancy after an interval of 1 min. 20 sec. Being also of a *red* colour, this light is readily distinguished from Fontan light, and the other lights in the Black Sea. In foggy weather a bell is kept ringing. — (*Coulier sur les Phares*, 2d ed.; *Norrie's Sailing Directions for the Mediterranean and Black Seas, &c.*)

Not being at the mouth of any great river, nor having any considerable manufactures, Odessa is not a port for the exportation of what may be called articles of native growth; but in consequence of her convenient situation, excellent port, and the privileges she enjoys, she is, as already remarked, the emporium where most of the produce of Southern Russia destined for foreign countries is collected for exportation, and where most of the foreign articles required for home consumption are primarily imported. The shallowness of the water at Taganrog, and the short period during which the Sea of Azoff is navigable, tend to hinder foreign vessels of considerable burden from entering the Strait of Yenikalé, and occasion the shipment of a considerable portion of the produce brought down the Don in lighters to Caffa and Odessa, especially the latter. All the products brought down the Dniester, the Bug, and the Dnieper, are exported from Odessa; but owing to the difficult navigation of the first and last mentioned rivers, by far the greater part of the corn brought to Odessa from Podolia, the Ukraine, &c. is conveyed to the town in carts drawn by oxen. The roads traversed by these carts are only practicable at certain seasons of the year; and nothing would contribute so much to increase the commerce of the port, and the prosperity of S. Russia, as the opening of improved communications with the interior; whether by removing obstructions in the channels of the rivers, constructing canals, or railways, or good common roads.

Among the articles of export from Odessa, corn, especially wheat, occupies, as every one knows, a high rank; but tallow is also a most important article; and next to it are linseed, wool, iron, hides, copper, wax, caviar, potash, beef, furs, cordage, sail-cloth, tar, butter, isinglass, &c. We subjoin an official

Account of the Value of the Exports from and Imports into the Port of Odessa in the different Years from 1802 to 1839 inclusive.

	Exports.	Imports.		Exports.	Imports.	Years.	Exports.	Imports.
	Rbls.	*Rbls.*		*Rbls.*	*Rbls.*		*Rbls.*	*Rbls.*
1802	1,534,000	749,000	1820	16,581,000	7,729,000		27,031,000	14,278,000
1804	2,339,000	1,223,000	1821	16,088,000	6,065,000		20,063,000	12,551,000
1805	2,599,00							14,985,000
1812								00
1814	7,280,00					834	19,273,000	14,989,000
1815	14,664,00					835	23,981,000	17,539,000
1816	37,717,000	4,204,000	1826	14,711,000	9,125,000	836	34,561,000	18,282,000
1817	41,936,000	19,710						19,231,000
1818	20,555,000	14,191					8,380,000	21,309,000
1819	15,225,000	8,398					8,636,350	

The great amount of the exports in 1816 and 1817 is ascribable to the failure of the corn crops in Italy and Western Europe during those two years, and to the consequent high price and ready demand for the wheat of Odessa, Dantzic, &c. The small amount of the trade in 1828 and 1829 is accounted for by the war with Turkey having interrupted all communication with the port by the channel of Constantinople. Subjoined is an

Account of the Arrivals of Wheat at Odessa since the beginning of the present Century.

1801	arrived	53,142 chetwerts.*	1835	arrived	528,100 chetwerts.
1802	—	285,106 —	1836	—	878,200 —
1803	—	494,858 —	1837	—	950,698 —
1804-13	—	1,898,367 average 184,836 chets. a year.	1838	—	1,241,000 —
1814-23	—	6,500,000 average 650,000 chets. do.	1839	—	1,159,000 —
1824-33	—	7,279,000 average 727,900 chets. do.	1840	—	680,000 —
1834	—	691,000 —			

* A chetwert is equivalent to about 6 imperial bushels, or 3-4ths of a quarter.

The small amount of the wheat brought to Odessa in 1835 was owing to the almost total failure of the crops in S. Russia in the course of that year. The price of the best wheat in Odessa is rarely under 25*s.* or 28*s.* a quarter; and, during the 3 years ending with 1840, it was 34*s.* 6*d.* free on board: the freight and other charges on importing a quarter of wheat from Odessa to England may be estimated at about 16*s.* Constantinople, Genoa, Leghorn, Marseilles, and Malta are the principal markets for Odessa wheat; but when our crops are deficient, considerable quantities are shipped for England. In 1839, the exports from Odessa comprised, among other things, 1,210,232 chetwerts of wheat, nearly 200,000 do. rye, oats, &c., 155,194 do. linseed, 118,000 pouds wool, and 223,192 pouds tallow. The subjoined account of the merchants belonging to Odessa inscribed in the different guilds affords an additional illustration of the progress of its commerce since 1808.

	Merchants.			
	1st Guild.	2d Guild.	3d Guild.	Total.
In 1808	39	30	135	204
1813	53	13	190	256
1823	57	11	213	281
1828	64	34	304	382
1838	67	54	644	765

The great articles of import into Odessa consist of sugar, coffee, and other colonial products; cottons, silks, woollens, and other manufactured goods; oil, wines, and spirits; spices and dye-stuffs; cotton twist and raw cotton; lemon juice; tin and tin plates; cutlery, timber for building and firewood, &c. About 800 ships from foreign parts enter and leave Odessa in ordinary years. Including Maltese and Ionians, nearly 200 ships under English colours have arrived in the port in a single season; but their number is very fluctuating, depending essentially on the state of the corn trade.

A tribunal of commerce was established at Odessa in 1824, whose jurisdiction extends over all disputes connected with trade. There is no appeal from its decisions except to the Senate. There are 12 sworn brokers, approved and licensed by the Tribunal of Commerce, who have deputies appointed by themselves. They register all transactions, and receive ¼ per cent. from each party as commission. There is a discount or loan bank, established in 1828, and marine and fire insurance societies. Most articles of provision are cheap; and fish, which costs next to nothing, is excellent. Fuel, however, is scarce and dear.

The exports of tallow have increased twenty-fold in 10 years; materially augmenting the value of the herds, and enriching vast countries, which must have remained comparatively poor, had not this outlet been found for their produce.

The increase in the exportation of wool is also very considerable. Within the last 20 years the Merino breed of sheep has been extensively introduced into the governments of Taurida, Cherson, and

Ekaterinoslov; so that there has been not only a great increase in the quantity, but also a very decided improvement in the quality, of the wool exported.

The iron shipped at Odessa is principally brought from Siberia, partly by the Wolga, and partly by the Don to Taganrog, whence it is conveyed to Odessa. A good deal of it is in a manufactured state, from the founderies at Tula; but the demand for it both in Europe and Asia has been perceptibly diminishing for some years past, and the exports are now comparatively small. Timber for ship-building, and pitch and tar, are also brought from Taganrog.

Corn Trade.— The principal trade of Odessa is with Constantinople, Smyrna, and other towns in the Levant, Naples, Leghorn, Genoa, Marseilles, &c. "It is generally stated," says Mr. Jacob (*Memoir on the Trade of the Black Sea*, in the *Appendix* to the 8vo edition of *Tracts on the Corn Trade*), "that the supply of Constantinople requires annually 100,000 quarters of Black Sea wheat. The Greek islands scarcely, on the average of years, produce sufficient wheat for their own consumption, and, in some years, require a large supply, which is furnished partly from the neighbouring continent, and partly from the Black Sea.

"The Asiatic coasts of the Turkish Empire, especially in Anatolia, are nearly in the same predicament. At times, the market of Smyrna is very favourable for the sale of the corn of Southern Russia. The islands of Malta and Gozo produce only about half as much corn as the 120,000 inhabitants require.

"Sicily, though it has greatly declined from its ancient productiveness, has still a quantity of grain to spare for the less fruitful parts of Italy, in most years; and its wheat enters into competition with that of the Black Sea, in the ports of Naples, Genoa, and Leghorn.

"There are few years in which Tuscany grows a sufficiency of wheat; and its chief port, Leghorn, being one of those in which ships can unload their cargoes of corn, without being detained to perform quarantine, has been at all times a place of deposit for the wheat of the Black Sea. A market at some price may always be found there, as the capitalists are disposed to purchase; relying on the uncertain productiveness of some adjacent country, in which they may realise a profit at no great distance.

"Genoa, like Leghorn, is a port where wheat can be unloaded within the bounds of the lazaretto. The country around it yields but little wheat: and, at some periods, it enjoys a trade in that article even as far as Sunderland. This internal demand, and the chance of advantageous re-exportation, induces much trade in corn. There is said to be seldom less than 100,000 quarters in store at the two ports of Genoa and Leghorn; and at some periods, a far greater quantity.

"Nice, though not having the same advantageous quarantine regulations, and, consequently, not being a *depôt* for corn beyond its own demand, from the sterile soil that surrounds it, requires every year a large importation of wheat. That of Sicily and Odessa create a competition in its port; and the government draws a revenue, by imposing a heavy duty on both.

"Though the corn laws of France have kept the ports closed against the introduction of foreign corn for domestic use, yet it is allowed to be bonded for re-exportation. From the frequent local and partial scarcities which occur on the eastern coast of Spain, at which periods wheat is allowed to be lawfully imported, and, it is said, from the facility of its introduction by contraband, when not legally allowed, Marseilles has been a great *depôt* for the wheat of the Black Sea.

"From thence, as also from Gibraltar, where there is generally some in store, it can easily be transported to Spain, to Sardinia, to Corsica, to Tunis, to Tripoli, or wherever scarcity has created a beneficial market.

"The coasts of Barbary, though often having a surplus of wheat, much of which occasionally assists to feed Portugal, in some seasons have been affected with most deficient harvests. This was recently the case in a remarkable degree. Tripoli and Tunis experienced, in the year 1820, a harvest most miserably short, and were supplied from other countries."

Charges on Shipping Corn.— In 1816, the expenses of delivering a chetwert of wheat free on board, including commission, warehouse rent, and shipping charges, amounted to upwards of 5 roubles; but at present (1836) it does not exceed 2 roubles. The duties per chetwert are as follow:—

	Wheat.	Other grain
Export duty	21 3.5ths cop.	11 cop.
Quarantine	¼ —	¼ —
Town and harbour duties	7¼ —	2 —
Lyceum duty	9 —	9 —
	38¼	22¼

The warehouse rent of corn at Odessa is from 8 to 10 copecks per chetwert per month. M. De Hagemeister supposes that Turkey and the different ports of the Mediterranean require, at an average, an annual supply of 1,400,000 chetwerts, or about 1,050,000 quarters, of which 1,000,000 chetwerts, or 750,000 quarters, are furnished by Southern Russia, and principally shipped from Odessa. Wallachia and Moldavia are both very fertile in corn; and were tranquillity and good order introduced into them, and the free navigation of the Danube secured, Galacz and Brailoff would be two of the principal European grain shipping ports. (See the excellent Report of Hagemeister on the Trade of the Black Sea, pp. 96—114. Eng. trans.)

Tallow exported from Odessa pays an export duty of 8 roubles per 10 poods.

Exclusive of corn, the other articles mentioned as being exported from Odessa, find their way to the different markets in the Mediterranean. Those shipped for Turkey are iron, tallow, sail-cloth, cordage, anchors for ships of war, butter, &c. The exports to Italy and other European countries are similar.

The importation of all foreign articles into the Russian dominions on the Black Sea and the Sea of Azoff is confined to Odessa, Theodosia or Kaffa, and Taganrog. The import trade is, however, of inferior importance when compared with the export trade. The principal articles are sugar and coffee, dye woods, wine and brandy, cotton stuffs and yarn, woollen and silk manufactures, spices, cutlery; oranges, lemons, figs, and other fruit; lemon juice, oil, tin and tin plates, dried fruits, paper, silk, specie, &c.

The following instructive details as to the trade of Odessa in 1842 have been obtained from a quarter on which every reliance may be placed.

"The import trade at Odessa in 1842 exceeded, by a trifling amount, that of the two preceding years, in consequence of the larger quantities of olive oil and refined sugar introduced. Of these articles, the first is almost wholly carried into the country, even as far as Moscow; while the consumption of the latter is confined by the tariff to this town, though a part may no doubt be smuggled out of it. In wine there was a considerable falling off; and so there appears to have been in manufactures; but, on this head, the [illegible] report may be distrusted, and precise information can hardly be obtained. The ships that carry out manufactured goods from British and other ports for Odessa seldom bring them to their destination, the importers here preferring to have them transhipped in the Bosphorus into the steamers which run between Constantinople and this place, that they may avail themselves of the facilities accorded in favour of steam navigation, whereby some vexatious customs formalities are avoided. There is also a disposition in all parties to show imports at their least possible amount and value, lest any apparent excess should raise in Petersburg the suspicion of an illicit trade beyond the barriers of this privileged town. A new item in the return, that of opium of the value of 25,000*l.*, would have deserved more particular notice, were its future introduction not arrested by a duty, brought into force during the present year—40 silver roubles per pood, equal to 3*s.* 6*d.* per pound English—which is considered as implying prohibition. A drug imported from Smyrna, was sent to Moscow, destined for the caravans going to Kiachta.

The return of exports exhibits an increase upon the trade of preceding years, from the larger shipments of wheat and tallow. The quantity of wheat exported was 621,664 quarters, of which 200,592 quarters were for England, and the remainder chiefly for Genoa, Leghorn, Marseilles, and other ports of the Mediterranean. The purchases for British account had in most part been made late in the autumn of 1841, though the shipments were long delayed by reason of the suspended navigation in the winter: those for the Mediterranean were, on the other hand, in great part made only after the cessation of demand for England, and prices had receded from 30*s.* and 32*s.*, to 22*s.* and 20*s.* per quarter. The grain speculations were throughout unsuccessful, but those on English account were nothing less than ruinous. The Odessa commission merchants were not, however, involved in the losses, for they detained the wheat which had not been shipped, and by its resale covered their unpaid drafts. In this way many ships, that came chartered, found no cargoes; indeed such was the situation of 20 vessels belonging to one concern.

"It may be observed, that prices of wheat in this place are affected much more by a demand from England than by one from other countries; for the English agent goes into the market with orders in hand which are to be hastily executed, *more regard being had to time than to price*, in *consequence of the fluctuating duty in England*. Whereas those engaged in the regular trade for the Mediterranean purchase at leisure, and have even supplied the English purchasers from their own stores, securing to themselves an immediate profit. The quantity of wheat remaining at Odessa at the end of the year (1842) was about 120,000 quarters. This stock will not be augmented by the produce of the circumjacent Steppes, where the crops failed; but large supplies are expected to arrive next May and June from the Polish provinces, where the harvest was abundant. A new feature in the grain trade of 1842 was the arrival here of about 5 000 quarters of wheat from Austrian Gallicia, which came down the Dniester as far as Mayac, and thence to Odessa overland. The duty on wheat brought into Russia over the land frontier is one rouble, paper money, per chetwert, which at the exchange of 22 roubles per £ is 1*s* 3*d* per quarter but it is generally believed that this duty will be considerably augmented, if such importations are continued to any large amount.

"The exportation of tallow amounted to 9,296 tons, of which 8,851 tons went to England. The quantity shipped in 1840 and 1841 was only 6,222 and 5 932 tons. This excess was occasioned by the fact of the carriage of a good deal of tallow, made in neighbouring districts, and destined for Petersburg, having been prevented by the state of the roads from being sent thither It was, therefore, sold to the Odessa merchants, who hope that those transactions may lead to a continued diversion of the tallow that formerly went to Petersburg into this new channel

"Notwithstanding the export of wool has not fallen off, the owners of merinos complain of extreme distress arising from low prices, and from several disadvantages natural to this country under which it is difficult for these establishments to prosper They have, however been signally favoured by the mildness of the two last winters, during which their flocks were kept upon open pasture. A transaction, too, which took place in October, seems to promise a new source of profit to them. A sale was made by Mr. Baguer, the owner of a fine flock in the vicinity of Kertch, of 2000 merino sheep to the Sultan. They were carried in five vessels to Constantinople, where they arrived in perfect condition, and gave great satisfaction. It is thought that Asia Minor unites in a high degree the various conditions necessary to the production of fine wool, and if the example set by the Sultan should open the way to such undertakings, the owners here will be able to dispose of their surplus stocks.

"The rates of freight fluctuated as usual in these ports, having ranged from 65 to 35 shillings per ton. Great losses were incurred by the chartered ships which found no cargoes, and which, after the expiration of their 'lay days,' accepted low freights here, and had to claim the differences of their original charterers in England, in most cases bankrupts by the failure of grain speculations."

Moneys, Weights, and Measures, same as at Petersburg, which see.

Account of Imports and Exports at the Port of Odessa in 1842.

Imports.		Exports.	
Cotton wool	cwt. 20,851	Wheat	quarters 621,664
twist	— 2,153	Peas	— 2,385
Raw silk	— 469	Indian corn	— 1,288
Tea	— 307	Flour	— 10,057
Coffee	— 4,353	Linseed	— 47,898
Refined sugar	— 20,111	Hempseed	— 4,869
Havannah do.	— 1,233	Butter	cwt. 341
Olive oil	— 40,977	Caviar	— 995
Olives	— 3,589	Wax	— 253
Pepper	— 3,846	Cables and cordage	— 7,931
Tobacco	— 2,129	Candles	— 2,875
Dry fruit	— 74,995	Wool	— 47,858
Gums	— 347	Hides	— 10,541
Wood for furniture	— 11,678	Tallow	tons 9,256
Lead	— 5,138	Hemp	— 63
Tin	— 652	Potashes	— 21
Wine	hhds. 10,659	Iron in bars	— 49
Do.	bottles 42,217	Copper	— 47
Rum	gallons 6,193	Timber and planks	value £ 1,900
Colouring materials	value £ 17,365	Gold twist and spangles	— 18,173
Fresh fruit	— 15,369	Manufactured articles	— 17,875
Opium	— 25,000	Sundries	— 24,884
Drugs	— 27,000		
Manufactures	— 111,589		
Jewellery and watches	— 10,162		
Paints	— 9,002		
Corals	— 8,746		
Sundries	— 131,743		
Coin, gold and silver	— 117,694		

Valued amount of all imports, according to the official report, £985,510.

Total value of exports, according to official report, £1,881,805

Account of Imports at Odessa, by British Ships, from Great Britain, in 1842.

Description.	Quantity.	Invoice Value.	Description.	Quantity.	Invoice Value.
		£			£
Refined sugar cwt.	28,330	44,900	Hardware value	—	6,500
Havannah do. —	7,000	1,050	*Earthenware* and glass —	—	5,000
Tea —	870	18,000	Tin plates —	—	1,000
Pepper —	2,000	4,000	Dye and other woods —	—	2,500
Coffee —	1,500	4,200	Drugs —	—	5,500
Rum puncheons	60	720	Iron chain cables and machinery —	—	5,600
Porter bottles	120,000	3,500	Coals tons	16,000	8,500
Cotton wool cwt.	3,000	6,000			
Cotton twist —	2,280	10,000	Total value	—	184,370
Woollen, cotton, and silk goods value	—	60,000			

This return is made up from inquiries made of the Custom house.

Account of Exports from Odessa to Great Britain in 1842.

Wheat	-	-	-	quarters	200,592	Hemp	-	-	tons	45
Indian corn	-	-	-	—	568	Wool	-	-	cwt.	17,340
Linseed	-	-	-	—	11,252	Bones	-	-	tons	143
Rapeseed	-	-	-	—	402	Ox horns	-	-	No.	20,788
Tallow	-	-	-	tons	8,851					

This return is extracted from the Consular Register, wherein the bills of lading are inscribed.

Return of the principal Articles of Import sent onwards from Odessa into the Interior of the Empire in 1842, on Payment of Duties at the Rate of 4-5ths of the Duties of the Tariff; the remaining 1-5th being levied on Goods when brought to Odessa.

Cotton wool	-	-	-	cwt.	17,254	Wine	-	-	hhds.	4,561
Cotton twist	-	-	-	—	1,529	Do.	-	-	bottles	20,954
Raw silk	-	-	-	—	434	Porter	-	-	hhds.	2
Coffee	-	-	-	—	1,116	Do.	-	-	bottles	27,582
Olive oil	-	-	-	—	29,250	Rum	-	-	gallons	6,501
Olives	-	-	-	—	1,879	Fresh fruit	-	-	value, £	21,654
Pepper and spices	-	-	-	—	3,175	Drugs	-	-	—	45,403
Tobacco	-	-	-	—	2,179	Manufactures	-	-	—	10,723
Dry fruit	-	-	-	—	63,725	Pearls, corals, &c.	-	-	—	16,900
Colouring materials	-	-	-	—	9,835	Goods by travellers	-	-	—	11,610
Havannah sugar	-	-	-	—	982	Sundries	-	-	—	72,917
Lead	-	-	-	—	3,999	Total value, £516,617				
Wood for furniture	-	-	-	—	787					

This return was obtained from the Custom-house.

Return of Duties levied at Odessa in the Year 1842.

Levied for the Imperial treasury on imports sent into the country at 4-5ths of the tariff duty	-	£108,952	Levied for the benefit of the town of Odessa: —						
Additional duties	-	9,340	On imports entered for the town's consumption, at 1-5th of tariff duties	-	-	-	-	-	£79,769
Duties on goods prohibited out of the town, by weight	-	4,763	On grain	-	-	-	-	-	1,089
On home produce exported	-	32,831	Tonnage and anchorage	-	-	-	-	-	2,060
Dues for the Richelieu Lyceum	-	3,510							83,518
On goods declared verbally by travellers at the barriers	-	8,094	Levied for lighthouses	-	-	-	-	-	665
		£167,510	Total	-	-	-	-	-	£251,993

This return is extracted from the Official Report of the Custom-house.

Account of the extreme Prices of the principal Articles of Import and Export, and of the extreme Rate of the Exchanges and of Freights, in Odessa, in 1842.

Articles.	Highest.	Lowest.	Articles.	Highest.	Lowest.
Cotton wool (Smyrna) -	5¾d. per lb.	4¼d. per lb.	Wheat - - -	32s. per qr.	19s. 4d. per qr.
Cotton twist (English) -	1s. 3d. —	9¾d. —	Linseed - -	38s. 6d. —	35s. —
Refined sugar - -	6¼d. —	5d. —	Tallow - -	35s. 6d. per cwt.	30s. per cwt.
Coffee - - -	1s. 5d. —	5¾d. —	Washed common wool	5d. per lb.	4¾d. per lb.
Tea - - -	7s. —	1s. —	— eglas —	8d. —	8d. —
Olive oil - - -	1s. —	5s. —	— merinos —	1s. 8d. —	1s. 1d. —

Rates of Exchange: On London - - - 6 roubles 90 cop. silver - - 5 roubles 87 per £.
Paris - - - 402 francs, - 416 fr. per 100 roubles silver.
Vienna - - - 154 florins, - 160 fl. per 100 roubles silver.

Rates of Freight.

Countries.	Highest.	Lowest.	Countries.	Highest.	Lowest.
To England - -	6½s.	3½s. per ton.	To Leghorn - -	35	20 soldi per sack.
or	10s.	5s. 8d. per qr.	Trieste - -	29	20 kreutzer per stoio.
Marseilles - -	4½s.	2 francs per charge.	Constantinople -	55	35 paras per kilo.

Odessa has a considerable and increasing trade with Redout-kalé, at the mouth of the Phasis, and with Trebisond and several ports on the south coast of the Black Sea. Georgian and Armenian merchants are already considerable purchasers at the Leipsic and other German fairs; and civilisation is beginning to strike its roots throughout all the extensive countries between the Black Sea and the Caspian. It is probable that, at no very remote period, the Phasis will be frequented by British ships; and that our merchants, without any enchantress to aid them, and depending only on the superior cheapness and excellence of their goods, will be hospitably received in the ancient Colchis, and bear away a richer prize than fell to the lot of Jason and his Argonauts.

Epochs in the Trade of the Black Sea. Depth of Water. Difficulty of Navigation, &c. — The trade of the Black or Euxine Sea was of great importance in antiquity. The shores of the Crimea, or Taurica Chersonesus, were settled by Milesian adventurers, who founded Panticapæum and Theodosia. The exports thence to Athens were nearly the same as those which are now sent from Odessa and Taganrog to Constantinople, Leghorn, &c; viz. corn, timber, and naval stores, leather, wax, honey, salt fish, caviare, &c., with great numbers of slaves, the best and most serviceable that were anywhere to be met with. The Athenians set a very high value upon this trade, which supplied them annually with about 400,000 medimni of corn; and to preserve it, they carefully cultivated the alliance of the Thracian princes, and kept a garrison at Sestus, on the Hellespont. — (See the authorities in *Anacharsis's Travels*, c. 55.; and in *Clarke's Connection of the Saxon and English Coins*, pp. 54—64.) During the middle ages, the Genoese acquired an ascendancy on this sea, and laboured with pretty considerable success to monopolise its trade. Their principal establishment was at Caffa, which was the centre of a considerable commerce. But the conquest of Constantinople by the Turks, in 1453, was soon after followed by the conquest of Caffa, and the total exclusion of European vessels from the Black Sea, which became in a great measure unknown. This exclusion was main-

tained for about 300 years, or till it was opened to the ships of Russia by the treaty of Kainardgi in 1774. The Austrians obtained a similar equality of privileges in 1784; and British, French, &c. ships were admitted by the treaty of Amiens. There were, however, some restraints still kept up; but these have been abolished by the late treaty between the Turks and Russians in 1829; and, for commercial purposes at least, the Black Sea is now as free as the Mediterranean.

Notwithstanding the number of English and other European ships that have visited this sea within the last 20 years, its geography is still very imperfectly known. A notion seems to have been long prevalent, that it was not only stormy, but also infested with numerous shoals. Polybius, indeed, contends, that, owing to the vast quantities of alluvial deposit brought down by the Danube and other large rivers that fall into the Black Sea, it was gradually filling up, and would become, at no very remote period, an immense morass! Dr. Clarke seems to have espoused the same theory. But, how probable soever it may appear, extremely little progress has hitherto been made towards the consummation described by Polybius. Instead of being shallow, the water is for the most part remarkably deep; with a bottom, where soundings have been obtained, of gravel, sand, and shells. A strong current sets from the Black Sea, through the Bosphorus, or Canal of Constantinople, into the Sea of Marmara, and from the latter through the Dardanelles, which it requires a fresh breeze to stem. This current is said to be sensibly felt in the Black Sea, 10 or 12 miles from the Bosphorus; and it may probably carry off some of the mud brought down by the rivers. — (See *Tournefort's Voyage du Levant*, Lett. 15, 16.; Art. 9. in No. I. of the *Journal of the Geographical Society*; *Macgill's Travels in Turkey*, vol. i. p. 215., &c.)

The navigation of the Black Sea has been represented by most modern and all ancient writers as exceedingly dangerous. We believe, however, that there is very little foundation for the greater number of the statements on this subject. It is said to be particularly subject to dense fogs, and to currents; but the former are prevalent only at particular seasons, and the influence of the latter is not greater than in many other seas which are not reputed dangerous. Tournefort, one of the best and most accurate of travellers, considers the navigation of the Black Sea as safe as that of the Mediterranean: — "*Il n'a rien de noir, pour ainsi dire, que le nom: les vents n'y soufflent pas avec plus de furie, et les orages ne sont guères plus fréquens que sur les autres mers.*" — (Tome ii. p. 164. 4to ed.) Dr. Clarke (*Travels*, vol. ii. p. 387. 8vo ed.) affects to doubt this; but he assigns no grounds for his opinion; and who would think of putting his authority in competition with that of Tournefort? Indeed the accuracy of the statements of the latter has been fully established by the recent reports of Captain Middleton and other able officers who have navigated this sea. But, though without "a hidden danger," any sea would be dangerous to the Greek and Turkish pilots, by whom the Black Sea has been principally navigated. If the progress of navigation were to be estimated by its state amongst them, we should have to conclude that it had been stationary from the æra of the Argonauts. They seldom venture out of sight of the coasts; they have neither charts nor quadrants; and hardly even know that one of the points of the needle turns towards the North! — (*Tournefort, in loc. cit.*) There is not, certainly, much room for wonder at shipwrecks being frequent among vessels so navigated. On leaving the Black Sea, the greatest difficulty is in making the Bosphorus. "The mountains," says Mr. Macgill, "are all so much alike, that it is difficult to determine which of them is at the entrance, until you are within a very few miles of the coast: then, with a fair wind, you are on a lee shore with a lee current; and if you make a mistake, destruction is almost inevitable. The Turks have two light-houses at the entrance; but unless you see them before sunset, they are of little use: in the forests, on its borders, great quantities of charcoal are made, and the lights from it bewilder, and often mislead, the unhappy mariner." — (i. 245.)

From the vast quantity of fresh water poured into the Black Sea, the saline particles are so much diluted, that, with a slight frost, the surface becomes covered with ice; hence, during a great part of the year, hardly any navigation is attempted. The vessels that resort to Odessa seldom arrive at that port before the latter end of May; and those whose cargoes are not completed before the end of October, more frequently wait the return of spring, than adventure to encounter the dangers of an autumnal or winter voyage.

At Taganrog the frost commences earlier, and continues longer, than at Odessa; so that there are scarcely more than 4 or 5 months in the year, during which the Sea of Azoff can be safely navigated.

OIL (Fr. *Huile*; Ger. *Oel*; It. *Olie*; Lat. *Oleum*; Rus. *Maslo*; Sp. *Aceite*). The term *oil* is applied to designate a number of unctuous liquors, which, when dropped upon paper, sink into it and make it seem semi-transparent, or give it what is called a greasy stain. These bodies are very numerous, and have been in common use from time immemorial. Chemists have divided them into two classes; namely, *volatile* and *fixed* oils. We borrow from Dr. Thomas Thomson the following statement with respect to these bodies: —

1. VOLATILE OILS, called also *essential oils*, are distinguished by the following properties: — 1. Liquid, often almost as liquid as water, sometimes viscid; 2. Very combustible; 3. An acrid taste and a strong fragrant odour; 4. Volatilised at a temperature not higher than 212°; 5. Soluble in alcohol, and imperfectly in water; 6. Evaporate without leaving any stain on paper.

By this last test it is easy to discover whether they have been adulterated with any of the fixed oils. Let a drop of the volatile oil fall upon a sheet of writing paper, and then apply a gentle heat to it; if it evaporates without leaving any stain upon the paper, the oil is pure; but if it leaves a stain upon the paper, it has been contaminated with some fixed oil or other.

Volatile oils are almost all obtained from vegetables, and they exist in every part of plants, — the root the bark, the wood, the leaves, the flower, and even the fruit; though they are never found in the substance of the cotyledons; whereas the fixed oils, on the contrary, are almost always contained in these bodies.

When the volatile oils are contained in great abundance in plants, they are sometimes obtained by simple expression. This is the case with oil of oranges, of lemons and bergamotte; but in general they can only be obtained by distillation. The part of the plant containing the oil is put into a still with a quantity of water, which is distilled off by the application of a moderate heat. The oil comes over along with the water, and swims upon its surface in the receiver. By this process are obtained the oil of peppermint, thyme, lavender, and a great many others, which are prepared and employed by the perfumer: others are procured by the distillation of resinous bodies. This is the case in particular with oil of turpentine, which is obtained by distilling a kind of resinous juice, called turpentine, that exudes from the juniper.

Volatile oils are exceedingly numerous. They have been long known; but as their use in chemistry is but limited, they have not, hitherto, been subjected to an accurate chemical investigation. They differ greatly in their properties from each other; but it is impossible at present to give a detailed account of each.

1. The greater number of volatile oils are *liquid*; many, indeed, are as limpid as water, and have none of that appearance which we usually consider oily. This is the case with the following; namely, oil of turpentine, oranges, lemons, bergamotte, roses. — Others have the oily viscidity. It varies in them in all degrees. This is the case with the oils of mace, cardamom, sassafras, cloves, cinnamon. — Others have the property of becoming solid. This is the case with the oils of parsley, fennel, aniseed, balm. — Others crystalise by slow evaporation. This is the case with oil of thyme, peppermint, marjoram. — The oil of nutmegs has usually the consistence of butter. This is the case also with the oils of hops and of pepper.

2. The colour of the volatile oils is as various as their other properties. A great number are limpid and colourless; as oil of turpentine, lavender, rosemary, savine, aniseed: some are yellow; as spike, bergamotte: some are brown; as thyme, savory, wormwood: others blue; as camomile, motherwort: others green; as milfoil, pepper, hops, parsley, wormwood, cajeput, juniper, sage, valerian: others, though at first colourless, become yellow or brown by age; as cloves, cinnamon, sassafras.

3. The odours are so various as to defy all description. It is sufficient to say, that all the fragrance of the vegetable kingdom resides in volatile oils. Their taste is acrid, hot, and exceedingly unpleasant.

4. Their specific gravity varies very considerably, not only in different oils, but even in the same oil in different circumstances. The following are the specific gravities of several of the volatile oils, as ascertained by Dr. Lewis: —

Oil of sassafras	1·094	Oil of tansy	·946
cinnamon	1·035	caraway seeds	·940
cloves	1·034	origanum	·940
fennel	·997	spike	·936
dill	·904	rosemary	·934
pennyroyal	·928	juniper berries	·911
cummin	·925	oranges	·888
mint	·925	turpentine	·792
nutmegs	·948		

When the volatile oils are heated in the open air, they evaporate readily, and without alteration diffuse their peculiar odours all around; but there is a considerable difference between the different oils in this respect. When distilled in close vessels, they do not so readily assume the form of vapour. Hence they lose their odour, become darker in colour, and are partly decomposed. Oils do not seem very susceptible of assuming the gaseous form, unless some other substance, as water, be present.

II. FIXED OILS are distinguished by the following characters: — 1. Liquid, or easily become so when exposed to a gentle heat; 2. An unctuous feel; 3. Very combustible; 4. A mild taste; 5. Boiling point not under 600°; 6. Insoluble in water, and nearly so in alcohol; 7. Leave a greasy stain upon paper.

These oils, which are called fat or expressed oils, are numerous, and are obtained partly from animals and partly from vegetables, by simple expression. As instances, may be mentioned whale oil or train oil obtained from the blubber of the whale and from cod: olive oil, obtained from the fruit of the olive; linseed oil and almond oil, obtained from linseed and almond kernels. Fixed oils may also be extracted from poppy seeds, hemp seeds, beech mast, and many other vegetable substances.

All these oils differ from each other in several particulars, but have also many particulars in common.

1. Fixed oil is usually a liquid with a certain degree of viscidity, adhering to the sides of the glass vessels in which it is contained, and forming streaks. It is never perfectly transparent; has always a certain degree of colour, most usually yellowish or greenish; its taste is sweet, or nearly insipid. When fresh it has little or no smell.

There exist also in the vegetable kingdom a considerable number of bodies which, at the ordinary temperature of the atmosphere, are solid, and have hitherto been considered as fixed oils. Palm oil may be mentioned as an example. The various substances used in India and Africa as substitutes for butter, and as unguents, may likewise be mentioned.

2. All the fixed oils hitherto examined are lighter than water: but they differ greatly from one another in specific gravity. The same difference is observable in different samples of the same oil. The following Table contains the specific gravity of such oils as have been examined: —

Oil of palm	·968	Oil of beech nuts	·923
hazel nuts	·941	ben	·917
poppies	·939	olives	·913
linseed	·932	rape-seed	·913
almonds	·932	cacao	·892
walnuts	923 to 947		

Fixed oil when in the state of vapour, takes fire on the approach of an ignited body, and burns with a yellowish white flame. It is upon this principle that candles and lamps burn. The tallow or oil is first converted into a state of vapour in the wick; it then takes fire, and supplies a sufficient quantity of heat to convert more oil into vapour; and this process goes on while any oil remains. The wick is necessary, to present a sufficiently small quantity of oil at once for the heat to act upon. If the heat were great enough to keep the whole oil at a temperature of 600°, no wick would be necessary, as is obvious from oil catching fire spontaneously when it has been raised to that temperature. When oil is used in this manner, either in the open air or in contact with oxygen gas, the only new products obtained are *water* and *carbonic* acid.

The drying oils are used as the vehicle of paints and varnishes. Linseed, nut, poppy, and hemp-seed oils belong to this class. These oils in their natural state possess the property of drying oils, but imper-

fectly. To prepare them for the use of the painter and varnish maker, they are boiled for some time in an iron pot, and sometimes burnt till they become viscid. When they burn for some time, their unctuous quality is much more completely destroyed than by any method that has been practised. Hence it is followed frequently in preparing the drying oils for varnishes, and always for printers' ink, which requires to be as free as possible from all unctuosity.

Nut oil has been found preferable to all other oils for printers' ink; though the dark colour which it acquires during boiling renders it not so proper for red ink as for black. Linseed oil is considered as next after nut oil in this respect. Other oils cannot be employed, because they cannot be sufficiently freed from their unctuosity. Ink made with them would be apt to come off and smear the paper while in the hands of the bookbinder, or even to spread beyond the mark of the types and stain the paper yellow.

For the regulations with respect to the importation and exportation of train oil, see p. 138.

OLIBANUM (Fr. *Encens*; Ger. *Weirauch*; It. *Olibano*; Arab. *Luoban*), a gum-resin, the produce of a large tree (*Libanus thurifera*) growing in Arabia and India. It is imported in chests containing each about 1 cwt., from the Levant and India; the best comes from the former, and is the produce of Arabia. Good olibanum is in semi-transparent tears, of a pink colour, brittle, and adhesive when warm; when burnt, the odour is very agreeable; its taste is bitterish, and somewhat pungent and aromatic; it flames for a long time with a steady clear light, which is not easily extinguished, leaving behind a *black* (not, as has been said, a whitish) ash. Olibanum is the frankincense (*thus*) of the ancients; and was extensively used by them in sacrifices. — (*Plin. Hist. Nat.* lib. xii. c. 14.) It has also been used in the ceremonies of the Greek and Roman churches. — (*Ainslie's Mat. Indica*; *Thomson's Chemistry*; *Kippingii Antiq. Rom.* lib. i. c. 11.)

OLIVE, OLIVES (Ger. *Oliven*; Fr. *Olives*; It. *Ulive, Olive*; Sp. *Aceitunas*; Port. *Azeitonas*; Lat. *Olivæ*), a fruit yielding a large quantity of oil, the produce of the *Olea*, or olive tree. The wild olive is indigenous to Syria, Greece, and Africa, on the lower slopes of Mount Atlas. The cultivated species grows spontaneously in Syria, and is easily reared in Spain, Italy, and the south of France. It has even been raised in the open air in England, but its fruit is said not to have ripened. The fruit is a smooth oval plum, about $\frac{3}{4}$ of an inch in length, and $\frac{1}{2}$ an inch in diameter; of a deep violet colour when ripe, whitish and fleshy within, bitter and nauseous, but replete with a bland oil; covering an oblong, pointed, rough nut. Olives intended for preservation are gathered before they are ripe. In pickling, the object is to remove their bitterness, and to preserve them green, by impregnating them with a brine of aromatised sea salt; for this purpose various methods are employed. The wood of the olive tree is beautifully veined, and has an agreeable smell. It is in great esteem with cabinet-makers, on account of the fine polish of which it is susceptible.

OLIVE OIL (Ger. *Baumol*, Fr. *Huile d'olives*; It. *Olio d'ulivo*, Sp. *Aceite de aceitunas*; Lat. *Oleum olivarum*). The olive tree is principally cultivated for the sake of its oil. This is an insipid, inodorous, pale greenish yellow coloured, viscid fluid, unctuous to the feel, inflammable, incapable of combining with water, and nearly insoluble in alcohol. It is the lightest of all the fixed oils; and is largely used, particularly in Greece, Italy, Spain, and France, as an article of food, and in medicine, and the arts. It is also very extensively used in this country, particularly in the woollen manufacture.

The ripe fruit is gathered in November, and immediately bruised in a mill, the stones of which are set so wide as not to crush the kernel. The pulp is then subjected to the press in bags made of rushes; and by means of a gentle pressure, the best, or *virgin* oil, flows first; a second, and afterwards a third, quality of oil is obtained by moistening the residuum, breaking the kernels, &c., and increasing the pressure. When the fruit is not sufficiently ripe, the recent oil has a bitterish taste; and when too ripe, it is fatty. After the oil has been drawn, it deposits a white, fibrous, and albuminous matter but when this deposition has taken place, if it be put into clean glass flasks, it undergoes no further alteration; the common oil cannot, however, be preserved in casks above $1\frac{1}{2}$ or 2 years. It is sometimes adulterated by the admixture of poppy oil. — (*Thomson's Dispensatory.*)

The best olive oil is said to be made in the vicinity of Aix, in France. That which is brought from Leghorn, in chests containing 30 bottles, or 4 English gallons, is also very superior; it is known in our markets by the name of Florence oil, and is used mostly for culinary purposes. Olive oil is the principal article of export from the kingdom of Naples. — (See NAPLES.) Apulia and Calabria are the provinces most celebrated for its production. The Apulian is the best, and is preferred by the woollen manufacturers, by whom it is extensively used. By far the largest portion of the olive oil brought to England is in general imported from Italy; principally from Gallipoli, on the east coast of the Gulph of Taranto, lat. 40° 3′ N., lon. 18° 25′ 55″ E., whence it is commonly known by the name of Gallipoli oil. But, besides Italy, Spain sends us large quantities, and we derive smaller supplies from Turkey, the Ionian Islands, &c.

The price of olive oil, duty paid, in London, in June 1843, was as follows: —

		£ s.		£ s.
Gallipoli - - -	tun	46 0 to 47 0	Barbary - -	tun (252 gals.)	53 0 to 54 0
Spanish Calabria - -	—	44 0 - 45 0	Leccia, in jars - -	- -	5 10 - 6 10
Calabria, Genoa, and Provence, lat	—	75 0 - 80 0	Florence - -	½ chest	0 18 - 1 3

The duty on olive oil was for a lengthened period most exorbitant. In 1834 it was fixed at 10*l.* 10*s.* a ton if imported in a Neapolitan, and at 9*l.* 9*s.* if imported in a British or other vessel. But as olive oil is of essential importance in the arts, being extensively used in the manufacture of woollens, in the pre-

paration of the best species of soaps, and other departments of industry, this duty was much and justly objected to. In consequence it was reduced in 1841, to 4*l.* 4*s.* a tun if imported indirectly and not in a Neapolitan ship, and in 1842, the duty was farther reduced to 2*l.* and 4*l.* a ton according to the vessels in which it is imported. At present (1843), therefore, the amount of the duty cannot be justly objected to, but the differential principle on which it has been and is imported, is most objectionable. It imitates and (in so far as copying can do) justifies the worst part of the commercial policy of the Neapolitan government, and prompts them to keep up high discriminating duties on all articles imported into Naples and Sicily in British ships. So wretched an attempt at retaliation is quite unworthy of an enlightened nation, and deserves to be universally scouted. It is, in fact, injurious only to ourselves.

Account of the Quantities of Olive Oil imported into the United Kingdom during each of the 7 Years ending with 1841; specifying the Countries from which the Oil was brought and the Quantities brought from each, with the Quantities entered for Home Consumption.

	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*
France - - - -	42,099	30,093	3,624	6,714	11,092	6,797	56,885
Portugal Proper - - -	270	10,439	106,133	407,046	586,723	41,737	11,398
Spain and the Balearic Islands -	1,793	562,034	583,141	57,845	136,167	1,305,384	382,982
Italy and the Italian Islands -	376,434	1,818,735	.....	1,385,734	783,024	719,355	543,456
Ionian Islands - - -	68,800	40,808	80,076	47,500	56,751	56,319	10,810
Turkey - - - -	34,789	23,695	13,434	26,753	40,303	24,956	45,358
Tripoli, Tunis, Algiers, and Morocco	42,113	109,674	50,094	62,864	150,882	45,708	11,062
All other countries - -	39,868	86,538	22,806	14,856	28,978	15,220	113,071
Totals - -	606,166	2,682,016	1,721,914	2,009,110	1,793,920	2,213,436	1,193,900
Quantities entered for home consumption - -	554,196	1,841,622	1,496,656	2,026,146	1,806,178	1,985,202	1,335,788

Olive oil, the produce of Europe, may not be imported into the U. Kingdom for home consumption, except in British ships or in ships of the country of which it is the produce, or from which it is imported on forfeiture of the same and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

It is ordered by a Customs Minute of the 23d of July, 1828, that when the actual tare is not taken, 1-3d for tare on each jar, and 1-7th for foot, may be allowed.

Oil Trade of Naples. — The oils of the kingdom of Naples are produced in Apulia, from Bari to its southern extremity, the Capo di Leuca; a district comprising the territories which export from Gallipoli and Taranto; and in Calabria from Rossano, on the Gulph of Taranto, across to Gioja. The whole coast from Gioja as far as Gaeta is covered with olive trees. They are also abundant in the Abruzzi and the Terra di Lavoro; but Apulia and Calabria furnish by far the greatest quantity of oil.

The principal magazines, or *caricatori*, for oil, are at Gallipoli and Gioja.

Gallipoli supplies England, Holland, the north of Europe, and, in short, all those countries that require the most perfectly purified oil. It is clarified to the highest degree, by merely keeping it in cisterns hollowed out of the rock on which the town is built. The voyages it has to perform being long, it is put into casks so well constructed, that it frequently arrives at Petersburg in the heat of summer, without the least waste or leakage, — an advantage attributed to the seasoning of the staves, which, before they are put together, are well soaked in sea water.

We borrow the following details with respect to the preparation of oil at Gallipoli, from a very interesting paper, communicated by an English gentleman who had resided in the town, in the volume entitled *Vegetable Substances Materials of Manufactures*, published by the Society for the Diffusion of useful Knowledge.

"The rock on which the town is built is easily excavated; and in caverns thus constructed oil clarifies sooner, and keeps without rancidity much longer, than in any other place. Hence numerous oil-houses are established at Gallipoli, and a very considerable portion of the rock is cut into cisterns. A Gallipolitan oil warehouse generally occupies the ground floor of a dwelling-house, and has a low arched roof. Some are more extensive, but on an average they are about 30 feet square. In the stone floor you see 4, 6, or more holes, which are circular, about 2 feet in diameter, and like the mouths of wells. Each of these holes gives access to a separate cistern beneath your feet; and when the oil is poured into them care is taken not to mix different qualities, or oils at different stages, in the same reservoir. One cistern is set apart for *oglio mosto*, or oil that is not clarified, another for pure oil of the season, another for old oil, &c. I have seen oil that had thus been preserved for 7 years in a perfect state, or, as the Gallipoli merchants have it, *chiaro, giallo, e lampante*, — words which, during some months, I have heard at least 100 times a day. I also many times verified the fact: the *mosto*, or oil in its turbid state, which arrived almost as black and thick as pitch, soon became bright and yellow in these excellent reservoirs, without any help from man.

"All the oil, whatever may be its quality, is brought to the magazine in sheep or goat skins, which are generally carried on mules — there being but few *strade rotabile*, or roads fit for wheeled carriages, in these parts. In a good year, and at the proper season, I have counted, in the course of an afternoon's ride, as many as 100 mules returning from Gallipoli, where they had been to deposit their unctuous burdens, to different towns and villages in the Terra d'Otranto, or the more distant province of Bari. The quantity of oil required may be conceived, when I state, that at one time (in the year 1816) I saw 9 English, 3 American, 2 French, and 6 Genoese vessels, (not to mention some small craft from the Adriatic,) all waiting in the port of Gallipoli for entire or partial cargoes of it. When the oil is to be shipped, it is drawn off the cistern into *uteri*, or skins, and so carried on men's shoulders down to a small house on the sea shore. In that house there is a large open basin, capable of containing a given quantity, and of measuring the oil; and into that the porters empty their skins as they arrive. A tube communicates from the basin to a large cock at the outside of the house. When the basin is full, well-made casks, of various sizes for the convenience of stowage, are placed under the cock, which is then turned, and the casks are filled. As the casks are closed up by the cooper, the porters roll them down to the brink of the sea, where the sailors secure several of them together with a rope, and taking the end of the cord into the boat, they row off to the vessel, towing the oil casks through the water after them.

"I first became acquainted with the Gallipolitans shortly after the fall of Napoleon, whose system, whatever good parts of it may have done in the rest of Italy, was certainly most ruinous to the provinces of Lecce and Bari. Unable to export, or find any market for their produce, the proprietors in many parts of those provinces let the olives lie and rot upon the ground. For some years, indeed, the price of oil scarcely paid the cost of its preparation, to say nothing of transport and other necessary expenses. During the Continental system, the best *chiaro, giallo, e lampante* oil was sold at Gallipoli for 8 Neapolitan ducats the salma; in 1816 and 1817, it found a ready market at from 60 to 70 ducats per salma!

"Those who, during the evil time, had penetration enough to foresee better days, and that a system opposed to the general commercial prosperity of Europe could not last; and who had, at the same time, money enough for such objects; by annually making their oil as usual, and buying up the oil of others at the low current prices of the day, realised enormous profits when peace threw open the port of Gallipoli, and ships of all nations flocked thither as before.

"The olives of which the Gallipoli oil is made, are never gathered, but allowed to drop in their ma-

turity from the tree on the ground, where they are picked up chiefly by women and children, and carried to the mill.

"The machinery employed in expressing the oil is of the rudest kind, and, no doubt, numerous improvements might be introduced, not only into this branch, but into that of cultivating the olive tree. The peasantry, however, and, in the kingdom of Naples, those who stand higher in the scale of fortune and rank, are too often but boors in intellect, are obstinate in their attachment to old practices, and are apt, when any of these are reprehended, to stop discussion by saying—*Faccio come faceva la buon' anima di mio padre, e ciò basta.* (I do as my father of blessed memory did before me, and that 's enough.)

"The poor people of the country make culinary uses of the same oil that is exported, and which in England is only used in manufactures, or burnt in lamps; but in the houses of the gentry I have often tasted oil prepared with more care, which was truly delicious, being equal to that of Sorrento, Vico, and Massa, or even to the best oils of Tuscany or Provence."—(Pp. 200—204.)

The oil received into the cisterns in Gallipoli, either belongs to the proprietor who buys it of the planter, or is received in *deposit* on account of some other party who gets a receipt (*biglietto di magazzino*) specifying the quantity of the oil received on his account, its quality, &c. Depositors pay at the rate of 20 grani a-year for every salma of oil to the party holding it in deposit, and who is bound to account for it.

The *carricatori* of Bari and Monopoli furnish oils for the consumption of Upper Italy and Germany, through the medium of Venice and Trieste. They also draw supplies from Brindisi and Otranto.

The *carricatori* of Taranto, of Eastern Calabria or Retromarina, and of Western Calabria, the principal of which is Gioya, furnish supplies for Marseilles, &c. But the *carricatori* now mentioned, having no conveniences for clarification, produce only the thick oils used for soap-making.

The oils of Sicily, like those of Tunis, are too thin to be used singly in the making of soap; and being used only for mixing, are less valuable than most others.

At present (1843) a full crop of oil in the province of Terra d'Otranto is supposed to yield about 300,000 salme, or 41,666 tuns. To facilitate transactions, orders or *cedules* are circulated, representing quantities of oil deposited in the provincial *carricatori*. These orders are negotiable, like bills of exchange, and are indorsed by the intermediate holder, who receives their value in cash, without, however, becoming liable for their due satisfaction. The only responsible parties are the drawer and drawee. The latter is obliged to deliver the oil at sight of the order, or to hold it at the bearer's disposal, till the 10th of November for the *carricatori* of Apulia, and till the 31st of December for those of Calabria. If the contract be for time, that is, from one year to another, the oil is usually placed at the purchaser's command on the 1st of March. Purchases for time are effected by means of a contract, wherein the vendor undertakes to deliver the oil by the end of January, on receiving payment of the money, but the oil as observed above, is not really at the purchaser's disposal before the beginning of March. Hence, in time bargains, the payment of the money precedes the delivery of the oil more than is usual with scarce an instance is on record of an engagement of this sort having been broken, and the order is as readily negotiable as any other security.

In purchases of oil at command, payment likewise precedes the delivery of the article; but in this case the advance is confined to the 3 days necessary to transmit the order to the *carricatore* where the oil is kept for delivery.

The oil remains in the *carricatori* under the care and responsibility of the vendor, to be delivered on demand to the bearer of the order, free of all costs and charges whatever for the first year; but for every successive year from 25 to 2 grani per salma are charged for keeping and for renewal of warranty. (We are indebted for these details to a very valuable Report by Mr. Steel, vice-consul at Gallipoli, and to a *brochure* of M. Millarini, entitled *Cenni sull' Olivo e sull' Regno di Napoli*. Naples, 1842.)

OMNIUM, a term used at the Stock Exchange, to express the aggregate value of the different stocks in which a loan is now usually funded.

Thus, in the loan of 36,000,000*l.* contracted for in June, 1815, the omnium consisted of 120*l.* 3 per cent. reduced annuities, 44*l.* 3 per cent. consols, and 16*l.* 4 per cent. annuities, for each 100*l.* subscribed.

The loan was contracted for on the 14th of June, when the prices of the above stocks were—3 per cent. reduced, 54; 3 per cent. consols, 55; 4 per cent's, 74: hence the parcels of stock given for 100*l.* advanced, were worth —

	£.	s.	d.
120*l.* reduced, at 54	70	4	0
44*l.* consols, at 55	24	4	0
16*l.* 4 per cents, at 74	7	0	0
Together	101	8	0

which would be the value of the omnium, or 1*l.* 8*s.* per cent. premium, independently of any discount for prompt payment.

ONION (Ger. *Zwiebel*; Fr. *Oignon*; It. *Cipolla*; Sp. *Cebolla*; Rus. *Luk*), a well known bulbous plant (*Allium Cepa* Linn.) cultivated all over Europe for culinary purposes. The Strasburg, Spanish, and Portuguese varieties are the most esteemed.

ONYX (Ger. *Onyx*; Fr. *Onix*, *Onice*; Sp. *Onique*; Lat. *Onyx*). "Any stone exhibiting layers of 2 or more colours strongly contrasted is called an *onyx*; as banded jasper, chalcedony, &c., but more particularly the latter, when it is marked with white, and stratified with opaque and translucent lines. But the Oriental onyx is considered a substance consisting of 2 or more layers or bands of distinct and different colours. A sard, or sardoine, having a layer of white upon it, would be called an onyx; and according to the number of layers it would be distinguished as an onyx with 3 or more bands. Some of the antique engravings are upon onyxes of 4 bands."—*Mawe's Treatise on Diamonds, &c.*)

OPAL (Ger. *Opal*; Fr. *Opale*; It. *Opalo*; Sp. *Opalo, Piedra iris*; Port. *Opala*; Lat. *Opalus*), a stone, of which there are several varieties, found in different parts of Europe, particularly in Hungary, and in the East Indies, &c. When first dug out of the earth it is soft, but it hardens and diminishes in bulk by exposure to the air. The opal is always amorphous; fracture conchoidal; commonly somewhat transparent. Hardness varies considerably. Specific gravity from 1·958 to 2·54. The lowness of its specific gravity in some cases is to be ascribed to accidental cavities which the stone contains. These are sometimes filled with drops of water. Some specimens of opal have the property of emitting various coloured rays, with a particular effulgency, when placed between the eye and the light. The opals which possess this property are distinguished

by lapidaries by the epithet *Oriental*; and often, by mineralogists, by the epithet *nobilis*. This property rendered the stone much esteemed by the ancients. — (*Thomson's Chemistry*; see also *Plin. Hist. Nat.* lib. xxxvii. c. 6., where there are some very curious details as to this stone.)

Mr. Mawe gives the following statement with respect to the precious opal, or opal *nobilis*: — "The colour of the opal is white or pearl grey, and when held between the eye and the light is pale red, or wine yellow, with a milky translucency. By reflected light it exhibits, as its position is varied, elegant and most beautiful iridescent colours, particularly emerald green, golden yellow, flame and fire red, violet, purple, and celestial blue, so beautifully blended, and so fascinating, as to captivate the admirer. When the colour is arranged in small spangles, it takes the name of the harlequin opal. Sometimes it exhibits only 1 of the above colours, and of these the most esteemed are the vivid emerald green and the orange yellow. When the stone possesses the latter of these colours, it is called the golden opal.

"The precious opal is not quite so hard as rock crystal: it is frequently full of flaws, which greatly contributes to its beauty, as the vivid iridescent colours which it displays are occasioned by the reflection and refraction of light, which is decomposed at these fissures. It is never cut in facets, but always hemispherical. It is generally small, rarely so large as an almond or hazel nut, though I have seen some specimens the size of a small walnut, for which several hundred pounds were demanded. At present, a pretty opal may be bought at from 1 to 3 or 5 guineas, sufficiently large for a pin or ring stone. It requires great care and judgment in the cutting, as it is fragile and easily spoiled.

"The opal, in all ages, has been highly esteemed: the history of the Roman senator, who preferred death rather than give up his opal ring to the Emperor Nero, is familiar to every one. Among the Eastern nations, the opal ranks higher than in Europe.

"A spurious substance is sometimes sold for black and green opal, and often set in jewellery; it occurs of the size of a small almond, but more commonly not larger than a lentil or pea. This *precious gem* is nothing more than the cartilage of the hinge of a large shell. Glass, and even scoria, having an iridescent appearance, have also often been sold for opal."— (*Treatise on Diamonds*, &c. 2d ed. pp. 123—125.)

OPIUM (Ger. *Mohnsaft*; Fr. *Opium*; It. *Oppio*; Sp. and Port. *Opio*; Lat. *Opium*; Arab. *Ufyoon*; Hind. *Ufeem*; Turk. *Madjoon*), the concrete juice of the white poppy (*Papaver somniferum*), which is most probably a native of Asia, though now found growing wild in the southern parts of Europe, and even in England. Opium is chiefly prepared in India, Turkey, and Persia; but the white poppy is extensively cultivated in France, and other parts of Europe, on account of its capsules, and of the useful bland oil obtained from its seeds. It has also been cultivated, and opium made, in England: but there is very little probability of its ever being raised here to any considerable extent.

The poppy is an annual plant, with a stalk rising to the height of 3 or 4 feet; its leaves resemble those of the lettuce, and its flower has the appearance of a tulip. When at its full growth, an incision is made in the top of the plant, from which there issues a white milky juice, which soon hardens, and is scraped off the plants, and wrought into cakes. In India, these are covered with the petals of the plant to prevent their sticking together, and in this situation are dried, and packed in chests lined with hides and covered with gunny, each containing 40 cakes, and weighing 2 maunds or 149⅛ lbs.; they are exported in this state to the places where the opium is consumed. Turkey opium is in flat pieces, covered with leaves, and the reddish capsules of some species of *rumex*; which is considered an indication of its goodness, as the inferior kinds have none of these capsules adhering to them.

According to Dr. A. T. Thomson, Turkey opium has a peculiar, strong, heavy, narcotic odour, and a bitter taste, accompanied by a sensation of acrid heat, or biting on the tongue and lips, if it be well chewed. Its colour when good is a reddish brown, or fawn colour; its texture compact and uniform. Its specific gravity is 1·336. When soft, it is tenacious; but when long exposed to the air, it becomes hard, breaks with a uniform shining fracture, is pulverulent, and affords a yellowish brown powder.

East Indian opium has a strong empyreumatic smell; but not much of the peculiar narcotic, heavy odour of the Turkey opium; the taste is more bitter, and equally nauseous, but it has less acrimony. It agrees with the Turkey opium in other sensible qualities, except that its colour is blacker, and its texture less plastic, although it is as tenacious. Good Turkey opium has been found to yield nearly 3 times the quantity of *morphia*, or of the peculiar principle of the drug, that is yielded by East Indian opium.

Opium is regarded as bad, when it is very soft, greasy, light, friable, of an intensely black colour, or mixed with many impurities. A weak or empyreumatic odour, a slightly bitter or acrid, or a sweetish taste, or the power of marking a brown or black continuous streak when drawn across paper, are all symptoms of inferior opium. — (*Dispensatory.*)

The raising of opium is a very hazardous business; the poppy being a delicate plant, peculiarly liable to injury from insects, wind, hail, or unseasonable rain. The produce seldom agrees with the true average, but commonly runs in extremes; while one cultivator is disappointed, another reaps immense gain: one season does not pay the labour of the culture; another, peculiarly fortunate, enriches all the cultivators. This circumstance is well suited to allure man, ever confident of good fortune. — (*Colebrooke's Husbandry of Bengal*, p. 119.)

In England, opium is little used, except as a medicine. During the 3 years ending with 1842, the quantity entered for home consumption amounted, at an average, to

44,683 lbs. a year. The principal part of our supply is brought from Turkey. Opium from the latter was worth, in the London market, in June 1843, from 8*s.* to 8*s.* 6*d.* per lb., duty (1*s.*) paid.

Consumption and Trade of Opium in China. — Opium is pretty extensively used, both as a masticatory and in smoking, in Turkey and India; but its great consumption is in China and the surrounding countries, where the habit of smoking it has become almost universal. The Chinese boil or seethe the crude opium; and by this process the impurities, resinous and gummy matter, are separated, and the remaining extract only is reserved for use. Thus prepared, the drug loses its ordinary strong and offensive aromatic odour, and has even a fragrant and agreeable perfume. A small ball of it, inserted in a large wooden pipe with some combustible matter, is lighted, and the amateur proceeds to inhale four or five whiffs, when he lies down and resigns himself to his dreams, which are said to have no inconsiderable resemblance to the sensations produced by inhaling the oxide of azote. Those who do not carry the indulgence to excess, do not, it is said, experience any bad effects from it.

Nine tenths of the supplies of opium for the consumption of China have always been derived from India, a comparatively small quantity only being derived from Turkey. The trade has always been contraband, the introduction of the drug having been prohibited by the Chinese government. Until about 1810 the trade had not attracted much attention, or become of any very great importance, but it has since been very greatly extended, and has been since 1828 of first-rate consequence. The trade was at first carried on at Whampoa, about 15 miles below Canton; next at Macao, whence it was driven by the exactions of the Portuguese; and thereafter in the bay of Lintin. Here the opium is kept on board ships, commonly called receiving ships, of which there are often 10 or 12 lying together at anchor. But latterly the trade has been carried on all along the south-east coast of China, by means of a species of fast sailing vessels called "clippers," built expressly for the trade and strongly armed. The sales are mostly effected by the English and American agents in Canton, who give orders for the delivery of the opium; which, on producing the order, is handed over to the Chinese smuggler, who comes alongside at night to receive it. Frequently, however, the smuggler purchases the opium on his own account, paying for it on the spot in silver; it being a rule of the trade, never departed from, to receive the money before the drug is delivered.

During the first 10 years of the present century, the exports of opium from India to China averaged about 2,500 chests, of 149½ lbs. each. But after the introduction of Malwa opium into the markets of Bombay and Calcutta, the exports began rapidly to increase. We subjoin

An Account of the Quantities and Prices (excluding Fractions) of the different Species of East India Opium, imported into China from the Seas in 1816-1817, down to Season 1837-1838, when the Trade was interrupted.

Seasons.	Patna and Benares.			Malwa.			Total.	
From April 1st to March 31st.	Number of Chests.	Price per Chest.	Value in Dollars.	Number of Chests.	Price per Chest.	Value in Dollars.	Number of Chests.	Value in Dollars.
1816-17	2,070	1,480	3,136,000	600	875	525,000	2,670	3,661,000
1817-18	2,350	1,365	3,206,250	1,150	675	776,250	3,500	3,982,500
1818-19	3,000	1,080	3,240,000	1,450	1,100	1,595,000	4,450	4,835,000
1819-20	2,020	1,235	2,495,200	1,650	1,175	1,938,750	3,670	4,433,950
1820-21	3,050	1,080	3,294,000	1,750	1,315	2,301,250	4,770	5,595,250
1821-22	3,010	2,025	6,095,250	1,518	1,545	2,345,310	4,528	8,440,560
1822-23	1,816	1,552	2,818,650	4,000	1,200	5,100,000	5,816	7,918,650
1823-24	2,910	1,940	5,645,400	4,178	495	3,879,210	7,088	8,815,610
1824-25	2,653	1,175	3,116,645	6,000	750	4,500,000	8,653	7,670,645
1825-26	2,414	915	3,441,255	6,177	750	4,866,450	9,091	7,907,705
1826-27	3,661	1,002	3,668,502	6,308	912	5,941,520	9,969	9,610,022
1827-28	5,154	998	5,142,155	4,191	1,204	5,099,980	9,345	10,142,075
1828-29	5,965	940	5,601,235	7,771	939	6,998,880	13,178	12,535,115
1829-30	7,143	860	6,143,227	6,857	864	5,907,580	14,000	12,052,135
1830-31	6,660	870	5,797,201	12,190	888	7,111,059	18,740	12,908,260
1831-32	5,672	967	5,484,560	8,331	995	8,147,355	13,903	13,631,695
1832-33	9,157	792	7,251,550	13,105	570	8,281,350	23,070	15,532,750
1833-34	8,672	639	5,541,845	11,114	629	7,510,695	19,786	13,056,510
1834-35	7,767	574	4,457,815	8,747	595	5,223,125	16,514	9,655,010
1835-36	6,123	696	4,262,000	10,619	580	6,159,055	16,783	10,530,855
1836-37	8,074	724	5,848,456	13,450	628	8,450,600	21,599	14,282,530
1837-38	6,165	653	4,063,125	15,875	563	8,980,938	30,049	10,885,157

Note. — The opium trade upon the coast of China east of Canton began to be of importance in the years 1834-35, since which it has rapidly increased, and bids fair to exceed that carried on at the Lintin station.

The imports of Turkish opium into China are believed to amount to about 1,000 chests. The East India Company did not engage in the opium trade, which has always been in the hands of individuals.

Confiscation of Opium in 1839. War with China. — We have already seen (see art CANTON) that opium has always been prohibited in China, and that consequently its importation has always been looked upon as a smuggling speculation. There would seem, however, to be good grounds for thinking that the prohibition of the importation of opium was all along intended to be more apparent than real. At all events, it is certain

that the trade grew gradually up, from a small beginning, to be one of great extent and value; and it is contradictory and absurd to suppose that this should have been the case, had it encountered any considerable opposition from the Chinese authorities. But the truth is, that these functionaries, instead of opposing the trade, or even merely conniving at it, were parties to its being openly carried on; and received certain regulated and large fees on all the opium that was imported. It has even been alleged that a part of these fees found its way into the Imperial treasury at Pekin, though that is more doubtful. The appetite for the drug increased with the increasing means of gratifying it; and there appeared to be no assignable limits to the quantity that might be disposed of in the empire.

The rapid extension of the trade seems at length to have drawn the attention of the court of Pekin to the subject. We doubt, however, notwithstanding what has been alleged to the contrary, whether a sense of the injurious consequences of the use of the drug had much to do in the matter. This, indeed, is a part of the subject as to which there exists a great deal of misapprehension; and we are well assured, that, provided it be not carried to excess, the use of opium is not more injurious than that of wine, brandy, or other stimulants. The alarm of the Chinese government was probably not so much about the health or morals of its subjects, as about their bullion! They are still haunted by the same visionary fears of being drained of a due supply of gold and silver, that formerly haunted the people of this country. The imports of opium having increased so rapidly as to be no longer balanced by the exports of tea and silk, sycee silver began also to be exported! The paternal government of Pekin might have tolerated what are called the demoralising effects of opium with stoical indifference, but the exportation of silver was not a thing to be endured. It is, however, only fair to state, that the Chinese statesmen are not all of the school of Mun and Gee; and that some of them appear to have taken an enlightened view of the question, and to have emancipated themselves from the prejudices that still influence the majority of their colleagues. The statesmen in question contended, that whether the use of the drug were injurious or not, the taste for it was too deeply seated and too widely diffused to admit of its effectual prohibition; and they, therefore, proposed that its importation should be legalised, subjecting it, at the same time, to a heavy duty. There cannot be a doubt that this was the proper mode of dealing with the subject. In the end, however, the government of Pekin, influenced by unfounded theories, as to the mischievous effect of the export of the precious metals, came to a different conclusion, and resolved to put a stop to the traffic.

No sooner had this resolution been adopted, than a most extraordinary change appears to have taken place in the conduct of the Chinese authorities; and their usual caution seems to have wholly deserted them. They now became as precipitate and violent as they had previously been slow and circumspect; and resolved at all hazards to attempt forcibly to put down the trade. To accomplish this, all foreigners were, in March, 1839, prohibited from leaving Canton; and compulsory measures were at the same time resorted to for compelling them to deliver up the opium in their possession.

How the affair might have ended, had our countrymen at Canton been left to the exercise of their own judgment in this crisis, it is impossible to say; but we have been assured by those on whose statements we are disposed to rely, that they would most probably have succeeded in getting out of it with comparatively little loss. Instead, however, of acting for themselves, they had to act in obedience to the orders of Mr. Elliot, chief superintendent of the British trade in Canton; and he, while under constraint, occasioned by confinement to the factory, commanded all the opium belonging to British subjects to be given up to him for delivery to the Chinese authorities; declaring, at the same time, that "failing the surrender of the said opium," the British government should be free "of all measure of responsibility or liability in respect of British-owned opium."

We do not presume to offer any opinion as to the necessity or policy of this proceeding on the part of the superintendent; but, in consequence thereof, and of the unjustifiable proceedings of the Chinese, above 20,000 chests of opium were delivered up to Mr. Elliot by British subjects, and by him to the Chinese authorities; and the latter, not satisfied with the possession of the opium, which it was their duty to have placed in a state of security till the matters with respect to it should be arranged, immediately proceeded to destroy it! Having succeeded thus far, the Chinese next insisted that the foreign merchants should subscribe a bond, pledging themselves not to import opium into any part of China; or that, if they did, they were to be justly liable to the penalty of *death*. But this condition being refused, and no arrangement having been come to, Mr. Elliot suspended the trade on the 22d of May. Our readers do not require to be told that a war with China grew out of these extraordinary proceedings, which terminated in the treaty already laid before the reader. —(See *antè*, art. CANTON.) Perhaps, however, we may be allowed, before dismissing this subject, to make a few

observations on the grounds on which we undertook this contest, which seem to have been a good deal misunderstood.

That the Chinese have the same right to exclude opium from their empire, that we have to prohibit the importation of beef, or ammunition, or to lay a duty on corn, does not admit of any question. But in endeavouring to suppress a trade that had been carried on under the sanction of the authorities at Canton, all of whom had largely participated in its profits, justice required that notice should have been given to the parties concerned of the intentions of government. It is necessary to bear in mind that the Chinese were in the habit of frequently issuing proclamations against the importation of opium; but as no attempt was ever made to give any real effect to these proclamations, the parties engaged in the trade were naturally led to conclude that such would always be the case. Hence the necessity for a distinct intimation being made, that the laws against the importation of opium were, in future, to be *bonâ fide* and truly carried into effect, and for fixing some period after which all parties found engaged in the trade would be subject to certain penalties. No valid objection could have been made to such a course of proceeding. The Chinese are clearly entitled to prohibit the importation of opium; but neither the Chinese nor any other nation are entitled, after having, by a long connivance at and participation in the trade, induced foreigners to import a large amount of valuable property into their territories, to pounce upon and seize such property on pretence of its being contraband! The Chinese are a remarkably clever people; and it is impossible that they should not see that, in this instance, their government was guilty of gross injustice; and that it consequently rendered itself liable for the value of the property it so unwarrantably seized upon and destroyed.

Suppose the British parliament had, in 1796, passed an act prohibiting the importation of tea; and suppose, farther, that the collector of customs and other authorities in Liverpool had paid no attention whatever to this act, but that, from 1796 down to the present day, they had openly countenanced the trade; that it had rapidly increased; and that every year scores of Chinese ships laden with tea had arrived in the Mersey, safely unloaded their cargoes, and sailed either with silver or other British produce on board: what, under these circumstances, would the Chinese have said, had the British government suddenly turned round and declared, "You are engaged in an illegal trade;" and, without farther intimation, have proceeded to seize and destroy all the tea belonging to them in England? Would not the Chinese, the Russians, French, and, in short, the whole world, have declared such an act to be flagrantly unjust? And would not every honest man in England have said that the Chinese had been swindled; and that the government of China did not deserve to be treated with ordinary respect, if it did not endeavour to procure redress for its subjects.

Now, this is precisely the case of England against the Chinese. The morality or immorality of the opium trade is wholly beside the question. Though the use of opium were ten times more injurious than has ever been represented, that would not alter the fact that the trade in it had been openly countenanced by the Chinese authorities for a period of more than forty years; and such being the case, foreigners were certainly entitled to infer that that countenance would not suddenly be withdrawn; and that, at all events, their property would be respected. This, in fact, is not a question about which there is any real room for doubt or difference of opinion. The conduct of the Chinese was most unwarrantable; and the government of this country had not only a well-founded claim for redress, but was called upon to enforce it by a just regard for the national honour and the interests of the British subjects, whose rights had been so outrageously violated at Canton.

But we may farther observe, in reference to this matter, that though it be laid down by all writers on public law, that it depends wholly on the will of a nation to carry on commerce with another, or not to carry it on, and to regulate the manner in which it shall be carried on (*Vattel*, book i. § 8.), we incline to think that this rule must be interpreted as applying only to such commercial states as recognise the general principles of public or international law. If a state possessed of a rich and extensive territory, and abounding with products suited for the use and accommodation of the people of other countries, insulates itself by its institutions, and adopts a system of policy that is plainly inconsistent with the interests of every other nation, it appears to us that such nation may be justly compelled to adopt a course of policy more consistent with the general well-being of mankind. No doubt, the right of interference, in cases of this sort, is one that should be exercised with extreme caution, and requires strong grounds for its vindication. But that this right does exist, seems sufficiently clear. We admit that a slight degree of inconvenience, experienced from one nation refusing to enter into commercial transactions with another, or from its insisting that these transactions should be carried on in a troublesome and vexatious manner, would not warrant any interference with its internal affairs: but this, like all other questions of the same kind,

is one of degree. Should the inconvenience resulting from such anti-social vexatious conduct become very oppressive on others, the parties so oppressed would have as good a right to interfere to enforce a change of conduct, as if the state that has adopted this anti-social offensive policy had openly attacked their territory or their citizens. A state has a *perfect* right to enact such rules and regulations for its internal government and the conduct of its trade as it pleases, provided they do not exercise any very injurious influence over others. But should such be the case — should the domestic or commercial policy of any particular state involve principles or regulations that trench on the rights or seriously injure the interests of other parties, none can doubt that these others have a right to complain; and, if the injury be of a grave character, and redress be not obtained on complaint being made, — no reasonable doubt can be entertained that the aggrieved party is justified in resorting to force.

These principles appear to apply with peculiar force in the case of China. Tea, a peculiar product of that country, has become a necessary of life in England; and no one can doubt that a most serious injury would be inflicted on the people of Britain, were any considerable impediment thrown in the way of its importation; and as the arbitrary policy of the Chinese government, which is not influenced by the maxims, and is regardless of the forms, that prevail among civilised states, has on various occasions interrupted this trade, and constantly exposes it to great dangers, it certainly appears that this was a case for forcible intervention — *dignus vindice nodus*, — and that we were entitled to demand that the trade should be placed on a solid footing, that the import and export duties should be rendered intelligible and moderate, and that an end should be put to the extortion and interference of the Chinese authorities.

Indemnity for the Opium destroyed in China. — The question as to the amount of the compensation that should be awarded to the parties who delivered up the opium to the superintendent in China, has since attracted considerable attention. The merchants contended that they were entitled to its cost, or to the price at which it had been invoiced to them, or to above 2,300,000*l*. It is, however, admitted on all hands that the price of opium is exceedingly fluctuating, and that it is influenced in a very high degree by variations in the facilities for smuggling into China. And it was contended by government, that such were the obstacles thrown in the way of its clandestine importation when the delivery was made in 1839, that the price of opium had fallen to less than half its invoice cost, and that supposing the merchants had retained it, they must necessarily have sustained a very heavy loss. Having taken this view of the matter, government proposed that indemnity should be made at the rate of 6*l*. per chest (1,250,000*l*. in all), being (though little more than half the sum claimed) considerably above the current price of opium in Canton previously to its being delivered up. As might have been expected, this decision was much found fault with. On the whole, however, we think it eminently fair and reasonable. No one doubts, though not a pound of the opium had been delivered up to Captain Elliot, that its owners must, in consequence of the increased difficulties in the way of its sale, have lost heavily; and, under the circumstances, we see no ground for contending that government was bound, because their agent had interfered, to place the merchants in a better position than they would have been in, but for that interference. All that they could justly require was, that it should not be permitted to injure them.

Cultivation of Opium in India. Monopoly. — The cultivation of opium in India is a government monopoly, and is confined to the provinces of Bahar * and Benares, and Malwa in Central India. Every one within the prescribed limits may engage in the opium cultivation; but the drug, when prepared, must all be sold at a fixed price to the Company's agents. The price is very far below the price at which it is afterwards sold for exportation; and the circumstance of its being fixed and inadequate deprives the cultivator of most part of the favourable chances in the lottery previously alluded to by Mr. Colebrooke. Indeed, Mr. C. distinctly tells us (*Husb. Bengal*, p. 118.) that, except in a few situations that are peculiarly favourable, its cultivation is unprofitable. The peasants engage in it with reluctance; and are tempted only by the immediate advances the government agents are obliged to make to enable them to carry on the business.

The monopoly has sometimes produced a nett revenue of about 1,000,000*l*. a year. Latterly, however, this revenue has been materially diminished. This has been occasioned, partly by the conquest of Malwa, and the impossibility of extending the same sort of monopoly into that province that was established in Bahar and Benares, and partly to the introduction of Turkey opium into the Chinese market by the Americans.

The system under which the Indian opium trade has been conducted, has been the theme of much eulogy, and has been supposed to afford the only example of an *unexceptionable monopoly!* By confining the cultivation of the plant to particular districts, and taking care that the whole produce raised in them shall be exported, we prevent, it is said, the use of this deleterious drug from gaining ground in India, while the high price at which it is sold produces a large revenue to the Company's treasury. It is affirmed, too, that even the interests of the Chinese are consulted by the system; that they obtain the drug in a state of purity, which would otherwise be adulterated; and that the high price they are obliged to pay for it merely acts as a wholesome restraint on their vicious propensity to indulge in what is so very injurious. We doubt, however, whether there be much foundation for these eulogies. There can be no question that opium is a very excellent subject for taxation; and the higher the duty can be raised on it, without encouraging smuggling, the better. It is not, however, so clear that the monopoly system is the best way of accomplishing this; and, though the system had been originally a good one, it is no longer possible to

* The opium of Bahar is known in commerce by the name of Patna opium.

enforce it. To imagine, indeed, that the illicit cultivation of, and traffic in, opium can be prevented, now that it is raised in most parts of the extensive country of Malwa, is altogether ludicrous. As to the supposed influence of the monopoly in insuring the purity of the drug, it is sufficient to observe, that Malwa opium, which is produced under a comparatively free system, has been rapidly improving in its quality, and now very often fetches a higher price than the opium of Bahar and Benares, where the strictest surveillance is kept up. The latter, indeed, has sometimes been nearly unsaleable, from the careless way in which it has been prepared, and the extent to which it was adulterated. — (*Crawfurd on the Monopoly of the East India Company*, p. 55.) It is needless, however, to say more on this point, than that Turkish opium maintains, in respect of purity and careful preparation, a decidedly higher reputation than any produced in India. — (*Thomson's Dispensatory*.)

We doubt, too, whether the use of opium, when taken in moderate quantities, be really so injurious as has been represented. That it may, like spirits and wine, be abused, is abundantly certain; but it has not been shown that it is more liable to abuse than either of these articles. No one doubts that the Chinese, by whom it is principally consumed, are a highly industrious, sober, frugal people; but though it were otherwise, we really do not see that the East India Company are warranted in subjecting a profitable article of cultivation in India to the fetters of monopoly, that the morals of the Chinese may be preserved. It is unnecessary, however, to dwell upon this view of the matter. The Turks and Americans have no scruples of this sort; and the only effect of the Company's attempting to force up the price of opium to an extravagant height, would be to throw a still greater proportion of the trade into the hands of their active competitors, to the great injury of the Indian cultivators.

Neither must the interests of the cultivators in India be lost sight of, who are materially injured by the existing system. Even were it in other respects proper, their allowances are far too small.

Upon the whole, therefore, we do not see any solid grounds for supposing that this monopoly forms an exception to the common rule; and we agree with those who think that the better way would be to establish the same system, as to the trade in opium, that is established with respect to the spirit trade in this country; that is, to allow every one to cultivate it upon taking out a licence, and to lay an excise duty on the prepared article. Such a plan would put an end to some most oppressive regulations; and while it would open a new source of wealth to the cultivators, the revenue derived by government would be materially augmented.

Besides the works previously referred to, we have consulted, in compiling this article, *Ainslie's Mat. Indica*; *Milburn's Orient. Com.*; *Bell's Review of the Commerce of Bengal*; *Evidence on East Indian Affairs, before the Parliamentary Committee*, in 1830 and 1831, &c. &c.

OPOBALSAM. See BALSAM.

OPOPONAX (Ger. *Opopanax*; Fr. *Opopanax*; It. *Opoponasso*, Sp. *Opopanaca*; Arab. *Jawesheer*), a gum-resin obtained from the *Pastinaca Opopanax*, a species of parsnep. It is a native of the south of Europe, and Asia Minor. The stem rises to the height of 4 or 5 feet, with a thick branched yellow-coloured root. The roots being wounded, a milky juice flows from them, which, being dried in the sun, is the opoponax of the shops. It is in lumps of a reddish yellow colour, and white within. Smell peculiar. Taste bitter and acrid. Specific gravity 1·022. It is imported from Turkey. Being used only to a small extent in medicine, the consumption is inconsiderable. — (*Thomson's Chemistry*; *Ainslie's Mat. Indica*.)

OPORTO, or PORTO, a large city and sea-port of Portugal, on the north bank of the Douro, about 2 miles from its mouth, lat. 41° 10′ 30″ N., lon. 8° 37′ 18″ W. It is a beautifully situated, well-built city; and is supposed to contain, including the suburbs of Villanova and Gaya, on the opposite bank of the river, about, 80,000 inhabitants.

Harbour. — The harbour of Oporto is a bar harbour, and can only be entered, at least by vessels of considerable burden, at high water, and it is seldom at any time practicable for vessels drawing more than 16 feet. On the north side of the entrance is the castle of St. Joao de Foz, whence a ledge of rocks, some of which are at all times above water, extends in a south-west direction. The outermost of these rocks, named Filgueira, which is always visible, is left on the left or larboard side on entering. Cabedelo Point, forming the southern extremity of the entrance, is low and sandy. The bar being liable, from the action of the tides, and of sudden swellings or *freshes* in the river, to perpetual alterations, it is exceedingly dangerous for any vessel to attempt crossing it without a pilot. Pilots are always on the alert, and ready to offer their services when a vessel comes in sight, unless the weather be so bad that they cannot go off. On some few occasions of this sort, vessels have been detained for 3 weeks off the port, without having an opportunity of entering. The chapel of St. Catherine in a line with that of St. Michal leads over the bar. The ordinary rise of spring tides is from 10 to 12 feet, and of neaps from 6 to 8 feet. A light-house with a fixed light is erected on a hill about 740 yards N.N.W. of St. Joao de Foz.

The swellings of the river, or *freshes*, as they are called, most commonly occur in spring, and are caused by heavy rains, and by the melting of the snow on the mountains. The rise of water at such times is frequently as much as 40 feet; and the rapidity and force of the current are so very great, that no dependence can be placed on anchors in the stream. Fortunately a *fresh* never occurs without previous warning; and it is then the practice to moor with a cable made fast to trees, or stone pillars erected on the shore for that purpose. — (For further information as to the harbour of Oporto, see *Purday's Sailing Directions for the Bay of Biscay*.)

Trade. — Oporto is the emporium of a large portion of the kingdom of Portugal, and enjoys a pretty considerable foreign commerce. The well known red wine, denominated Port, from its being exclusively shipped at this city, forms by far the largest article of export. The exports vary in different years, from about 26,000 to near 40,000 pipes. England is much the largest consumer of port. The high discriminating duties on French wine originally introduced port into the British markets, and gave it a preference to which, though an excellent wine, it had no just title: this preference first generated, and its long continuance has since so confirmed, the taste for port among the great bulk of the population, that it bids fair to maintain its ascendancy as an after-dinner wine, notwithstanding the equalisation of the duties. At an average of the 8 years ending with 1841, there were shipped from Oporto for England 26,370 pipes a year. Next to England, Brazil, Russia, and the north of Europe are the principal consumers of port; but it appears, from the subjoined account, that the

total exports to them do not amount to a fourth part of those to England. The other exports are oil, oranges and other fruits, wool, refined sugar, cream of tartar, shumac, leather, cork, &c. The imports are corn, rice, beef, salt fish, and other articles of provision; sugar, coffee, &c. from Brazil; cotton and woollen goods, hardware, tin plates, &c. from England; hemp, flax, and deals, from the Baltic, &c.

Besides the British manufactured goods imported into Portugal for the use of the natives, a considerable quantity is destined for the consumption of Spain; being smuggled into that country through Braganza and other towns on the frontier.

Moneys, Weights, and *Measures* same as those of Lisbon; which see

We subjoin —

An Account of the Wine shipped from Oporto during the 8 Years ending with 1841, specifying the Quantities shipped for the U. Kingdom, and for all other Parts.

	To the U. Kingdom.	To all other Parts.	Total.
1834	28,208 pipes.	3,150 pipes.	31,358 pipes.
1835	32,535	5,933	38,468
1836	30,206	3,079	33,285
1837	21,110	4,672	25,782
1838	26,057	11,918	37,975
1839	26,159	7,046	33,205
1840	25,678	7,512	33,190
1841	21,011	5,344	26,355
	210,964	48,654	259,618
Average of 8 years	26,370	6,081	32,452

The comparatively large amount of shipments in 1834, 1835, and 1836, is explained by the fact of the siege of Oporto having continued during the greater part of the two previous years; the obstruction to exportation which it occasioned, by reducing the stocks in this and other countries below their usual level, having necessarily led to a proportional increase of shipments in the two or three following years. The decreased export in 1841 (and the almost total cessation of exportation in 1842) is to be ascribed to the protracted negotiations with Portugal on the subject of a commercial treaty, and to the disinclination of the merchants to import, and of the consumers to order, any considerable quantity of wine, when it was supposed the duties were to be immediately reduced. It is estimated that a vintage in the Upper Douro produces at an average about 70,000 pipes, of which above 32,000 are usually exported, while 30,000 of an inferior sort are consumed in the neighbourhood of Oporto, and the remainder, which is still inferior to the second description, is distilled for brandy.

It is hardly possible to form any estimate of the value of the wine shipped from Oporto; the price varying from 5*l.* to 50*l.* per hogshead. The export duty on wine approved for exportation (*vinho d'embarque*), is about 6 ½ 500 *rs.* per pipe, or, at the present (July, 1843) rate of exchange, 1*l.* 9*s.* a pipe. Separated wine (*vinho separado*) is not generally allowed to be exported; but at present it may be shipped on paying 18 ½ 500 *rs.* more, or 5*l.* 9*s.* 2*d.* a pipe. The other expenses are trifling. Freight to this country varies from 1*l.* to 1*l.* 11*s.* 6*d.* per pipe. — For an account of the Oporto Wine Company, see WINE.)

Sometimes wine is purchased from the farmer in the wine country. In this case, the casks are sent about 60 miles up the river, in boats, to be filled. Owing to the miserable state of the roads, the expense of carriage is very considerable; the cartage from and to the river side frequently costing from 1*l.* to 2*l.* per pipe. The freight from the upper country down the river to Oporto is about equal to that from the latter to England. There is also an internal duty of about 1*l.* 2*s.* per pipe on all wine brought down the river. Inasmuch, however, as these charges are perpetually varying, it is not possible to lay before the reader any *pro formâ* account of the cost of wine bought in the Upper Douro.

The Oporto Wine Company have the monopoly of the brandy as well as of the wine trade of the Douro. — (*Private information.*)

ORANGES (Ger. *Pomeranzen*; Du. *Orangen*; Fr. *Oranges*; It. *Melarance*; Sp. *Naranjas*; Rus. *Pomerancžii*; Hind. *Narunge*; Malay, *Simao-manis*), the fruit of the orange tree. The common, or sweet orange (*Citrus sinensis*, or *Citrus nobilis*), and the Seville, or bitter orange (*Citrus aurantium*), are natives of China: and the Portuguese are entitled to the honour of having transferred the plant to other countries. Particular species of *Citrus* seem to be indigenous to various Eastern countries; but the birth-place of the proper orange may be distinctly traced to China. It is now to be found in our green-houses. Oranges are imported in chests and boxes, packed separately in paper. The best come from the Azores and Spain; very good ones are also brought from Portugal, Italy, Malta, and other places.

The orange trade carried on by this country is of considerable value and importance. Oranges are not much more expensive than most of our superior domestic fruits, while they are, perhaps, the most refreshing and wholesome of those of warmer climates. The entries for home consumption amounted, at an average of the 3 years ending with 1842, to 334,070 boxes a year; and assuming each box to contain 650 oranges and lemons, the number annually entered for consumption will have been 217,145,500, exclusive of 26,863 entered by number, and 7,013*l.* worth entered at value! The duty produced, at an average of the above years, 70,833*l.* a year. The number of persons employed in the importation and sale of oranges must be very considerable. The policy of charging any duty on oranges seems questionable. They are very apt to spoil; and as no abatement is made from the duty on account of any damage, its influence on their price is much more considerable than might at first be supposed.

ORCHILLA WEED, ORCHELLA, OR ARCHIL (Ger *Orseille*; Fr. *Orseille*; It. *Oricello, Orcella*; Sp. *Orchilla*), a whitish lichen (*Lichen orcella*) found in the Isle of Portland; but that which is used is imported from the Canary and Cape de Verd Islands, Madeira, Barbary, and the Levant. From it is obtained the archil, or orchal, of commerce, which yields a rich purple tincture, fugitive, indeed, but extremely beautiful. The preparation of orchilla was long a secret, known only to the Florentines and Hollanders; but it is now extensively manufactured in this country. Orchil is generally sold in the form of cakes, but sometimes in that of moist pulp; it is extensively used by dyers; and in times of scarcity the weed or lichen has sold as high as 1,000*l.* per ton! — (*Thomson's Dispensatory.*) At present (July 1843) Madeira orchilla fetches, in

the London market, 75*l.* a ton; but orchilla from the Canary Islands fetches a higher, and that from Barbary a much lower price. The entries for consumption amounted, at an average of the 3 years ending with 1842, to 6,050 cwt. 3 qrs. 10 lbs. The duty, which had been 3*s.* a cwt., was reduced in 1842 to 1*s.* a cwt.

ORGOL. See ARGOL.

ORPIMENT (Ger. *Operment*; Fr. *Orpiment*; It. *Orpimento*; Sp. *Oropimente*; Lat. *Auripigmentum*), the name usually given to sulphuret of arsenic. When artificially prepared, it is in the form of a fine yellow-coloured powder; but it is found native in many parts of the world, particularly in Bohemia, Turkey, China, and Ava. It is exported from the last two in considerable quantities; and is known in the East by the name of hartal. Native orpiment is composed of thin plates of a lively gold colour, intermixed with pieces of a vermilion red, of a shattery foliaceous texture, flexible, soft to the touch like talc, and sparkling when broken. Specific gravity 3·45. The inferior kinds are of a dead yellow, inclining to green, and want the bright appearance of the best specimens. Its principal use is as a colouring drug among painters, bookbinders, &c. — (*Thomson's Chemistry*; *Milburn's Orient. Com.*)

ORSEDEW, ORSIDUE, MANHEIM OR DUTCH GOLD (Ger. *Flittergold*; Du. *Klatergoud*; Fr. *Oripeau, Oliquant*; It. *Orpello*; Sp. *Oropel*), an inferior sort of gold leaf, prepared of copper and zinc. It is sometimes called *leaf* brass. It is principally manufactured in Manheim.

OSTRICH FEATHERS. See FEATHERS.

OWNERS OF SHIPS. Property in ships is acquired, like other personal property, by fabricating them, or by inheritance, purchase, &c.

No ship is entitled to any of the privileges of a British ship until she be duly registered as such, and all the provisions in the Registry Act (3 & 4 Will. 4. c. 55.) be complied with. — (See REGISTRY.)

A British ship may belong either to one individual, or to several individuals. It is ordered by the act just cited, that the property of every vessel of which there are more owners than one, shall be divided into 64th shares; and that no person shall be entitled to be registered as an owner who does not, at least, hold one 64th share. It is further provided by the same statute, that not more than *thirty-two* persons shall be owners of any one ship at any one time. Companies or associations holding property in ships, may choose *three* of their members to act as trustees for them.

Neither the property of an entire ship, nor any share or shares in such ship, can be transferred from one individual to another, except by bill of sale or other instrument in writing; and before the sale is valid, such bill or instrument must be produced to the collector and comptroller, who are to enter the names, residences, &c. of the seller and buyer, the number of shares sold, &c. in the book of registry of such vessel, and to indorse the particulars on the certificate of registry. — (See the clause in the statute, art. REGISTRY.)

But, though compliance with the directions in the statute accomplishes a complete transference of the property, when the transaction is not in its nature illegal, it gives no sort of security to a transference that is otherwise bad. The purchaser should in all cases endeavour to get *possession* of the ship, or of his share in her, as soon as his title to her or it is acquired, by the registration of the particulars of the bill of sale; for though all the formalities of sale have been completed, yet, if the sellers continue as apparent owners in possession of the ship, their creditors may, in the event of their becoming bankrupt, acquire a right to it, to the exclusion of the purchasers. In the case of a sale or agreement for a part only, it is enough if, the sale being completed, the seller ceases to act as a part owner. — (*Lord Tenterden on the Law of Shipping*, part i. c. 1.)

Property in ships is sometimes acquired by capture. During war, his Majesty's ships, and private ships having letters of marque, are entitled to make prizes. But before the captors acquire a legal title to such prizes, it is necessary that they should be condemned in the admiralty or other court constituted for that purpose. When this is done, the captors are considered to be in the same situation, with respect to them, as if they had built or purchased them.

The act 3 & 4 Will. 4. c. 55. has ruled, that no person having the transfer of a ship, or a share of a ship, made over to him as a security for a debt, shall be deemed an owner, or part owner, of such ship. And when such transfer has been duly registered according to the provisions of the act, the right and interest of the mortgagee are not to be affected by the bankruptcy of the mortgagor, though he be the reputed owner, or part owner, of such ship. — (See REGISTRY.)

In the article MASTERS OF SHIPS is given an account of the liabilities incurred by the owners of ships for the acts of the master. But it has been attempted to encourage navigation by limiting the responsibility of the owners, without, however, depriving the freighter of a ship of an adequate security for the faithful performance of the contract. To effect this desirable object, it has been enacted, that the owner or owners

shall not be liable to make good any loss or damage happening *without their fault or privity*, to any goods put on board any ship or vessel belonging to such owner or owners, further than the value of such ship or vessel, with all its appurtenances, and the freight due, or growing due, during the voyage that may be in prosecution, or contracted for, at the time when the loss or damage has taken place. — (*53 Geo.* 3. c. 159.)

This limitation was first introduced into our law by the 7 Geo. 2. c. 15. But it had previously been adopted in the law of Holland, and in the justly celebrated French Ordinance of 1681. In the Ordinance of Rotterdam, issued in 1721, it is expressly declared, that "the owners shall not be answerable for any act of the master, done without their order, any further than their part of the ship amounts to." Independently, however, of this general agreement, the expediency of the limitation appears, for the reasons already stated, sufficiently obvious.

It was also enacted in 1786 (26 Geo. 3. c. 60.), that neither the master nor owners of any ship or vessel shall be liable to answer for or make good any gold or silver, diamonds, watches, jewels, or precious stones, lost or embezzled during the course of the voyage, unless the shipper thereof insert in his bill of lading, or declare in writing to the master or owners, the true nature, quality, and value of such articles.

The responsibility, at common law, of a *master* or *mariner* is not affected by the first-mentioned limitation, even though such master or mariner be owner or part owner of the vessel; neither does the limitation extend to the owner or owners of any lighter, barge, boat, &c. used solely in rivers or inland navigation, nor to any ship or vessel not duly registered according to law.

When several freighters sustain losses exceeding in the whole the value of the ship and freight, they are to receive compensation thereout in proportion to their respective losses: and any one freighter, on behalf of himself and the other freighters, or any part owner, on behalf of himself and the other part owners, may file a bill in a court of equity for the discovery of the total amount of the losses, and of the value of the ship, and for an equal distribution and payment. If the bill be filed by or on behalf of the part owners, the plaintiff must make affidavit that he does not collude with the defendants, and must offer to pay the value of the ship and freight, as the court shall direct.

It is usual in most countries, where the part owners of a ship disagree as to her employment, to give those possessed of the greater number of shares power to bind the whole. But in this country, while the majority of the owners in value have authority to employ the ship as they please, the interests of the minority are secured from being prejudiced by having their property engaged in an adventure of which they disapprove. For this purpose the Court of Admiralty has been in the practice of taking a stipulation from those who desire to send the ship on a voyage, in a sum equal to the value of the shares of those who object to it, either to bring back and restore to them the ship, or to pay them the value of their shares. When this is done, the dissentient part owners bear no portion of the expenses of the outfit, and are not entitled to a share in the profits of the voyage; the ship sails wholly at the charge and risk, and for the profit, of the others. — (*Abbott*, part i. c. 3.)

For the statutory enactments as to the sale and transfer of ships, see REGISTRY.

OYSTER, OYSTERS (Ger. *Austern*; Fr. *Huitres*; It. *Ostriche*; Sp. *Ostras*; Lat. *Ostreæ*). This well known shell-fish is very generally diffused, and is particularly plentiful on the British coasts, which were ransacked for the supply of ancient Rome with oysters. They differ in quality according to the different nature of the soil or bed. They are particularly abundant in the rivers and creeks of Essex and Kent; in Poole harbour, and elsewhere on the coast of Hants and Dorset; at Porth Einion, in Glamorgan, &c. They are also very abundant on the Mersey shores. Those found at Carlingford, in Ireland, are of a peculiarly delicate flavour. The breeding and fattening of oysters for the London market forms a considerable branch of business. It is principally carried on in Essex and Kent; the rivers Crouch, Blackwater, and Colne being the chief breeding-places in the former, and the channel of the Swale, contiguous to Milton, in the latter. The oysters found in them are not, however, brought immediately to town; but are deposited for a while in beds or layings in the adjoining creeks, where they are fed and fattened for the market. Exclusive of the oysters bred in Essex and Kent, vast numbers brought from Jersey, Poole, and other places along the coast, are fattened in the beds. The export of oysters from Jersey is very considerable, having amounted, at an average of the 4 years ending with 1832, to 208,023 bushels a year, of which a large portion comes to London. The Jersey fishery employs, during the season, about 1,500 men, 1000 women and children, and 250 boats.—(*Inglis's Channel Islands*, p. 142. 2nd ed.) The consumption of oysters in London is immense, being, notwithstanding their high price, largely consumed by the middle and lower classes.

The imports of oysters are very various, sometimes amounting to several thousand bushels a year; but in the majority of years none are imported.

The stealing of oysters, or oyster brood, from any oyster bed, laying, or fishery, is larceny, and the offender, being convicted thereof, shall be punished accordingly; and if any person shall unlawfully and wilfully use any dredge, net, &c. for the purpose of taking oysters, or oyster brood, within the limits of any oyster bed or fishery, every such person shall be deemed guilty of a misdemeanour, and, upon being convicted thereof, shall be punished by fine or imprisonment, or both, as the court may award; such fine not to exceed 20*l.*, and such imprisonment not to exceed 3 calendar months. It is provided, that nothing in the act shall be construed as preventing any one from catching *floating fish* within the limits of any oyster fishery, with any net, instrument, or engine adapted to the catching of such fish. — (7 & 8 *Geo.* 4. c. 29. § 36.)

P.

PACKAGE, SCAVAGE, BAILLAGE, AND PORTAGE, were duties charged in the port of London, on the goods imported and exported by aliens, or by denizens being the sons of aliens.

During the dark ages, it was usual to lay higher duties upon the goods imported or exported by aliens, whether in British or foreign ships, than were laid on similar goods when imported or exported by natives. But according as sounder and more enlarged principles prevailed, this illiberal distinction was gradually modified, and was at length wholly abolished, in so far at least as it was of a public character, by the 24 Geo. 3. c. 16. This act, after reciting that "the several duties and restrictions imposed by various acts of parliament upon merchandise are, by the alterations of the trade now carried on between this kingdom and foreign states, in some cases become an unnecessary burden upon commerce, without producing any real advantage to the public revenue, and that it is expedient they should no longer continue," enacts, that the duty commonly called "the petty customs," imposed by the 12 Car. 2., and all other additional duties imposed by any act upon the goods of aliens above those payable by natural-born subjects, should be no longer payable. The act then goes on to provide, that nothing contained in it shall "alter the duties due and payable upon goods imported into or exported from this kingdom in any *foreign* ship, nor the duties of *package* and *scavage*, or any duties granted by charter to the city of London;" and then follow provisions to prevent the city being defrauded of such duties by false entries of aliens' goods in the name of a British subject. — (*Chitty's Commercial Law*, vol. i. p. 160.)

The duties thus preserved to the city were not very heavy; but the principle on which they were imposed was exceedingly objectionable, and their collection was attended with a great deal of trouble and inconvenience. Not being levied in other places, they operated to the prejudice of the trade of the metropolis. For these reasons, we observed, in the first edition of this work, that "if the funds of the corporation will not admit of their following the liberal example of the legislature, by voluntarily abandoning this vexatious impost, it would be good policy to give them a compensation for relinquishing it." And we are glad to have to state that this suggestion has since been carried into effect. The act 3 & 4 Will. 4. c. 66. authorised the Lords of the Treasury to purchase up the duties in question from the city. This was done, at an expense of about 140,000*l.*, and the duties were abolished. There is a Table of the duties in the first edition of this work.

PACKETS. See NEW YORK, PASSENGERS, and POST-OFFICE.

PALERMO (anciently PANORMUS), a large city and sea-port, the capital of the noble island of Sicily, on the north coast of which it is situated, the light-house being in lat. 38° 8′ 15″ N., lon. 13° 21′ 56″ E. Population, 170,000.

The bay of Palermo is about 5 miles in depth, the city being situated on its south-west shore. A fine mole, fully ¼ of a mile in length, having a light-house and battery at its extremity, projects in a southerly direction from the arsenal into 9 or 10 fathoms water, forming a convenient port, capable of containing a great number of vessels. This immense work cost about 1,000,000*l.* sterling in its construction; but the light-house, though a splendid structure, is said to be very ill lighted. There is an inner port, which is reserved for the use of the arsenal. Ships that do not mean to go within the mole may anchor about ¼ a mile from it, in from 16 to 23 fathoms, the mole light bearing N.W. ¼ W. A heavy sea sometimes rolls into the bay, but no danger need be apprehended by ships properly found in anchors and chain cables. In going into the bay, it is necessary to keep clear of the nets of the tunny fishery, for these are so strong and well moored, as to be capable of arresting a ship under sail. — *Smyth's Sicily*, p. 70. and *Appen.* (*C.*)

Money. — Since 1818, the coins of Sicily have been the same as those of Naples, their names only differing. — (See NAPLES.) The ducat, = 3*s.* 5½*d.* sterling, is subdivided into 100 *bajocchi* and 10 *piccioli*; but accounts are still generally kept in *oncie*, *tari*, and *grani*: 20 grani = 1 tarì; 30 tari = 1 oncia. The oncia = 3 ducats; and 1 carlino of Naples = 1 taro of Sicily. The Spanish dollar is current at 12 tari 8 grani.

Weights. — These are the *cantaro grosso*, subdivided into 100 *rottoli grossi* of 33 oncie, or into 110 rottoli sottili of 30 oncie; and the *cantaro sottile*, subdivided into 100 rottoli sottoli of 30 oncie, or 250 lbs. of 12 oncie. The rottolo of 33 ounces = 1·93 lbs. avoirdupois = 2·34 lbs. Troy = 8·73 hectogrammes = 1·77 lbs. of Amsterdam = 1·8 lbs. of Hamburg. The rottolo of 30 ounces = 1·75 lbs. avoirdupois = 2·13 lbs. Troy = 7·94 hectogrammes = 1·6 lbs. of Amsterdam = 1·64 lbs. of Hamburg.

100 Sicilian pounds of 12 ounces = 70 lbs. avoirdupois = 85·11 lbs. Troy = 31·76 kilog. = 64·23 lbs. of Amsterdam = 65·58 lbs. of Hamburg.

Measures. — The *salma grossa* = 9·48 Winch. bush.: the *salma generale* = 7·62 Winch. bush.

The principal liquid measure is the tonna, divided into 4 barili, each equivalent to 9¾ wine gallons. 1 barile = 2 quartare; 1 quartara = 20 quartucci. The cafiso of oil = 4¾ Eng. gallons.

The yard or *canna* = 8 *palmi*; 2¼ palms = 1 yard Eng.—(*Nelkenbrecher*; *Smyth*, p. 62. App.)

Tares.—Coffee, indigo, pepper, and dye woods, 2 per cent. and weight of package. Cinnamon, 6 rottoli per seron, with 1 wrapper, or 8 rottoli, with 2 wrappers; cocoa, 2 per cent., weight of package, and 3 per cent. for dust; cod-fish, 3 per cent.; herrings, 12 per cent.; tin, 13 rottoli per barrel; wax, weight of package, and 3 to 4 per cent. extra allowance; Havannah sugars, 16 per cent.; Brazil do., in short cases, 18 per cent., and in long cases, 20 per cent.; crushed sugar, weight of cask, and 5 per cent., or 13 per cent. in all, at the option of the buyer; East India do., in bags, 8 rot. to 10 rot. per bag. 1 rottolo taken as weight of bag, for coffee and cocoa in bags.

Charges on Goods.—The regular charges on the sale of goods consigned to Palermo, are—commission, 3 per cent.; brokerage, ¼ per cent.; warehouse rent, ½ per cent.; and porterage and boat hire; with 2 per cent. *del credere*,—imports being almost always sold on credit. The charges may occasionally vary ¼ to 1 per cent., and imports are frequently sold duty paid; the prices, however, so obtained, fully compensate for the trifling increase of charges.

The charges on goods exported are—3 per cent. commission; brokerage, so much per *cantaro*, *salma*, &c., generally amounting to about ¼ per cent., except on fruit, on which it is equivalent to from 2 to 3 per cent.

Imports and Exports.—The great articles of export from Sicily are—olive oil, grain, particularly wheat and barley; silk, brimstone, wine and brandy, barilla, lemons and oranges, lemon juice, manna, shumac, linseed, fruit, salted fish and salt; with argol, liquorice, pumice stone, rags, skins, honey, cotton wool, saffron, &c. Wheat is largely exported. It is of a mixed quality, hard, and is generally sold from the public magazines, or *caricatori* (see *post*), by measure, without weight. But the best hard wheat, grown in the neighbourhood of Palermo, is sold by the salma of 272 rottoli = 476 lbs. Eng.; the difference between weight and measure being made good by the seller or buyer, as the case may be. Wine is principally shipped from Marsala; lemons, oranges, and lemon juice, from Messina; salt, from Trapani; and barilla, from the southern coast. But all the articles to be found on the coast may, for the most part, be had at Palermo; unless, however, the quantity required be small, it is usually best to ship them from the outports, the expense of their conveyance to Palermo being very heavy. The crops of barilla and shumac come to market in August; but brimstone, salt, oil, wine, rags, &c. may generally be had all the year round. The first shipments of lemons and oranges may be made in the beginning of November. Purchases of produce are always paid for in cash, generally ¼ on making the purchase, and the other ¼ on delivery, when in Palermo, and on receiving order for delivery, on the coast.

The imports consist of cotton yarn, wool, and stuffs; sugar, coffee, cocoa, dye stuffs, iron, earthenware, spices, tin, hides, Newfoundland cod, timber for building, &c. The best of the old accounts of the trade of Sicily that we have met with is contained in *Swinburne's Travels in the Two Sicilies*, 4to ed. vol. ii. pp. 401—413. But the information in this article has been principally derived from the elaborate and valuable reports of Mr. Consul Goodwin, one of the most intelligent of that class of functionaries. The subjoined Tables show in detail the trade of the island and of Palermo.

Account of the Quantities and Values of the Articles exported from and imported into Sicily in 1842, exhibiting the Quantities and Values of those exported to and imported from the United Kingdom and all other Countries.

Articles.		EXPORTS.					
		U. Kingdom.		All other Countries.		Totals.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Value in £ sterling.
			£		£		£
Argols and cream of tartar	cwts.	4,335	5,630	15,665	21,118	20,000	26,748
Barilla	—	29,330	10,186	54,137	18,921	83,467	29,107
Brimstone	—	326,650	39,516	429,195	44,113	755,845	83,629
Cantharides	—	—	—	57	1,020	57	1,020
Cheeses	—	3,462	1,590	3,280	5,256	6,682	9,846
Corn, grain, and pulse	qrs.	54,609	56,579	42,189	36,057	96,798	92,636
Cotton wool	cwts.	—	—	2,420	4,975	2,420	4,975
Essences	lbs.	50,000	11,250	81,729	18,129	131,729	29,379
Fish, salted	cwts.	611	711	1,689	1,449	2,300	2,160
Fruit, dry and picked	—	10,511	9,724	160,716	48,595	171,227	58,319
oranges and lemons	box	100,350	20,587	359,055	87,224	459,405	107,811
Lemon juice	gall.	18,000	2,700	74,400	11,700	92,400	14,400
Linseed	qrs.	3,812	6,723	13,122	23,506	16,934	30,229
Liquorice paste	cwts.	570	1,005	4,616	8,136	5,186	9,141
Manna	—	72	1,970	2,493	68,614	2,565	70,284
Oil, linseed	galls.	—	—	701	—	14,990	701
olive	—	795,117	84,952	1,171,486	149,270	1,969,603	234,222
Rags	cwts.	3,454	2,996	13,201	9,820	16,655	12,816
Salt	tons	354	192	28,425	16,717	28,779	16,909
Seeds	cwts.	8,293	3,773	6,405	3,044	14,698	6,817
Shumac	—	141,010	37,998	105,599	30,896	246,609	68,894
Silk	lbs.	50,000	50,000	53,200	53,200	103,200	103,200
Skins	numb.	40,000	1,500	232,500	7,665	272,500	9,165
Wine and spirits	galls.	1,223,972	32,072	1,681,945	87,871	2,905,917	119,946
Other articles	—	—	41,342	—	31,387	—	73,729
Total	—	—	429,116	—	807,639	—	1,236,755

Articles.		IMPORTS.					
		U. Kingdom.		All other Countries.		Totals.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Value in £ sterling.
			£		£		£
Cocoa	cwts.	100	200	2,496	6,245	2,596	6,445
Cochineal	lbs.	2,000	500	2,100	360	4,400	660
Coffee	cwts.	2,850	5,140	10,307	24,654	13,157	29,794
Indigo	—	1,415	1,280	2,240	1,240	3,655	2,520
Molasses	gall.	200	30	100	15	300	45
Pepper	cwts.	1,158	1,993	4,481	8,496	5,639	10,489
Rum	galls.	480	96	10,180	1,584	10,660	1,680
Spices	cwts.	92	2,961	89	3,833	181	6,794
Sugars	—	19,750	39,640	30,599	59,578	50,349	99,218
Woods	—	786	509	10,148	7,110	10,934	7,619
Cottons	packages	360	13,500	419	17,350	779	30,850
Cotton yarn	cwts.	13,154	94,150	5,972	64,400	19,126	158,550
Cotton and linen	packages	20	900	338	15,000	358	15,900
Cotton and wool	—	471	7,815	198	11,260	669	19,075
Earthenware and glass	—	671	14,265	482	14,100	1,153	28,365
Fancy goods	—	10	1,000	75	7,500	85	8,500
Hardware	—	148	5,400	697	17,230	845	22,630
Linens	—	80	4,000	246	12,400	326	16,400
Silks	—	22	2,200	447	38,000	469	40,200
Woollens	—	56	8,100	87	12,200	143	20,300

Articles exported from and imported into Sicily in 1842 — *continued*.

Articles		U. Kingdom.		All other Countries.		Totals.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Value in £ sterling.
			£		£		£
Copper	cwts.	1,000	5,600	1,264	7,192	2,264	12,792
Copperas	—	156	300	-	-	156	300
Coals	tons	12,800	15,180	-	-	12,800	15,180
Deal boards	numb.	-	-	459,975	24,408	459,975	24,408
Drugs and colours	packages	184	3,405	999	20,580	1,183	23,985
Fish, cod	cwt.	5,522	4,580	25,000	15,000	30,522	19,580
herrings	barr.	660	930	868	1,098	1,528	2,028
stock	cwts.	-	-	11,500	7,950	11,500	7,950
Flax	—	-	-	420	1,010	420	1,010
Hides	—	9,703	27,856	19,033	56,220	28,736	84,176
Iron	—	49,361	26,628	4,206	2,489	53,567	29,117
Lead	—	2,556	1,910	6,074	5,708	8,427	7,618
Leather	—	19	280	49	640	68	840
Pitch and tar	barr.	569	718	1,928	1,498	2,497	2,216
Saltpetre	cwts.	1,393	2,712	692	957	2,085	3,669
Skins	bales	-	-	21	700	21	700
Stationery and books	packages	2	50	193	4,990	195	5,040
Steel	cwts.	200	480	2,825	3,060	3,025	3,540
Tin in bars	—	876	3,595	187	840	1,063	4,435
Tin plates	box	4,000	6,495	-	-	4,000	6,495
Tobacco	cwts.	1,137	8,673	4,951	11,645	6,508	14,318
Wax	—	400	1,200	3,446	16,580	3,846	17,780
Wool	lbs.	5,552	722	40,000	666	45,552	1,388
Other articles		-	3,245	-	23,508	-	26,753
Total		-	309,519	-	529,244	-	838,736

Account of the Quantities and Values of the Articles exported from and imported into Palermo in 1842 exhibiting the Quantities and Values of those exported to and imported from the United Kingdom and all other Countries.

Articles.		EXPORTS.					
		U. Kingdom.		All other Countries.		Totals.	
		Quantities.	Values.	Quantities.	Values.	Quantities.	Value in £ sterling.
			£		£		£
Argols and cream of tartar	cwts.	335	430	2,217	2,878	2,552	3,308
Barilla	—	-	-	6,462	2,065	6,462	2,065
Brimstone	lbs.	39,096	4,081	39,345	5,018	78,441	10,099
Cantharides	—	-	-	22	294	22	294
Corn, grain and pulse	qrs.	12,046	15,070	2,408	3,010	14,464	18,080
Essences	lbs.	-	-	3,150	621	3,150	621
Fruits, dry and picked	—	2,440	1,668	20,156	16,392	22,596	17,860
oranges and lemons	boxes	103,500	2,587	113,655	29,014	126,255	31,501
Linseed	qrs.	638	1,276	1,364	2,728	2,002	4,004
Liquorice paste	cwts.	70	150	1,216	2,536	1,286	2,466
Manna	—	92	1,860	2,409	67,690	2,471	69,550
Oils, linseed	gals.	-	-	3,090	492	3,090	492
olive		607,025	30,370	225,665	22,074	632,890	61,823
Rags	cwts.	218	136	7,981	5,050	8,115	5,186
Sea-ols	—	-	-	1,505	964	1,505	964
Shumac	qrs.	112,000	96,283	68,933	16,309	180,933	42,692
Silks	lbs.	-	-	5,000	5,000	5,000	5,000
Skins	No.	-	-	10,000	65	10,000	65
Wine and spirits	gals.	56,264	5,350	147,152	11,650	183,480	17,070
Other articles		-	1,500	-	5,208	-	7,408
Total	£	-	163,099	-	199,414	-	362,513

		IMPORTS.					
Cocoa	cwts.	-	-	526	1,685	526	1,685
Coffee	—	250	640	4,907	14,504	5,157	15,144
Indigo	—	175	50	-	-	175	50
Pepper	—	658	1,263	2,784	6,048	3,442	7,309
Rum	gals.	400	96	5,840	1,154	6,240	1,250
Spices	cwts.	47	1,880	25	1,000	72	2,880
Sugar	—	9,750	24,640	20,119	49,901	29,869	74,541
Woods	—	117	175	2,262	2,617	2,379	2,792
Manufactures, viz. —							
cottons	packages	60	3,000	179	8,950	239	11,950
cotton yarn	cwts.	5,119	49,150	5,865	58,550	10,984	107,700
cotton and linen	packages	-	-	2	150	2	150
cotton and wool	—	441	35,280	18	1,440	459	36,720
earthenware and glass	—	411	6,165	267	3,600	678	9,765
hardware	—	68	3,400	277	7,850	345	11,250
linens	—	-	-	8	300	8	300
silks	—	-	900	137	7,000	139	7,900
woollens	—	8	600	17	1,700	25	2,300
Copper	cwts.	-	-	143	990	143	990
Copperas	—	156	300	-	-	156	300
Coals	tons	5,200	6,810	-	-	5,200	6,810
Deal boards	No.	-	-	140,975	8,458	140,975	8,458
Drugs and colours	packages	180	2,806	830	8,290	1,010	11,096
Fish, cod	cwts.	4,522	4,100	-	-	4,522	4,100
herrings	barrels	60	180	12	36	72	216
Hides	cwts.	1,705	5,450	3,933	13,990	5,638	19,440
Iron	—	12,511	7,008	96	58	12,607	7,066
Lead	—	156	150	4,981	4,836	5,137	4,986
Leather	—	10	240	40	800	68	840
Pitch and tar	barrels	209	536	2448	490	617	1,026
Saltpetre	cwts.	1,093	2,532	178	440	1,265	2,972
Skins	bales	-	-	21	700	21	700
Stationery and books	packages	1	40	123	3,660	124	3,700
Steel	cwts.	100	440	869	1,320	1,269	1,760
Tin in bars	—	678	2,135	187	840	865	2,975
in plates	boxes	490	735	-	-	490	735
Tobacco	cwts.	137	528	1,533	4,200	1,770	6,728
Wax	—	-	-	916	2000	916	2,000
Wool	lbs.	5,852	260	-	-	5,852	260
Other articles		-	215	-	3,408	-	3,623
Total	£	-	161,895	-	227,763	-	389,658

Remarks on the Trade, &c. of Sicily. — This noble island contains about 10,500 square miles, being the largest in the Mediterranean, and one of the most fertile and best situated in the world. Its population is about 2,100,000. In ancient times, Sicily was celebrated for the number, magnitude, and opulence of its cities. Notwithstanding, however, that its population was then probably treble its present amount, it obtained, from its furnishing vast supplies of corn and other articles of provision for the use of Rome, the appropriate epithet of *horreum Romanorum*, and is said by Livy to have been *Populoque Romano, pace ac bello, fidissimum annonæ subsidium.* — (Lib. xxvii. cap. 5.) But (*quantum mutatus!*) there are now few countries in which agriculture and the arts are in so degraded a state! It does not, however, appear very difficult to account for this melancholy change. After the overthrow of the Roman power, Sicily was occupied successively by the Greeks, Saracens, Normans, and French, till at length it became a dependency, first of the crown of Spain, and more recently of that of Naples. It is to this dependence, and to the introduction of the feudal system by the Normans, that its backward state is principally to be ascribed. The multiplied abuses which grew up in Spain under the reign of Ferdinand and his successors of the Austrian line, flourished with equal luxuriance in Sicily, and have proved no less destructive of the industry and civilisation of its inhabitants than of those of Spain. Misgovernment, the abuses of the feudal system, insecurity, and unequal and arbitrary taxes, have here, as every where else, paralysed industry, and impoverished the people.

But the grand curse of Sicilian, as of Sardinian industry, will probably be found in the oppressive restrictions that have been laid on the exportation of corn. Down to a late period, no corn could be exported without leave being obtained from the *Real Patrimonio*, a body that pretended to take an account of the crops, and which determined whether there were to be any exportation; and in the event of its being allowed, it issued, or rather sold, licences to a few favoured individuals *, authorising them to export certain specified quantities! Even had Sicily been ten times more productive than she really is, it is quite impossible that agriculture could have flourished under such discouragements. Luckily, however, these oppressive restraints have recently been abolished, and there are no longer any obstacles to the free exportation of corn. Oppressive taxes, the want of leases of a reasonable length, and of practicable roads, are at present, perhaps, the greatest obstacles to agriculture.

The property of the island was valued in 1811, when the English garrison and fleet occasioned a great demand, and high prices for produce of all kinds; and this valuation has been continued to this day, as the basis on which the land and house tax (*fondiaria*) is levied. A rate of 7½ per cent. on the valuation was first charged, which was subsequently raised to 12½ per cent., at which it is now fixed. Owing, however, as is stated, to the fall in the price of agricultural produce since 1811, this tax is alleged by Mr. M'Gregor to be more than equivalent to a duty of 25 per cent. on the produce of the soil taken at its present (1840) value, and to be a very great obstacle to improvement. We believe, however, that its influence in this respect, though considerable, has been much over-rated; and that the backward state of Sicily is principally owing to other and different causes.

Though there be in Sicily a very considerable number of small proprietors, by far the greater part of the land belongs to the crown, the church, and the nobility, some of whom have very extensive and valuable estates. Down to a recent period, these were held under a system of strict entail, and their occupiers, as well as those of the estates of the crown and the church, usually held under triennial leases, and were in a state of feudal bondage, and subject to numerous exactions on the part of their lords. Under such circumstances, even though there had been neither restrictions on exportation nor a land tax, the depressed condition of the peasantry, and the low state of agriculture, need not be wondered at.

But we are glad to have to state that the dawn of a better day seems to have arisen, and that several important changes have lately been introduced. We have already noticed the removal of the restrictions on exportation; and in 1812 and 1838 laws were passed for the abolition of the feudal system, and the complete emancipation of the peasantry. And, notwithstanding the poverty and ignorance of the latter will hinder them from speedily profiting to the extent that might be anticipated from the passing of these laws, this cannot fail, in the end, to be productive of the best effects. It was also enacted in 1819, that in future, on the death of any individual possessed of an estate in land, and having more than one son, the half only of the estate should descend to the eldest son, and that the other half should be divided in equal shares among the other children. This law, which appears to have been framed on the model of that which regulates the succession to property in France, will probably have nearly similar effects. In both countries, the abuses of entails might have been obviated without running into

* The late Queen is said to have been a great dealer in corn on her own account!

the opposite extreme, and establishing a system that can hardly fail in the end to occasion the too great division of landed property.

Exclusive of wheat and barley, hemp, flax, and cotton are raised with but little labour. The culture of the last is said to be extending of late years, especially in the neighbourhood of Mazzara. It is mostly short-stapled, and but little is exported, and that only to Naples and Trieste. It is probable, however, that by attention to its culture, and the introduction of improved varieties, its quality might be improved, and it might become an article of some importance. The sugar-cane was formerly a staple product of the S. shore of Sicily. But owing to the introduction of cheaper sugar from the W. Indies and Brazil, the culture of the cane is now restricted to some small plantations near Avola, and will probably at no distant period be wholly abandoned.

The district round Marsala is the principal seat of the wine culture; and, thanks to the exertions of some English capitalists established in that city, the production of wine is become an important branch of industry, and it forms a principal article of export. — (See Wine.) But, except in the English establishments, little care is in general bestowed on the vintage. Along the N. coast, the mountain slopes and valleys are almost wholly covered with olive groves; though elsewhere they are rare, and do not furnish sufficient oil for the inhabitants. But for the imperfections in the mode of its preparation, the oil of Sicily would be excellent. The olives, however, are permitted to hang on the tree till they come off with shaking, or beating with light canes; and they are then kept in vats till they get quite black, so that the oil becomes pungent and rancid, and, though fit for the lamp, is totally unfit for the table. It is only near the capital and in a few other places, that a more improved process is followed. Lemons and oranges, which grow luxuriantly, are of excellent quality, well adapted for long voyages, and, when intended for exportation, are collected with more care than any other agricultural product. They are largely exported, and are altogether highly important. Almonds, pistachios, dates, madder, the barilla plant, hazel-nuts, the *Ricinus palma*, or castor oil plant, saffron, tobacco, &c., might all be raised in any quantity; but their culture is for the most part neglected, or ill-conducted. The mulberry is grown in the vicinity of Messina, and in the N. E. part of the island; but the produce of silk does not exceed 400,000 lbs. a year. The manna ash is grown near the capital, and, manna not being monopolised by the government in Sicily, as in Naples, it might be a much more extensive and profitable article of trade than it really is, if there were any public enterprise. Liquorice is found growing wild in several parts of the island, and considerable quantities of juice are exported. The culture of shumac is a good deal attended to, and it forms a principal article of export.

Formerly there were only certain ports from which corn could be exported; a limitation which gave rise to the establishment at these ports of public magazines or *caricatori*, where the corn may be deposited till an opportunity occurs of shipping it off. Provided it be of good quality (*mercantibile* or *recebile*), and provided it be brought in immediately after harvest, or, at farthest, in August, it is warehoused free of expense; what it gains in bulk after that period (about 5 per cent.) being sufficient to defray all expenses. The receipt of the *caricator*, or keeper of the magazine, is negotiable like a bill of exchange, and is the object of speculative purchases on the exchange at Palermo, Messina, &c. according to the expected rise or fall in the price of corn. The depositor of a quantity sells it in such portions as he pleases, the whole being faithfully accounted for. The public magazines, in some parts of the island, are either excavations into calcareous rocks, or holes in the ground shaped like a bottle, walled up, and made water-proof, containing each about 200 salme of corn, or about 1,600 English bushels. The neck of the bottle is hermetically closed with a stone fastened with gypsum. Corn may be thus preserved for an indefinite length of time; at least, it has been found in perfectly good order after the lapse of a century. — (*Simond*, p. 540.; *Swinburne*, vol. ii. p. 405. For an account of the oil *caricatori* of Naples, see Olive Oil.)

The fisheries are chiefly conducted by corporations of fishermen, or monied individuals. That at Palermo employs, during the season, from 900 to 1,000 boats, and 3,500 fishermen; and the produce is valued at from 20,000*l*. to 25,000*l*. a year. Tunnies, the fish principally caught on the Sicilian coasts, and which were in great request in antiquity, as well as in modern times, are of large dimensions, being generally from 4 to 8 feet in length, with a nearly equal girth. Their flesh is highly nutritious. The shoals of tunny enter the Mediterranean early in the year. The *tonnare*, or fishing establishments, on the Sicilian coasts, are more extensive and valuable than those of any other part of the Mediterranean. The nets belonging to the one in the Bay of Palermo are so very strong as to be able to arrest the progress of a ship when under sail. The fishery of the sword-fish is confined chiefly to the Straits of Messina, and the anchovy and pilchard fisheries to Siculania. Lentini has some trade in *botarga*, made of the roe of the mullet. The coral fishery, near Bona, in Africa, is principally

frequented by fishermen from Trapani, at which city the coral is polished, and brought for exportation to Catania, Naples, Leghorn, &c.

The minerals of Sicily are important and valuable. Sulphur ranks first; it is found in great quantities imbedded in blue marl, or in gypsum and limestone, over most of the central and S. parts of the island. The sulphur mines have been wrought for upwards of 200 years; but it is only since 1820 that any extraordinary quantity has been prepared for exportation. Subsequently to 1833, the trade with this country increased so much that the export of sulphur to the U. Kingdom rose from 19,122 tons in the above year, to 38,654 tons in 1838. In this year, however, the Neapolitan government granted to a French company the monopoly of the trade in sulphur, the production of which was to be limited to 600,000 quintals, to be supplied to the company by the proprietors of the mines at certain fixed prices, on condition of the latter paying to the government a bonus of 400,000 Neapolitan ducats a year! It is needless to dwell on the impolicy and absurdity of such a project. Instead of attempting to limit the export of sulphur, government should have given it every possible facility; and taking the export under a free system, at only 1,000,000 quintals, it would have yielded, at the low duty of 2*s.* a cwt. on export, a larger sum than was to be paid by the company for their monopoly. Luckily, however, a firm remonstrance by England occasioned the suppression of the monopoly, and the sulphur trade is again restored to its former state. Some sulphur mines are wrought by English speculators, with machinery brought from England, and workmen from Wales, Cornwall, and Scotland; but in most of the other mines the processes are very rude, and, in melting, a great part of the sulphur is allowed to escape in gas, to the destruction of the surrounding vegetation. Sicily furnishes saltpetre of excellent quality in sufficient quantity for her own consumption, but from want of enterprise none is produced for exportation. Rock salt, bitumen, gypsum, and marble of different kinds are found in various places; and good salt is made at Trapani, and other coast towns. There are also ores of copper, lead, mercury, and iron, but very few of these are wrought. There are no iron foundries in the island, and iron and tin goods are principally imported from England, lead from Spain, and steel from Germany.

Were the bounty of nature towards Sicily not counteracted by vicious laws and institutions, she would undoubtedly be one of the richest and finest of European countries. All that she requires is security of property and freedom of industry. Let but these be given to her, and a few years will develop her gigantic resources, and elevate Girgenti, Termini, and Sciacca, to a very high rank among corn-shipping ports.

PALM OIL (Ger. *Palmöl*; Fr. *Huile de palme, Huile de Sénegal*; It. *Olio di palma*; Sp. *Aceite de palma*) is obtained from the fruit of several species of palms, but especially from that of the *Elais Guineensis*, growing on the west coast of Africa, to the south of Fernando Po, and in Brazil. When imported, the oil is about the consistence of butter, of a yellowish colour, and scarcely any particular taste; by long keeping it becomes rancid; loses its colour, which fades to a dirty white; and in this state is to be rejected. It is sometimes imitated with hog's lard, coloured with turmeric, and scented with Florentine iris root. The inhabitants of the coast of Guinea employ palm oil for the same purposes that we do butter. Our supplies of palm oil are almost wholly derived from the west coast of Africa, of which it is the staple article of export.—(*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

Account of the Quantities of Palm Oil entered for Consumption in the U. Kingdom, with the Amount of Duty received thereon, during each of the 3 Years ending with 1842.

Quantities.				Duties.					
1840.		1841.		1842.		1840.		1841		1842.	
Cwt.	*qrs.*	*Cwt.*	*qrs.*	*Cwt.*	*qrs.*	£ *s.* *d.*		£ *s.* *d.*		£ *s.* *d.*	
317,376	3	303,992	0	356,222	0	20,638	8 4	19,949	12 6	13,641	13 6

The duty on palm oil was reduced in 1834 from 2*s.* 6*d.* to 1*s.* 3*d.* a cwt.; and in 1842 it was farther reduced to 6*d.* a cwt.

PAMPHLET, a small book, usually printed in the octavo form, and stitched.

It is enacted by 10 Ann. c. 19. § 113. that no person shall sell, or expose to sale, any pamphlet, without the name and place of abode of some known person, by or for whom it was printed or published, written or printed thereon, under a penalty of 20*l.* and costs.

It is enacted by the 55 Geo. 3. c. 185. that every book containing 1 whole sheet, and not exceeding 8 sheets, in 8vo, or any lesser size; or not exceeding 12 sheets in 4to, or 20 sheets in folio, shall be deemed a pamphlet. The same act imposed a duty of 3*s.* upon each sheet of *one* copy of all pamphlets published. This duty, which was at once vexatious and unproductive, hardly ever yielding more than 1,000*l.* or 1,100*l.* a year, was repealed in 1833.

PAPER (Ger. and Du. *Papier*; Fr. *Papier*; It. *Carta*; Sp. *Papel*; Rus. *Bumaga*; Lat. *Charta*; Arab. *Kartas*; Pers. *Kaghas*). This highly useful substance is, as every one knows, thin, flexible, of different colours, but most commonly white, being used for writing and printing upon, and for various other purposes. It is manufactured of ve-

getable matter reduced to a sort of pulp. The term paper is derived from the Greek παπῦρος (*papyrus*, see *post*), the name of the plant on the inner bark of which (*Liber*, *βιβλος*, whence our word *book*) the ancients used to write. Paper is made up into *sheets*, *quires*, and *reams*; each quire consisting of 24 sheets, and each ream of 20 quires.

Historical Sketch of Paper. Difference between ancient and modern Paper. — Some of those learned and ingenious persons who have investigated the arts of the ancient world, have expressed their surprise that the Greeks and Romans, though they possessed an immense number of books, and approached very near to printing in the stamping of words and letters, and similar devices, should not have discovered the art; the first rude attempts at typography being sufficiently obvious, though much time and contrivance have been required to bring the process to its present state of perfection. But they should rather, perhaps, have wondered that the more civilised nations of antiquity did not invent paper, an invention which, it may easily be shown, necessarily preceded that of printing. But this was an exceedingly difficult task; the more so, that the vast importance of paper could not be appreciated, or even imagined, till after it had been generally introduced. At first, the memory of important events appears to have been handed down by inscriptions cut on rocks, pillars of stone or marble, and the walls of edifices; and this primitive usage is still retained in the monuments in our churches and cemeteries. In a later, though still very remote age, men were accustomed to write upon portable surfaces of various kinds. Everybody knows that the Decalogue was written upon tables of stone; and Joshua wrote a copy of the law upon the like materials. — (*Josh.* c. viii. v. 32.) The Greeks and Romans engraved laws, treaties, contracts, and other important documents, on plates of brass; and it is stated, that a fire which broke out in the capitol, in the reign of Vespasian, consumed above 3,000 such bronze muniments. — (*Nouveau Traité de Diplomatique*, i. 451.) But exclusive of plates of this sort, which were necessarily inconvenient, costly, and quite unfit for ordinary use, thin and flexible plates of lead and other metals, (*Job*, c. xix v. 23, 24.) thin pieces of wood, skins, parchment, linen, and a variety of similar substances were used in writing. Cheaper materials, such as the leaves and bark of trees, palms, &c., were also used from a very remote period for the same purpose; but leaves (χαρτης, *chartæ*) being, when dry, apt to split in the direction of the fibres, it was found to be necessary, in preparing them for writing, to glue them together, so that the fibres might cross each other in opposite directions. The texture of the leaf, or sheet, if we may so call it, is thus greatly strengthened; and when it has been smoothed, polished, and fitted for use, it is less inconvenient and better looking than might be supposed. Such, in fact, is the principle on which the paper of the ancients was formed. This, however, which was called *Charta Egyptiaca*, from the place of its manufacture, did not consist of leaves, but of the inner bark of the famous reed or rush, the *Cyperus Papyrus*, found along the banks of the Nile, or rather in the pools and ditches which communicate with the river. The ancients applied this useful plant to an immense variety of purposes; but here we shall only notice that from which it has acquired an immortality of renown. The inner bark having been divided by a needle or other sharp instrument into very thin and broad layers or filaments, portions of these were placed side by side longitudinally, and glued together at the ends; another portion being glued crosswise on the backs of the latter, to give the page the requisite strength. Pliny and other writers have described the process (*Hist. Nat.* lib. xiii. c. 11, 12, 13.), which has been farther elucidated by Hardouin and other commentators. But the fullest and ablest discussion of this curious subject is contained in the very learned and elaborate work, the *Nouveau Traité de Diplomatique* (i. pp. 448—524.), where the most interesting particulars respecting the history and manufacture of papyrus, as well as of the greater number of the other writing materials used in antiquity, have been collected and set in the clearest point of view. — (See also the *Dictionnaire Diplomatique* of De Vaines, art. *Papier*, ii. pp. 165—174.) Bruce has given a summary of the authorities in the seventh volume of the octavo edition of his Travels; and, not satisfied with this, he attempted to make paper from the papyrus, in which not being very successful, he imputes his failure to errors in the statements of Pliny; not reflecting that, had he endeavoured, trusting to written directions, without experience and traditional art, to make modern paper, or even a pair of shoes, he would, most probably, have been equally infelicitous. Egypt enjoyed for a lengthened period a natural monopoly of this valuable article; and even attempted, in anticipation of a later policy, by prohibiting the growth of the papyrus, except in certain localities, and limiting its supply, to sell its produce at an artificially enhanced price! — (*Ameilhon, Commerce des Egyptiens*, p. 238.) But this policy ceased on the conquest of Egypt by the Romans, who, having imported the plant into Rome, succeeded in preparing from it a very superior article. Pliny enumerates the various kinds of paper, from the coarsest, which was used, like our brown paper,

for packing, to the most expansive and finest. The latter, which was made of the innermost filaments, was of a snowy whiteness; and when properly dressed and polished, was easily written upon. The consumption was very considerable; and being, after the foundation of Alexandria, principally made in that city, it formed an important article in her commerce, and furnished employment for many workmen and much capital. Flavius Vopiscus relates, that in the 3d century, the tyrant Firmus used to say there was so much paper there, and so large a quantity of the glue or size used in its preparation, that he could maintain an army with it: — "*Tantum habuisse de chartis, ut publicè sæpe diceret, exercitum se alere posse papyrô et glutinô.*" We may doubt whether the value of the paper at present belonging to any single city would do the like. *Charta Egyptiaca* is very ancient, having, notwithstanding the assertion of Varro and Pliny to the contrary, (*Hist. Nat.* lib. xiii. cap. 11.,) been in common use long before the age of Alexander. This is evident from the statement of Herodotus, who, though he lived about a century before that conqueror, tells us, that in former times, when papyrus was scarce, the Ionians wrote on the skins of goats and sheep; and that that practice continued to be customary among several barbarous nations. — (Lib. v. cap. 58.)

Though white, smooth, durable, and not ill-adapted for writing, ancient paper was not suited for the printer: by reason of the closeness of the grain, it would not have received the ink from types more kindly than shavings of wood, and such like materials; and its texture was so very brittle, that it would have shivered to pieces under the press. It was, in truth, an inartificial mass ("*viscera nivea virentium herbarum*"), no great invention or ingenuity being discovered in its preparation. Modern paper, on the other hand, is wholly artificial; and the contrivances for its manufacture are marvellous alike for the sagacity evinced in their design and their practical efficiency. Like the paper of antiquity, it is formed of the filaments of various sorts of vegetable substances, derived principally from the tearing to pieces or pounding cotton and linen rags, and similar materials, mixed with water. This process is called beating them into pulp; and when examined with a microscope, the floating filaments are found to be well fitted for adhering together, being jagged and rough, and mixed in every possible way. A portion of this mixture or pulp being, when properly prepared, poured upon moulds or sieves of fine woven wire, the water is drained off, and the suspended fibres, falling to the bottom, form a layer or sheet, which, being consolidated by pressure and dried, becomes paper; its strength and goodness depending, of course, in a great measure, on the quality of the rag or other material of which it is made. Paper used to be manufactured by dipping sieves or frames into the pulp; the portion of filaments so lifted up forming the sheet of paper. But the application of rotary motion to the manufacture has effected a total change in the mode in which it was carried on: instead of dipping the sieves or frames into the cistern of pulp, a circular web, or round towel of woven wire, revolves horizontally under the vessel, (technically called the vat,) receives the deposit, conveys it away, and, by an adjustment of extraordinary delicacy, transfers it uninjured, though as fragile as a wet cobweb, to a similar revolving towel of felt: thus an endless web of paper is spun, as long, at least, as the machine continues to move, and pulp is supplied.

The pervious and spongy texture of paper make it readily imbibe and retain the ink impressed on it by types in printing, and by the pen in writing; its toughness hinders it from being easily torn; and, in a well-bound book, under favourable circumstances, its duration is indefinite, and, for all practical purposes, eternal! It is true that legal documents are sometimes written or printed on parchment, which is less liable to be torn, or injured by rubbing; the luxury of typography occasionally, also, exhibits a few impressions of a splendid work upon vellum; and, it is farther true, that these substances were used for writing upon by the ancients: but they are necessarily expensive, and the cost of either far exceeds the means of the great majority of book buyers; so that it would be altogether unprofitable to cast types, to construct presses, and to incur the various and heavy charges of an establishment for printing, unless we possessed a cheaper material on which to print.

Almost all the more ancient and valuable existing Greek and Latin manuscripts are written either on parchment or vellum, but generally on the latter. It is singular, however, that while such is the case, all or almost all the very old charters and diplomas are written on papyrus. Indeed the learned authors of the *Nouveau Traité de Diplomatique* affirm that no parchment charter has been discovered anterior to the 6th century. — (i. 479.)

It appears to be sufficiently established that paper, fabricated like that now in use, of cotton and other vegetable materials, and of silk, has been manufactured in China from a very remote epoch — (*Nouveau Traité de Diplomatique*, i. 519.): the Arab historians state that similar paper was manufactured in Mecca in the beginning of the 8th century — (*Andres, Origine e Progressi d' Ogni Letteratura*, i. 202., ed. Rom. 1808,

and Gibbon, ix. 379.); and most probably the mode of its production was then, also, known to the Greeks. It appears to have been soon after introduced into Europe; but it is doubtful whether this were done by the Arabians or Greeks. The mode of fabricating paper from cotton and other vegetable materials being once discovered, its fabrication from linen rags was a comparatively easy, and in Europe, where cotton was then extremely scarce, an all but necessary step. It is singular, however, that we have no positive information either as to the country where, or the epoch when, paper from rags began to be manufactured in Europe. *Mais on ne peut reculer son invention plus tard, qu'au Treizieme siecle, ni son usage ordinaire au-delà du Quatorzième.* — (*Nouveau Traité, &c.*, i. 524.) In fact, Egyptian paper, or paper made of papyrus, in the manner described above, continued to be partially employed down to the middle of the 11th century, though parchment was then the principal material used in writing.

It is curious to observe how very shortly the introduction of paper preceded the invention of printing, to which, indeed, as already seen, it was an indispensable preliminary. Muratori attributes the ignorance of the barbarous ages principally to the scarcity and high price of paper, and the superior intelligence of modern times to its abundance and cheapness. — (*Andres*, i. 200.) And whatever opinion may be entertained as to the first part of this statement, there can be no question that the latter is perfectly well founded.

Not only are we in the dark as to the history of modern paper, but we are unable to make any very satisfactory conjectural estimate of the mode in which it was invented. It is, however, all but certain that the invention must have been suggested by accident, or by observing the effects produced by the accidental drying of triturated vegetable matter, or in some such way; and that the hint thus afforded was gradually improved upon. It is not possible to imagine that the invention should have been wholly the result of design; for, we cannot conceive how any one without any previous knowledge should have proposed to himself to produce paper by pounding rags, or other vegetable matter, mixing the mass in water, and then pressing and drying the deposit. But, without indulging in unprofitable conjectures, it is at all events certain, that however and by whomsoever discovered, no invention has been of greater importance. *Chartæ usu maxime humanitas vitæ constet et memoria.* — (*Plin. Hist. Nat.* lib. xiii. cap. 11.) The processes by which the most worthless and vilest materials are converted into such admirable substances as paper and glass, are probably the greatest triumphs of human talent and ingenuity. They have more than realised the dreams of the alchemists; and have been incomparably more advantageous than if we had become acquainted with a means of transmuting the inferior metals into gold.

Manufacture of Paper in England. — The application of paper to the purposes of writing and printing, and the fact of its being indispensable to the prosecution of the latter, render its manufacture of the highest utility and importance. But, even in a commercial point of view, its value is very considerable. France, Holland, and Genoa had, for a lengthened period, a decided superiority in this department. The finest and best paper being made of linen rags, its quality may be supposed to depend, in a considerable degree, on the sort of linen usually worn in the country where it is manufactured; and this circumstance is said to account for the greater whiteness of the Dutch and Belgian papers, as compared with those of the French and Italians, and still more the Germans. The rags used in the manufacture of writing paper in Great Britain are collected at home; but those used in the manufacture of the best printing paper are imported, principally, from Italy, Hamburg, and the Austrian States, by way of Trieste. — (See Rags.) We believe, however, that it was owing rather to the want of skill, than, as has sometimes been supposed, to the inferior quality of the linen of this country, that the manufacture of paper was not carried on with much success in England till a comparatively recent period. During the 17th century, most part of our supply was imported from the Continent, especially from France. The manufacture is said to have been considerably improved by the French refugees who fled to this country in 1685. But it is distinctly stated in the *The British Merchant* (vol. ii. p. 266.), that hardly any sort of paper, except brown, was made here previously to the Revolution. In 1690, however, the manufacture of white paper was attempted; and within a few years, most branches were much improved. In 1721, it is supposed that there were about 300,000 reams of paper annually produced in Great Britain, which was equal to about two thirds of the whole consumption. In 1783, the value of the paper annually manufactured was estimated at 780,000*l*. At present, besides making a sufficient quantity of most sorts of paper for our own use, and for exportation, we annually export about 100,000*l*. worth of books. The importation of foreign paper for British consumption has now nearly ceased. A small quantity of French paper was used in this country for copperplate printing till within these few years; but, in this respect, we now surpass the French, and there is no artist of either country, who does not consider English paper, manufactured according to the latest improvements, best

adapted for prints. The French have, however, always excelled in the manufacture of very thin letter paper; and a small portion of this article, and some paper hangings, are now the only articles of import.

In 1813, Dr. Colquhoun estimated the value of paper annually produced in Great Britain at 2,000,000*l.*; but Mr. Stevenson, an incomparably better authority upon such subjects, estimated it at only half this sum. From information obtained from those engaged in the trade, we incline to think that the total annual value of the paper manufactured in the United Kingdom, exclusive of the duty, may at present amount to about 1,600,000*l.* or 1,700,000*l.* There are about 700 paper-mills in England, and from 70 to 80 in Scotland. The number in Ireland is but inconsiderable. Of these mills, we believe very few have lately been unemployed. About 28,000 individuals are supposed to be directly engaged in the trade: and, besides the workmen employed in the mills, the paper manufacture creates a considerable demand for the labour of millwrights, machinists, smiths, carpenters, iron and brass founders, wire-workers, woollen manufacturers, and others, in the machinery and apparatus of the mills. Some parts of these are very powerful, and subject to severe strain; and other parts are complicated and delicate, and require continual renovation. Owing to this, the manufacture is of much greater importance, as a source of employment, than might at first be supposed, or than it would seem to have been formerly considered by government, who loaded it, down to a very recent period, with an excise duty amounting to more than *three times as much as the total wages of the workpeople employed!*

It was formerly customary to collect the rags used in the manufacture into large heaps, in order that, by their heating and fermentation, they might be the more easily reduced to filaments. But this injured the rags; and it is now the practice to tear them to pieces, without any such preparation, by powerful machines, constructed for the purpose.

During the present century this manufacture has been signally promoted by the combined influence of science, ingenuity, and mechanical skill. These have been successfully exerted in the preparation of the pulp; the conversion of the pulp into paper; and the provision of materials: and in none has their influence been more remarkable than in the last. This is evident from the fact, that while the manufacture has been more than doubled since 1820, the demand for continental rags and other foreign materials has actually been reduced within that time, in consequence of the immense home supply we derive from substances previously regarded as worthless, and treated as refuse. The sweepings of cotton and flax mills, owing to the grease and dirt with which they are mixed up, were, until within these few years, of no value whatever, except as manure. But means having been discovered of rendering them clean and white, they are now made into very good paper; and the neighbourhood of Manchester has, in consequence, become a principal seat of the manufacture. The chemical and mechanical processes by which these materials are purified, whitened, and made available for the production of paper, without their strength being impaired, are not only exceedingly interesting in themselves, but are of great national importance; and, by reducing the cost of paper, have done ten times more to lower the price of books, and diffuse literature, than all the efforts of all the societies that ever existed.

The first idea of a machine for converting pulp into paper, originated in France, the inventor being an ingenious workman of the name of Louis Robert. A model of this machine was brought to England by M. Leger Didot; and though at first it was far from giving an assurance of success, it sufficed to induce English capitalists and engineers, particularly Mr. Donkin, to follow up the scheme; and in the course of a few years they brought it to a high degree of perfection. Mr. Dickinson, of Hertfordshire, one of the most intelligent mechanists and extensive paper manufacturers in England, has invented a machine of a different construction for the same purpose, and has also introduced various subsidiary improvements into the manufacture. One of these consists in the application of air pumps to the process, by the action of which, he produces a partial vacuum under a portion of the wire on which the pulp is in the act of settling, and thus very much accelerates its consolidation; in fact, prepares it almost instantaneously for the first mechanical pressure. The result is all but miraculous. By the agency of a great deal of complicated machinery, so admirably contrived as to produce the intended effect with unerrring precision and in the very best manner, a process, which in the old system of paper-making occupied about *three* weeks, is performed in as many minutes! A continuous stream of fluid pulp is, within this brief space of time, and the short distance of 30 feet, not only made into paper, but actually dried, polished, and every separate sheet cut round the edges, and rendered completely ready for use! The paper manufactured by this wonderful combination of intelligence and power is, at once, moderate in price, and, for most purposes, superior in quality to what was formerly made by hand. The sample before the reader, though not the finest that is made, will warrant what is now stated.

Mr. Dickinson some time since made an important improvement in the paper manufacture, on the principle of veneering in cabinet work. He makes two webs of paper, each by a separate process; and by laying them together while in an early stage, they are rendered inseparable by the pressure to which they are subjected. This paper is used in copperplate printing; and by adopting a peculiar method of preparing the pulp, and selecting a finer rag for the web which forms the face of the paper, it is much better calculated for taking a fine impression. Its introduction has put a total stop to the importation of that species of French paper, which was formerly used in considerable quantities by copperplate printers. Probably, however, the most ingenious of the modern inventions in the manufacture is that by which Mr. Dickinson has contrived, without increasing the thickness of paper, to embody parallel coloured threads in its fabric. This novel description of paper is now used in the printing of exchequer bills and postage envelopes, for which it is admirably fitted, inasmuch as it cannot be counterfeited, except by employing similar machinery, which it would cost a great deal to construct, and be all but impossible to conceal.

Duty on Paper.—Previously to 1836, all writing, coloured, or wrapping papers, cardboards, and pasteboards, were denominated 1st class paper, and paid 3*d.* per lb. duty (28*s.* a cwt.); unless *manufactured wholly of tarred ropes, without the tar being previously extracted*, in which case the paper was denominated 2d class, and paid 1½*d.* per lb. (14*s.* a cwt.). Millboards and scaleboards, made of the same materials as 2d class paper, paid 2¼*d.* per lb. (21*s.* a cwt.) duty.

This duty varied on the different descriptions of 1st class paper from about 25 or 30 per cent. on the finest, to about 200 per cent. on the coarsest! A duty so oppressive led to the commission of very great frauds, which all the vigilance of the officers, and the endless multiplication of checks and penalties, were unable to prevent; the real effect of such devices being to injure the honest manufacturers, and to give those of a different character greater facilities for carrying on their fraudulent schemes. But, laying out of view for a moment the oppressiveness of the duty, could any thing be more absurd, than to interdict the manufacturer of third class wrapping paper (for it is to him that the regulation applied) from using any other material than *tarred ropes*? After the peace, and the very general introduction of iron cables, tarred ropes advanced considerably in price; but as the use of *any other material whatever* would have occasioned an increase of 14*s.* a cwt. of duty, advantage could not be taken of this circumstance; so that the excise regulation, without putting one sixpence into the pockets of government, obliged the public to pay an increased price for an inferior article! Neither was this its only effect: a good deal of the refuse thrown out in sorting rags, which might have been used in the manufacture of coarse wrapping paper, was sold by the manufacturers for about 3*s.* a cwt.; while a good deal that might have been used in the same way could not be sold at all, but was absolutely lost. It is plain, therefore, that this regulation had a two-fold operation: first, in adding to the cost of wrapping paper, by compelling it to be made from a comparatively expensive article; and, secondly, in adding to the expense of fine paper, by preventing the refuse of the rags used in its manufacture from being beneficially employed.

Owing to the decline in the price of paper, the duty still amounts to about 50 per cent. on a large proportion of what is manufactured, though it may be doubted, considering the purposes to which paper is applied, whether it should be subject to any duty whatever. Printers, stationers, bookbinders, type-founders, artists, copperplate and lithographic printers, card-makers, paper-stainers and paper-hangers, &c. are all injured by a duty on it. But the greatest evil of all is its influence in increasing the price, and hindering the publication, of books. "This places a great obstacle in the way of the progress of knowledge, of useful and necessary arts, and of sober, industrious habits. Books carry the productions of the human mind over the whole world, and may be truly called the raw materials of every kind of science and art, and of all social improvement."—(*Sir H. Parnell on Financial Reform*, 3d ed. p. 30.)

But though the exigencies of the public service have not permitted the total repeal of the duties on paper, we are glad to have to state that they have been most materially lowered. In 1836, the duty on first-class papers was reduced to the same level as that on papers of the second class, or from 3*d.* per lb. to 1½*d.* per lb.; the manufacturers of the coarser descriptions of paper being at the same time relieved from the restraints under which they had previously laboured, and allowed to use any material in the manufacture which they may judge best. The oppressive duty of 1½*d.* per square yard laid on paper when printed or stained, over and above the ordinary duty on paper, was then also repealed, and the various acts relating to paper were combined into a single statute. At present, therefore, the same rate of duty is laid on all descriptions of paper, so that there is no longer any room for cheating the revenue by the substitution of superior for inferior paper, and, consequently, no necessity for exercising so great a degree of vexatious surveillance over the manufacture as formerly prevailed.

The influence of this wise and judicious measure in reducing the price of paper used in printing and writing, has since been decidedly manifested. The abolition of the discriminating duty on stained or printed paper has, also, been of material importance. The reduction of price it has occasioned has enabled a much larger class of persons to get their apartments papered; and it has been in this way productive, not only of a great additional demand for paper and labour, but of a great increase of comfort and cleanliness.

This measure has, also, in part obviated the injustice done to authors and publishers, by compelling them to pay a duty on the paper used in printing books previously to their publication; and, consequently, before it can be known whether the books will sell. When they do not sell, the tax has obviously to be paid out of the capital of the authors or publishers, and the loss arising from an unsuccessful publishing speculation is increased by its amount. — (See *antè*, p. 160.) It is true that every duty on paper, how limited soever, operates in this way, and is, therefore, objectionable on principle; but the hardship inflicted on an unsuccessful author by the existing paper duty being only half its former amount, is not nearly so much felt.

As respects revenue, too, the measure has been successful. In 1835, the nett produce of the duties on paper, in the U. Kingdom, amounted to 796,305*l.* Of this sum, the duty on first class paper-produced about 650,000*l.*; and as the rate of charge on it has been reduced a half, it follows, had there been no increased production, that the duty should now (1843), amount to about 471,000*l.* (viz. 325,000*l.* half the duty on first class paper, plus 146,000*l.* the duty on second paper, pasteboard, &c.) But, in fact, the paper duty produced in 1841, a nett revenue of 587,380*l.*, being an increase of nearly 25 per cent. This, however, gives a very imperfect view of the progress of the manufacture; for, owing to the premium (for so it may be called) which the new postage regulations give on the use of thin and light paper, the increase in its production has been incomparably greater than we might infer from the increase of weight. Indeed, the probability is, that but for the change in the postage system, the revenue would now (1843) have lost little, if anything, by the reduction of the paper duties.

An Account exhibiting the Quantities of the different Sorts of Paper charged with Duties, the Rates of Duty, and the Produce of the Duties, &c., during each of the Three Years preceding the Reduction of the Duties in 1836, and the Six subsequent Years. — (From *Parl. Papers*, No. 295. Sess. 1842, and No. 43. Sess. 1843.)

Years.	First Class Paper.	Second Class Paper.	Millboard, Glazed Paper, Sheathing Paper, Button Board, &c.		Pasteboard.		Total Weight of Paper, Millboard, and Pasteboard.	Gross Produce of the Duties.			Nett Produce of the Duties.			Drawbacks on Paper exported.		
			First Class.	Second Class.	First Class.	Second Class.										
	Duty, 3*d.* per lb.	Duty, 1½*d.* per lb.	Duty, 17*s.* per cwt.	Duty, 11*s.* 1*s.* per cwt.	Duty, 17*s.* per cwt.	Duty, 11*s.* per cwt.										
1833	*Lbs.*	*Lbs.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Lbs.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
England -	42,735,481	14,198,390	1,753	22,227	10,531	5,030	61,138,515	665,591	2	7	621,773	15	9	30,247	0	8
Scotland -	7,317,789	1,770,225	-	3,641	2,488	2,455	10,049,383	111,560	13	5	100,926	16	10	8,659	1	5
Ireland -	1,888,590	508,490	-	518	23	-	2,457,707	27,361	15	10	26,677	19	10	649	0	6
U. Kingdom	51,941,860	16,477,105	1,753	26,386	13,042	5,485	73,645,605	804,513	11	10	748,478	12	5	39,555	2	5
1834.																
England -	44,713,546	14,211,091	1,875	24,423	10,021	2,719	63,296,978	691,941	8	0	639,467	7	10	36,789	1	2
Scotland -	7,466,550	1,883,569	-	3,647	2,610	3,738	10,469,570	115,204	3	3	105,894	7	0	6,459	18	3
Ireland -	1,873,625	457,508	30	323	8	8	2,372,403	26,677	0	9	25,800	17	9	876	3	0
U. Kingdom	54,053,721	16,552,168	1,905	28,393	12,639	6,465	76,138,945	833,822	12	0	771,162	12	7	44,125	2	5
1835.																
England -	45,329,243	15,586,171	2,328	23,004	9,543	2,487	64,899,901	705,292	15	4	645,578	7	6	41,960	8	9
Scotland -	8,626,830	2,045,766	-	3,118	2,999	5,869	12,015,050	132,272	11	1	120,299	7	6	7,236	6	11
Ireland -	2,223,482	431,158	17	373	21	15	2,702,352	30,943	15	0	30,427	1	3	386	18	5
U. Kingdom	56,179,555	17,863,095	2,345	26,495	12,563	8,371	79,617,312	868,439	1	5	796,304	16	3	50,283	14	1

PAPER OF ALL KINDS.

Rate of duty on all sorts of Paper in 1837, 1838, 1839, *and till the 15th May*, 1840, 1½*d. per lb.; and thereafter* 1½*d. per lb. and 5 per cent. additional.*

Years.	Weight of Paper.	Gross Produce of the Duties.			Nett Produce of the Duties.			Drawbacks on Paper exported.			Years.	Weight of Paper.	Gross Produce of the Duties.			Nett Produce of the Duties.			Drawbacks on Paper exported.		
1837.	*Lbs.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	1840.	*Lbs.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
England -	71,921,280	449,508	0	0	412,213	15	11	20,849	11	9	England -	76,780,041	494,828	5	9	457,281	10	1	24,854	13	8
Scotland -	13,781,383	86,133	12	10	77,256	6	6	3,910	18	6	Scotland -	16,866,024	108,674	12	5	101,215	7	1	6,929	10	2
Ireland -	3,248,182	20,301	2	9	19,112	17	5	109	16	7	Ireland -	5,591,293	23,159	17	6	22,901	18	8	257	18	10
U. Kingdom	88,950,845	555,942	15	7	508,582	19	10	24,870	6	10	U. Kingdom	97,237,358	626,662	15	8	581,428	15	10	32,042	2	8
1838.											1841.										
England -	73,805,741	461,285	17	7	436,246	2	5	17,658	17	0	England -	76,292,724	500,671	0	0	459,956	19	4	25,737	5	3
Scotland -	16,105,666	100,660	8	3	96,264	7	10	3,543	4	10	Scotland -	16,821,554	110,390	2	10	101,569	14	7	8,018	15	11
Ireland -	3,554,879	22,217	19	10	22,037	17	0	122	4	0	Ireland -	3,991,472	26,194	0	7	26,053	1	2	134	19	8
U. Kingdom	93,466,286	584,164	5	8	554,548	7	3	21,324	5	10	U. Kingdom	97,105,550	637,255	3	6	587,379	15	1	33,891	0	10
1839.											1842.										
England -	76,987,279	481,170	9	10	450,659	17	5	22,476	15	10	England -	75,574,228	495,955	17	6						
Scotland -	17,196,736	107,479	12	1	101,193	13	2	4,896	14	9	Scotland -	17,063,666	111,993	8	9						
Ireland -	3,462,329	21,640	16	1	21,379	4	10	211	5	0	Ireland -	4,053,429	26,600	12	5						
U. Kingdom	97,646,344	610,290	18	0	573,232	15	5	27,584	15	7	U. Kingdom	96,693,323	634,549	18	8						

PARCEL, a term indifferently applied to small packages of wares, and to large lots of goods. In this latter sense, 20 hogsheads of sugar or more, if bought at one price, or in a single lot, are denominated "a parcel of sugar."

PARCELS, BILL OF, an account of the items composing a parcel.

PARCHMENT AND VELLUM. The former consists of the skins of sheep and goats, and the latter of those of calves, prepared in such a manner as to render them suitable for being written upon, for covering books, and other purposes. The consumption of these articles is very considerable. In this and most other countries, it is customary to use them instead of paper in the drawing up of a great variety of deeds and other legal instruments. They are also extensively used, especially in Italy, in the binding of books. The finest copies of the magnificent classics which issued from the Dutch presses, in the 17th century and the early part of the 18th, were all bound in vellum.

Parchment is coarser than vellum, and not so well adapted for writing upon. The qualities of both articles differ very widely; so much so that the best parchment is preferable to inferior or even middling vellum. The goodness of each depends partly on the quality of the skins of which they are made, and partly, and indeed in a very high degree, on the care and skill with which they are manufactured.

Historical Notice. — The history of these articles is involved in some obscurity. Varro and Pliny (*Hist. Nat.* lib. xiii. cap. 11.), who have been generally followed, state that they were originally manufactured at Pergamus, in Asia Minor, the capital city of Eumenes II., one of Alexander's successors *, during the reign of that prince; and that parchment owes to this circumstance its classical name of *charta Pergamena*. But there seems to be little if any foundation for this statement. We have seen, in the preceding article on paper, that Herodotus, who flourished rather more than a century before Alexander the Great, states distinctly, that previously to his æra, when paper (*charta Egyptiaca*) was scarce, the Ionians were accustomed to write on the skins of sheep and goats, and that that practice was then followed (viz. in his time) by several barbarous nations. — (Lib. v. cap. 58.) And it is all but certain, seeing that the practice of writing on skins had been in use for at least 2½ centuries, and probably much more, previously to the æra of Eumenes, that their preparation would, in the course of that lengthened period, be so much improved as to render them little different from parchment. It is probable, indeed, that their manufacture may have been improved in Pergamus; but we incline to think that parchment owes its name rather to the extensive demand for it in that city, in consequence of Eumenes having amassed a large and valuable library, than to any thing else. He was, in fact, compelled to use parchment and vellum in the copying of books, as his contemporary Ptolemy Philadelphus had prohibited the exportation of paper. — (*Plin. ubi supra.*)

The scarcity of parchment during the middle ages, and in antecedent times, led to the practice of obliterating the writing on old parchments, by rubbing them with pumice stone, immersing them in boiling water, and such like devices; and there can be no manner of doubt that the prevalence of this practice has been most injurious to literature, and that it has most probably occasioned the total destruction of some of the noble *chefs-d'œuvre* of antiquity. In the middle ages these were erased that room might be made for some worthless treatise on scholastic theology or logic! Sometimes, however, it happens that the ancient writing is not so much obliterated, but that it may still be read; and to that circumstance the recent discovery of a portion of Cicero's treatise *De Republica* is to be ascribed. It had been effaced to make room for a commentary of St. Augustine on the Psalms. — (See the preface of May, the ingenious discoverer of this lost treatise.)

Parchments that have been erased in this way are called *Palimpsests* (from πάλιν, *again*, and ψάω, *to efface or clean*), or repeatedly cleaned parchments; because they have been repeatedly cleaned, renewed, or prepared for writing upon. If the learned world is ever to be gratified by the recovery of the lost comedies of Menander, or the lost books of Polybius, Livy, and Tacitus, it will most probably be by finding them under some homily or such like trash. — (*Nouveau Traité de Diplomatique*, i. 482, &c.; *Dom de Vaines*, ii. 177, &c.)

PARTIAL LOSS. See INSURANCE (MARINE).

PARTNERSHIP, the association of two or more individuals for carrying on some business or undertaking in common; each deriving a certain share of the profits, and bearing a corresponding share of the loss arising therefrom.

The term partnership is usually applied to those smaller associations in which the partners personally conduct their joint affairs: the term company being applied to those great associations conducted by directors and servants appointed by the body of the

* He was a successor of, but must not be confounded with, Eumenes, the secretary and general of the Conqueror.

partners to act for them; the latter having no direct concern in the management of the affairs of the company. — (See COMPANIES.)

The advantages of partnership are obvious. Many businesses could not be successfully carried on without a larger command of capital than usually belongs to an individual; and most of them require the combination of various species of talent. An individual may have capital sufficient to undertake a particular business; but he may not be thoroughly versed in any of its details, or he may be familiar with certain parts of it and not with others; so that it might be for his advantage to assume one or more individuals as his partners, supposing them to be without capital, provided they possessed the skill and other qualifications required in prosecuting the business. Associations of this sort enable capital and talent to derive all the assistance that each is capable of lending to the other. And as the gains of each partner usually consist of a certain *proportion* of the total profits made by the company, each has the most powerful motive to exert himself for the benefit of the concern. It is not, indeed, to be denied, that associations of this sort are occasionally productive of mischievous consequences. The public interest requires that the whole partners in a firm should be bound by the acts of any one of their number; so that the folly or fraud of a single partner may entail very serious consequences upon those associated with him. Generally, however, this is not an evil of frequent occurrence; and there can be no question that, both in a private and public point of view, partnerships are highly beneficial.

To enter into any thing like a full discussion of the law of partnership would very far exceed our limits. We shall, therefore, merely state a few of those leading principles with respect to it, as to which it is of importance that mercantile men, and the public generally, should be well acquainted.

Formation of Partnerships. — The mere consent of the partners, fixed and certified by acts or contracts, is quite sufficient to constitute a private copartnership; so that if two or more merchants, or other persons, join together in trade, or in any sort of business, with a mutual, though it may be unequal, participation in the profit and loss of the concern, they are in every respect to be considered as partners. No particular form of words or proceeding is necessary to constitute a partnership. It may be entered into either by an express written agreement, or by a merely verbal one. The former ought in almost all cases to be preferred. The contract of copartnery should state the parties to it, the business to be carried on, the space of time the partnership is to continue, the capital each is to bring into the business, the proportion in which the profit and loss are to be divided, the manner in which the business is to be conducted, the mode agreed upon for settling accounts at the dissolution of the partnership, together with the special covenants adapted to the circumstances of each particular case.

To constitute a partnership, there must be a participation in uncertain profits and losses: and the true criterion to determine, when money is advanced to a trader, whether the individual making the advance is to be looked upon as a partner or not, is to ascertain whether the *premium or profit be certain and defined, or casual, indefinite, and depending upon the accidents of trade.* In the former case he is a lender merely; in the latter he is a partner. The mere participation in the profits of any business or adventure, without a participation in the losses, constitutes a partnership, so far as to render the individual so participating liable to third parties for the engagements of the concern, though as between the parties themselves it may be no partnership. Thus, if a clerk or other servant stipulate for a share of the profits of any business *a reward for his labour*, he becomes responsible to third parties as a partner, and no private arrangement can cancel his liability.

If an individual, by his own act or inadvertence, allow himself *to appear to the world as a partner*, he is precluded from disputing the fact, even though he have no interest in the profits. A partner who withdraws from a firm is liable on account of the remaining partners continuing his name in the firm, though without his consent, unless he take the necessary precautions — (see *post*) — to show that he has ceased to belong to it.

If there be no express stipulation as to the management of partnership property, the majority decide as to the disposition and management of the joint affairs of the firm; or, if there be but two parties in a firm, one may manage the concern as he thinks fit, provided it be within the rules of good faith, and warranted by the circumstances of the case. The general duty of a partner is to keep in view, at all times, and in all transactions, the interest and welfare of the partnership, by acting honestly and uprightly, and as a prudent man would conduct his own affairs.

Liability of Partners as to third Parties. — It may be laid down as a general rule, that partners, whether actual, ostensible, or dormant, are bound by the act of their partner, made in the course of and with reference to the partnership business, and in the regular course of dealing by the firm; and though the general rule of law be, that no one is liable upon any contract, except such as are privy to it, yet this is not contravened by the liability of partners, as they are supposed virtually present at and sanctioning the pro-

ceedings they singly enter into in the course of trade, or as being severally vested with a power enabling them to act at once as principals and as the authorised agents of their copartners. It is for the advantage of partners that they are thus held liable; for the credit of their firm is in consequence greatly enhanced, and facility is given to all their dealings, even when they reside in different parts of the country, or of the world. A due regard to the interest of strangers is at the same time observed; for where an individual deals with one of several partners, he relies upon the credit of the entire firm, and therefore ought to have his remedy against all the individuals who compose it.

Unless, however, the act of one partner relate to and be connected with the partnership trade, and in the *course of dealing by the firm*, such acting partner only will be bound; for it is only by acting in the course of their particular trade or line of business that an implied authority is delegated by partners to each other; and it is only in such transactions that third parties have a right to rely upon the partnership funds. To bind a partnership, credit must be given to the firm itself, and not to one merely of its partners. One of them may even, in furtherance of the objects of the firm, enter into a contract with some third party; but if such contract be made *exclusively and solely upon the credit of the individual partner*, it will only bind him, and not the firm. The presumption of the law, however, always is, that a contract with one of the partners in reference to the business of the firm has been entered into upon the credit of the whole; and this presumption is not to be rebutted, except by very clear evidence. One partner cannot, as such, except in bankruptcy, bind another by *deed*.

The authority of a partner is revocable; and it is now fully established that a *disclaimer* of the authority of the partners in any particular transaction will preclude him from binding his copartners. Even during the subsistence of the partnership, one partner may to a certain degree limit his responsibility; and if there be any particular speculation or bargain proposed, which he disapproves of, he may, by giving distinct notice to those with whom his partners are about to contract that he will not be concerned in it, relieve himself from all consequences. Such notice would rebut his *primâ facie* liability. The partnership would be suspended *quoad* this transaction. Thus, if a partner draw, accept, or indorse a bill or note, he will, in all ordinary cases, thereby render the firm liable. But, to use the words of Lord Ellenborough, "it is not essential to a partnership that every partner should have such power; they may stipulate among themselves that it shall not be done; and if a third party, *having notice of this*, will take such security from one of the partners, he shall not sue the others upon it, in breach of such stipulation, nor in defiance of notice previously given to him by one of them, that he will not be liable for any bill or note signed by the others." — (*Galway* v. *Matthew*, 10 East, 264.); and so in other cases.

However small the share a partner may have in a concern, he is liable for the *whole* of the debts contracted by the firm; and must seek his remedy in a rateable contribution against his partners. Should one party enter into a smuggling or other illegal transaction on the partnership account, the other partners are liable to the duties and the penalty; and the Crown may proceed against the real delinquent alone, or against all the partners. A bookseller, or newspaper proprietor, is answerable for the acts of his agent or copartner, not only civilly, but also *criminally*.

Dissolution of Partnerships. — A partnership may be dissolved by the effluxion or expiration of the time during which it was originally agreed that it should continue. When a copartnership is formed for a single dealing or transaction, the moment that is completed, it is at an end. Partnerships may also be dissolved by death, agreement, bankruptcy, outlawry, &c. A court of equity will interfere to dissolve a partnership, in cases where a partner so misconducts himself as to be injurious to the firm, or to defeat the object for which the partnership was formed; or when a partner becomes insane, or is in such a state of mind as to render him permanently incapable of transacting the peculiar business of the firm; or where a partnership is formed for an impracticable purpose. Indeed, in all cases, where even a partnership may be dissolved without the interference of a court of equity, it may be most prudent, if the dissolution be opposed by one of the partners, to file a bill, praying a dissolution and account, and an injunction against using the partnership name.

When a partnership is dissolved by agreement, or one of the partners withdraws from it, public notice of the dissolution must be given in the *London Gazette*; and *a specific intimation of the circumstance must be sent to* ALL *individuals accustomed to deal with the firm*. Where such intimation has not been sent, the individual withdrawing from the firm may be made liable to third parties after he has ceased to have any thing to do with it. A dormant partner, whose name has never been announced, may withdraw from a firm without making the dissolution of partnership publicly known.

When the joint debts of the firm are paid, and the property duly distributed among the partners, the dissolution may be said, in a general sense, to be accomplished. If any one of the firm be guilty of a breach of duty in misapplying the effects before the

concern is finally wound up, the proper course is to apply to the Court of Chancery to appoint a manager.

Within a reasonable time after the death of one partner, the survivors must account to the representatives of the deceased; and if not willing to do so, a court of equity will compel them. In taking partnership accounts at the death of a partner, they must commence with the last stated account; or, if there be none such, with the commencement of the partnership; and they must end with the state of the stock at the time of the partner's death, and the proceeds thereof until it be got in.

No notice is necessary to third parties of the death of a partner; the partnership is dissolved, and all liabilities for subsequent acts cease. The surviving parties are to be sued alone for the partnership liabilities and obligations, for which they are liable to the full extent. But they are not liable for the separate debts of the deceased partner, unless, after payment of all the joint debts, they have a surplus of the partnership effects in their hands.

Upon a dissolution by death, if the joint effects be insufficient to pay the partnership debts, the separate estate of the deceased partner, if he have any, is liable for the deficiency.

The statements now made will, probably, be sufficient to give our readers a tolerably distinct notion of the formation of partnerships; and of the more important rights, duties, liabilities, &c. arising out of such institutions. Those who wish to go deeper into the subject, may consult the treatises of *Watson* and *Montague* on the *Law of Partnership*; *Chitty's Commercial Law*, vol. iii. pp. 225—269.; *Woolrych on Commercial Law*, pp. 298—317., &c..

PASSENGERS, in commercial navigation, are individuals conveyed for hire from one place to another on board ship. Passage ships are those peculiarly appropriated to the conveyance of passengers.

Passage ships are generally placed under certain regulations; and the extent to which emigration is now carried renders it of the utmost importance that these regulations should be carefully compiled.

Account of the Number of Emigrants from the U. Kingdom during each of the 18 Years from 1825 to 1842; both inclusive, specifying the Countries for which they sailed, and the Numbers that sailed for each.

Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.	Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.
1825	8,741	5,551	485	111	14,891	1835	15,573	26,720	1,800	325	44,478
1826	12,818	7,063	903	116	20,900	1836	34,226	37,774	3,124	293	75,417
1827	12,648	14,526	715	114	28,003	1837	29,884	36,770	5,054	326	72,034
1828	12,084	12,817	1,056	135	26,092	1838	4,577	14,332	14,021	292	33,222
1829	13,307	15,678	2,016	197	31,198	1839	12,658	33,536	15,786	227	62,207
1830	30,574	21,887	1,242	204	56,907	1840	32,293	40,642	15,859	1,958	90,745
1831	58,067	33,419	1,561	114	93,160	1841	38,164	45,017	32,625	2,786	118,592
1832	66,339	32,879	3,733	196	103,140	1842	54,123	63,852	8,534	1,835	128,344
1833	28,808	29,109	4,093	517	62,527						
1834	40,060	33,074	2,800	288	76,222	Total	504,944	507,638	115,458	10,037	1,128,077

Average annual emigration from the U. Kingdom for the 18 years ending with 1842 - - 62,671

The following account exhibits the emigration of 1842 more in detail.

Return of Emigrants from the different Portions of the United Kingdom in 1842, specifying the Countries for which they sailed, and the Number that sailed for each.

	England.				
To Foreign America:					
United States	53,439	4,214	6,199	63,852	
Texas -	38			38	
Central America	195			195	
Ayres	130			130	
					64,215
British North American Colonies:					
Canada	11,257	5,955	24,163		
New Brunswick - -	522	98	8,048		
Nova Scotia and Cape Breton -	467	1,625	241		
Newfoundland - -	135	30	325	490	
Prince Edward Island - -	624		633	1,257	
					54,123
West Indies:					
Jamaica - - -	203			244	
British Guiana - -	64			122	
Trinidad - - -	27			61	
Other West India Islands -	288			386	
					813
Falkland Islands - -	2				2
Western Africa - -	44				44
Cape of Good Hope - -	583				587
Mauritius - - -	26				26
n Colonies:					
- - -	1,062	78	310	450	
- - -	760	104	- -	864	
m's Land - -	1,790	31	627	448	
h Australia - -	119	26		145	
Western Australia - -	563			563	
New Zealand - -	2,345			664	
					5,534
Total number of emigrants		13,108			

It is seen from this statement, that in 1849 no fewer than 128,844 voluntary emigrants left the U. Kingdom; and such being the extent to which emigration is carried, the propriety, or rather necessity, of enacting some general regulations, with respect to the conveyance of emigrants to their destination, must be obvious to every one at all acquainted with the subject. The greater number of emigrants are in humble life: few among them know any thing of ships, or of the precautions necessary to insure a safe and comfortable voyage; they are also, for the most part, poor, and exceedingly anxious to economise, so that they seldom hesitate to embark in any ship, however unfit for the conveyance of passengers, or inadequately furnished with provisions, if it be cheap. Unprincipled masters and owners have not been slow to take advantage of this; and in order to prevent the frauds that would otherwise be practised on the unwary, it has been found indispensable to lay down some general regulations as to the number of passengers to be taken on board ships as compared with their tonnage, the quantity of water and provisions as compared with the passengers, &c. But this is no very easy task. If the limitations be too strict, that is, if comparatively few passengers may be carried, or if the stock of provisions to be put on board be either unnecessarily large or expensive, the cost of emigration is proportionally enhanced; and an artificial and serious impediment is thrown in the way of what should be made as easy as possible, consistent with security. But, on the other hand, if too many passengers be allowed, their health is liable to suffer; and should the supply of provisions be inadequate, or the quality bad, the most serious consequences may ensue. The act 6 G. 4. c. 116. obliged too great a quantity of expensive provisions to be put on board, and was in consequence objected to by emigrants as well as shippers. The act 9 G. 4. c. 21. avoided this error; but it was defective, inasmuch as it made no provision with respect to the sufficiency of the ship, the having a surgeon or other properly qualified medical person on board ships carrying a certain number of passengers, and in other particulars. These deficiencies were in part supplied by the act 5 & 6 W. 4. c. 53., and the acts 3 & 4 Vic. c. 21. and 1 & 2 Vic. 119. But the provisions in these acts having been still in several respects inadequate, the statute 5 & 6 Vic. c. 107 has repealed them, and substituted the following regulations in their stead

The 1st clause repeals the acts 5 & 6 Will. 4. c. 53., 3 & 4 Vict. c. 21., and 1 & 2 Vict. c. 119. in part.

Limitation of Numbers of Passengers according to Tonnage and Space. — No ship carrying passengers on any voyage from any port or place in the U. Kingdom, or in the Islands of Guernsey, Jersey, Alderney, Sark, or Man, to or for any port or place out of Europe, and within the Mediterranean Sea, shall proceed on her voyage with or shall carry more persons on board than in the proportion of 3 persons to every 2 tons of the registered burden of such ship, the master and crew being included in and forming part of such prescribed number, and that no such ship shall whatever be the tonnage thereof, proceed on her voyage with or carry more passengers on board than in the following proportion to the space occupied by them and appropriated for their use, and unoccupied by stores not being the personal luggage of passengers; (that is to say,) on the lower deck or platform 1 passenger for every 10 clear superficial feet, if such ship is not to pass within the tropics during such voyage, but if such ship is to pass within the tropics during such voyage, then 1 passenger for every 12 clear superficial feet, if such voyage is computed in manner after mentioned not to exceed 12 weeks and 1 passenger for every 15 such clear superficial feet if such voyage is so computed to exceed 12 weeks, and under the poop and on the orlop deck, if any, 1 passenger for every 20 superficial feet in all cases, and that if any ship carrying passengers upon any such voyage as aforesaid shall carry any passengers beyond these proportions, the master of such ship shall, for or in respect of every passenger constituting such excess, be liable, on conviction, to a penalty not exceeding 5*l.* — § 2.

Construction and Thickness of Lower Deck. — No ship shall carry passengers on any such voyage as aforesaid, unless she have lower or hold beams forming part of the permanent structure of the vessel, and also a lower deck or platform, of which the underside shall be not lower than 3 inches above the level of the lower beams, and properly and substantially secured to the same, nor unless such lower deck or platform shall be of not less than 1½ inch in thickness — § 3.

Height between Decks. — No ship shall carry any passengers upon any such voyage as aforesaid, unless she be of the height of 6 feet at the least between the upper deck and the lower deck or platform before mentioned, nor carry passengers on the orlop deck, if any, unless the height between such orlop deck and the deck immediately above the same be 6 feet at least — § 4.

Sleeping Berths. — No ship carrying passengers on any voyage as aforesaid shall have more than 3 tiers of berths; and in no such ship shall the interval between the floor of the berths and the deck or platform beneath them be less than 6 inches; and further, that the berths shall be securely constructed, and that their dimensions shall not be less than 6 feet in length, and 18 inches in width, for each passenger — § 5.

Quantities of Provisions and Water to each Passenger. — On board every ship carrying passengers as aforesaid, there shall be issued to the passengers daily a sufficient quantity of water at the rate of at least 3 quarts for each passenger per day; and there shall also be issued to the passengers at such intervals, not less than twice a week, a supply of provisions after the rate of 1 lbs. of bread or biscuit, 1 lbs. of oatmeal, or rice, or other farinaceous provisions, that ¾ at least of the supply shall consist of bread or biscuit, and that the remainder may be employed in the extent of the remaining ¼ of the supply; 2 lbs. of potatoes, 1 pint of pease or beans, as equal to 1 lb. of the other articles above enumerated; and such issues as aforesaid to be made during the whole voyage, including the time of detention, if any, at any port or place in the course of such voyage; and further, no ship proceeding on any voyage as aforesaid shall be cleared out or allowed to proceed on her voyage with and no board such quantity of pure water, and of good and wholesome provisions of such kinds, as shall be sufficient to allow of the above issues during the period assigned to such voyage, subject to the provisions of this act. — § 6.

Further Regulations as to Water. — In such ships the water to be laden on board as aforesaid shall be carried in tanks or sweet casks, and none of such casks shall exceed thirty-two gallons in capacity; and further, when any ship shall be destined to call at a port or place in the course of her voyage for the purpose of filling up her water, a supply of water at the rate before prescribed for the whole of the reported voyage to such port or place of calling shall be deemed to be sufficient, any thing in this act, subject to the following conditions: —

1 That the government emigration agent at ports where there is one, and the [illegible] or emigration

of customs at ports where there is no such agent, signify his approval, in writing, and that the same be carried amongst the papers of the ship, to be delivered to the collector of customs or her Majesty's consul, on reaching her final destination.

2. That an engagement to call at such port or place be inserted in the bond which is herein-after required to be given to the crown by the owner or charterer and master.
3. That if the computed length of voyage to such port or place be not declared in this act, it shall be competent to the government emigration agent, or the collector or comptroller of customs, as the case may be, to fix the same in each case; and
4. That the ship shall have on board, at the time of clearing out, tanks or water casks sufficient for stowing the quantity of water required for the longest portion of the whole voyage. — § 7.

Computed Length of different Voyages — The number of weeks deemed to be necessary for the voyage of any such ship, according to her destination, shall be determined by the following rule of computation; viz.: —

For a voyage to North America, except the west coast thereof, 10 weeks.
For a voyage to the West Indies, including under that term the Bahama Islands and British Guiana, 10 weeks.
For a voyage to any part of the continent of Central or South America, except the west coast thereof, and except British Guiana, 12 weeks.
For a voyage to the west coast of Africa, 12 weeks.
For a voyage to the Cape of Good Hope or the Falkland Islands, 15 weeks.
For a voyage to the Mauritius, 18 weeks.
For a voyage to Western Australia, 20 weeks.
For a voyage to any other of the Australian colonies, 22 weeks.
For a voyage to New Zealand, 24 weeks. — § 8.

How Children are to be computed. — For the purposes of this act it shall in all cases be computed that 2 children, each being under the age of 14 years, shall be equal to 1 passenger, and that children under the age of 1 year shall not be included in the computation of the number of passengers. — § 9.

Government Emigration Agents. — Before any such ship shall be cleared out for the voyage, the government emigration agent, at ports where there is such an officer, or in the absence of such agent, and in ports where there is no such agent, the collector or comptroller of customs, shall survey or make some competent person survey the provisions and water required by this act for the consumption of the passengers, and shall ascertain that the same are in a sweet and good condition, and shall also ascertain that over and above the same there is on board an ample supply of water and stores for the victualling of the crew of the ship and other persons (if any) on board. — § 10.

Clause 11. directs that the same officers do attend generally to enforcement of the act.

Seaworthiness of the Ship may be ascertained by Survey. — If doubts shall arise whether any ship about to proceed with passengers as aforesaid is seaworthy, so as to be fit for her intended voyage, and such doubts shall not be removed to the satisfaction of the collector and comptroller of the customs at the port from which such vessel is to be cleared out, or in case there shall be a government emigration agent at such port, then to the satisfaction of such emigration agent, it shall be lawful for such collector and comptroller, or for such emigration agent (as the case may be), at any time to cause such ship to be surveyed by 2 competent persons, and if these persons report that such ship is not in their opinion seaworthy with reference to such voyage, such ship shall not be cleared out, unless the contents of such report be disproved to the satisfaction of the commissioners of the customs or of the colonial land and emigration commissioners in those cases in which the report shall have been made at the instance of a government emigration agent, or until such ship shall have been rendered seaworthy — § 12

Sufficient Boats to be carried — No ship shall carry any passengers on any such voyage as aforesaid unless she be provided with good sound boats of suitable size, and properly supplied with all requisites for their use in the following proportion to the registered tonnage of such ship; viz. —

Two boats, if the tonnage of such ship be 150 tons and upwards, but under 250 tons:
Three boats, if the tonnage of such ship be 250 tons and upwards:
Four boats, if the tonnage of such ship be 400 tons and upwards, and the number of passengers exceed 200:

Nor unless one of such boats be a long boat of a size duly proportioned to the tonnage of the ship. — § 13.

Copies of the Act to be kept on board, and produced if demanded. — Two copies of this act shall be kept on board every ship carrying passengers as aforesaid and for this purpose 2 copies of the same, provided and issued by the authority of the commissioners of the customs, shall be delivered to the master, on demand, by the collector or comptroller of the customs at the port and time of clearance of the ship; and 1 of such copies shall, upon request made at reasonable times to the master of the ship, be produced to any passenger for his perusal. — § 14.

Regulations as to Medical Practitioner and Medicines — No ship carrying passengers on any voyage as aforesaid to any port or place as aforesaid, except to some port or place in North America, shall, in case the number of such passengers amount to or exceed 100, or in case the estimated length of the voyage, computed as before mentioned, exceed 12 weeks, and the number of such passengers shall amount to or exceed 50, clear out for such voyage from any port in the U. Kingdom or in the before mentioned islands, unless there be rated upon the ship's company, and be actually serving on board such ship, some person duly authorised by law to practise in this kingdom as a physician, surgeon, or apothecary, and that no such ship shall put to sea or proceed on such voyage unless such medical practitioner be therein, and shall *bond fide* proceed on such voyage, taking with him a medicine chest, and a proper supply of medicines, instruments, and other things suitable to the intended voyage; and no ship carrying passengers on any voyage from any port or place in the U. Kingdom to or for any port or place out of Europe, not being within the Mediterranean Sea, shall clear out for any such voyage unless there be actually laden and on board such ship medicines, and printed or written directions for the use of the same, and other things necessary for the medical treatment of the passengers on board during such intended voyage, and available for that purpose, nor unless such medicines and other things be adequate in amount and kind to the probable exigencies of any such voyage; and, together with such medicines and other things, shall also be put on board every such ship previously to her clearing out for any such voyage as aforesaid, a certificate under the hands of any 1 or more such medical practitioner, qualified as aforesaid, who shall not have been the seller of the medicines and other things, or any part of them, to the effect that the same have been inspected by him, and are in his judgment adequate to meet any such probable exigencies as aforesaid, and further, that he has no pecuniary interest in the supply of the same. — § 15.

Sale of Spirits to Passengers prohibited. — In any ship carrying passengers upon any such voyage as aforesaid no spirits or strong waters shall be sold to any passenger during the voyage; and if the master of the ship shall, directly or indirectly, sell or cause to be sold any spirits or strong waters to any passenger during the voyage, he shall be liable to a penalty not exceeding 100*l*. — § 16.

List of Passengers to be delivered before clearing. — The master of every ship carrying passengers on any such voyage as aforesaid shall, before clearing out his ship for such voyage from any port or place in the U. Kingdom, sign and deliver, in duplicate, to the collector or to such officer of her Majesty's customs at such port or place as may clear the ship, a list, made out according to the form contained in schedule (A) hereto annexed, of all and every the passengers on board of such ship, specifying, as accurately as may be, all the particulars required in said form, and such collector or other officer shall thereupon countersign and return to the said master one of such duplicate lists; and the said master shall exhibit such duplicate list, with the additions, if any, to be made thereto, as herein directed, to the collector or other chief officer of her Majesty's customs at any port or place in her Majesty's possessions, or to her

Majesty's consul at any foreign port at which the said passengers or any of them shall be landed, and shall deposit the same with such collector or chief officer of customs, or such consul, as the case may be, at his final port of discharge. — § 17.

Lists of additional Passengers after clearing out. — In case any vessel shall have cleared out as aforesaid with a number of passengers less than the number she could lawfully carry under the provisions of this act, or in case any passenger or passengers named in the list afore mentioned, shall not proceed on the voyage, and there shall afterwards be taken on board any additional passenger or passengers, the master shall in every such case add to the first list so countersigned and returned to him as aforesaid, and in the same manner as is required in such first list, the names and particulars of such additional passenger or passengers; and shall moreover prepare, in the form aforesaid, a separate list of such additional passenger or passengers, and deliver the same, together with the said first list so added to as aforesaid, both being duly signed by him, to the collector or other officer of customs at the port or place where such additional passenger or passengers may have embarked, and thereupon such collector or other officer of customs shall countersign the additions so made to such first list, and shall return the same to the master, and retain the separate additional list, and so on in like manner whenever any additional passenger or passengers may be taken on board: Provided always, that in the event of there being no collector or other officer of customs stationed at any port or place where such additional passenger or passengers may be taken on board, then such separate list, and also the said first list, with the additions so to be made to it as aforesaid, shall, in case the vessel shall subsequently touch at any port or place at which there shall be stationed any officer of her Majesty's customs, be delivered by the master to such officer of customs, and the same respectively shall be dealt with in all respects by such officer of customs as it would have been dealt with by the collector or other officer of customs as aforesaid had there been one at the port or place where such additional passenger or passengers embarked. — § 18.

Written Receipts to be given in respect of Passengers for N. America. — If any owner, charterer, or master of a ship, or any passage broker, agent, or other person, receive any money from any person, for or in respect of the conveyance of any person as a passenger on any voyage as aforesaid, to any port or place in North America, the person so receiving such money shall give a written acknowledgment for the same to the party from whom the same shall have been received, in the form contained in the schedule (B) hereto annexed, and in default thereof shall be liable to a penalty not exceeding 10*l.* in respect of each such passenger, and if he shall be so licensed as after mentioned, his licence shall be forfeited, in case the justices before whom the penalty shall be sued for shall declare the forfeiture thereof. — § 19.

Licences to be taken out by Dealers and Brokers in respect of Passages to North America. — From and after the commencement of this act no person, not being the owner or master of the ship in which such passages as after mentioned shall be taken, shall carry on the business of a passage broker or passage dealer in respect of passages from the U. Kingdom to any port or place in North America, or shall sell or let, to any person, any such passage, unless he have previously taken out a licence to carry on the business of a passage broker or passage dealer as after mentioned, and unless such licence continue in force; and if any person shall carry on such business, or sell or let any such passage contrary to this enactment, every person so offending shall be liable to a penalty not exceeding 10*l.* in respect of every such offence, and shall further be subject to all the same penalties and liabilities to which licensed passage brokers and passage dealers are subject under this act; and that it shall be lawful for any person desiring to carry on the business of a passage broker or dealer, in respect of such passages to North America, to make application to the justices assembled in petty or quarter sessions held for the district or place in which such person shall reside, for a licence to carry on such business, and such justices so assembled are authorised to grant such licence to the party making application for the same, such licence to be made out according to the form contained in the schedule (C) hereunto annexed, and to continue in force for the period named in such form, unless sooner forfeited in manner after mentioned; and where any such licence shall be granted, such justices shall cause notice thereof to be forthwith transmitted by post to the colonial land and emigration commissioners at their office in London: provided that no such licence shall be granted unless the party applying for the same shall show to the satisfaction of the justices that he has given notice to the colonial land and emigration commissioners of his intention to apply for the same 21 clear days at least before such application, such notice to be transmitted by post to the office of the said colonial land and emigration commissioners, and to be in the form contained in the schedule (D) hereto annexed. — § 20.

Penalties for acting without written Authority, &c. — If any licensed broker or dealer shall receive money for or on account of the passage of any passenger for any voyage to any port or place in North America, without having a written authority to act as agent for the party on whose behalf the contract for such passage purports to be made, or shall by any fraud or false pretence whatsoever induce any person to purchase, hire, or engage a passage in any ship for any such voyage, every such broker or dealer shall be liable, upon conviction, in respect of every such offence, to a penalty not exceeding 10*l.*; and it shall be lawful for the justices before whom the penalty shall be sued for to declare, if they think fit, the licence of such broker or dealer forfeited, and the same shall upon such declaration be forfeited accordingly: provided, that in any case in which any justices shall declare the licence of any passage broker or passage dealer forfeited, such justices shall cause notice of such forfeiture, in the form contained in the schedule (E) hereunto annexed, to be forthwith transmitted by post to the colonial land and emigration commissioners, at their office in London. — § 21.

Return of Passage Money and Compensation to Passengers, in certain Cases. — If any passenger or person on his behalf shall have entered into a contract for a passage or passages for such passenger, or for him and his family, in any ship, from any port in the U. Kingdom, to or for any port or place out of Europe, and not being in the Mediterranean Sea, and if such passenger, or such passenger and his family (as the case may be), shall be at the place of embarkation at the time appointed for that purpose in such contract, and such passenger shall apply for such passage or passages, and shall, on demand, pay or tender such part of the passage money not already paid as shall be payable under such contract previously to embarkation, and if, owing to the previous departure of the ship in which such passage or passages shall have been engaged, or the neglect, refusal, or other default of the owner, charterer, or master thereof, or of the party with whom such passage or passages shall have been contracted for, such passenger shall not obtain such passage or passages, or shall not within a reasonable time obtain a passage or passages by some other equally eligible vessel to the same port or place, and in the meantime be paid subsistence money, or be provided with lodging and maintenance, as after mentioned, such passenger shall be entitled to recover, in manner herein provided, all monies which he shall have paid for such passage or passages, from the party to whom he shall have paid the same, or from the owner or charterer of the ship for whom such party shall be the agent, and also such further sum not exceeding 10*l.* in respect of each such passage as shall, in the opinion of the justices who shall adjudicate on the complaint, be a reasonable compensation for the loss or inconvenience occasioned to such passenger or his family by the loss of such passage or passages. — § 22.

Subsistence in case of Detention. — If any ship shall not actually put to sea, and proceed upon any such intended voyage as aforesaid, on the day for that purpose appointed in and by any contract made by the owner, master, or charterer of such ship, or their agent, with any passenger who shall on that day be on board the same, or ready to proceed on such intended voyage, then and in every such case the master of such ship shall victual each and every such passenger in like manner as if the voyage had commenced; and if the ship does not put to sea after the interval of 2 clear working days from the day appointed for sailing, shall be liable to pay to each and every such passenger, instead of victualling him, subsistence money, at the rate of 1*s.* for each day's delay, until the actual clearing out and final departure of such ship on such voyage; provided that such subsistence money shall not be payable in lieu of victualling

in respect of any unavoidable detention by wind or weather, and also shall not be payable to any passenger who shall, with his own consent, be suitably lodged and maintained on shore at the expense of the parties who are bound to provide him with a passage. — § 23.

Clause 24. enacts that passengers shall not be landed without their consent at any other place than that contracted for.

Clause 25. enacts that passengers are to be maintained for 48 hours on board ship after their arrival, unless the ship shall quit any such port or place within the said period of 48 hours.

Facilities to be given for Inspection of Ships, &c. — The master of every ship carrying passengers shall afford to the government agent for emigration, or to the proper officer of customs, at any port or place in her Majesty's dominions from which such ship shall sail, or at which such ship shall touch during the voyage, or at which such ship shall arrive at the end of such voyage, and to her Majesty's consul at any port or place at which such ship shall arrive, being in a foreign country, every facility for the inspection of the ship, and for communication with the passengers, and for ascertaining that the act has been duly observed. — § 26.

Penalties. — If in any ship carrying passengers on any voyage as aforesaid, such lower deck or platform of such thickness as before directed shall not be laid and continued throughout the whole duration of any such voyage in such manner as is before required; or if the height between such lower deck or platform and the upper deck shall be less than six feet; or if there shall be more than 2 tiers of berths; or if such berths shall not be securely constructed, or shall not be of the dimensions before required; or if there shall not be throughout the whole duration of any such voyage such an interval as is before prescribed between the deck and the floor of the berths; or if any such ship shall clear out and put to sea not having on board tanks or sweet casks of such size and number as aforesaid, and such water and provisions as aforesaid, for the use and consumption of the said passengers, of the kind and to the amount and in the proportion before required; or if such water and provisions be not issued in manner before required; or if such ship be not provided with good boats according to the rates aforesaid; or if copies of this act have not been kept on board and produced on demand as before required; or if there be not on board any such vessel such medical practitioner as aforesaid, or such medicines and other things necessary to the medical treatment of the passengers as is before required; or if any such ship be cleared out before such list of passengers as before mentioned have been delivered in manner and form aforesaid to such officer as aforesaid; or if the additions to such list and such additional separate list or lists as aforesaid be not made in the cases aforesaid, and delivered in the cases in which they are herein required to be delivered; or if any such list, or the additions to the same, be wilfully false; or if any such list, including the additions, if any, to the same, be not exhibited to or deposited with the proper officer at any port or place at which it is before required to be exhibited or deposited; or if any passenger shall, without his previous consent, be put on shore at any place other than that at which the master had contracted to land such passenger; or if any passenger be not allowed to continue on board such ship in manner before provided; or if every such facility for inspection be not afforded as is before required, the master of any such ship shall for and in respect of each and every such offence be liable, on summary conviction, to the payment of a fine not exceeding 50*l.* sterling. — § 27.

The Right of Action of Passengers not taken away or abridged. — Nothing herein contained shall take away or abridge any right of suit or action which may accrue to any passenger in any ship, or to any other person, in respect of the breach or nonperformance of any contract made or entered into between or on behalf of any such passenger or other person, and the master, owner or owners, of any such ship.

Clause 29. directs the steps to be taken for the recovery of penalties.

Clause 30. enacts that *viva voce* evidence may be given of a party being a government agent or officer.

Clause 31. enacts that passengers suing are not incompetent witnesses.

Clause 32. enacts that distress shall not be unlawful for informality.

Clause 33. enacts that no plaintiff shall recover in any action against any person for any thing done in pursuance of this act if tender of sufficient amends have been made before such action was brought, or if, after the action was brought, a sufficient sum of money shall have been paid into court, with costs, by or on behalf of the defendant.

Clause 34. enacts that 21 days' notice of action shall be given.

Owners or Charterers and Masters of Vessels to enter into Bond for the Performance of the Regulations prescribed by this Act. — Before any ship carrying passengers, if the number of such passengers shall exceed 50, shall clear out for any voyage as aforesaid from any port or place in the U. Kingdom, the owner or charterer, or, in the event of his absence, one good and sufficient person on his behalf, to be approved by the collector or chief officer of customs at such port, and the master of the said ship, shall enter into a joint and several bond to her Majesty, her heirs and successors, in the sum of 100*l.*, the condition of which bond shall be that the said ship is seaworthy, and that all and every the rules and regulations made and prescribed by this act for the carriage of passengers shall be well and truly performed before and during such intended voyage, and that all penalties, fines, and forfeitures which the master of such ship may be sentenced or adjudged to pay for or in respect of the breach or nonperformance, before or during such voyage, of any such rules and regulations, shall be well and truly paid: provided, that such bond shall be without stamps; and that no such bond shall be put in suit, and that no prosecution, suit, action, information, or complaint shall be brought under or by virtue of this act, or by reason of the breach of any provision thereof, in any of her Majesty's possessions abroad, after the expiration of 12 calendar months next succeeding the commencement of any such voyage as aforesaid, nor in the U. Kingdom, after the expiration of 12 calendar months next after the return of the said ship or of the said master to the U. Kingdom. — § 35.

Exception of particular Kinds of Ships. — Nothing in this act shall extend or be construed to extend to ships carrying passengers on such voyage as aforesaid if the number of such passengers shall not amount to or exceed 30, nor shall any thing in this act extend to any of her Majesty's ships of war, or to any ship in the service of the commissioners for executing the office of lord high admiral of the U. Kingdom, or to ships of war or transports in the service of the East India Company. — § 36.

Extension of Act to West Indies, Western Africa, Malta, and Mauritius. — This act shall, except as herein-after stated, extend and apply to the carriage of passengers by sea from any of the British West Indies, in which term are included the British West India islands, the Bahamas, and British Guiana, and from Malta, and from the British possessions in Africa, and from the Mauritius, to any other place whatsoever. — § 37.

Power to Governors of Colonies to adopt the Act. — It shall be lawful for the governor or officer administering the government of any British colony not enumerated in the previous enactment, to declare by proclamation, that this act, except as herein is excepted, shall be extended and shall apply to the carriage of passengers by sea from such colony to such places as may by him be named for the purpose in such proclamation, and thereupon this act shall be thenceforth so extended, and shall so apply accordingly. — § 38.

Governors empowered to declare computed Length of Voyage. — It shall be lawful for the governor or officer administering the government of any of the British colonies to which this act has been extended or shall be extended by proclamation issued for that purpose, to declare the rule of computation by which the length of the voyage of any ship carrying passengers from such colony to any other place shall be estimated for the purposes of this act: Provided nevertheless, that this act shall not, except as respects the West Indies, and as after mentioned, extend or apply to any such voyage, if the length thereof so computed shall not be three weeks or upwards. — § 39.

Clause 40. enables the governors of colonies to issue proclamations substituting other articles of food, &c., if equivalent to those previously specified.

Clause 41. directs copies of such proclamations to be transmitted for her Majesty's confirmation or disallowance.

Clause 42. vests the powers for determining the seaworthiness of any ship in governors, &c.

Clause 43. enacts that no bond shall be required for voyages from the colonies.

Certain Provisions of this Act excepted in the Case of Voyages from the Colonies. — The provisions of this act shall not extend or apply to voyages from the colonies, so far as relates to the following subjects: (namely,)

The keeping copies of the act on board:
The use of the form of receipt herein-before required to be given for passage money:
The licensing of passage brokers:
The return of passage money and compensation, in case the party cannot be forwarded by the appointed ship, or by some other eligible vessel, and victualling or the payment of subsistence money in case of detention.

Extension of the Act to Voyages shorter than 3 Weeks to the West Indies. — Except as herein is excepted with respect to voyages from the colonies, the provisions and regulations of this act shall extend and apply to voyages from the West Indies of less duration, so computed as aforesaid, than 3 weeks, but being of not less duration, so computed as aforesaid, than 3 days, save and except so far as relates to the following subjects; (namely,)

The construction or thickness of the lower deck or platform:
The berths:
The height between decks:
The surgeon and medicine chest:
The maintenance of passengers for 48 hours after arrival:

Provided also, that as respects such voyages from the West Indies of less computed duration than 3 weeks, the owner or charterer of a ship may, if he think fit, contract with the passengers engaging passages therein, that they shall respectively provide themselves with necessary food (not including water) for the voyage; and in such case the regulations of this act respecting the issue of provisions by the master shall not be applicable to such passengers on such voyage.

Clause 46. empowers governors of other colonies to adopt the same extension of the act to voyages shorter than three weeks.

Clause 47. directs that this act shall not prevent the enactment by colonial assemblies, or by her Majesty in council, of laws necessary for establishing the rules and regulations required to carry this act into full effect.

Clause 48. enacts that this act may, with certain exceptions, be adopted in India.

Clause 49. enacts that the mode of proceeding for recovery of penalties in India is to be regulated by the governor in council.

Act to extend to Foreign Vessels. — The provisions, regulations, penalties, and forfeitures set forth in this act shall extend and be deemed to extend to foreign vessels carrying passengers upon any voyage from any port or place in the United Kingdom, or in the herein before mentioned islands, to or for any port or place out of Europe, and not being within the Mediterranean Sea, or upon any other voyage to which the provisions of this act shall for the time being extend.

Act not to extend to Cabin Passengers. — Wherever the term "passage" or "passenger" is used in this act, it shall be held not to include or extend to the class of passages or passengers commonly known and understood by the name of cabin passages and cabin passengers.

SCHEDULE (A) referred to in the 17th Section of the Passengers Act.

Ship's Name.	Master's Name.	Tons per Register.	Aggregate Number of superficial Feet in the several Compartments set apart for Steerage and Intermediate Passengers.	Total Number of Statute Adults the Ship can legally carry.	Where bound.

I hereby certify, that the provisions actually laden on board this ship, according to the section of the Passengers Act, are sufficient for passengers, computed according to the act.

(Signed)

Master.

Date

*Nominal List of Passengers.**

Ports of Embarkation.	Adults.			Children under 14 Years.			Profession, Occupation, or Calling of Passenger.	Port at which Passengers
	M.	F.	Total.	M.	F.	Total.		
Total number of souls equal to statute adults								

* We hereby certify the above is a correct list of all the passengers who embarked at the port of

(Signed) Master.

(Countersigned) Officer of Customs.

N.B. — Lines should be ruled in the same form, for any additions to the list after the ship first clears out; and similar certificates be subjoined to such additions, according to the requirements of the act.

SCHEDULE (B) referred to in the 19th Section of this Act.

Passenger's Contract Ticket.

N.B. — Any one receiving money from or in respect of any passenger about leaving the United Kingdom for any place in North America, without using this form, and correctly filling up the blanks therein, and signing it with his name in full, will be liable to a penalty not exceeding 10*l.* for each such passenger

Ship _____ of _____ tons register burden, to sail from _____ for _____ on the _____ day of _____ 18 .

Name.	Ages.	Equal to Statute Adults.

I engage that the parties herein named shall be provided with a steerage passage to _____ in the ship _____ with not less than ten cubic feet for luggage for each statute adult for the sum of £_____ including head money, if any, at the place of landing and every other charge; and I hereby acknowledge to have received the sum of £_____ in part full payment.

Water and provisions according to the annexed scale will be supplied by the ship, as required by law, and also fires and suitable hearths for cooking.

Utensils for eating and drinking will be provided by*

Bedding will be provided by*

Signature _____

Date

[N. B.— If signed by a broker or agent, state on whose behalf.

* Fill up these blanks by stating in each case whether the articles are to be supplied by the ship or by the passenger.

[At the end of this contract insert the victualling scale, which must in no case be less than required under the provisions of the Passengers Act.]

Deposit £ _____

Balance £ _____ to be paid at _____

Total £ _____

SCHEDULE (C) referred to in the 20th Section of this Act.

Form of Passenger Broker's Licence.

*A. B.** of in the having shown to the satisfaction of us, the undersigned justices of the peace in quarter petty sessions assembled, that he hath duly given notice to her Majesty's colonial land and emigration commissioners of his intention to make application for a licence to carry on the business of a passage broker or passage dealer in respect of passages to North America: we, the undersigned justices so assembled as aforesaid, and having had no sufficient cause shown to us why the said *A. B.* should not receive such licence, do hereby licence and authorise the said *A. B* to carry on the business of a passenger broker or passage dealer as aforesaid, until the 31st day of December in the year following the present year, unless this licence shall be sooner determined by forfeiture for misconduct on the part of the said *A. B.*, as in the Passengers Act is provided.

*The names in full, with the additions and address of the party applying for the licence, must be correctly inserted.

Given under our respective hands and seals, this _____ day of _____ 18 . at _____

_____ (L.S.)
Justice of the Peace.

_____ (L.S.)
Justice of the Peace.

SCHEDULE (D) referred to in the 20th Section of this Act.

Form of Notice to be given by Passage Broker to Her Majesty's Colonial Land and Emigration Commissioners.

Gentlemen,

I *A. B.* of in do hereby give you notice, that it is my intention to apply, after the expiration of twenty-one clear days from the putting of this notice into the post, to the justices to be assembled in the quarter petty sessions to be held for for a licence to carry on the business of a passenger broker or passage dealer in respect of passages to North America.

N. B.— The names in full, with the additions and address of the party, must be here correctly inserted.

N. B.— Name the place or district in which the party giving the notice resides.

Signature _____

Date _____

To her Majesty's Colonial Land and Emigration Commissioners.

SCHEDULE (E) referred to in the 21st Section of this Act.

Form of Notice to be given to Her Majesty's Colonial Land and Emigration Commissioners of Forfeiture of Passage Broker's Licence.

Gentlemen,

This is to give you notice that the licence granted on the day of 18 , to *A. B.* of in to act as a passage broker or passage dealer, was on the day of now last past duly declared by us, the undersigned Justices of the peace in petty sessions assembled, to be forfeited.

The names in full, with the additions and address of the party, to be here inserted.

Here state the reason of forfeiture.

Signatures _____

Date _____

To Her Majesty's Colonial Land and Emigration Commissioners, London.

In some respects, passengers may be considered as a portion of the crew. They may be called on by the master or commander of the ship, in case of imminent danger either from tempest or enemies, to lend their assistance for the general safety; and in the event of their declining, may be punished for disobedience. This principle has been recognised in several cases; but, as the authority arises out of the necessity of the case, it must be exercised strictly within the limits of that necessity. —(*Boyce* v. *Badcliffe*, 1 Campbell, 58.) A passenger is not, however, bound to remain on board the ship in the hour of danger, but may quit it if he have an opportunity; and he is not required to take upon himself any responsibility as to the *conduct* of the ship. If he incur any

responsibility, and perform extraordinary services in relieving a vessel in distress, he is entitled to a corresponding reward. The goods of passengers contribute to general average. — (*Abbott on the Law of Shipping*, part iii. c. 10.)

PATENT, a privilege from the Crown granted by letters patent (whence the name), conveying to the individual or individuals specified therein, the sole right to make, use, or dispose of some new invention or discovery, for a certain specified period.

The power to grant patents seems to exist at common law; but it is limited and defined by the famous statute 21 Jac. 1. c. 3., which enacts, "That any declaration before-mentioned shall not extend to any letters patent and grants of privilege for the term of 14 years or under, thereafter to be made, of the sole working or making of any manner of new manufactures within this realm, to the *true and first* inventor and inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient. The said 14 years to be accounted from the date of the first letters patent, or grant of such privilege hereafter to be made; but that the same shall be of such force as they should be if that act had never been made, and none other."

Policy of Patents. — The law with respect to patents is unavoidably encumbered with several difficulties. The expediency of granting patents has been disputed; though, as it would seem, without any sufficient reason. Were they refused, the inducement to make discoveries would, in many cases, be very much weakened; at the same time that it would plainly be for the interest of every one who made a discovery, to endeavour, if possible, to conceal it. And notwithstanding the difficulties in the way of concealment, they are not insuperable; and it is believed that several important inventions have been lost, from the secret dying with their authors. On the other hand, it is not easy to decide as to the term for which the patent, or exclusive privilege, should be granted. Some have proposed that it should be made perpetual; but this would be a very great obstacle to the progress of improvement, and would lead to the most pernicious results. Perhaps the term of 14 years, to which the duration of a patent is limited in England, is as proper a one as could be suggested. It may be too short for some inventions, and too long for others; but, on the whole, it seems a pretty fair average.

Specification. — Previously to the reign of Queen Anne, it was customary to grant patents without any condition, except that they should be for really new inventions. But a condition was then introduced into all patents, and is still retained, declaring that if the inventor do not, by an instrument under his hand and seal, denominated a specification, *particularly describe* and ascertain the nature of his invention, and in what manner the same is to be performed, and also cause the same to be enrolled in Chancery within a certain time (generally a month), the letters patent, and all liberties and advantages whatever thereby granted, shall utterly cease and become void. This was a very judicious regulation. It secures the invention from being lost; and the moment the patent expires, every one is in a situation to profit by it.

Mode of granting a Patent. — Letters patent are obtained upon petition and affidavit to the Crown, setting forth, that the petitioner has, after great labour and expense, made a certain discovery, which he describes, and which he believes will be of great public utility, and that he is the first inventor. The petition is referred to the attorney or solicitor general, who is separately attended by the applicant and all competitors, if there be any. They explain their projects to him, and he decides on granting or withholding the patent. When the inventions of two or more conflicting applicants coincide, he rejects all the applications. It would seem, that to decide upon such difficult questions in mechanics as are often agitated in applications for patents, a familiar knowledge of the principles and practical application of mechanical science would be indispensable. But by the law, as it now stands, such knowledge is not deemed necessary. The legal officers of the Crown are the sole judges as to what patents should or should not be granted; their award is *final*; and they are subject to no responsibility, other than the common remedies against public officers by impeachment, indictment, &c. — none of which would be entertained, unless a corrupt motive were established. After approval by the law officers, the grant is made out, sealed, and enrolled.

Considering the authority under which patents are granted, can any one wonder at the number that have been overturned in the courts of justice? or at the litigation to which they have given rise?

Expense of Patents. — Separate patents have to be taken out for England, Scotland, and Ireland, if it be intended to secure the privilege in the three kingdoms. The expense of stamps, fees, &c. is in all cases very heavy. It varies according to the intricacy of the invention, the opposition (if any) to the patent being granted, &c. But at a rough average it may, perhaps, be estimated at 120*l.* for England, 100*l.* for Scotland, and 100*l.* for Ireland. — (See *Parl. Paper* No. 729. Sess. 1838.)

Conditions as to Patents. — The *novelty* and *utility* of the invention are essential to the validity of a patent; if it can be shown to have been in use previously to the grant of the patent, or to be of no utility, it will be void. It must also be for something vendible — something "material and useful made by the hands of man." — (*Lord Kenyon*, 8 T. R. 99.) A philosophical principle only, neither organised, nor

capable of being so, is no ground for a patent; because it is an element and rudiment of science, and which, till applied to some new production from these elements, cannot, with justice to other inventors, be applied to the exclusive use of any one of them. *In all patents there is required, in the words of* Lord Tenterden, "something of a *corporeal or substantial nature*, something that *can be made* by man from the matters subjected to his art and skill, or at the least some *new mode of employing practically his art and skill*." — (*Godson on the Law of Patents*, p. 81.) Previously to Lord Tenterden, it had been ruled that a new process or method was not the subject of a patent. But his Lordship having suggested that "the word manufacture (in the statute) may, perhaps, extend to a *new process* to be carried on by known implements, or elements acting upon known substances, and ultimately producing some other known substance, &c." — *Godson*, p. 83.) — this principle of interpretation has now been adopted.

A patent for a machine, each part of which was in use before, but in which the *combination* of the different parts is *new*, and a *new result* is obtained, is valid. But, in order to its being valid, the specification must clearly express that it is in respect of such new combination or application, and of that only; and not lay claim to original invention in the use of the materials.

A patent may be granted for an addition to an old invention. But the patent must be *confined to the addition* or improvement, that the public may purchase it without being encumbered with other things. If the patent include the whole, it will be void; for the property in the addition or improvement can give no right to the thing that has been improved. — (*Godson*, p. 71.)

A valid patent may be obtained for an invention, "*new in this realm*," though it may have been previously practised in a foreign country.

A patent is void, if it be for several distinct inventions, and *any one of them* fail of originality.

The specification must be prepared with *great care*. It should set forth the invention fully and correctly. The terms used must be clear and unambiguous; no necessary description must be omitted, nor what is unnecessary be introduced; and the invention must be described in the *best and most improved state* known to the inventor. If any one of these conditions be not complied with, the patent will be void. Any inaccurate or defective statement, *were it even inserted through inadvertency*, will vitiate the whole.

Caveat. — It is not unusual for inventors who have not brought their inventions to perfection, and who are afraid lest they be anticipated by others, to lodge a caveat at the offices of the attorney and solicitor general; that is, an instrument by which notice is requested to be given to the person who enters it, whenever any application is made for a patent for a certain invention therein described in general terms. The entry of a caveat is, therefore, nothing more than giving information that an invention is nearly completed; so that, if any other person should apply for a patent for the same thing, the preference may be given to him who entered it.

An injunction may be obtained for the infringement of a patent, in the same way as for a violation of the copyright acts.

Patents have been sometimes extended by act of parliament beyond the term of 14 years, on the ground that that term was too short properly to reward the inventor.

An act passed in 1835, 5 & 6 W. 4. c. 77., made sundry regulations in the law or regulations under which patents had been previously granted as well as in the rules for their interpretation, and pointed out the method of proceeding in cases where application is made for a prolongation of the term of the patent. We subjoin an abstract of this act.

Any person having obtained Letters Patent for any Invention may enter a Disclaimer. — Any person who hath obtained or shall hereafter obtain letters patent for the sole making, exercising, &c. of any invention, may, if he think fit, enter with the clerk of the patents of England, Scotland, or Ireland, respectively, as the case may be, having first obtained the leave of the attorney-general, or solicitor-general in case of an English patent, of the lord advocate or solicitor-general of Scotland in the case of a Scotch patent, or of the attorney-general or solicitor-general for Ireland in the case of an Irish patent, a disclaimer of any part of either the title of the invention or of the specification, stating the reason for such disclaimer, or may, with such leave as aforesaid, enter a memorandum of any alteration in the said title or specification, not being such disclaimer or such alteration as shall extend the exclusive right granted by the said letters patent; and such disclaimer or memorandum of alteration, being filed by the said clerk of the patents, and enrolled with the specification, shall be taken to be part of such letters patent or such specification in all courts whatever; provided, that any person may enter a caveat, as caveats are now entered, against such disclaimer or alteration; which caveat shall give the party entering a right to have notice of the application being heard by the attorney-general or solicitor-general or lord advocate respectively; provided also, that no such disclaimer or alteration shall be receivable in evidence in any action or suit (except in any proceeding by scire facias) pending at the time when it was enrolled, but in every such action or suit the original title and specification alone shall be given in evidence, and taken to be the title and specification of the invention for which the letters patent have been granted; provided also, that it shall be lawful for the attorney-general or solicitor-general or lord advocate, before granting such fiat, to require the party applying for the same to advertise his disclaimer or alteration, as to the said attorney-general, &c. shall seem right, and shall, if he require such advertisement, certify in his fiat that the same has been duly made. — (§ 1.)

Mode of Proceeding where Patentee is proved not to be the real Inventor. — If in any suit or action it shall be proved or found by the verdict of a jury that a person who has obtained letters patent for any invention, or supposed invention, was not the first inventor thereof, or of some part thereof, by reason of some other person or persons having invented or used the same, or some part thereof, before the date of such letters patent, or if such patentee or his assigns shall discover that some other person had, unknown to such patentee, invented or used the same, or some part thereof, before the date of such letters patent, it shall be lawful for such patentee or his assigns to petition H. M. in council to confirm the said letters patent or to grant new letters patent, the matter of which petition shall be heard before the judicial committee of the privy council; and such committee, upon examining the said matter, and being satisfied that such patentee believed himself to be the first and original inventor, and being satisfied that such invention or part thereof had not been publicly and generally used before the date of such first letters patent, may report to H. M. their opinion that the prayer of such petition ought to be complied with, whereupon H. M. may, if he think fit, grant such prayer; and the said letters patent shall be available to give to such petitioner the sole right of using, making, and vending such invention: provided, that any person opposing such petition shall be entitled to be heard before the said judicial committee; provided also, that any person party to any former suit or action touching such first letters patent, shall be entitled to have notice of such petition before presenting the same. — (§ 2.)

If in any Action or Suit a Verdict pass for the Patentee, the Judge may certify, &c. — If any action at law or suit in equity shall be brought in respect of any alleged infringement of such letters patent heretofore or hereafter granted, or any scire facias to repeal such letters patent, and if a verdict pass for the patentee, or if a final decree or order be made for him, upon the merits of the suit, it shall be lawful for the judge who tried such action to certify on the record, or the judge who shall make such order to give a certificate under his hand, that the validity of the patent came in question before him, which record or certificate being given in evidence in any other suit or action touching such patent, if a verdict pass, or order be made, in favour of such patentee, he shall receive treble costs in such suit or action, to be taxed at three times the taxed costs, unless the judge making such second or other order, or trying such second or other action certify that he ought not to have treble costs. — (§ 3.)

Mode of Proceeding in case of Application for the Prolongation of the Term. — If any person who hath or shall hereafter obtain letters patent shall advertise in the London Gazette 3 times, and in 3 London papers, and 3 times in some country paper published in the town where or near to which he carried on any manufacture of any thing made according to his specification, or near to or in which he resides in case he carried on no such manufacture, or published in the county where he carries on such manufacture, or where he lives in case there shall not be any paper published in such town, that he intends to apply to H. M. in council for a prolongation of his term of sole using and vending his invention, and shall petition H. M. in council to that effect, it shall be lawful for any person to enter a caveat at the council office; and if H. M. refer such petition to the judicial committee of the privy council, and notice shall first be by him given to any person who has entered such caveat, the petitioner shall be heard by his counsel and witnesses to prove his case, and the persons entering caveats shall likewise be heard by their counsel and witnesses; whereupon the judicial committee may report to H. M. that a further extension of the term in the said letters patent shall be granted, not exceeding 7 years; and H. M. is hereby authorised and empowered, if he thinks fit, to grant new letters patent for the said invention for a term not exceeding 7 years after the expiration of the first term: provided that no such extension shall be granted if the application by petition be not made and prosecuted with effect before the expiration of the original term in such letters patent. — § 4.)

In case of Action, &c., Notice to be given. — In any action brought for infringing any letters patent, the defendant on pleading thereto shall give to the plaintiff, and in any score facies to repeal such letters patent the plaintiff shall file with his declaration, a notice of any objections on which he means to rely at the trial of such action, and no objection shall be allowed to be made in behalf of such defendant or plaintiff at such trial, unless he prove the objections stated in such notice: provided always, that it shall be lawful for any judge at chambers, on summons served by such defendant or plaintiff on such plaintiff or defendant respectively to show cause why he should not be allowed to offer other objections whereof notice shall not have been given, to give leave to offer such objections, on such terms as to him shall seem fit. — (§ 5.)

Costs in Actions for infringing Letters Patent. — In any action brought for infringing any letters patent, in taxing the costs thereof regard shall be had to the part of such case proved at the trial, which shall be certified by the judge, and the costs of each part of the case shall be given according as either party has succeeded or failed therein, regard being had to the notice of objections, as well as the counts in the declaration, and without regard to the general result of the trial. — (§ 6.)

Penalty for using, unauthorised, the Name of a Patentee, &c. — If any person shall write, paint, or print, or mould, cast, or carve, or engrave or stamp upon, any thing made, used, or sold by him, for the sole making or selling of which he hath not obtained letters patent the name or any imitation of the name of any other person who hath obtained letters patent, for the sole making and vending of such thing, without leave in writing of such patentee or his assigns, or if any person shall upon such thing not having been purchased from the patentee or some person who purchased it from him, or not having the licence in writing of such patentee or his assigns, write, paint, or otherwise mark the word "patent," the words "letters patent," or the words "by the king's patent," or any words of the like kind, meaning, or import, with a view of imitating or counterfeiting the stamp, mark, or other device of the patentee, he shall for every such offence be liable to a penalty of 50*l.*, to be recovered by action of debt, bill, &c. in any court of record at Westminster or in Ireland, or in the court of session in Scotland, one half to H. M. and the other to any person who shall sue for the same: provided, that nothing herein contained shall be construed to extend to subject any person to any penalty in respect of stamping or in any way marking the word "patent" upon any thing made, for the sole making or vending of which a patent before obtained has expired. — (§ 7.)

The reader will find a great deal of curious and instructive information with respect to patents, in the *Report of the Committee of the House of Commons* on that subject (No. 332, Sess. 1851), particularly in the evidence and papers laid before the Committee by Mr. Farey. The treatise on the *Law of Patents and Copyrights*, by Mr. Godson, is clear and able.

PATRAS, or PETRASSO, a sea-port in the N.W. corner of the Morea, near the entrance of the Gulph of Lepanto, lat. 38° 14′ 25″ N., lon. 21° 46′ 20″ E. Population variously estimated, from 4,000 to 5,000.

The port lies a little to the northward of the town; but the part fronting it is unsafe, and exposed to heavy seas, particularly in winter. Vessels, therefore, go a little further up the gulph, where there is a mole or quay, and where they can lie close to the wharf. Patras has a more extensive trade than any other port of Greece. The principal exports are currants, oil, valonia, wine, raw silk, raw cotton, wool, skins, wax, &c. Of these, currants are by far the most important. The fruit is larger, and treer grown in sand and gravel, than that of the Ionian Islands. They are shipped in casks of various sizes; but, as the weight of the cask is included in that of the fruit, it is said to be, for the most part, heavier and are richer than necessary. Morea currants are preferred in most countries, except England, but here the currants of Zante are held in equal, or perhaps greater, estimation. The exports of currants from Patras may average from 60,000 to 70,000 cwts. a year; but the produce of the crop varies extremely in different seasons. Latterly the culture of currants in the Morea has been very greatly extended, and, we believe, we may add, completely overdone. Owing to the increase of their quantity, their price, which in 1840 amounted to 80 dollars per 1000 lbs., had, in 1842, sunk to 23 dollars per do.! And as this price will not pay the expenses of cultivation, the growers are involved in the greatest difficulties, and the inferior plantations will necessarily have to be abandoned. The crops of oil, the next great article of export from Patras, are, if possible, still more fluctuating than those of currants. The imports at Patras, as at the other Greek ports, consist principally of sugar, coffee, and other colonial products; plain and printed cotton stuffs, woollen goods, salted fish, iron, tin plates, hardware, coal, cordage, hemp, deals, &c. Imported articles are brought principally from the Ionian Islands, Malta, Venice, Leghorn, Marseilles, and Trieste; but, from the want of authentic details, it is quite impossible to form any accurate estimate of their amount either as respects Patras, or any other Greek port: —

Shipping. — The arrivals and departures at Patras in 1841 were —

Flags.	Arrivals.				Departures.			
	Vessels.	Tonnage.	Crews.	Value of Cargoes.	Vessels.	Tonnage.	Crews.	Value of Cargoes.
				£				£
British *	46	6,735	348	18,656	47	6,550	303	108,557
Ionian	344	3,477	1,504	unknown	332	3,479	1,564	unknown
Greek	645	26,844	3,870	unknown	645	26,844	3,870	unknown
Austrian	69	10,822	1,471	25,830	69	10,822	1,471	25,830
Neapolitan	6	320	48	unknown	6	320	48	610
Ottoman	none	none	none	none	none	none	none	none
Total	1,110	47,548	7,359		1,106	47,615	7,346	

* Exclusive of Peninsular couriers four times a month. Of the 46 British arrivals, 24 were in ballast, 12 had manufactures, 4 coals, 2 sundries, 1 timber, and 3 currants. Of the 47 departures, 28 had currants, 11 were in ballast, 3 oil, &c., 3 sundries, 1 wheat and currants, and 1 manufactures.

Money. — Since the revolution, the Greeks have established a system of coinage in imitation of that of France. The phœnix is a silver coin, that should contain 9·10ths of pure metal, and 1·10th of alloy, or 4·0·9 grammes of the former, and ·4th do. of the latter, being worth about 8½*d.* sterling. The lepta is a copper coin, being 1·100th part of the phœnix. But the silver coins are already so much debased, that they have been refused even by the officers of government.

Weights and Measures. — The quintal is divided into 44 okes, or 132 lbs. Hence, 100 lbs. of Patras = 88 lbs. avoirdupois. Silk weight is 1·5th heavier.

A sack of currants weighs 140 lbs. of the common weight, or about 125 lbs. avoirdupois.

The staro, corn measure, = 2¾ Winch. bushels.

The long pic, or pik, used in measuring linens and woollens, = 27 English inches. The short pic, used in measuring silks, = 25 ditto.

Port Charges in the Kingdom of Greece.

Tonnage.

In the ports of Patras, Syra, Nauplia, Piræus, Marathonensis, Pylos, Calamata, and Navarino.

	Drs.	*Lep.*
On vessels under 5 tons	free.	
— of 20 —	0	9
— above 20 —	0	12
In the other ports: —		
On vessels under 5 tons	free.	
— of 20 —	0	6
— above 20 —	0	9

Permit of Departure.

On vessels under 5 tons	free.	
— of from 5 to 20 tons	0	50
— — 21 - 50 —	1	00
— — 51 - 100 —	2	00
— — 101 - 200 —	3	00
— — 301 and above	5	00

Lighthouse (only where there is one).

On vessels under 5 tons	free.	
— of from 5 to 20 tons	0	50
— — 21 - 50 —	1	00
— — 51 - 100 —	2	00
— — 101 - 200 —	5	00
— — 201 - 300 —	8	00
— — 301 and above	9	00

When gunpowder remains on board, *for* every 2½ lbs. per month of 30 days — — — — — 0 2

When it is placed in the public magazine, *for* the same quantity and time — — — — — 0 3

Observations on the Tonnage Duty. — 1. Vessels arriving from abroad loaded, and which discharge their cargoes, and depart loaded, pay the whole duty.

2. Vessels arriving from abroad loaded, and which depart in ballast, pay two thirds of the duty, which is also exacted if they arrive in ballast, and depart loaded.

3. Vessels arriving from abroad in ballast, and departing without lading, or arriving and departing with cargo, and not discharging any of it, pay one third of the duty.

4. Vessels arriving from and going to another port of the kingdom pay but one half of the duty.

5. A vessel is considered as loaded, whether she be so fully or partially.

Exceptions. — 1. Every vessel forced to enter a port, either by a storm or in consequence of damage, is exempted from all charges during 8 days.

2. Every vessel entering a port, from whatever cause, and destined to another port, and the master of which shall immediately make a declaration to the captain of the port, that he has no intention either of loading or discharging his goods, may remain 5 days without paying any duty except the light-house duty. He is permitted also to receive or to deliver letters or money, unless otherwise provided for by special ordinances.

We have derived these details partly from consular returns, and partly from other sources.

Commerce of Greece. — Considering the favourable situation of Greece, the number and excellence of her ports, the hardy enterprising character of her people, and the progress they had already made in navigation, it might have been supposed that she would have made a rapid advance in prosperity after being emancipated from the blind and brutal despotism of the Turks. But, however the fact may be accounted for, this has not certainly been the case. The ministers of King Otho appear not to have had the remotest idea of what was necessary to promote the development of industry in such a country as Greece. The new customs law, enacted in 1843, is arbitrary, and is full of prohibitions and penalties against which no caution can guard. Duties are, at the same time, laid on most articles of export; and though the rates of duty in the tariff on imports (amounting to 10 per cent. on cotton and woollen goods) cannot be fairly objected to, they are rendered most oppressive from the practice of charging them on arbitrary valuations, and of levying arbitrary fines. Agriculture is, also, subject to the greatest discouragement; from a third part to a half of the public revenue of the kingdom being derived from the worst of all possible taxes — a tithe! And we are assured by those well acquainted with the practical details, that the burden which the tithe really imposes is, in consequence of the illegal way in which it is assessed and collected, nearer 15 and 20 than 10 per cent. of the gross produce of the soil! Hence, instead of advancing, commerce and agriculture have, of late years, rather retrograded. And if to these defects in the commercial and fiscal regulations under which the country is placed, we add the deficiency of capital, the all but total want of good roads, the barbarism of a large portion of the population, the bankrupt state of the public finances, and the preference given by the government to military parade and ostentatious display, we need not be surprised at the stationary condition, the poverty, and the all but universal discontent of the people. But it is to be hoped that the excess of the evil may at length lead to a cure; and that at no distant period measures may be devised for giving freedom to industry, and for developing the extensive resources of the country, and the talents and ingenuity of its inhabitants.

It is deeply to be regretted that Candia, or Crete, was not either added to the new kingdom of Greece, or made independent. We cannot help considering it as disgraceful to the Christian nations of Europe, that this famous island, where European civilisation first struck its roots, should be consigned to the barbarians by whom it is now laid waste. It is as well entitled to the favourable consideration of England, France, and Russia, as any part of Continental Greece; and we do hope that measures may yet be devised for rescuing it from the atrocious despotism by which it has been so long weighed down.

PATTERNS, are specimens or samples of commodities, transmitted by manufacturers to their correspondents, or carried from town to town by travellers, in search of orders.

PAWNBROKERS AND PAWNBROKING. A pawnbroker is a species of banker, who advances money, at a certain rate of interest, upon security of goods deposited in his hands; having power to sell the goods, if the principal sum and the interest thereon be not paid within a specified time.

1. *Advantages and Disadvantages of Pawnbroking.* — The practice of impledging or pawning goods, in order to raise loans, is one that must necessarily always exist in

civilised societies, and is, in many cases, productive of advantage to the parties. But it is a practice that is extremely liable to abuse. By far the largest proportion of the *bonâ fide* borrowers of money on pawn consist of the lowest and most indigent classes; and were the lenders not subjected to any species of regulation, advantage might be taken (as, indeed, it is frequently taken, in despite of every precaution) of their necessities, to subject them to the most grievous extortion. But, besides those whose wants compel them to resort to pawnbrokers, there is another class, who have recourse to them in order to get rid of the property they have unlawfully acquired. Not only, therefore, are pawnbrokers instrumental in relieving the pressing and urgent necessities of the poor, but they may also, even without intending it, become the most efficient allies of thieves and swindlers, by affording them ready and convenient outlets for the disposal of their ill-gotten gains. The policy of giving legislative protection to a business so liable to abuse, has been doubted by many. But though it were suppressed by law, it would always really exist. An individual possessed of property which he may neither be able nor willing to dispose of, may be reduced to a state of extreme difficulty; and in such case, what can be more convenient or advantageous for him than to get a loan upon a deposit of such property, under condition that if he repay the loan, and the interest upon it, within a certain period, the property will be returned? It is said, indeed, that the facilities of raising money in this way foster habits of imprudence; that the first resort for aid to a pawnbroker almost always leads to a second; and that it is impossible so to regulate the business, as to prevent the ignorant and the necessitous from being plundered. That this statement, though exaggerated, is to a certain extent true, no one can deny. On the other hand, however, the capacity of obtaining supplies on deposits of goods, by affording the means of meeting pressing exigencies, in so far tends to prevent crime, and to promote the security of property; and it would seem as if the desire to redeem property in pawn would be one of the most powerful motives to industry and economy. At the same time, too, it must be borne in mind, that it is not possible, do what you will, to prevent those who are poor and uninstructed from borrowing; and that they must, in all cases, obtain loans at a great sacrifice, and be liable to be imposed upon. But the fair presumption is, that there is less chance of any improper advantage being taken of them by a licensed pawnbroker, than by a private and irresponsible individual. Although, however, the business had all the inconveniences, without any portion whatever of the good which really belongs to it, it would be to no purpose to attempt its suppression. It is visionary to imagine that those who have property will submit to be reduced to the extremity of want, without endeavouring to raise money upon it. Any attempt to put down pawnbroking would merely drive respectable persons from the trade, and throw it entirely into the hands of those who have neither property nor character to lose. And hence the object of a wise legislature ought not to be to abolish what must always exist, but to endeavour, so far at least as is possible, to free it from abuse, by enacting such regulations as may appear to be best calculated to protect the ignorant and the unwary from becoming the prey of swindlers, and to facilitate the discovery of stolen property.

2. *Obligations under which Pawnbrokers should be placed.* — For this purpose it seems indispensable that the interest charged by pawnbrokers should be limited; that they should be obliged to give a receipt for the articles pledged, and to retain them for a reasonable time before selling them; that the sale, when it does take place, should be by public auction, or in such a way as may give the articles the best chance for being sold at a fair price; and that the excess of price, if there be any, after deducting the amount advanced, and the interest and expenses of sale, should be paid over to the original owner of the goods. To prevent pawnbrokers from becoming the receivers of stolen goods, they should be liable to penalties for making advances to any individual unable to give a satisfactory account of the mode in which he became possessed of the property he is desirous to pawn; the officers of police should at all times have free access to their premises; and they should be obliged carefully to describe and advertise the property they offer for sale.

3. *Law as to Pawnbrokers.* — It may appear singular that pawnbrokers should hardly have been named in any legislative enactment till after the middle of last century. It was enacted by the 30 Geo. 2. c. 24. that a *duplicate* or receipt should be given for goods pawned; and that such as were pawned for any sum less than 10*l.* might be recovered any time within *two* years, on payment of the principal and interest; but the rate of interest was not fixed. This defect was supplied by the 25 Geo. 3. c. 48.; but the act 39 & 40 Geo. 3. c. 99. contains the latest and most complete regulations on the subject.

Every person exercising the trade of a pawnbroker must take out a licence, renewable annually, 10 days at least before the end of the year, for which he shall pay, within the cities of London and Westminster, and the limits of the twopenny post, 15*l.*, and every where else, 7*l.* 10*s.* No person shall keep more than 1 house by virtue of 1 licence; but persons in partnership need only take out 1 licence for 1 house. All persons receiving goods by way of pawn or pledge for the repayment of money lent thereon, at a higher rate of interest than 5 per cent., to be deemed pawnbrokers.

Upon every pledge on which there shall have been lent not exceeding 2*s.* 6*d.*, interest may be charged at the rate of ½*d.* per month;

£	s.	d.		£	s.	d.	
1	0	5	0	-	0	0	1 per month.
	0	7	6	-	0	0	1½ —
	0	10	0	-	0	0	2 —
	0	12	6	-	0	0	2½ —
	0	15	0	-	0	0	3 —
	0	17	6	-	0	0	3½ —
	1	0	0	-	0	0	4 —
2	0	0	and not exceeding				
2	2	0	-		0	0	8 —

And for every sum exceeding 10*s.* and not exceeding 10*l.* at the rate of 5*d.* in the pound by the calendar month, including the current month, and so in proportion for any fractional sum.

Pawnbrokers are to give farthings in exchange.

Persons applying to redeem goods pawned within 7 days after the first calendar month after the same shall have been pledged, may redeem the same without paying any thing for the first 7 days; and, upon applying before the expiration of 14 days of the second calendar month, shall be at liberty to redeem such goods, upon paying the profit payable for 1 calendar month and the half of another; and in all cases where the parties so entitled, and applying as afore-said, after the expiration of the first 14 days, and before the expiration of the second month, the pawnbroker is allowed to take the interest of the whole second month; and the same regulations and restrictions shall take place in every subsequent month.

When goods are pawned for more than 5*s.*, the pawnbroker, before advancing the money, shall immediately enter in his books a description of the pawn, the money lent thereon, the day of the month and year, the name of the person pawning and the name of the street, and number of the house, if numbered, where such person resides, and use of the letter L, if the person be a lodger, and the letters H K, if a housekeeper, and also the name and abode of the owner of the party offering such pledge; and if the money lent shall not exceed 5*s.*, such entry shall be made within 4 hours after the goods shall have been pawned; and the pawnbroker shall, at the time of taking the pawn, give to the person so pawning a duplicate, corresponding with the entry in the book, which the party pawning shall take in all cases; and the pawnbroker shall not receive any pledge, unless the party so pawning shall receive such duplicate.

Rates payable for Duplicates.

	£	s.	d.
If under 5*s.* -			gratis.
5*s.* and under 10*s.* -	0	0	0½
10*s.* and under 20*s.* -	0	0	1
20*s.* and under 5*l.* -	0	0	2
5*l.* and upwards -	0	0	4

The duplicate to be produced to the pawnbroker before he shall be compelled to redeliver the respective goods and chattels, except as herein after excepted.

The aforesaid rates of duplicates shall be added on pledges redeemed, and such duplicate shall be kept by the pawnbroker for 1 year.

Persons pawning other people's goods without their consent may be apprehended by the warrant of 1 justice, and committed to a term not exceeding 3*l.* nor less than 20*s.*, and the full value of the goods pawned; and the forfeiture to be immediately paid, the party shall commit the party to the house of correction, to be kept to hard labour for 3 calendar months; and if within 3 days before the expiration of the committment the forfeiture shall not be paid, the justice may order the person to be publicly whipped, and the forfeitures shall be applied towards making satisfaction to the parts injured, and defraying the costs; but if the party injured shall decline to accept such satisfaction and costs, or if there be any overplus, such forfeitures or overplus shall be paid to the poor of the parish.

Persons forging or counterfeiting duplicates may be seized and delivered to a constable, who shall convey them before a justice; and, upon conviction, such person shall be committed to the house of correction for any time not exceeding 3 calendar months.

Persons offering pledges, not giving a satisfactory account of themselves, or the means by which they became possessed of such goods, or wilfully giving any false information, or if there shall be reason to suspect that such goods are stolen, or illegally obtained, or if any person not entitled to redeem goods in pawn shall endeavour to redeem the same, they may be seized and delivered to a constable, to be carried before a justice; and if there should appear ground for a second examination, they shall be committed to the common gaol or house of correction, to be dealt with according to law; or where such proceedings are not authorised by the nature of the offence, the party shall be committed for any time not exceeding 3 calendar months.

Persons buying or taking in pledge unfinished goods, linen, or apparel, intrusted to others to wash or mend, shall forfeit double the sum lent, and restore the goods.

Peace officers are empowered to search for unfinished goods which shall be come by unlawfully.

When goods are unlawfully pawned, the pawnbroker is to restore them; and their houses may be searched during the hours of business, by a warrant from a magistrate for the discovery of such property.

Persons producing notes or memorandums are to be deemed the owners of the property.

Where duplicates are lost, the pawnbroker, upon affidavit made by the owner of such loss before a magistrate, shall deliver another duplicate.

Goods pawned are deemed forfeited at the end of a year; but, on notice from persons having goods in pledge, 3 months further are to be allowed beyond the year for redemption; such notice to be given before the twelvemonth is expired.

All goods pawned may be sold at the expiration of *one* whole year; and all goods so forfeited, on which above 10*s.* and not exceeding 10*l.* shall have been lent, shall be sold by public auction, and not otherwise; notice of such sale being twice given, at least 3 days *before the auction*, in a public newspaper, upon pain of forfeiting to the owner of the goods not more than 5*l.* nor less than 2*l.*

All pictures, prints, books, bronzes, statues, busts, carvings in ivory and marble, cameos, intaglios, musical, mathematical and philosophical instruments, and china, shall be sold by themselves, and without other goods, 4 times only in every year, viz. on the 1st *Monday* in *January*, *April*, *July*, and *October*, every year.

Pawnbrokers are not to purchase goods, while in their custody, nor take in pledges from persons under 12 years of age, or intoxicated, nor take in any goods before 8 in the forenoon or after 8 in the evening between *Michaelmas-day* and *Lady-day*, or before 7 in the forenoon or after 9 in the evening during the remainder of the year, excepting only until 11 on the evenings of *Saturday*, and the evenings preceding *Good Friday* and *Christmas-day*, and every fast or thanksgiving day.

An account of the sale of pledges for more than 10*s.* is to be entered by pawnbrokers in a book, and the surplus is to be paid to the owner of the goods pawned, if demanded within *three years* of the sale, under penalty of 10*l.* and treble the sum lent.

Pawnbrokers are to place in view the table of profits; and their name and business is to be placed over the door, on penalty of 10*l.*

Pawnbrokers inquiring goods, or selling them before the time specified, shall, upon application to a magistrate, be compelled to make satisfaction for the same; and if the satisfaction awarded shall not exceed the principal and profits, the pawnbroker shall deliver the goods pledged to the owners without being paid any thing for principal or profit.

Pawnbrokers shall produce their books before a magistrate; or, refusing so to do, shall forfeit a sum not exceeding 10*l.* nor less than 5*l.*

Pawnbrokers offending against this act, shall forfeit for every offence not less than 40*s.* nor more than 10*l.*

It has been held by the Court of King's Bench, that a pawnbroker has no right to sell unredeemed pledges, after the expiration of a year from the time the goods were pledged, if, while they are in his possession, the original owner tender him the principal and interest due. — *Wallace v. Smith*, 22d of January, 1820. On a motion for a new trial, Lord Tenterden said, "I am of opinion, that if the pledge be not redeemed at the expiration of a year and a day, and no notice given that 3 months further are to be allowed for its redemption, the pawnbroker has a right to expose it to sale so soon as he can, consistently with the provisions of the act. But if at any time *before the sale has actually taken place*, the owner of the goods tender the principal and interest, and expenses incurred, he has a right to his goods, and the pawnbroker is not injured; for the power of sale is allowed him merely to secure to him the money which he has advanced, together with the high rate of interest which the law allows to him in his character of pawnbroker."

Such is the present state of the law with respect to pawnbrokers. On the whole, the regulations seem to be judiciously devised. Perhaps, however, the rate of interest on small deposits might be advantageously lowered. The law allows interest at the rate of ½*d.* per month to be charged on loans of 2*s.* 6*d.*, which is at the rate of 20 per cent.: but the same sum of ½*d.* per month is exigible from all smaller loans; and as very many do not exceed 1*s.* 6*d.*, and even 6*d.*, the interest on them is exceedingly oppressive. No doubt there is a great deal of trouble with respect to such loans; but still, considering the vast number of advances under 2*s.* 6*d.*, it would seem that the interest on them might be somewhat reduced. Perhaps, too, it might be advisable, still better to secure compliance with the statute, to enact that no one should be licensed as a pawnbroker without producing sufficient security for a certain sum, to be forfeited in the event of his knowingly or wilfully breaking or evading any of its provisions. This would prevent (what Colquhoun says is not an uncommon practice) swindlers from becoming pawnbrokers, in order to get the means of selling stolen goods. — (*Treatise on the Police of the Metropolis*, 2d ed. p. 156.)

It would be a useful regulation to oblige pawnbrokers to insure against losses by fire. Much mischief has been occasioned by the neglect of this precaution.

The duties on pawnbrokers' licences produced, in 1841, 16,365*l.*

4. *Notices of Pawnbroking in Italy, France, &c.*—The practice of advancing money to the poor, either with or without interest, seems to have been occasionally followed in antiquity.—(*Beckmann*, vol. iii. p. 14. 1st Eng. ed.) But the first public establishments of this sort were founded in Italy, under the name of *Monti di Pietà*, in the 14th and 15th centuries. As it was soon found to be impossible to procure the means of supporting such establishments from voluntary contributions, a bull for allowing interest to be charged upon the loans made to the poor was issued by Leo X. in 1521. These establishments, though differing in many respects, have universally for their object to protect the needy from the risk of being plundered by the irresponsible individuals to whom their necessities might oblige them to resort, by accommodating them with loans on comparatively reasonable terms. And though their practice has not, in all instances, corresponded with the professions they have made, there seems no reason to doubt that they have been, speaking generally, of essential service to the poor.

From Italy these establishments have gradually spread over the Continent. The *Mont de Piété*, in Paris, was established by a royal ordinance in 1777; and after being destroyed by the Revolution, was again opened in 1797. In 1804, it obtained a monopoly of the business of pawnbroking in the capital. Loans are made, by this establishment, upon deposits of such goods as can be preserved, to the amount of *two thirds* of the estimated value of all goods other than gold and silver, and to *four fifths* of the value of the latter. No loan is for less than 3 francs (2*s.* 6*d.*). The advances are made for a year, but the borrower may renew the engagement. Interest is fixed at the rate of *one* per cent. per month.

The *Mont de Piété* has generally in deposit from 600,000 to 650,000 articles, worth from 12,000,000 to 13,000,000 francs. The expense of management amounts to from 60 to 65 *centimes* for each article; so that a loan of 3 francs never defrays the expenses it occasions, and the profits are wholly derived from those that exceed 5 francs. At an average the profits amount to about 280,000 francs, of which only about 155,000 are derived from loans upon deposit, about 125,000 being the produce of other funds at the disposal of the company.

In some respects, particularly the lowness of interest upon small loans, and the greater vigilance exercised with respect to the reception of stolen goods, the *Mont de Piété* has an advantage over the pawnbroking establishments in this country. It may be doubted, however, whether it is, on the whole, so well fitted to attain its objects. The limitation of the loans to 3 francs would be felt to be a serious grievance here, and it can hardly be otherwise in France; nor is it to be supposed, that the servants of a great public establishment will be so ready to assist poor persons, having none but inferior articles to offer in security, as private individuals anxious to get business. And such, in point of fact, is found to be the case, not in Paris only, but in all those parts of the Continent where the business of pawnbroking is confined to a few establishments. And hence, though the question be not free from difficulty, it would seem that, were the modifications already suggested adopted, our system would be the best of any.

For further information with respect to this curious and interesting subject, the reader is referred to the *Traité de la Bienfaisance Publique* of Degerando, iii. 1—55.; besides giving a succinct historical notice of *Monts de Piété*, the learned author has discussed most part of the knotty questions connected with the proper organisation of these establishments, and with their influence on society, with equal sagacity and ability.

PEARL-ASH. See Potash.

PEARLS (Du. *Paarlen*, Fr. *Perles*; Ger. *Perlen*; It. *Perle*; Lat. *Margaritæ*; Rus. *Shemtchug*, *Perla*; Sp. *Perlas*; Arab. *Lodun*; Cyng. *Mooloo*; Hind. *Mootie*), are well known globular concretions found in several species of shell-fish, but particularly the mother-of-pearl oyster (*Concha margaritifera* Lin.). Pearls should be chosen round, of a bright translucent silvery whiteness, free from stains and roughness. Having these qualities, the largest are of course the most valuable. The larger ones have frequently the shape of a pear; and when these are otherwise perfect, they are in great demand for ear-rings. Ceylon pearls are most esteemed in England.

Value, &c. of Pearls.—Pearls were in the highest possible estimation in ancient Rome, and bore an enormous price.—(*Principium culmenque omnium rerum pretii, margaritæ tenent.*—*Plin. Hist. Nat.* lib. x. c. 35.) Their price in modern times has very much declined; partly, no doubt, from changes of manners and fashions; but, more probably, from the admirable imitations of pearls that may be obtained at a very low price. According to Mr. Milburn, a handsome necklace of Ceylon pearls, smaller than a large pea, costs from 170*l.* to 300*l.*; but one of pearls about the size of peppercorns may be had for 15*l.*: the pearls in the former sell at a guinea each, and those in the latter at about 1*s.* 6*d.* When the pearls dwindle to the size of small shot, they are denominated *seed* pearls, and are of little value. They are mostly sent to China. One of the most

remarkable pearls of which we have any authentic account was bought by Tavernier, at Catifa, in Arabia, a fishery famous in the days of Pliny, for the enormous sum of 110,000*l.*! It is pear-shaped, regular, and without blemish. The diameter is ·63 inch at the largest part, and the length from 2 to 3 inches.

Much difference of opinion has existed among naturalists with respect to the production of pearls in the oyster; but it seems now to be generally believed that it is the result of disease, and is formed in the same manner as bezoar — (see BEZOAR); pearls, like it, consisting of successive coats spread with perfect regularity round a foreign *nucleus*. In fact, the Chinese throw into a species of shell-fish (*mytilus cygneus*, or swan muscle), when it opens, 5 or 6 very minute mother-of-pearl beads strung on a thread; and in the course of a year they are found covered with a pearly crust, which perfectly resembles the real pearl. — (*Milburn's Orient. Com.; Ainslie's Mat. Indica, &c.*)

Pearl Fisheries. — The pearl oyster is fished in various parts of the world, particularly on the west coast of Ceylon; at Tuticoreen, in the province of Tinnevelley, on the coast of Coromandel; at the Bahrein Islands, in the Gulph of Persia; at the Sooloo Islands; off the coast of Algiers; off St. Margarita, or Pearl Islands, in the West Indies, and other places on the coast of Colombia; and in the Bay of Panama, in the South Sea. Pearls have sometimes been found on the Scotch coast, and in various other places.

The pearl fishery of Tuticoreen is monopolised by the East India Company, and that of Ceylon by government. But these monopolies are of no value; as in neither case does the sum for which the fishery is let equal the expenses incurred in guarding, surveying, and managing the banks. It is, therefore, sufficiently obvious that this system ought to be abolished, and every one allowed to fish on paying a moderate licence duty. The fear of exhausting the banks is quite ludicrous. The fishery would be abandoned as unprofitable long before the breed of oysters had been injuriously diminished; and in a few years it would be as productive as ever. Besides giving fresh life to the fishery, the abolition of the monopoly would put an end to some very oppressive regulations, enacted by the Dutch more than a century ago.

Persian Gulph. — The most extensive pearl fisheries are those on the several banks not far distant from the island of Bahrein, on the west side of the Persian Gulph, in lat. 26° 50′ N., long. 51° 10′ E.; but pearl oysters are found along the whole of the Arabian coast, and round almost all the islands of the gulph. Such as are fished in the sea near the islands of Karrak and Corgo contain pearls said to be of a superior colour and description. They are formed of 8 layers or folds, whilst others have only 5, but the water is too deep to make fishing for them either very profitable or easy. Besides, the entire monopoly of the fishery is in the hands of the sheik of Bushire, who seems to consider these islands as his immediate property.

"The fishing season is divided into two portions — the one called the short and cold, the other the long and hot. In the cooler weather of the month of June, diving is practised along the coast in shallow water; but it is not until the intensely hot months of July, August, and September, that the Bahrein banks are much frequented. The water on them is about 7 fathoms deep, and the divers are much inconvenienced when it is cold; indeed, they can do little when it is not as warm as the air, and it frequently becomes even more so in the hottest months of the summer. When they dive, they compress the nostrils tightly with a small piece of horn, which keeps the water out, and stuff their ears with bees' wax for the same purpose. They attach a net to their waists, to contain the oysters; and aid their descent by means of a stone, which they hold by a rope attached to a boat, and shake it when they wish to be drawn up. From what I could learn, 2 minutes may be considered as rather above the average time of their remaining under water. Although severe labour, and very exhausting at the time, diving is not considered particularly injurious to the constitution; even old men practise it. A person usually dives from 12 to 15 times a day in favourable weather; but when otherwise, 3 or 4 times only. The work is performed on an empty stomach. When the diver becomes fatigued, he goes to sleep, and does not eat until he has slept some time.

"At Bahrein alone, the annual amount produced by the pearl fishery may be reckoned at from 200,000*l.* to 240,000*l.* If to this, the purchases made by the Bahrein merchants or agents at Aboottabee Sharga, Ras-ul Khymack, &c. be added, which may amount to half as much more, there will be a total of about 300,000*l.* or 360,000*l.*; but this is calculated to include the whole pearl trade of the gulph; for it is believed that all the principal merchants of India, Arabia, and Persia, who deal in pearls, make their purchases, through agents, at Bahrein. I have not admitted in the above estimate much more than *one sixth* of the amount some native merchants have stated it to be, as a good deal seemed to be matter of guess or opinion, and it is difficult to get at facts. My own estimate is in some measure checked by the estimated profits of the small boats. But even the sum which I have estimated is an enormous annual value for an article found in other parts of the world as well as here, and which is never used in its best and most valuable state, except as an ornament. Large quantities of the seed pearls are used throughout Asia, in the composition of majoons, or electuaries, to form which all kinds of precious stones are occasionally mixed, after being pounded, excepting, indeed, diamonds; these being considered, from their hardness, as utterly indigestible. The majoon, in which there is a large quantity of pearls, is much sought for and valued, on account of its supposed stimulating and restorative qualities.

"The Bahrein pearl fishery boats are reckoned to amount to about 1,500, and the trade is in the hands of merchants, some of whom possess considerable capital. They bear hard on the producers or fishers, and even those who make the greatest exertions in diving hardly have food to eat. The merchant advances some money to the fishermen at cent per cent., and a portion of dates, rice, and other necessary articles, all at the supplier's own price; he also lets a boat to them, for which he gets one share of the gross profits of all that is fished; and, finally, he purchases the pearls nearly at his own price, for the unhappy fishermen are generally in his debt, and therefore at his mercy." — (*Manuscript Notes communicated by Major D. Wilson, late Political Resident at Bushire.*)

The fishery at Algiers was farmed by an English association in 1826, but we are ignorant of their success.

The pearl fisheries on the coast of Colombia were at one time of very great value. In 1587, upwards of 697 lbs. of pearls are said to have been imported into Seville. Philip II. had one from St. Margarita, which weighed 250 carats, and was valued at 130,000 dollars. But, for many years past, the Colombian pearl fisheries have been of comparatively little importance. During the mania for joint stock companies, in 1825, two were formed; — one, on a large scale, for prosecuting the pearl fishery on the coast of Colombia; and another, on a smaller scale, for prosecuting it in the Bay of Panama and the Pacific. Both were abandoned in 1826.

The best fishery ground is said to be in from 6 to 8 fathoms water. The divers continue under water from a minute to a minute and a half, or at most 2 minutes. They have a sack or bag fastened to the neck, in which they bring up the oysters. The exertion is extremely violent; and the divers are unhealthy and short-lived.

PEARL SHELLS, commonly called *Mother-of-pearl shells*, are imported from various parts of the East, and consist principally of the shells of the pearl oyster from the Gulph of

Persia and other places, particularly the Sooloo Islands, situate between Borneo and the Philippines, the shores of which afford the largest and finest shells hitherto discovered. On the inside, the shell is beautifully polished, and of the whiteness and water of pearl itself: it has the same lustre on the outside, after the external laminæ have been removed. Mother-of-pearl shells are extensively used in the arts, particularly in inlaid work, and in the manufacture of handles for knives, buttons, toys, snuff-boxes, &c. The Chinese manufacture them into beads, fish, counters, spoons, &c.; giving them a finish to which European artists have not been able to attain. Shells for the European market should be chosen of the largest size, of a beautiful pearly lustre, thick and even, and free from stains. Reject such as are small, cracked or broken, or have lumps on them. When stowed loose as dunnage, they are sometimes allowed to pass free of freight.—(*Milburn's Orient. Com.*) The imports during the 3 years ending with 1842 amounted, at an average, to about 950,000 lbs. a year.

PEAS (Ger. *Erbsen*; Fr. *Pois*; It. *Piselli, Bisi*; Sp. *Pesoles, Guisantes*; Rus. *Goroch*). The pea is one of the most esteemed of the leguminous or pulse plants. It is supposed to be indigenous to the south of Europe, and was cultivated by the Greeks and Romans, the latter of whom probably introduced it into Britain. There are many varieties; but the common garden pea (*Pisum sativum*), and the common grey or field pea (*Pisum arvense*), are the most generally cultivated; being reared in large quantities in all parts of the country, particularly in Kent. But since the introduction of the drill husbandry the culture of the pea as a field crop has been to a considerable extent superseded by the bean. Sometimes, however, it is drilled along with the latter; for, being a climbing plant, it attaches itself to the bean, so as to admit the ground being hoed; at the same time that the free admission of air about its roots promotes its growth. It is not possible to frame any estimate of the consumption of peas. The field pea is now hardly ever manufactured into meal for the purpose of being made into bread, as was formerly the case in many parts of the country; but there is reason to think that the garden pea is now more extensively used than ever. — (*Loudon's Ency. of Agriculture*; *Brown on Rural Affairs*, vol. ii. p. 72. For an account of the laws regulating the importation, &c. of peas, see Corn Laws and Corn Trade.) Leguminous crops are very extensively cultivated in India.

PECK, a dry measure for grain, pulse, &c. The standard, or Imperial peck, contains 2 gallons, or 554·55 cubic inches. Four pecks make a bushel, and 4 bushels a coomb. — (See Weights and Measures.)

PELLITORY, the root of a perennial plant (*Anthemis pyrethrum*), a native of the Levant, Barbary, and the south of Europe. The root is long, tapering, about the thickness of the finger, with a brownish cuticle. It is imported packed in bales, sometimes mixed with other roots, from which, however, it is easily distinguished. It is inodorous. When chewed, it seems at first to be insipid, but after a few seconds it excites a glowing heat, and a pricking sensation on the tongue and lips, which remains for 10 or 12 minutes. The pieces break with a short resinous fracture; the transverse section presenting a thick brown bark, studded with black shining points, and a pale yellow radiated inside. It is used in medicine as a stimulant. — (*Thomson's Dispensatory.*) The price varies, including the duty (*6d.*), from *2s.* to *2s. 6d.* per lb.

PENCILS (Ger. *Pinsel*; Du. *Pinseelen*; Fr. *Pinceaux*; It. *Pennelli*; Sp. *Pinceles*), the instruments used by painters in laying on their colours. They are of various kinds, and made of various materials; some being formed of the bristles of the boar, and others of camel's hair, the down of swans, &c.

PENCILS, BLACK LEAD. See Black Lead Pencils.

PENKNIVES (Ger. *Federmesser*; Fr. *Canifs*; It. *Temperini*; Sp. *Corta plumas*), small knives, too well known to need any particular description, used in making and mending pens. The best and most highly ornamented penknives are manufactured in London and Sheffield.

PENNY, formerly a silver, but now a copper coin. This was the first silver coin struck in England by our Saxon ancestors, being the 240th part of their pound; so that its weight was about 22½ grains Troy.

PENS (Fr. *Plumes à écrire*; Ger. *Schreibfedern*; It. *Penne da scrivere*; Rus. *Pera Stsoli*), well known instruments for writing, usually formed of the quills of the goose, swan, or some other bird. Metallic pens have been occasionally employed for a lengthened period; but it is only within these few years that they have been extensively introduced. They are now, however, manufactured in vast quantities, and of an immense variety of forms. But though they have superseded, to a very considerable extent, the use of quills, and have some peculiar advantages, it does not appear possible to give them the elasticity of the quill, nor to fit them so well for quick and easy writing on common descriptions of paper.

PENNYWEIGHT, a Troy weight, being the 20th part of an ounce, containing 24 grains.

PEPPER (Fr. *Poivre*; Ger. *Pfeffer*; Du. *Peper*; It. *Pepe*; Sp. *Pimienta*; Rus. *Perez*; Lat. *Piper*), the berry or fruit of different species of plants, having an aromatic, extremely hot, pungent taste, used in seasoning, &c. The following sorts of pepper are met with in commerce: —

I. Black Pepper (Fr. *Poivre*; Ger. *Schwarzen pfeffer*; It. *Pepe negro*; Sp. *Pimienta*; Sans. *Mercha*; Hind. *Gol-mirch*; Malay, *Lada*; Jav. *Mariha*), the fruit of a creeping plant (*Piper nigrum*), one of the pepper genus, of which there are upwards of 80 species. It is cultivated extensively in India, Siam, the Eastern islands, &c. It requires the support of other trees, to which it readily adheres. It climbs to the height of 20 feet; but is said to bear best when restrained to the height of 12 feet. It begins to produce at about the 3d year, and is in perfection at the 7th; continues in this state for 3 or 4 years; and declines for about as many more, until it ceases to be worth keeping. The fruit grows abundantly from all the branches, in long small clusters of from 20 to 50 grains; when ripe, it is of a bright red colour. After being gathered, it is spread on mats in the sun, when it loses its red colour, and becomes black and shrivelled as we see it. The grains are separated from the stalks by hand rubbing. That which has been gathered at the proper period shrivels the least; but if plucked too soon, it will become broken and dusty in its removal from place to place. The vine produces two crops in the year; but the seasons are subject to great irregularities.

Pepper should be chosen of a pungent aromatic odour, an extremely hot and acrid taste, in large grains, firm, sound, and with few wrinkles — for of these it always has some. Reject that which is shrivelled, or small grained, or which on being rubbed will break to pieces.

In point of quality, the pepper of Malabar is usually reckoned the best; but there is no material difference between it and that of Sumatra, and the other islands. In the market of Bengal, where they meet on equal terms, the produce of Malabar is generally about 2 per cent. higher than the other. In Europe, there is generally a difference of ½*d.* per lb. in favour of Malabar; but in China they are held in equal estimation.

Black pepper sold ground, is said to be often adulterated with burnt crust of bread.

II. White Pepper is made by blanching the finest grains of the common black pepper by steeping them for a while in water, and then gently rubbing them, so as to remove the dark outer coat. It is milder than the other, and is much prized by the Chinese; but very little is imported into England.

III. Cayenne Pepper is the produce of several varieties of the *Capsicum*, an annual plant, a native of both the Indies. The best, which is brought home from the West Indies ready prepared, is made from the *Capsicum baccatum* (bird pepper). It has an aromatic, extremely pungent, acrimonious taste, setting the mouth, as it were, on fire, and the impression remaining long on the palate. It is sometimes adulterated with muriate of soda; and sometimes with a very deleterious substance, the red oxide of lead; but this fraud may be detected by its weight, and by chemical tests. — (See Chillies.)

IV. Long Pepper. — This species is the produce of a perennial (*Piper longum*), a native of Malabar and Bengal. The fruit is hottest in its immature state; and is therefore gathered while green, and dried in the sun. It is imported in entire spikes, which are about 1½ inch long. It has a weak aromatic odour, an intensely fiery pungent taste, and a dark grey colour. The root of long pepper is a favourite medicine among the Hindoos.

The quantities of the last 3 species of pepper imported are quite inconsiderable, compared with the quantity of black pepper. — (*Milburn's Orient. Com.*; *Ainslie's Mat. Indica*; *Thomson's Dispensatory*, &c.)

Trade in Pepper. Consumption of, and Duties on, in England. — Pepper is extensively used, all over Europe and the East, as a condiment. It was originally imported into this country by way of the Levant (see *antè*, p. 517.); and for many years after the establishment of the East India Company, it formed the most important article of their imports. In nothing has the beneficial effect of opening the Indian trade been so unequivocally displayed as in the instance of pepper. The private traders have resorted to new markets, and discovered new sources of supply, which had hitherto been wholly unexplored; so that there has been not only a very great increase in the quantity of pepper brought to Europe, but also a very great fall in its price, which does not now exceed a third part of what it amounted to in 1814!

Pepper for a lengthened period was one of the most grossly over taxed articles in the British tariff. Until 1823, the duty was 2*s.* 6*d.* per lb. — a duty so exorbitant, that one would be inclined to think it had been imposed to put a total stop to the use of the article. In 1826, the duty on pepper from a British possession was reduced to 1*s.* per lb; but even this duty, as compared with the price of the article (3*d.* to 4*d.* per lb.), was quite oppressive, amounting to no less than from 300 to 400 per cent.; so that it was further and most properly reduced in 1837, to 6*d.* per lb. And in consequence principally of these reductions, the entries of pepper for home consumption,

which, previously to 1826, had not amounted to 1,450,000 lbs. in any one year, amount at present to about 2,700,000 lbs.! Still, however, the duty as compared with the price of pepper, is decidedly too high; and should not in fact, exceed 2*d.* or at most 3*d.* per lb. Were the duty reduced to this amount, pepper would become accessible to the lower classes, to whom its free use would be of much importance; and if so, the probability is, that the consumption would in no very lengthened period be doubled or more, which would either prevent the revenue from sustaining any loss by such a measure, or make it not worth mentioning.

Account of the Quantities of Pepper imported into the U. Kingdom during each of the 8 Years ending with 1842, specifying the Countries whence it was brought, and the Quantities brought from each; and specifying also the Quantities re-exported and retained for Consumption.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Western coast of Africa - -	49,433	56,142	180,562	14,775	10,833	49,530	22,559	
Mauritius - - -	4,133	257,850	- -	11,486	500,324	10,979	58,285	
East India Company's territories and Ceylon - - -	6,807,014	6,777,892	4,150,534	3,526,980	9,090,808	5,814,756	14,781,102	5,788,740
Sumatra, Java, and other islands in Indian Seas - - -	74,861	467,319	654,858	119,413	171,705	46,550	14,255	
British West Indies - - -	10,342	46,503	4,253	5,350	5,805	2,147	871	
All other places - - -	399,134	119,846	374,251	206,178	21,896	5,607	154,198	
Total imports - -	7,345,077	7,724,952	5,364,458	3,884,182	9,798,059	5,927,969	15,034,166	
Re-exports - -	1,240,187	1,131,500	1,268,500	1,077,100	8,334,200	5,040,125		
Quantities retained for consumption -	6,104,890	6,593,452	4,095,958	2,807,082	1,463,859	887,844	6,994,041	

The duty on pepper produced, in 1842, 70,348*l.* 3*s.* 4*d.*

Supply of Pepper.—The following interesting details with respect to the supply of pepper are taken from the *Singapore Chronicle*, to which they were contributed by John Crawfurd, Esq.—than whom there can be no more competent authority as to such subjects.

Of all the products of the Eastern islands, and of the countries immediately in their neighbourhood, in demand among strangers, black pepper is the most important, both in value and quantity.

The pepper countries extend from about the longitude of 96° to that of 115° E., beyond which no pepper is to be found; and they reach from 5° S. latitude to about 12° N., where it again ceases. Within these limits we have Sumatra, Borneo, the Malayan peninsula, and certain countries lying on the east coast of the Gulph of Siam.

The whole produce of the island of Sumatra is estimated not to fall short of 168,000 piculs of 133⅓ lbs. each; the south-west coast being set to produce 150,000, and the north-east coast 18,000 piculs.

The pepper ports on the north-east coast of Sumatra are Lankat and Delli, with Siadong. The first 2 produce 15,000 piculs, and the latter 3,000 annually. The cultivation is carried on by the Batta nation in the interior.

The ports on the south-west coast, and the amount of their produce, as given in a recent estimate, are as follows: viz. port and district of Trumah, 10,000; district of Pulo Dua 1,000, ditto of Choat, 30,000; coast from Tampat Tuan to Susu, 30,000, port of Susu, 1,000, Kualla Batta, 20,000; Analaban, 2,000; districts to the north of Analaban, 30,000; make 2 small, 1,000 piculs.

Here it is of importance to remark that the culture and production are extremely fluctuating.

During the last pepper season, there obtained cargoes on the west coast of Sumatra 27 American ships, 6 country traders, 4 large French ships, besides the ships belonging to the East India Company which generally take away 500 tons. Nearly the whole of this trade is in the hands of Europeans or Americans; the pepper finds its way to Europe, to America, and in a small proportion to China.

The north-east coast of Sumatra, from Pedier down to the Carimons, is estimated, as already mentioned, to produce 18,000 piculs. Prince of Wales Island is the principal *depôt* for this, from whence the greatest part is exported to India and China. The produce of Prince of Wales Island itself is about 15,000 piculs.

Of the islands at the mouth of the Straits of Malacca and Singapore, Bintang, on which Rhio is situated, and adjacent islands, produce 10,000 piculs; and Lingga about 2,000. A large proportion of this is brought to Singapore, which exported last year about 21,000 piculs: some part to Bengal and China, but principally to Europe direct, in free traders.

The west coast of the Malayan peninsula produces no pepper, with the exception of about 4,000 piculs afforded by the territory of Malacca.

On the east coast of the peninsula, the production of pepper is very considerable. The ports of Patani and Calantan—chiefly the latter—yield about 16,000 piculs annually, and Tringanu about 8,000. A portion of this is brought to Singapore and Penang, but we believe the greater proportion goes direct to China in junks, of which 3 large ones frequent Tringanu annually, and 1 Calantan. The Americans, too, occasionally visit these ports. In the year 1821, 3 vessels of considerable burden obtained cargoes.

The east coast of the Gulph of Siam, from the latitude of 10½° to that of 12½° N., affords an extensive produce of pepper. This coast is scarcely known, even by name, to the traders of Europe. The principal ports here are Chantibun, Tungyal, Pongsom, and Kampop; the first 2 being under the dominion of Siam, and the latter under that of Kamboja. The whole produce is estimated at not less than 60,000 piculs, 40,000 of which are brought at once to the capital of Siam as tribute to the king, and the whole finds its way to China in junks. It remains only to estimate the produce of the island of Borneo. The whole produce of Borneo is estimated at about 20,000 piculs; of which a large share is carried to China direct in junks, some by Portuguese vessels; and about 7,000 piculs are now annually brought by the native craft of the country itself to Singapore in the course of that free trade, which is happily flourishing at this settlement. The data which have been stated, will enable us to estimate the whole production of the Malayan Archipelago, including that of the peninsula of Malacca, and that of the east coast of the Gulph of Siam, at 298,000 piculs; and as there is no other part of the world that affords pepper, excepting the western coast of the peninsula of India, and this affords but 30,000 piculs, or less than 1-10th part of what the places we have enumerated produce, we have, accordingly, at one view, the whole production of the earth, being 334,000 piculs, or 45,066,666 lbs. avoirdupois. The average price of pepper has been lately about 9 Spanish dollars a picul; so that the whole value drawn into India from Europe, China, and the New World, on account of this single commodity, is 3,042,000 dollars. The quantity given in this statement may appear enormous; but if meted out to the whole population of the globe, or to 1,000,000,000 of people, it would be found that the average annual consumption of an individual would amount to no more than 3½ grains.

Mr Crawfurd has more recently supplied us with a revised estimate of the production of pepper as follows:—

	Lbs.		Lbs.
Sumatra (west coast) - -	20,000,000	Siam - - - -	8,000,000
Do. (east do.) - - -	8,000,000	Malabar - - - -	4,000,000
Islands in the Straits of Malacca -	3,600,000		
Malay peninsula - - -	3,733,333	Total -	50,000,000
Borneo - - - -	2,666,667		

The localities in the previous estimate are quite correct ; and we, therefore, did not think it would be right to suppress it.

PERCH, a long measure, 16½ feet in length. — (See WEIGHTS AND MEASURES.)

PERIODICAL PUBLICATIONS. These, as the name implies, are publications which appear at fixed periods or stated intervals, and consequently include newspapers, monthly and other magazines, quarterly reviews, and journals, and all such books as appear at monthly or other intervals. But the term "periodical publications" is usually understood in a more confined sense, or as comprising only magazines and such political, literary, and scientific journals as appear at regular intervals, without including newspapers or works published in parts.

Even when thus restricted, this is a very extensive and important department of literature. No doubt a vast deal of trash gets into print by the agency of magazines that might not otherwise see the light; but most part of these publications contain at the same time some superior articles; and a few are ably conducted and embrace a wide range of topics. Since the establishment of the Edinburgh Review in 1802, the quarterly journals, especially those that embrace politics and literature, have risen to great eminence, and have had a powerful influence over the public mind. At present, however, and for some time past, the influence of this class of journals has been declining. An ably conducted daily paper is, at this moment, by far the most powerful engine the press can bring into the field.

In a mercantile point of view periodical literature is of more importance than most persons would probably be at first disposed to admit. We have inquired with some care into the subject, and we are inclined to think that the following estimate of its extent and value in 1843 may be relied on with pretty considerable confidence.

Monthly Magazines. — These in the U. Kingdom amount, including all descriptions, to about 200: and taking their average price at 1*s.* 2*d.*, and their average sale at 1,500 copies, their produce will be 17,500*l.* a month, and 210,000*l.* a year.

Quarterly Journals. — There are 27 of these; and taking the average price of each at 5*s.*, and their average sale at 2,000 copies, they will produce 13,500*l.* a quarter, and 54,000*l.* a year. Hence, supposing these estimates to be nearly accurate, the annual produce of the sale of periodical publications (exclusive of what they yield by advertisements) will amount to about 264,000*l.*

PERMIT, a licence or instrument, granted by the officers of excise, certifying that the excise duties on certain goods have been paid, and permitting their removal from some specified place to another.

The acts relative to permits were consolidated by the stat. 2 Will. 4, c. 16. The commissioners of excise provide moulds or frames for making the paper used in the printing of permits, which have the water mark "Excise Office" visible in its substance; and the counterfeiting of such frames or paper, or the having the latter in one's possession without being able satisfactorily to account for it, are felonies punishable by transportation. Permits are not delivered except on the receipt of "request notes," specifying the places from and to which the goods are to be conveyed. A penalty of 500*l.* is to be imposed on all persons counterfeiting "request notes," or fraudulently procuring or misapplying permits, and all goods, for the removal of which permits are necessary, if they be removed without them, are to be forfeited, and the various parties engaged in their removal are to be each amerced in a penalty of 200*l.* It is needless to dwell on the extreme inconvenience that would result from such regulations were permits in extensive use. But such is not the case, and they are now wholly dispensed with, except in the case of a very few articles.

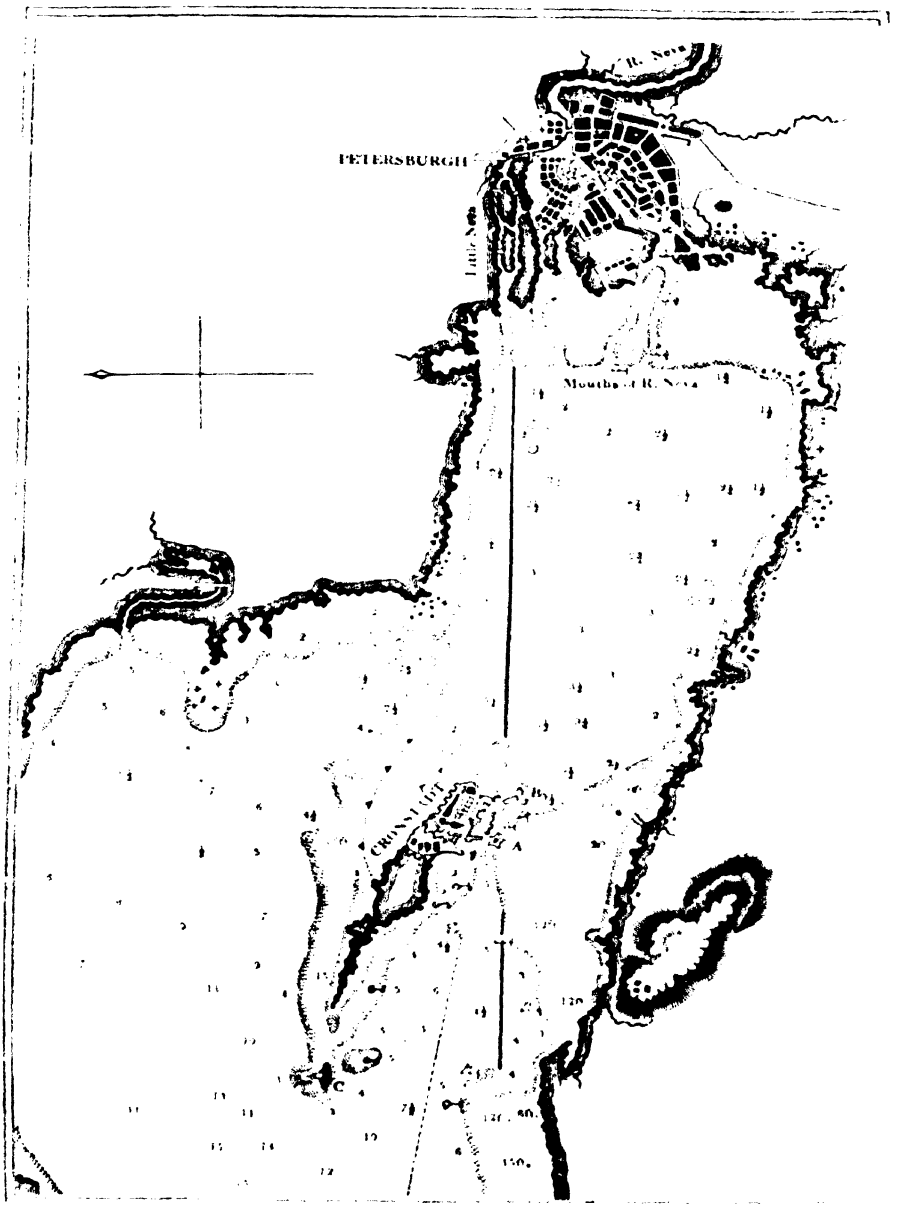
PERRY, a fermented liquor made from pears, in the same manner as cider from apples. The pears best fitted for producing this liquor are exceedingly harsh and tart; but it is itself pleasant and wholesome. — (See CIDER.)

PETERSBURG, the modern metropolis of the Russian empire, situated at the confluence of the river Neva with the eastern extremity of the Gulph of Finland, in lat. 59° 56′ 23″ N., lon. 30° 18¾′ E. Population, 480,000.

This flourishing emporium was founded by Peter the Great, whose name it bears, in 1703. In the same year, the first merchant ship that ever appeared on the Neva arrived from Holland: and the Czar, to mark his sense of the value of such visitors, treated the captain and crew with the greatest hospitality, and loaded them with presents. In 1714, 16 ships arrived at Petersburg; in 1730, the number had increased to 180; and so rapid has been the progress of commerce and civilisation in Russia since that period, that, at present, from 1,200 to 1,500 ships annually enter and clear out from Petersburg!

It is much to be regretted, that, although favourable to commerce, the situation of Petersburg is, in other respects, far from good. The ground on which it stands is low and swampy; it has, on different occasions, sustained great injury from inundations; and the country round is, generally speaking, a morass and forest, so that almost

every thing required for the subsistence of the inhabitants must be brought from a distance. No one less bold and daring than Peter the Great would have thought of selecting such a situation for the metropolis of his empire; and none possessed of less



References to Plan. — A, Cronslot; B, Men-of-war haven; C, Tolboken light-house, 88 feet high, furnished with a fixed light. Soundings in fathoms. It appears, from the above plan, that the depth of water between Cronstadt and Petersburg does not, in some places, exceed 6 or 7 feet; but it is increased about a foot by continued westerly, and is diminished about as much by continued easterly, winds. Cronstadt is, therefore, as already observed, in reality, the port of Petersburg; and has, indeed, no separate Custom-house or jurisdiction. The transfer of goods between the two places by means of lighters has of late years been materially facilitated by the employment of steam tugs.

power and resolution could have succeeded in overcoming the all but insuperable obstacles which the nature of the country opposed to the completion of his gigantic schemes.

Cronstadt, situated on a small island about 20 miles W. of Petersburg, may, in some measure, be considered as the port of the latter. Almost all vessels bound for Petersburg touch here; and those drawing above 8 feet water load and unload at Cronstadt; the goods being conveyed from and to the city in lighters, the charges of which vary according to the demand at the time. The merchants' harbour at Cronstadt is fitted to contain about 600 ships; but it is exposed to the westerly winds. Cronstadt is strongly fortified, and is the principal station of the Russian fleet. Vessels bound for Petersburg must pass by the narrow channel to the south of the island, commanded by the fortifications of Cronstadt on the one side, and of Cronslot on the other. The wood-cut on the opposite page, taken from the official survey published by the Russian government, gives a better idea of the situation of Petersburg, Cronstadt, &c. than could be derived from any description.

Trade, &c. — Petersburg has the most extensive foreign trade of any city in the north of Europe. This arises from its being the only great maritime outlet on the Gulph of Finland, and from its vast and various communications with the interior of the country. Few countries have such an extent of internal navigation as Russia. By means partly of rivers, and partly of canals, Petersburg is connected with the Caspian Sea. Goods are conveyed from the latter to the capital, through a distance of 1,434 miles, without once landing them! The iron and furs of Siberia, and the teas of China, are received at Petersburg in the same way; but owing to the great distance of those countries, and the short period of the year during which the rivers and canals are navigable, they take 3 years in their transit. Immense quantities of goods are also conveyed during winter upon the ice, in sledges, to the different ports, and to the nearest *pristans*, or places in the interior where barks are built for river or canal navigation. They are put on board in anticipation of the period of sailing, that the barks may be ready to take advantage of the high water, by floating down with the current as soon as the snow and ice begin to melt. The cargoes carried up the river into the interior during summer are principally conveyed to their ultimate destinations by the sledge roads during winter. The conveyance by the latter is generally the most expeditious; and it, as well as the internal conveyance by water, is performed at a very moderate expense.

The barks that come from the interior are mostly of a very rude construction, flat-bottomed, and seldom drawing more than 20 or 30 inches water. When they arrive at their destination, they are sold or broken up for fire-wood. Those that leave the ports for the interior are of a superior description, and are comparatively few in number; the commodities imported, being at an average, of much greater value relatively to their bulk and weight than those that are exported.

Principal Articles of Export and Import. — The principal articles of export are tallow, hemp and flax; grain, particularly wheat; linseed, timber; iron and copper; hides, potashes, bristles, hempseed oil, furs, leather; fox, hare, and squirrel skins; canvass and coarse linen, cordage, caviare, wax, isinglass, quills, tar, &c. Tallow, both for candles and soap, is more largely exported from this than from any other port in the Baltic or elsewhere, and is an article of great commercial importance. — (See Tallow.) The hemp is of good quality, though inferior to that of Riga: it is assorted, according to its quality, into *clean*, or firsts; *outshot*, or seconds; and *half-clean*, or thirds. The first sort should be quite clean, and free from spills: the second is less so; and the third, or *half-clean*, contains a still greater portion of spills, and is, besides, of mixed qualities and colours. Russian flax is much esteemed for the length of its fibre; it is naturally brownish, but becomes very white after the first bleaching. Three qualities are distinguished; viz. 12 head, 9 head, and 6 head. — (See Hemp, and Flax.) Iron is of very good quality, and is preferable to that from the other Russian ports: there are two kinds, old and new sable; the former is the best. The grain trade between this country and Petersburg has latterly become of very considerable importance; and Russia will, probably, continue to be one of the principal sources of our foreign supplies. It will be seen from the subjoined accounts that we drew from her in 1839 no fewer than 371,693 quarters wheat, and 316,823 ditto oats, and that the imports in 1840 and 1841 were also very large. A very considerable proportion of this supply was, however, derived from Odessa, Taganrog, Archangel, and other ports, exclusive of Petersburg. The *Russian wheat*, so called to distinguish it from the *azemaia*, or soft wheat, and the *kubanka*, or hard wheat, is the lowest description of wheat shipped from Petersburg. It is very small-grained, and dingy coloured; being, though sound, unfit for the manufacture of fine bread. The azemaia is of a larger, though still not a large grain, and better colour, and has of late been extensively imported into England. The kubanka, or hard wheat, is a large semi-transparent grain. Its hardness has nothing of the flinty character of the Spanish

hard wheat, which it most resembles. When first brought to London, the millers objected to it, on account of the difficulty experienced in grinding it; but it is now much esteemed. All the Russian wheats are well calculated for keeping, either in granary, or when made into bread: but the kubanka has this quality in a peculiar degree; and is in great demand for mixing with other wheats that are old, stale, or out of condition. A shipment of 100 chetwerts of wheat in Petersburg is found, when delivered here, to yield about 72 Imperial quarters. The principal imports are sugar, especially from the Havannah (the importation of refined sugar was prohibited in 1822); coffee, but not in large quantities; madder, indigo, cochineal, and dye woods; cotton stuffs and yarns, — the latter being by far the principal article sent from this country to Russia; woollens, oils, spices, salt, wine, lead, tin, coal, fine linen, from Holland and Silesia, &c.

Rapid as has been the increase of Russian commerce, its progress has been materially retarded by restrictions on importation. Considering the immense variety of valuable natural productions with which Russia abounds, the thinness of the population, and the slavery and ignorance of the great bulk of the people, nothing can be more childish than the attempt to render them, by dint of Custom-house regulations, rivals of the English and Germans in manufacturing industry! However, it must be confessed, that in enacting prohibitions and restrictions, they are only following a line of policy which more advanced countries have shown but little disposition to abandon. It should also be observed that, except in a few great towns, a middle class is all but unknown in Russia. And the population being consumers of coarse and heavy rather than of fine and finished goods, restrictions on importation are less injurious than might at first be supposed. Whether, in fact, importation be free or restricted, the great bulk of the Russian people will, for a lengthened period, be consumers of home made articles. Indeed the frontiers of the empire are far too extensive, and the functionaries too corrupt, to enable high duties on foreign produce to be levied to any great extent, or prohibitions of its importation to be made effectual, provided there were any considerable internal demand for it.

But, on the whole, the policy of Russia, in so far at least as respects commercial matters, has become more liberal of late years. Many articles are at present admitted for consumption that were formerly wholly excluded; and though the duties on various articles have been increased, there are others, and those too of considerable importance, on which they have been reduced. The Russian government wisely admits machinery of all sorts, including ships with their tackle, steamers, &c., duty free; and most articles necessary to the successful prosecution of art and science are treated in the same way. We, therefore, are not without hopes that her government may also at no very distant period see the advantage of materially reducing the duties on the superior descriptions of manufactured goods. It is true that, having by far the largest share of the foreign trade of Russia, this country will gain most by any modifications that may be made in her tariff. The Russian government is well aware of this, and may naturally enough suspect that we are more attentive to our own than to Russian interests when we recommend the repeal of restrictions; and certainly this suspicion will not be weakened by the very objectionable manner in which matters relating to Russia are too often discussed in this country. No one acquainted with our history during the last dozen years, can fail to know that a party amongst us have exerted themselves to the utmost to embroil the two countries; and have even gone so far, in furtherance of their object, as to establish journals apparently for the sole purpose of abusing and misrepresenting the government and people of Russia. This conduct is at once foolish and flagitious. We are not going to undertake the defence of Russia, but we have yet to learn what she has done to injure us; and her conquests, how objectionable soever in some respects, have, in most instances, materially promoted the interests of commerce and civilisation. The Russian government has, however, acted wisely as well as magnanimou-ly in despising the abuse alluded to. Instead of being enemies or estranged from each other, there are no two nations between whom so intimate a friendship should prevail as Russia and England. They have no really conflicting interests; she cannot injure us, nor we her. The products of the one country are admirably suited for the markets of the other; and a farther modification of protecting duties in Russia, accompanied, as it should be, by the adjustment of our regulations as to corn and timber on sound principles, would add largely to the intercourse between the two countries, and establish it on solid foundations.

Inspection of Goods. — At Petersburg, Riga, and other Baltic ports, when goods are brought from the interior to be shipped, they are inspected and classified according to their qualities, by officers (*brackers*) appointed by government for that purpose, and sworn to the faithful performance of their duty. All sorts of timber, linen and canvass, flax and hemp, linseed and hempseed, ashes, wax, &c. are subject to such inspection. They are generally divided into three qualities: *Krohn* (crown), or superior; *Brack*, or

middling: and *Bracks-Brack*, or inferior. This classification is said to be, in most cases, made with considerable fairness. A factor or commission agent in Russia, instructed to buy, on account of his correspondent in England or Holland, a specified quantity of any description of produce subject to the official visit, is not liable to any action in the event of the article being found upon delivery to be of inferior quality, provided he produce a certificate to show that it had been officially inspected, *or bracked*. But a factor is at liberty, should any article delivered to him be manifestly defective, to name 1 or 2 other *brackers* to decide whether the article be merchantable or not.

Native and Foreign Merchants, &c. — Every Russian carrying on trade must be a burgher, and have his name registered in the burghers' book; he thus acquires an unlimited freedom of trade. All whose names are in the burghers' books, are either townsmen who have property within the city, or members of a guild. There are three guilds. Those belonging to the first must possess from 10,000 to 50,000 roubles: these may follow foreign trade, are not liable to corporal punishment, and may drive about the city in a carriage drawn by 2 horses. Those belonging to the second guild declare themselves possessed of from 5,000 to 10,000 roubles; they are confined to inland trade. A capital of from 1,000 to 5,000 roubles entitles its owner to admission into the third guild, which comprises shopkeepers and petty dealers. The rates paid by the members of these guilds amount to 1 per cent. upon their declared capital, the "statement of which is left to the conscience of every individual." Burghers are not obliged to serve in the army, but may provide a substitute, or pay a fine. The *guests*, or foreign merchants, who enrol themselves in the city register on account of their commercial affairs, enjoy privileges nearly similar to those enjoyed by the members of the first guild.

None but native Russians are allowed to engage in the internal trade of the country; and hence a foreigner, who imports goods into Russia, must sell them to Russians only, and at the port where they arrive. A few foreigners, indeed, settled in Russia, and having connections with the natives, do carry on a trade with the interior; but it is contrary to law, and the goods are liable to be seized.

The merchants engaged in foreign trade are mostly foreigners, of whom the English are the principal. The peculiar privileges formerly enjoyed by the latter are now nearly obsolete; and their rights, in common with those of other foreigners, are merely those of *guests*. The English factory is, at present, little more than a society formed of some of the principal English merchants, several of whom, however, do not belong to it: its power extends to little else than the management of certain funds under its control.

Purchase and Sale of Commodities, &c. — Owing to the scarcity of capital in Russia, goods the produce of the country are frequently paid for in advance; and foreign goods are most commonly sold upon credit. From the month of November till the shipping season in May, the Russians who trade in flax, hemp, tallow, bristles, iron, &c. either come themselves to Petersburg, or employ agents to sell their goods to foreigners, to be delivered, according to agreement, in May, June, July, or August. The payments are made according to the circumstances of the sellers and buyers; sometimes the buyer pays the whole amount, in the winter months, for the goods which are to be delivered in the summer or autumn; and sometimes he pays a part on concluding the contract, and the remainder on delivery of the goods. The manufacturers and dealers in linen usually come to Petersburg in March, and sell their goods for ready money.

Foreign goods were formerly almost entirely sold at a twelvemonth's credit, and some at a still longer term; but of late years several articles, as coffee and sugar, are sold for ready money; still, however, the great bulk of foreign goods for the supply of the interior is sold on credit. Most part of the Russians who buy goods on credit of foreigners, for the use of the interior, have no other connection or trade with Petersburg, than merely coming there once or twice a year to make purchases; which having accomplished, they set off with the goods, and the foreigner neither sees nor hears of them again till the bill becomes due.

It is obvious, from this statement, that experience and sagacity are nowhere more requisite in a merchant than here. He has nothing, in fact, but his own knowledge of the native dealers to depend upon; and it is highly creditable to the Russians, that foreigners do not hesitate to trust them with immense sums on such a guaranty. A foreign merchant, carrying on business in Russia, must also be acquainted with the customary forms and obligations of contracts; the mode of making payments; the many formalities that encumber, and sometimes turn aside, the course of justice; the spirit, still more than the letter, of the tariff and the Custom-house regulations; the privileges claimed by the Crown, and the different orders; with a variety of other particulars, which attentive able men may learn on the spot, and nowhere else.

"Another circumstance connected the British trade is too curious to be passed in silence. Every mercantile house in Petersburg employs certain men, called in the language of the country *artelschicks*, who are the counting-house men, and employed by every merchant to collect payment on bills, and to receive money, as well as, in many instances, to pay it in very considerable sums. This is an important part of their trust. There being no bankers in Russia, every mercantile house keeps its own cash; and as the payments between merchants, and for bills of exchange, are made entirely of bank notes of no higher value than 5, 10, 25, 50, and 100 roubles — most of them in so tattered a state as to require several hours to count over a sum of 2,000*l.* or 3,000*l.* this business is performed by artelschicks; and very few instances have occurred of loss by their inattention, either in miscounting the notes, in taking false notes, or, where they are much worn, in receiving parts of different bank notes.

"These artelschicks are also employed to superintend the loading and unloading the different cargoes; they receive the most valuable into the warehouse, where they are left solely under their care; and in these warehouses not merely merchandise, but often large quantities of dollars, are deposited. These Russians are mostly natives of Archangel and the adjacent governments, of the lowest class; are often slaves, generally of the Crown: and the only security of the merchant arises in some degree from the natural reluc-

tance of the Russian to betray confidence reposed in him; but in a much greater from their association, which is called an artel.

"An artel consists of a certain number of labourers, who voluntarily become responsible, as a body, for the honesty of each individual. The separate earnings of each man are put into the common stock; a monthly allowance is made for his support; and at the end of the year the surplus is equally divided. The number varies in different associations from 50 to 100; and so advantageous is it considered to belong to one of these societies, that 500 and even 1,000 roubles are paid for admission. These societies are not bound by any law of the empire, or even written agreement; nor does the merchant restrain them under any legal obligation; yet there has been no instance of their objecting to any just claim, or of protecting an individual whose conduct had brought a demand on the society."—(*Coxe's Travels in Russia*, vol. iii. p. 315.)

Few Russian merchants engage in foreign trade. It is carried on principally in foreign bottoms, of which by far the larger proportion are English. Marine insurances are generally effected in London or Amsterdam; there being no establishment for that department of business in Russia. An insurance company against fire has been established in Petersburg, and enjoys several privileges. It is a joint stock company, divided into actions or shares. It has been very successful; and its shares are at a high premium. No insurance on houses or goods in Russia, made in a foreign country, can be legally recovered; no official documents of loss being allowed to be furnished for such a purpose. A life insurance company has, also, been established.

Money.—Accounts are kept at Petersburg, and throughout Russia, in roubles of 100 copecks.

The only gold coin at present struck is the ½ Imperial, or 5 rouble piece, = 16*s.* 8*d.* sterling very nearly. The silver rouble, worth 3*s.* 4¼*d.* sterling very nearly, was declared, by a ukase issued in 1839, to be worth ¾ paper rouble.

By another ukase, issued on the 14th June, 1843, directs that the old bank note rouble in circulation, amounting to the sum of 595,775,319, being equal, at the exchange of 3*s.*, to 120,221,203 silver roubles, should be called in, and replaced by an issue of 170,221,180 *billets de crédit*, to be exchangeable at the pleasure of the holder for silver roubles. This is a most important regulation, and if it be fully carried out, the distinction between silver and paper roubles will disappear, at the same time that additional security will be given to all sorts of industrious undertakings, and to the credit of the government.

Weights and Measures.—The Russian weights are the same for gold, silver, and merchandise, viz.—

3 Solotnicks = 1 Loth.	40 Pounds = 1 Pood.
32 Loths = 1 Pound.	10 Poods = 1 Berkowitz.

The Russian pound contains, according to Kelly, 0·815 English grains. Hence 100 lbs. Russian = 90·019 lbs. avoirdupois = 40·9 kilog. = 82·8 lbs. of Amsterdam = 84·444 of Hamburg.

The principal measure for corn is the chetwert, divided into 2 osmins, 4 pauks'ks, 8 chetwerticks, or 64 garnetz. The chetwert = 5·952 Winchester bushels. Hence, 100 chetwerts = 74·4 English quarters.

In liquid measure,	3 Wedros = 1 Anker.
11 Tcharki = 1 Krushka.	6 Ankers = 1 Oxhoft.
8 Krushka = 1 Wedro.	2 Oxhoft = 1 Pipe
40 Wedros = 1 Scrokowo.	In long measure,
The wedro = 3¼ English.	16 Werschok = 1 Arsheen.
wine gallons.	3 Arsheen = 1 Sashen.
13 1/3 Bottles = 1 Wedro.	500 Sashen = 1 Verst.

1 sashen = 7 English feet. 1 arsheen = 28 English inches. 100 Russian feet = 114½ English feet. The verst, or Russian mile, = 1 furlong 34 poles. The English inch and foot are used throughout Russia, chiefly however, in the measuring of timber.—(*Kelly's Cambist*, art. *Russia*; *Nekrasheschkov*, *Manuel Universel*.)

In taxing freight to England, a ton is = 3 pouds of hemp, flax, tallow, iron, copper, and ashes; 11 pouds of bristles, isinglass, leather, and wax; 1 dozen of deals; 2,240 bare skins; 9 chetwerts of wheat or linseed; and 10 pieces of sail cloth.

The following regulations for the importation of foreign goods are strictly enforced:—

All goods imported must be accompanied by the following documents:—

1. The declaration of the captain, according to the form ordered by the Custom-house.

2. An attestation from the Russian consul, and, where there is no consul, from the Custom-house of the place, of the country and quality of the goods, and a declaration that they are not the produce, manufacture, or property of an enemy's country.

3. Bills of lading of all goods, in which the weight, measure, or quantity of each package must be specified. In case the bills of lading are used after this regulation, the goods pay double duty as a fine. In the case of tea and wine specified in the bills of lading, the surplus contained, if less is found, the duty must be paid on the quantity specified. Of wine, it is not sufficient to specify the number of pipes or hogsheads only, but also their contents in gallons, &c. Of linens, the number in each box must be specified. Of manufactured goods, the measure of each piece must be specified, and the number of pieces in each bale. It is indifferent whether the gross or the nett weight be specified. If the packages be all of the same weight, measure, or contents, a general specification will do; as, for example, 100 casks assort, of 17 poods each. Of dye woods, the weight of the whole need only be mentioned. Of goods of small bulk, as pepper, &c., it is sufficient to state the weight of every 100 bales, but with specification of the numbers. There must not be any erasures or blots in the bill of lading. All goods not accompanied by these documents, or where the documents are not according to the above regulations will be sent back.

Bills of lading may be made out either to some house, or to order.

The following charges have been fixed by the merchants of Petersburg:—

	Per cent.
Commission on sales and purchases	2
Extra charges on all goods	1
Commission and extra charges for goods delivered up	2
Brokerage on sales and purchases	½
Del credere	1
Interest on bills	1
Insurance on freight, per ton, 60 copecks.	
Stamps	½

	Per cent.
Charges on duty, paid inwards	1
Ditto, paid outwards	1
Commission for procuring freight, or average inwards	3
Commission for procuring freight outwards	2
For clearances, 60 roubles.	

Dues to be paid to the church, 10 roubles each vessel.

Clearing of ships, of or under 25 lasts each, 6 roubles each vessel.

From 26 to 50 do. last	—
51 — 75 do. do.	—
76 — 100 do. do.	—
101 — 150 do. do.	—
Those above, 200 do.	—

Tare on Goods exported, as fixed by the Custom-house.

Dry Goods.	Per cent.
In barrels or chests	10
In sacks	2
In casks, or sacks made of mats	3
Except Morocco leather, of which in double bed	5

Moist Goods.	Per cent.
Pressed caviare	13
Soap	3
Meat and salt fish	10
Tallow	10

Moist Goods.	Per cent.
Hogs	17
Treacle	10
All other moist goods	17

Tare on Goods imported.

Dry Goods.	Per cent.
In barrels or chests	10
In vessels of glass or earthenware	20
In sacks	2

Dry Goods.	Per cent.
In double sacks	4
In mats	3

Dry Goods.	Per cent.
In casks and mats together	5
In baskets	5

Moist Goods imported.—The following are some of the tares specified in the tariff:—

Olive oil in casks	17	per cent.
Id. Leghorn, in flasks and straw	20	—
Id. France, in flasks and earthenware	60	—
Salt fish in barrels	25	—
Anchovies in barrels	17	—
And generally on all moist goods in barrels	17	—
Id. in tins and earthenware	40	—
Miscellaneous Goods.		
Cotton twist in cases	6	—
Id. in chests and barrels	15	—

Cochineal must be weighed in the sacks after being taken from the casks; for every sack of from 4 to 7 pouds	2	lbs.
sacks of from 2 to 3½ pouds	1	—
Indigo in serons; every seron of from 5½ to 7 pouds	34	—
in ½ serons, 9½ to 4 pouds	40	—
of Guatemala	50	per cent.
in boxes	20	—

Bills drawn in Russia, and payable after date, are allowed 10 days' *grace*; but if payable at sight, 3 days only: Sundays and holidays are included in both cases. The Julian calendar, or old style, is still retained throughout Russia. This is 12 days later than the new style; and in leap years, 13 days, after the month of February.

Port Charges.—The regular charges which British ships have to pay at the ports of Petersburg and Cronstadt, comprise the following fixed dues and expenses, viz. lastage, passes, clearing at Cronstadt, address money, Petersburg and Cronstadt church money, Cronstadt expedition and allowance to the

Russia Company's agent, for all which a charge is made in the ship's account in one sum, proportionally to the ship's register tonnage, according to the following scale, viz. : —

	Silv. roub.		Silv. roub.
For 61 tons register - - -	48 0	For 322 to 341 tons register - - -	156 0
62 to 81 — - - -	56 0	342 — 361 — - - -	141 14
82 — 101 — - - -	61 14	362 — 381 — - - -	119 14
102 — 121 — - - -	66 28	382 — 401 — - - -	154 0
122 — 141 — - - -	74 0	402 — 421 — - - -	162 0
142 — 161 — - - -	79 14	422 — 441 — - - -	167 14
162 — 181 — - - -	84 28	442 — 461 — - - -	173 14
182 — 201 — - - -	92 0	462 — 481 — - - -	180 0
202 — 221 — - - -	97 14	482 — 501 — - - -	188 0
222 — 241 — - - -	102 29	502 — 521 — - - -	193 14
242 — 261 — - - -	110 28	522 — 541 — - - -	200 86
262 — 281 — - - -	115 14	542 — 561 — - - -	209 0
282 — 301 — - - -	123 14	562 — 581 — - - -	214 0
302 — 321 — - - -	128 28	582 — 600 — - - -	218 86

II. Account of the Number of Ships, and of their Tonnage (in Lasts), that cleared out from the different Russian Ports in 1841, specifying the Numbers that cleared out in Ballast.

Ports.	Total.		Whereof in Ballast.	
	Ships.	Lasts.	Ships.	Lasts.
On the Baltic : —				
Cronstadt or Petersburg - -	1,773	128,846	92	7,575
Narva - - - -	146	12,936	23	1,628
Revel - - - -	84	5,556	28	2,476
Kunda - - - -	28	929	2	124
Haspal - - - -	1	34		
Riga - - - -	1,098	82,013	8	1,158
Arensburg - - - -	8	473	1	26
Pernau - - - -	77	5,178	3	320
Libau - - - -	189	9,169	31	2,050
Windau - - - -	65	3,782	1	35
Total -	3,069	248,186	189	15,312
On the White Sea : —				
Archangel - - - -	325	25,053		
Onega - - - -	12	1,178		
Total -	337	26,231		
On the Black Sea : —				
Odessa - - - -	549	76,813	63	7,240
Cherson - - - -	9	1,021	3	350
Theodosia - - - -	38	5,054	11	1,694
Eupatoria - - - -	43	4,115	3	277
Kertsch - - - -	156	20,815	3	294
Taganrog - - - -	235	22,075	11	1,120
Marioupol - - - -	65	8,579		
Berdia - - - -	57	4,888		
Ismail - - - -	71	5,027	1	89
Reni - - - -	19	1,904	14	1,482
Redout-kalé - - - -	28	1,813	1	97
Total -	1,319	154,304	109	12,970
On the Caspian : —				
Astrakhan - - - -	55	2,783	11	506
Baku - - - -	114	3,073	3	255
Total -	169	5,856	14	761
Grand total -	4,894	434,577	312	29,043

The 4,894 ships that sailed from Russian ports in 1841 belonged to the following countries, viz. : —

	Ships.	Lastage.		Ships.	Lastage.
Russia - - - -	915	80,741	Oldenburg - - - -	46	1,755
Great Britain - - - -	1,484	151,192	France - - - -	57	6,473
Hanover - - - -	202	20,054	Spain - - - -	6	450
Sweden - - - -	208	18,715	Portugal - - - -	1	59
Prussia - - - -	1961	14,955	Italian States - - - -	212	23,310
Denmark - - - -	311	24,237	Austria - - - -	180	21,731
Holland - - - -	248	14,595	Turkey - - - -	101	7,853
Belgium - - - -	5	315	Greece - - - -	248	32,851
Bremen - - - -	30	1,857	Ionian States - - - -	73	8,974
Hamburg - - - -	6	491	America - - - -	54	9,315
Lubeck - - - -	75	4,786	Total -	4,894	458,639
Mecklenburg - - - -	214	15,737			

III. Account of the Value of the Exports from Russia to the principal European States (including North America), and of the Value of the Imports from the same in 1841.

Countries.	Exports.	Imports.
	Silver roubles.	*Silver roubles.*
Norway and Sweden - - -	1,485,614	1,185,337
Prussia - - -	4,059,491	4,949,008
Denmark - - -	1,541,119	323,847
Hanover - - -	4,941,534	
Elsinore for orders (mostly for England) - - -	2,251,079	8,031,069
Hanseatic States - - -	4,971,572	1,841,591
Holland - - -	1,089,675	86,791
Belgium - - -	35,849,880	21,858,001
Great Britain - - -	5,931,450	7,391,868
France - - -	605,476	2,146,190
Spain and Portugal - - -	2,881,008	1,811,933
Italian States - - -	3,578,882	2,859,293
Austria - - -	4,393,042	5,497,796
Turkey - - -	2,409,074	6,178,403
America - - -	1,031,147	2,291,658
Other countries - - -		
Total -	74,817,163	64,336,087

VI. List of principal Goods imported into Petersburg during the Navigation of the Four Years ending with 1842.

Articles.	1839.	1840.	1841.	1842.
Cheese - - poods	8,639	8,427	9,714	12,340
Cocoa - - —	3,303	1,650	1,140	2,591
Coals - - chaldr.	29,471	38,388	30,929	25,826
Coffee - - poods	81,634	132,113	142,598	117,974
Cortwood - - —	3,855	19,057	9,301	10,959
Corks - - bales	810	975	801	1,037
Cotton wool - - poods	283,111	233,984	264,382	37,6417
yarn, cardved - —	302,899	147,967	162,543	384,0255
— dyed - —	2,767	1,637	912	1,064
Cotton goods - - —	6,895	6,701	3,649	4,303
white cambrics - pieces	24,000	23,607	31,322	33,054
cambric handkerchiefs & the like kind - —	74	1,115	1,608	465
coverlets - - —	3,267	3,091	1,170	3,369
muslins and muslin handkerchiefs - —	36,083	16,888	14,006	13,104
printers - - —	1,760	1,765	1,366	771
quiltings - - —	1,935	2,511	1,404	918
velveteens & velvet - —	518	14	-	8
Coloured stuffs - —	1,316	2,055	1,215	3,639
handkerchiefs - —	835	1,192	152	219
Embroidered stuffs - —	1,355	1,013	2,08	2,594
Gloves - - doz.	17,295	30,196	19,535	34,826
Stockings - - —	13,714	13,331	14,155	14,174
Tulle - - pieces	28,264	35,301	13,072	17,582
Sundries - - —	8,855	6,102	5,744	5,041
Drugs and dyestuffs, viz.				
aloes - - poods	180	328	405	1,555
alum - - —	40,910	50,995	43,546	62,059
annatto - - —	3,276	1,911	2,355	3,172
antimony - - —	1,961	922	599	1,009
argol - - —	4,175	11,988	1,958	2,560
arsenic - - —	6,054	5,502	8,965	6,255
bay leaves - - —	311	1,272	633	757
borax - - —	816	810	1,010	1,585
brimstone - - —	67,338	90,763	124,088	133,331
camphor - - —	1,530	830	1,492	1,482
cavenne - - —	1,031	1,011	46	1,011
cochineal - - —	775	724	715	461
cotton - - —	52	15	24	5
cochineal - - —	3,614	2,614	3,657	6,614
crystal Tartary - —	1,881	11,814	8,475	7,554
cudbear - - —	174	344	470	1,15
Dutch pink - —	18	225	-	-
ivory - - —	3,105	2,400	1,249	1,570
gum Arabic and Senegal - —	17,008	17,476	16,114	15,265
Benjamin - —	838	502	154	229
coral - - —	218	127	85	1,145
elastic or India rubber - lbs.	11,945	52,167	37,115	32,681
gamboge - poods	276	147	117	317
gum arabic - —	21,854	13,747	10,122	21,511
shell and seedlac - —	2,262	10,085	6,148	7,745
sulage - - —	35,707	31,413	36,516	30,351
lemon juice - pipes	70	98	120	102
madder - - poods	125,174	153,000	73,555	13,741
indigenous - - —	1,01	171	208	858
manganese - - —	26,554	25,84	26,252	14,147
mercury - - —	884	42	250	102
nutgalls - - —	814	278	1,647	1,0
orpiment - - lbs.	45	-	150	50
ochre - - poods	16,846	13,772	6,42	11,272
oil of vitriol - —	40	52	68	52
opium - - —	112	45	7	257
orchella - - —	141	126	209	422
peel, lemon and orange - —	531	250	1,326	642
Peruvian bark - —	203	134	220	852
pumice stone - —	4,560	14,048	6,015	5,950
quicksilver in bark - —	33,128	20,581	30,144	36,954
red ochre - - —	16,216	8,249	6,954	7,484
rock grunge - - —	507	585	1,254	1,107
sal ammoniac - —	69	65	258	1,01
sago - - —	248	151	229	208
Sicily manna - —	77	62	-	167
soda - - —	521	529	161	589
soap - - —	102	181	61	301
sarsaparilla - —	3,725	6,801	5,365	8,062
snake - - —	55	41	5	10
sulfilower - —	3,981	2,745	2,891	2,078
saffron - - lbs.	14,90	4,9	421	960
sago - - poods	132	90	75	90
sal ammoniac - —	6,355	6,242	6,800	8,343
senna leaves - —	1,718	936	429	894
shumac - - —	10,158	4,415	6,412	17,255
star aniseed - —	329	334	456	1,434
turmeric - - —	1,787	13,003	9,050	11,256
turpentine - —	1,155	655	760	1,661
vitriol, green - —	2,515	3,500	3,959	4,329
— white - —	405	546	450	442
wood - - —	182	6,0	867	800
water, mineral pitch - —	158,117	187,977	227,261	95,148
white lime and white lead - —	1,666	9,186	1,802	1,568
wool, Brazil, Nicholas, and St. Martha - —	60,250	42,927	100,973	129,918
fustic - - —	23,955	38,774	34,561	50,051
logwood - - —	363,646	322,140	390,276	237,528
dye, sundry - —	1,961	4,831	2,170	5,477
Elephant's teeth - —	202	54	150	54
Fruit, almonds - —	17,656	24,112	9,948	19,063
currants - - —	472	1,856	22,61	980
prunes - - —	20,815	12,152	8,267	17,147

Articles.	1839.	1840.	1841.	1842.
Fruits, figs - poods	217	463	148	136
raisins - - —	6,601	7,451	5,116	10,909
dry, other sorts —	24,761	38,931	25,289	38,542
capers - - —	326	932	1,301	861
olives - - —	435	1,119	1,058	1,193
lemons - - boxes	20,849	36,338	27,810	30,850
oranges, sweet —	51,450	47,967	39,047	44,130
— bitter —	749	891	321	692
lemons, salted - pipes	36	16	13	22
Glores, leather - dozen	9,289	11,940	14,035	12,471
Herrings, white - barrels	37,985	61,802	55,389	74,488
Linen goods, viz.				
cambric and ditto handkerchiefs - pieces	3,249	2,982	3,414	3,851
linen - - —	3,544	3,556	2,784	1,776
handkerchiefs - dozen	1,664	1,072	1,134	587
table cloths and napkins - pieces	1,109	491	616	423
Metals, lead, pig - poods	155,553	134,127	180,157	208,302
sheet —	24,285	20,411	25,610	16,910
litharge - - —	2,510	3,886	4,506	11,806
quicksilver - —	2,510	2,100	3,416	4,018
steel - - —	5,710	8,365	7,218	10,229
tin - - —	37,385	26,558	15,995	42,310
tinfoil - —	276	413	276	301
tin plates - } boxes	611	470	856	815
zinc - - poods	25,412	15,921	26,585	28,018
Oil, olive - - —	170,174	285,181	87,698	202,142
Paper, drawing - reams	372	602	408	321
card paper - —	7,809	8,215	3,399	8,853
writing - - —	3,571	4,204	4,103	3,729
Pencils in wood - dozen	22,480	26,598	35,178	27,696
Perfumery - oils - poods	132	112	68	57
waters - —	151	178	212	166
Porter - - hhds.	1,210	1,144	1,179	1,436
Ditto - - bottles	18,248	35,224	20,436	28,476
Rice - - poods	54,518	63,501	89,162	32,806
Salt - - —	499,454	585,811	619,964	707,966
Silk - - —	5,229	3,551	2,788	3,180
Silk & half silk goods - —	2,240	2,041	2,218	2,560
ribbons - - pieces	213,332	170,135	141,687	215,093
stuff not transparent - —	1,127	29,865	19,262	29,338
— transparent - —	2,760	6,501	3,250	7,415
stockings - - dozen	117	566	180	215
handkerchiefs - pieces	29,231	52,127	35,665	45,257
gloves - - dozen	4,127	10,0	5,915	5,991
Skins, fur - - pieces	1,033	963	1,108	1,10
raccon - - —	90,850	101,450	111,310	58,134
Spices, cardamoms, poods	40	11	87	116
cinnamon & cassia - —	1,00	469	905	1,118
cloves - - —	1,00	1,0	1,34	1,08
ginger, dry - —	1,35	1,00	1,762	758
ginger in sugar and molasses - lbs.	1,256	1,000	36	2,492
mace - - —	1,024	1,000	-	-
nutmegs - - poods	187	129	127	55
pepper - - —	8,064	18,162	4,954	2,212
pepper, cubeb - —	1,064	955	1,101	1,178
pepper, long - —	175	119	119	592
Sperm, spermaceti - lbs.	-	12	48	56
Spirits - - —	782	625	412	6,98
rum - - —	4,161	5,611	4,748	5,627
Sugar, Brazil - poods	5,127	5,4,6	-	6,688
Havannah - —	1,275,448	1,565,545	1,910,304	1,470,301
other sorts —	12,067	12,499	18,181	38,231
Tassels - - thousd	8,755	5,140	7,509	11,342
Tea, in leaves - poods	35,241	51,116	52,114	62,154
stalks - - —	9,189	25,750	40,017	41,122
cut - - —	36	35	56	71
Tobacco, cigars - thousd	2,680	2,879	3,554	3,015
snuff - - poods	300	231	468	499
Tortoiseshell - —	27	36	56	86
Vinegar - - hhds.	50	54	60	55
Wheat, rye - poods	1,143	617	328	317
Wine, French - hhds.	9,984	14,496	7,2,08	6,873
Port and Spanish - pipes	4,807	5,166	5,347	5,158
Rhenish - - aams	1,001	1,0,0	365	651
Champagne - bottles	751,700	998,901	611,728	694,118
other sorts bottled	84,857	73,455	74,127	87,530
Wood, mahogany - poods	27,705	63,128	37,351	32,017
Wood, raw - - —	4,043	3,0,5	922	1,303
Wooden yarn - —	5,655	5,575	3,878	2,777
Wooden goods - —	16,553	17,0,8	17,3,8	20,101
Carpets - - pieces	92	87	114	152
Carriages - - —	959	1,121	946	2,656
Cambrics - - —	46,176	57,078	59,424	59,075
Carpets - - —	1,164	645	415	741
Cashmere - - —	116	97	49	59
Cassinet - - —	-	95	8	-
Cloth - - —	1,444	1,455	1,145	834
Cords - - —	-	4	2	359
Coverlets - - —	168	175	69	214
Flannels - - —	214	132	252	475
Kerseymeres - —	152	138	252	207
ladies' cloth - —	68	32	106	98
merinos - - —	258	207	408	1,202
stockings - - dozen	372	502	462	727
tammies & shallows, pcs.	1,701	425	383	2,119
tolinets - - —	581	1,238	742	1,411
tibets - - —	25	41	91	125
Turkish imitation shawls and handkerchiefs, pcs.	3,564	4,047	2,303	5,688
all other kinds —	1,678	3,844	4,482	16,664

V. List of Goods cleared for Exportation at the Custom-house of Petersburg during the Navigation of the 4 Years ending with 1842.

Articles.	1839.	1840.	1841.	1842.
Bristles, cut - poods	2,293	1,057	847	740
Okatka - —	7,152	4,486	5,957	6,585
1st sort - —	18,080	13,674	15,960	15,372
2d sort - —	20,564	17,795	16,119	14,126
Subol - —	20,175	14,622	16,159	12,157
other sorts - —	5,812	5,508	4,810	5,881
Cantharides - —	286	115	1,200	1,142
Caviare - —	183	235	142	212
Copper - —	89,845	119,845	132,505	93,053
Cordage, new - —	131,596	126,229	119,759	100,029
old - —	61,555	51,256	25,599	25,479
Down, eider - lbs.	-	-	75	-
goose - poods	519	154	492	552
Goats' - —	5,717	2,801	989	5,117
Feathers - —	37,160	20,162	23,023	17,757
Flax, 12 head - —	42,889	22,051	12,868	13,772
9 head - —	113,201	200,564	286,303	396,290
6 head - —	28,713	103,235	110,721	125,211
codilla - —	46,732	80,733	58,891	60,191
yarn - —	7,530	2,759	1,111	180
Furs, squirrel - pieces	5957	76	219	1,623
Galls - poods	35	-	-	-
Glue - —	126	265	1,152	760
Grain, - oats - chtwt.	59,705	27,540	-	-
rye - —	3,721	8	-	12
wheat - —	105,201	6,580	16,088	2,268
Gum ammoniac, poods	-	79	13	156
Hair, camel - —	755	-	5	212
goats' - —	818	920	3,765	1,514
ox and cow - —	38	1,418	3,262	4,226
Hemp, clean - —	1,175,367	1,108,750	925,842	580,697
cutshot - —	368,267	305,599	252,315	347,769
hards, can - —	668,360	401,710	355,040	371,791
codilla - —	42,105	22,805	30,104	9,175
yarn - —	1,220	3,596	2,715	2,647
Hides, raw cow - —	64,101	104,848	83,194	115,594
raw horse - —	19,999	5,174	9,143	11,595
raw ox - —	572	14,129	2,167	2,511
red - —	21,737	24,005	28,284	15,812
white - —	1,362	2,572	1,525	755
black - —	-	99	27	6
dressed - pieces	-	50	1	4,653
Horse manes - poods	13,239	13,511	10,017	13,254
Hoofs - —	2,102	2,000	10,200	10,084
Iron, in bars - —	715,667	413,864	539,700	407,757
in blocks - —	4,169	-	6,653	-
in sheets - —	75,753	64,506	60,864	45,740
old - —	28,880	57,044	55,017	20,589
Isinglass - —	4,445	3,549	3,925	5,888
Ivory, Narwhal - —	1,981	1,575	734	1,710

Articles.	1839.	1840.	1841.	1842.
Licorice - poods	1,208	3,869	2,037	3,545
Manufactures: —				
flems - pieces	57,789	61,304	50,200	55,375
ravensduck - —	75,206	63,905	61,966	58,140
sailcloth - —	50,666	60,137	55,910	59,127
diaper, broad arsh.	2,551,716	2,585,282	2,727,118	813,105
narrow - —	417,929	808,781	341,784	599,759
linen, broad - —	-	180	-	91
narrow - —	20,000	310	-	15
drillings - —	209,176	81,557	156,078	87,211
crash - —	1,820,280	1,530,221	2,589,065	2,551,152
Meal, rye - chtwt.	5,750	7	3	7
wheat - —	2,878	30	97	21
Oil, aniseed - poods	79	20	86	124
hempseed - —	318,719	18,678	153,508	21,360
linseed - —	12	64	23	-
Potashes - —	448,808	334,375	401,954	379,711
Quills - - 1000	68,513	75,701	55,426	38,191
Rhubarb - poods	2,691	852	502	690
Seeds, aniseed - —	1,185	1,199	2,158	710
cumineed - —	652	1,508	2,558	4,125
hempseed - chtwt.	12	8	132	-
linseed - —	225,561	297,502	366,999	280,762
wormseed - poods	582	4,159	2,282	3,159
Skins, calf - —	9,033	2,751	1,148	1,341
dressed - pieces	64	352	1,441	10
badger - —	1,961	1,629	5,410	796
cat - —	1,161	1,216	-	1,536
ermine - —	56,580	18,195	65,150	141,497
hare, grey - —	91,819	126,110	52,567	49,513
white - —	-	6,000	27,120	1,557
sable - —	63	30	-	2,000
squirrel - —	1,999,766	666,000	1,056,418	715,922
Soap - poods	5,302	3,519	1,098	2,527
Sole leather - —	-	324	126	156
Squirrel tails - piece	1,856,840	2,320,000	1,955,245	967,754
Tallow - poods	3,709,600	3,170,134	3,310,888	2,746,310
candles - —	7,814	11,295	6,302	4,414
Wax, white - —	128	2,845	701	196
yellow - —	223	20	207	640
candles - —	8	18	28	16
Woods, battens, pieces	144,264	116,557	169,766	160,188
boards - —	504	542	1,000	515
deals - —	714,272	604,756	610,313	478,057
lathwood - —	23,705	10,513	64,217	30,685
Wool, sheep - poods	88,997	21,556	64,224	81,026
Woollen yarn - —	5,781	2,059	4,290	4,704
Sundries, val. roubles	499,105	485,157	753,800	791,643
Total value -	30,725,217	30,456,810	37,401,677	35,150,581

VI. Account of the Quantities of the principal Articles of Native Produce and Manufacture exported from Russia in 1841, specifying the Quantities exported by each Custom-House, and their Total Value. (From the *Official Returns* for 1841, p. 10.)

Articles	Peters-burg.	Riga.	Archangel.	Odessa.	Pogan-rog.	Radzi-willow.	Astra-khan.	Oren-burg.	Kiachta.	Other Custom-houses.	Total. Quantity.	Total. Value.
												Roubles.
Corn, viz. —												
Wheat, chetwerts -	16,088	¥	9,080	780,372	334,057	287	-	-	7,311	474,214	1,611,049	8,088,372
Rye, chetwerts -	- -	10,856	4,711	-	-	81	-	- -	- -	48,122	63,170	463,530
Barley, chetwerts -	- -	15,852	-	502	-	1,506	-	- -	- -	6,245	83,160	317,092
Oats, chetwerts -	- -	9,543	32,400	10,594	-	1,154	-	- -	- -	4,881	61,857	148,963
Dill sorts, chtwts.	- -	-	-	-	-	-	-	- -	- -	-	-	785,482
Wax, poods -	909	11	-	3,010	-	18,130	20	- -	- -	1,133	27,102	371,934
Leather, poods -	40,303	- -	- -	- -	-	1,961	27,510	1,047	11,288	pieces, 69,578	pieces, 69,578 / poods, 90,009 / pieces, 17,355 / poods, 51,955	poods, 177,358 / pieces, 69,578 / poods, 130,951 / 1,538,191
manufact., poods	- -	- -	- -	- -	-	-	-	- -	- -	-	-	330,937
unmanufact., poods	96,086	10,087	526	13,930	1,024	6,112	pieces, 4,669	- -	- -	- -	poods, 128,414 / pieces, 15,605 / pieces, 18,970	poods, 207,909 / pieces, 15,605 / 1,408,756
Flax, poods -	109,864	1,631,184	490,548	-	-	-	-	- -	- -	717,016	3,000,842	8,876,964
Hemp, poods -	1,438,747	997,166	142,970	10,517	-	50	-	- -	- -	49,709	2,518,159	7,411,514
Wood, poods -	- -	-	-	-	-	-	-	- -	- -	-	-	2,597,998
Potash, poods -	404,934	479	750	13,852	-	-	-	- -	- -	12,516	434,561	884,398
Hempseed oil, poods	135,551	22,953	14	1,081	-	335	31	13	- -	13,906	174,550	470,280
Metals, brass, poods	118,599	-	-	9,374	-	-	-	833	488	918	117,315	1,169,791
Iron, poods -	649,119	3,917	9,450	-	684	-	60,859	22,043	446	198,798	945,826	1,824,715
Tallow, poods -	3,310,889	875	23,414	373,929	7,164	2,538	-	- -	1,425	15,672	3,736,104	13,874,160
Linseed, chetwerts -	366,999	349,262	108,309	84,172	3,933	-	-	- -	- -	192,184	1,103,856	9,043,581
Wool, poods -	60,251	5,102	-	135,049	4,014	15,805	-	- -	- -	178,640	436,161	4,432,933
Bristles, poods -	58,817	70	143	-	2,861	-	-	- -	- -	5,997	67,888	894,319
Cordage, poods -	145,699	5,804	11,166	35,085	25,485	-	2,474	- -	- -	51,246	277,007	656,986
Linen sails, ends -	55,900	2,741	85	-	5,268	-	-	- -	- -	2,476	66,978	998,473
coarse, ends -	64,966	1,638	1,970	-	-	-	-	- -	- -	14,088	66,662	404,435
Dutch, ends -	50,910	49	112	-	-	-	-	- -	- -	731	51,125	445,728
Cattle, oxen &c., num.	- -	- -	- -	-	-	-	1,235	- -	- -	48,046	52,301	965,741
other sorts, num.	- -	- -	- -	-	-	-	-	- -	- -	-	-	35,594
Horses, number -	3	1	-	8	-	191	4	1,465	1,648	5,968	12,288	189,493
Cloth of Russian manufacture -	- -	- -	- -	- -	pieces, 95	-	yards, 16,634	yards, 79,950	yards, 1,580,477	yards, 196,124 / pieces, 318	yards, 1,842,743 / pieces, 343	3,592,336
Furs - -	- -	- -	- -	- -	-	-	-	- -	- -	- -	- -	2,482,861
Hare skins, poods	669	113	-	65	-	9,023	-	- -	- -	595	10,317	190,843
Other articles -	- -	- -	- -	- -	-	-	-	- -	- -	- -	- -	10,737,544
										Total value -	-	85,885,581
										Transit -	-	498,793
												86,384,17

VII. Account of the Quantities or Values of the principal Articles exported from Russia in 1839, 1840, and 1841.

Articles.		1839.	1840.	1841.	Articles.		1839.	1840.	1841.
Corn of different kinds	roubles	15,817,027	14,096,415	10,382,509	Bristles - -	poods	107,021	131,040	117,545
Hemp - - -	poods	3,571,768	3,043,765	2,518,159	Leather - -	roubles	1,328,025	1,413,070	1,538,191
Flax - - -	—	2,234,846	2,710,478	3,009,849	Hides - -	—	1,169,926	1,201,159	1,408,756
Tallow - - -	—	3,994,996	3,985,033	3,736,104	Wool - -	poods	414,807	290,591	436,181
Hemp and linseeds -	chets.	996,489	943,391	1,199,791	Linen - -	pieces	201,158	200,043	184,765
Iron - - -	poods	1,013,906	863,019	953,616	Wood - -	roubles	2,859,648	2,656,500	2,397,098
					Potash - -	poods	478,888	363,126	434,361

VIII. Account of the Quantities or Values of the principal Articles imported into Russia in 1839, 1840, and 1841.

Articles.		1839.	1840.	1841.	Articles.		1839.	1840.	1841.
Cotton, raw - -	poods	354,832	398,189	314,301	Coffee - - -	poods	126,444	153,291	147,738
Cotton yarn - -	—	333,817	519,189	560,799	Spirits - -	roubles	5,796,8[illegible]	6,488,416	6,563,402
Molasses - -	—	1,594,907	1,810,869	1,714,394	Cotton manufactures	—	3,942,005	4,509,016	4,350,787
Silk - - -	—	13,047	12,874	11,924	Silk ditto - -	—	3,715,019	4,507,175	3,862,690
Wool - - -	—	19,159	20,696	26,380	Linen ditto - -	—	379,474	408,659	413,342
Cotcum - -	roubles	5,284,963	6,221,213	5,771,013	Woollen ditto -	—	3,023,220	3,310,441	3,784,271
Sweet oil - -	poods	381,580	322,477	284,746					

IX. Account of the Quantities of the principal Articles of Foreign Produce and Manufacture imported into Russia in 1841, specifying the Quantities imported by each Custom-house, and their Total Value. —(From the *Official Returns* for 1841, p. 20.)

Articles.	Petersburg.	Riga.	Archangel.	Odessa.	Taganrog.	Radzivilow.	Astrakhan.	Orenburg.	Kiachta.	Other Custom-houses.	Total. Quantity.	V.
Coffee, poods -	115,371	15,644	651	10,388	1,006	1,794	-	-	-	2,878	147,732	1,1
Spices, poods -	-	-	-	-	-	-	-	-	-	-	-	4
Spirits, — wines -	hds. ank. 17,319 0 / bottles. 69,714	hds. an. 3,708 2 / bottles. 2,163	hd. a. 340 5	hds. ank. 23,879 1 / bottles. 22,091	hds. an. 13,416 1	hhds. 343 / bottl. 1,857	-	-	-	hhds. 4,074 / bottl. 9,297	hds. ank. 64,908 4 / bottles. 101,802	4,0
Champagne, bottls.	494,798	87,264	1,961	44,531	21,464	14,114	-	-	-	158,718	823,740	1,7
Fish - - -	-	-	-	-	-	-	-	-	-	-	-	1,1
Salt, poods - -	577,109	979,114	5,792	420,255	61,191	40	-	-	-	1,813,345	4,817,145	2,6
Tobacco, poods -	77,956	10,985	4	8,405	1,084	5	255	9	1	11,795	109,579	1,6
Fruits - - -	-	-	-	-	-	-	-	-	-	-	-	3,7
Tea, poods - -	-	-	-	1,979	-	-	2	76	242,608	3,000	247,665	7,4
Cotton, raw, poods -	244,032	9,251	-	25,747	633	-	6,456	13,295	1	11,366	314,301	1,9
yarn, poods -	397,569	7,849	04	7,336	-	417	16,123	30,126	-	111,378	560,799	8,2
coloured, poods	1,343	255	-	115	-	336	-	-	-	401	2,490	-
Colours, viz. —												
Indigo, poods -	55,871	837	7	62	-	726	-	-	-	2,257	59,760	3,4
Cochineal, poods -	5,404	395	-	16	-	498	-	-	-	665	6,978	4
Dutch crop and marine, poods -	85,008	156	-	2,014	-	413	-	-	-	11,371	98,967	6
Dyewood, poods -	365,264	19,321	4,164	12,853	-	34	-	-	-	15,151	416,791	6
Other sorts, poods	-	-	-	-	-	-	-	-	-	-	-	6
Drugs, poods -	-	-	-	-	-	-	-	-	-	-	-	4,3
Sweet oil, poods -	171,758	4,252	1,111	57,173	48,198	256	31	-	1	1,944	284,746	1,8
Scythes and reaping hooks -	-	-	-	-	-	-	-	-	-	-	-	5
Lead, poods - -	157,223	5,109	933	14,634	-	1,532	-	-	-	1,873	180,755	3
Molasses, poods -	1,529,413	141,526	20,120	6,996	6,190	-	32	-	-	19,117	1,714,394	6,9
Salt, poods - -	2,928½	6	-	1,694	-	217	1,059	9½	63½	5,354½	11,214½	2,3
Cotton manufac. -	-	-	-	-	-	-	-	-	-	-	-	4,3
Silk ditto - -	-	-	-	-	-	-	-	-	-	-	-	3,3
Woollen ditto -	-	-	-	-	-	-	-	-	-	-	-	3,1
Cloth, poods -	1,835	45	-	1,697	200	11	-	-	-	8144	4,593½	1,3
Precious stones -	-	-	-	-	-	-	-	-	-	-	-	1,3
Cattle - -	-	-	-	-	-	-	-	-	-	-	-	1,1
Other articles -	-	-	-	-	-	-	-	-	-	-	-	12,9
				Total value	-	-	-	-	-	-	-	97,4

X. Account of the Quantities of the principal Articles of Russian Produce and Manufacture imported into the United Kingdom during each of the Seven Years ending with 1841.

Articles.		1835.	1836.	1837.	1838.	1839.	1840.	1841.
Bristles - - - -	lbs.	1,188,861	1,321,264	1,296,336	1,224,814	1,272,148	1,478,767	1,419,514
Corn, wheat - - -	qrs.	-	1,036	11,244	41,336	371,695	988,283	99,599
barley - - -	—	-	-	24	338	18,338	4,657	2,036
oats - - -	—	19,370	1,731	161,906	10,219	316,833	107,948	88,400
rye - - -	—	-	992	2,107	-	14,020	-	-
peas and beans - -	—	87	-	3,121	1,196	3,104	270	309
wheatmeal and flour -	cwt.	-	2	1	742	2,964	63	73
Flax and tow or codilla of hemp and flax	—	456,183	1,037,721	692,785	1,089,339	706,708	870,401	969,456
Hemp, undressed - -	—	610,518	566,456	591,675	581,080	781,019	866,849	848,764
Hides, untanned - -	—	27,606	11,414	3,064	6,346	9,131	14,441	5,048
Iron, in bars - -	—	5,435	7,526	7,101	6,464	3,357	3,043	3,581
Linens, plain and diaper, entered by the ell - - -	ells	572,231	690,808	343,771	496,908	291,418	284,160	268,300
do. entered by the piece	pieces	1,305	1,788	2,185	2,702	13,948	3,003	1,439
Goods, fit used and linseed -	bushels	1,531,073	2,109,530	2,436,854	2,566,263	3,367,456	2,867,316	2,725,343
rape - - -	—	-	-	4,206	16,689	65,871	34,669	127,669
Skins, calf and kip untanned -	cwts.	29,654	27,005	9,147	17,974	14,809	22,282	22,528
Tallow - - - -	—	985,455	1,197,298	1,276,594	1,056,761	1,214,161	1,115,045	1,018,446
Tar - - - -	lasts	9,211	8,094	9,511	12,961	10,418	12,228	10,791
Timber, battens and battens ends	pt. hundr.	3,998	4,454	5,089	5,330	4,861	5,021	3,814
deals and deal ends -	—	14,864	17,113	18,826	17,305	15,949	19,996	13,925
lathwood - -	fathoms	2,257	3,171	3,043	2,778	2,089	2,361	2,361
masts, yards, and bowsprits under 12 inches in diameter	No.	1,664	1,798	2,491	2,097	3,404	4,086	3,470
fir, oak, and unenumerated 8 inches square or upwards -	loads	9,928	10,071	7,251	8,671	14,317	12,017	10,280
unknown logs, 8 inches square or upwards - - -	—	2,668	2,408	4,747	4,491	1,270	1,845	879
Wool, sheep's - - -	lbs.	4,091,740	5,414,915	6,114,943	5,760,109	7,886,794	4,817,996	4,131,692

XI. Account of the Quantities and Values of the principal Articles of British Produce and Manufacture exported to Russia during each of the Five Years ending with 1841.

Articles.	1837.		1838.		1839.		1840.		1841.	
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
		£		£		£		£		£
Beer and ale - - tuns	476	9,132	463	8,909	519	10,818	3,834	10,886	3,785	10,318
Books, printed - - cwts.	88	1,539	57	1,202	135	2,848	75	2,050	84	2,015
Coals, culm, and cinders - tons	58,738	18,280	68,051	20,128	78,054	25,300	93,370	28,014	77,152	23,398
Cotton manufactures, entered by the yard - yards	1,126,539	47,793	1,719,018	59,137	1,706,578	61,297	2,114,029	59,292	1,241,665	37,625
hosiery, lace, and small wares - - - £	- -	9,106	- -	5,618	- -	12,925	- -	9,594	- -	5,870
twist and yarn - - lbs.	24,108,593	1,612,956	19,794,501	1,236,584	18,849,506	1,215,621	16,884,418	1,082,912	17,308,142	1,096,606
Earthenware of all sorts - pieces	252,722	4,155	189,391	3,745	210,021	4,260	185,215	4,052	213,754	3,916
Hardware and cutlery - cwts.	6,021	35,030	7,082	36,830	6,380	34,707	7,231	39,764	5,897	30,969
Iron and steel, wrought and unwrought - tons	644	10,810	580	12,490	633	14,355	802	16,461	1,029	20,411
Lead and shot - - —	1,729	29,686	1,677	32,419	3,097	57,179	1,896	32,727	3,076	57,749
Machinery and mill-work £	- -	16,464	- -	18,714	- -	30,911	- -	34,092	- -	29,650
Salt - - - bushels	1,292,740	25,252	1,358,547	28,033	1,513,792	28,329	1,581,900	23,132	1,495,580	26,107
Sugar, refined - - cwts.	13,544	26,037	10,896	19,801	11,115	21,287	15,165	29,121	36,800	69,070
Tin, unwrought - - —	3,025	12,259	2,473	9,815	7,610	29,825	5,802	21,992	2,780	10,373
Woollen and worsted yarn lbs.	190,841	27,613	144,308	22,321	141,934	23,380	166,039	25,655	123,896	17,872
Woollen manufactures entered by the piece pieces	36,813	95,912	36,923	89,745	48,293	117,047	57,486	120,400	55,419	95,176
Ditto by the yard - yards	50,278	6,901	46,053	4,291	81,760	7,617	70,439	7,825	100,039	7,037
All other articles - - £	- -	57,687	- -	53,441	- -	78,620	- -	54,771	- -	63,413
Totals - - £	- -	2,046,592	- -	1,665,243	- -	1,776,426	- -	1,602,742	- -	1,607,175

XII. Imports of Raw Cotton into Russia in the undermentioned Years, specifying the Countries whence it was brought, and the Quantity brought from each.

Countries.	1837.	1838.	1839.	1840.	1841.
	Poods.	Poods.	Poods.	Poods.	Poods.
Great Britain - - - - - -	146,011	178,440	195,041	197,178	197,893
France - - - - - -	4,464	9,337	28,806	27,713	25,365
America - - - - - -	44,801	48,934	51,137	57,589	25,409
Turkey - - - - - -	59,563	65,531	44,657	67,243	13,671
Persia - - - - - -	767	1,234	3,482	3,407	3,891
Khiva - - - - - -	4,425	- -	- -	- -	11,791
Bokhara - - - - - -	11,774	9,454	19,206	29,383	12,939
Taschkent - - - - - -	5,550	101	2,892	5,639	4,268
Other countries of Asia - - - - -	5,393	13,876	9,603	10,037	19,144
Total - - - -	262,752	326,707	354,832	398,189	314,301
Whereof by way of Petersburg - - - -	179,986	231,681	267,200	236,113	244,052

XIII. Account of the Imports of Cotton Yarn into Russia in the undermentioned Years, specifying the Countries whence it was brought; and the Quantity brought from each.

Countries.	1837.	1838.	1839.	1840.	1841.
	Poods.	Poods.	Poods.	Poods.	Poods.
England, white yarn - - - - -	595,173	564,159	511,810	458,852	504,216
Ditto, coloured yarn - - - - -	847	1,780	1,403	1,437	1,206
Germany, white yarn - - - - -	755	5,841	770	2,174	1,893
Ditto, coloured yarn - - - - -	2,541	3,269	2,714	1,677	1,155
Turkey, white yarn - - - - -	4,156	1,591	1,132	3,977	1,488
Ditto, coloured yarn - - - - -	619	513	217	210	97
Persia, white yarn - - - - -	8,176	7,834	6,921	14,175	16,660
Khiva, white yarn - - - - -	- -	- -	- -	- -	6,107
Bokhara, white yarn - - - - -	34,897	20,537	15,151	28,689	25,575
Taschkent, white yarn - - - - -	13,945	6,459	- -	9,997	4,679
Other countries, white yarn - - - -	455	246	633	1,325	141
Ditto, coloured yarn - - - - -	280	31	122	300	32
Total white yarn - -	657,537	606,667	536,417	519,159	560,799
Total coloured yarn - -	4,287	5,593	4,456	3,624	2,490
Whereof by way of Petersburg, white yarn - -	527,572	498,064	438,163	381,507	397,369
Ditto, coloured yarn - - - - -	3,285	4,248	3,429	2,420	1,383

Exports of Wool from Russia.

	Poods.		Poods.
From 1800 to 1813, average annual exportation,	19,815	From 1834 to 1837, average annual exportation,	300,100
— 1814 — 1823, — — —	35,115	— 1838 — 1841, — —	375,680
— 1824 — 1833, — — —	111,546	In 1841, — —	456,181

In compiling this article, we have consulted *Schnitzler, Essai d'une Statistique Générale de la Russie*, pp. 133—157.; and his *Russie, Pologne, et Finlande*, pp. 187—289.; *Richard, Traité Général du Commerce*, ed. 1781, ii. pp. 268—317.; *Tooke's View of Russia*, book 12.; *Coxe's Travels in the North of Europe*, 8vo ed. iii. pp. 283—358. &c.; *Clark's Russian Trader's Assistant*, a valuable and useful work; *Supplement au Journal de St. Petersbourg*, for 1842; *Consular Returns* from Petersburg and Odessa: but we have derived our principal information from the official returns published by government, and *private communications* of eminent Russian merchants.

PEWTER (Ger. *Zinn, Zinngeisserzinn*; Fr. *Etain*; It. *Stagno*; Sp. *Estano, Peltre*; Rus. *Olowo*), a factitious metal used in making plates, dishes, and other domestic utensils. It is a compound, the basis of which is tin. The best sort consists of tin alloyed with about 1-20th or less of copper, or other metallic bodies, as the experience of the workmen has shown to be most conducive to the improvement of its hardness and colour, such as lead, zinc, bismuth, and antimony. There are 3 sorts of pewter, distinguished by the names of plate, trifle, and ley-pewter. The 1st was formerly much used for plates and dishes; of the 2d are made the pints, quarts, and other measures for beer; and of the ley-pewter, wine measures and large measures. — (*Ure.*)

PHILADELPHIA, a large city and sea-port of the United States, in Pennsylvania near the confluence of the rivers Delaware and Schuylkill, lat. 39° 57′ N., lon. 75° 10′ 59″ W. Population, in 1840, 258,832.

Harbour, Light-houses, Pilotage, &c. — Vessels of the largest burden ascend the river as far as Newcastle, but those drawing above 18 or 20 feet water cannot reach Philadelphia, on account of a bar a little below the city. The entrance to the magnificent bay formed by the embouchure of the Delaware, has Cape May on its north, and Cape Henlopen on its south side. The former, in lat. 38° 57′ N., lon. 75° 47′ 45″ W., is a sandy headland, rising about 12 feet above the level of the sea. It has recently been surmounted by a light-house, 60 feet in height. The light revolves once a minute; an eclipse of 50 seconds being succeeded by a brilliant flash of 10 seconds. It is seen in clear weather from 20 to 25 miles off. Cape Henlopen, marking the southern boundary of the bay, is in lat. 38° 47′ N., lon. 75° 4′ 45″ W. A little south from it is a hill, elevated about 60 feet above the level of the sea; and on it is erected a light-house, 72 feet in height, furnished with a powerful *fixed* light visible in clear weather 10 leagues off. To the N. of this principal light, and close to the extremity of the cape, a second light-house has been constructed, 36 feet above the level of the sea, which is also furnished with a *fixed* light, which may be seen at about 6 leagues off. The channel for large ships is between Cape Henlopen and the banks called the Overfalls. The navigation is, however, a little difficult, and it is compulsory on ships to take pilots. The latter frequently board them at sea; but if not, as soon as a ship comes between the capes, she must hoist the signal for a pilot, and heave to as soon as one offers to come on board. — (*Conlier sur les Phares*, 2d ed. See *post*, for regulations as to pilotage.)

Trade. — The trade of Philadelphia is very extensive. She communicates by various canals (one of which, 393¼ miles in length, unites her with Pittsburg, on the Ohio) and railways with the interior, and is the grand depôt for the coal of the Union. The increase of the coal trade has, indeed, been quite unprecedented. Previously to 1825 no coal had been sent down the Schuylkill, and in that year only 5,306 tons were brought by that channel to Philadelphia, whereas in 1841 the quantity amounted to 584,692 tons, exclusive of large supplies by other channels. Exclusive of coal and iron, the exports principally consist of wheat and wheat flour, Indian corn, and other agricultural products, timber, and various species of manufactured goods. The principal imports are cotton, woollen, and silk goods; sugar, coffee, and tea; wines, brandies, spices, dye stuffs, &c. In point of shipping, Philadelphia is the fourth port in the Union, being, in this respect, inferior only to New York, Boston, and New Orleans. The registered, enrolled, and licensed tonnage belonging to the port on the 30th September, 1841, amounted to 105,805 tons, of which 55,323 were engaged in the coasting trade, which is very large. The total value of the articles imported into Pennsylvania from foreign countries in the year ending the 30th of September, 1841, amounted to 9,840,354 doll., and that of the exports to 5,152,201 doll., of which 4,404,863 do. were domestic produce. — (*Papers published by order of Congress*, 21st July, 1842.) The coasting trade of the port is, however, more extensive and of greater importance than its foreign trade.

There are numerous banks in Philadelphia, but they stand no higher in point of character than those in most other parts of the Union, and have over and over again suspended payments. The Bank of the United States had its head office here. Besides banks, there are numerous insurance companies, and joint stock associations.

Value of Exports to and Imports from Foreign States at Philadelphia for the Year ending 30th September, 1842, specifying the Value of the Exports to and Imports from each.

Imports.				Exports.	
Countries.	Domestic Produce or Manufacture.	Foreign Produce or Manufacture.	Total.	Countries.	Value.
British West Indies	$ 567,483	$ 2,345	$ 569,828	England	$ 3,521,170
England	397,297	30,727	428,024	Spanish West Indies	970,903
Spanish West Indies	358,055	60,986	419,051	Brazil	724,755
Brazil	307,431	100,968	408,419	Colombian ports	483,946
British American Colonies	378,154	520	378,674	Hanse Towns	390,886
Buenos Ayres	199,219	41,284	241,503	Buenos Ayres	274,167
Colombian Ports	162,888	25,671	188,559	Spain on Mediterranean	154,922
Danish West Indies	168,689	10,464	179,153	Hayti	107,727
Hanse Towns	121,773	35,319	157,092	France on Atlantic	87,976
British and Dutch East Indies	123,485	399	123,884	Danish West Indies	83,882
Sicily	109,108	10,827	119,935	Italy	82,109
Chili	109,081	13,754	113,755	British American colonies	82,098
Hayti	67,409	4,363	72,253	Holland	80,108
Italy	16,851	44,803	61,654	British West Indies	79,780
Swedish West Indies	59,719	1,621	61,370	Chili	71,600
Gibraltar	35,971	24,860	60,831	British and Dutch East Indies	55,338
Holland	23,692	27,291	50,983	Mexico	51,089
Africa	44,792	2,696	47,488	Sicily	43,521
Trieste and Adriatic	2,514	30,628	33,142	Teneriffe and Canaries	22,849
France on Atlantic	17,490	1,760	19,490	Azores	17,409
Texas	12,994	222	13,216	Ireland	8,926
French West Indies	9,150	1,374	10,524	Swedish West Indies	8,606
Mexico	7,037	2,991	10,028	Africa	5,735
Teneriffe	2,261	-	2,261	Portugal	5,061
				Gibraltar	106
Total	$3,293,814	$ 476,913	$ 3,770,727		$ 7,381,788

Statement showing the Quantities and Value of the principal Articles of Domestic Produce exported from the Port of Philadelphia to Foreign Ports, from the 1st of January to the 30th of September, 1839.

Articles.			Value.	Articles.			Value.
Wheat flour	132,189 bbls.	$999,882	Beef	292 bbls.		
Rye do.	20,796 —	101,096	Hides	865 No.	$5,994	
Corn meal	56,712 —	224,724	Tallow	1,514 lbs.		
Corn	11,971 bush.	12,815	Pickled fish	1,363 bbls.	7,367	
Ship bread	14,068 bbls.	85,204	Ginseng	517,445 lbs.	117,765	
Do.	16,214 kegs		Sperm and whale oil	26,084 gals.	24,378	
Rice	449 tierces	13,177	Sperm candles	51,860 lbs.	13,811	
Pork	1,087 bbls.		Tallow do.	74,985	80,791	
Hams and bacon	68,187 lbs.	65,319	Soap	750,186		
Lard	200,694 —		Resin and turpentine	14,488 bbls.	43,201	
Butter	61,690 —		Tar and pitch	998		
Cheese	8,995 —	11,250	White and coloured cotton goods	- -	160,986	

Account showing the Number of Vessels, discriminating between Arrivals Foreign and Coastwise, which entered the Port of Philadelphia from the 1st of January, 1825, to the 1st of January, 1840.

Years.	Foreign.	Coastwise.	Total.	Years.	Foreign.	Coastwise.	Total.
1825	484	1,195	1,679	1833	474	2,573	3,047
1826	482	1,195	1,677	1834	450	2,686	3,116
1827	469	1,320	1,789	1835	429	3,573	4,002
1828	450	1,247	1,697	1836	421	3,764	4,185
1829	374	2,210	2,584	1837	409	7,776	8,185
1830	415	3,287	3,702	1838	464	10,860	11,324
1831	396	3,262	3,658	1839	521	11,188	11,709
1832	428	2,849	3,277				

The arrivals in 1839 were —

Ships	90	Schooners	117	Sloop	1
Barques	37	Galliot	1		
Brigs	274	Miatici	1	Total	521

Of these vessels, there were 86 belonging to foreign ports, viz. —

Austrian	2	French	2	Russian	2
Bremen	9	Genoese	1	Spanish	1
British	56	Hamburg	2	Swedish	1
Colombian	3	Haytien	2		
Danish	2	Portuguese	1	Total	86
Dutch	1	Prussian	1		

In Pennsylvania, the dollar is worth 7*s.* 6*d.* currency; so that 1*l.* sterling = 1*l.* 13*s.* 4*d.* currency. — (See NEW YORK.)

Weights and Measures same as those of England.

Regulations of the Port. — If any master or captain of any ship or vessel, or other person, shall refuse or neglect to comply with the directions of the harbour master, in matters within the jurisdiction of his office; such person shall, for each and every such offence, severally forfeit and pay any sum not exceeding 100 dollars. And the said harbour master, shall in full compensation for his services be entitled to have, recover, and receive from the master, captain, owner, or consignee of each and every ship or vessel arriving at the port of Philadelphia (coasting vessels not exceeding the burden of 75 tons excepted) the sum of 1 dollar for each and every voyage by such ship or vessel performed, and no more.

Every ship or vessel that may arrive in this harbour, and that shall come to anchor in the stream anywhere between Almond and Vine Streets, having previously caused her gunpowder, if any she had on board, to be landed as the law directs, may remain in that situation 24 hours, and no longer, taking care to lie as near to the island or sand bar as may be consistent with their safety. But if, from the circumstance of a vessel having servants on board, or from any other cause, it may be thought necessary or convenient to lie a longer time in the stream, then, and in every such case, the owner, master, pilot, or other person having the charge or direction of such vessel, shall remove her from opposite the city, and shall moor her, or cause her to be moored, to the north ward of Vine Street, with 1 anchor and cable up and 1 anchor and cable down the stream; and in both the above-mentioned situations, the regulation contained in the next succeeding article to be duly attended to.

If any vessel properly moored in the stream shall have her anchor or cable overlaid by any other vessel in anchoring or mooring, the master or person having the care or direction of such last-mentioned vessel shall immediately, or as soon as may be after application made to him by the party aggrieved, cause the said anchor or cable so overlaying to be taken up and cleared. When any ship or vessel shall be hauled in to any wharf or dock, or alongside of another vessel that may be lying at such wharf or dock, the owner, master, pilot, or whoever may have the command, care, or direction of her, shall have her securely moored; and if outside of another vessel, shall get one good fast from each end of the vessel to the shore, with sufficient fenders between them and the inside vessel; and shall cause the flukes of their anchors to be taken on board; and, within 24 hours thereafter, cause her jib boom, spritsail-yard, main boom, spanker and ringtail booms, if any they have, to be rigged in, and their lower yards topped up, in such a manner as least to interfere with vessels passing.

If the fasts of vessels when moored at a wharf shall extend across a dock, so as to obstruct the passing or repassing of shallops, lighters, or other craft or vessel, the master or other person having the command of such ship or vessel shall, upon the first application, immediately cause such fast or fasts to be cast off or slackened down.

No outward-bound vessel, putting off from a wharf, shall lie longer in the stream between Vine Street and Almond, in the district of Southwark, above mentioned, than 24 hours. And if vessels lying at the end of wharfs so much interlock with each other as to prevent vessels hauling in and out of docks, the master, owner, pilot, or other person having the charge of the same, shall, immediately on application from any person so wanting to haul his vessel in or out of docks aforesaid, have the vessel or vessels so interfering, moved in such a manner as to accommodate the one applied for; in which case the vessel making room for another to haul in or out shall have liberty to make her warps fast to the most convenient place adjacent, for a reasonable time; and all sea vessels, when transporting or wanting to haul into a wharf or dock, or to make sail in order to proceed to sea, shall have the same privilege.

When any ship or vessel may be lying alongside any wharf, and not taking in or discharging, she shall make way for and permit any vessel that wants to unload or load, to come inside next the wharf, until she discharges or loads her cargo; and the said vessel, when so discharged or loaded, shall haul outside and give way to the vessel that first occupied the wharf; provided that, from the 10th of December to the 1st of March, no vessel shall be compelled to move from her birth (only those at Gloucester Point piers), excepting to let vessels in and out of docks.

No ship or vessel loading or discharging hemp at any wharf, or within any dock, shall be allowed to have any fire on board; neither shall any vessel lying outside or near her be permitted to have fire on board, while it may be considered dangerous. And no tar, turpentine, rosin, or pitch shall be heated on the wharf, or on board any vessel lying at any wharf within the limits of the city.

Rates of Pilotage. — Inwards, up to 12 feet, at 2·67 dollars per foot: above 12 feet, at 3·33 dollars.

Outwards, up to 12 feet, at 2 dollars; above 12 feet, at 2·67 dollars.

Inwards.			Outwards.		
	Dolls.	*Cents.*		*Dolls.*	*Cents.*
5 feet is	13	33	5 feet is	10	0
5½ —	14	67	5½ —	11	0
6 —	16	0	6 —	12	0
6½ —	17	33	6½ —	13	0
7 —	18	67	7 —	14	0
7½ —	20	0	7½ —	15	0
8 —	21	33	8 —	16	0
8½ —	22	67	8½ —	17	0
9 —	24	0	9 —	18	0
9½ —	25	33	9½ —	19	0
10 —	26	67	10 —	20	0
10½ —	28	0	10½ —	21	0
11 —	29	33	11 —	22	0
11½ —	30	67	11½ —	23	0
12 —	32	0	12 —	24	0
12½ —	33	67	12½ —	25	33
13 —	35	33	13 —	26	67
13½ —	37	0	13½ —	28	0
14 —	38	67	14 —	29	33
14½ —	40	33	14½ —	30	67
15 —	42	0	15 —	32	0
15½ —	43	67	15½ —	33	33
16 —	45	33	16 —	34	67
16½ —	47	0	16½ —	36	0
17 —	48	67	17 —	37	33
17½ —	50	33	17½ —	38	67
18 —	52	0	18 —	40	0
18½ —	53	67	18½ —	41	33
19 —	55	33	19 —	42	67
19½ —	57	0	19½ —	44	0
20 —	58	67	20 —	45	33

Every vessel arriving from, or bound to, a foreign port, is required by law to receive a pilot, or to pay half pilotage in the warden's office, where the master of every such vessel is required, under a penalty of 10 dollars, to make report within 36 hours after his arrival, and again before his departure, signing his name to said report in the warden's book.

Every vessel of 75 tons and upwards arriving from, or bound to, any port within the United States, and the master of all such vessels, are bound as above.

The pilot of every vessel is required to inform the master of his having to report at the warden's office.

All vessels obliged to receive a pilot are required to pay 10 dollars in addition, as winter pilotage, from the 20th of November to the 10th of March, both days inclusive.

Foreign vessels, *i. e.* French, Spanish, Portuguese, Neapolitan, Danish, Russian, South American, and Haytian, to pay 2 dollars 67 cents in addition to other pilotage.

Every pilot detained more than 24 hours by any master, owner, or consignee, is entitled to 2 dollars per day for every day he is so detained.

Every pilot detained more than 48 hours by the ice, after he has conducted his vessel to a place of safety, is entitled to 2 dollars per day for every day he is so detained, and cannot be discharged in less than 6 days, without his consent.

Every pilot obliged by the ice or stress of weather to proceed to another port, is, when there, entitled to his pilotage; and if there discharged, to 8 cents a mile for every mile he has to travel home.

Every pilot is required, under a penalty of 12 dollars, to make report, within 48 hours, at the warden's office, of every vessel he conducts to the city.

Rates of Commission recommended for general Adoption, and allowed by the Philadelphia Chamber of Commerce, when no Agreement subsists to the contrary, established at a stated Meeting on the 10th of March, 1823.

	Foreign.	Domestic.	
	Per Cent.	*Per Cent.*	
Merchandise, sales	5	2½	on gross amount.
Purchase and shipment, or accepting bills for purchases	2½	2½	on cost and charges.
Landing and re-shipping goods from vessels in distress	2½	2½	on current value.
Receiving and forwarding	1	1	on ditto.
Besides	2½	2½	on responsibilities incurred.
Vessels, sale or purchase	2½	2½	on gross amount.
Procuring freight or chartering to proceed to another port	2½	2½	on ditto.
Collecting freight or general average	2½	2½	on amount collected.
Paying outfits or disbursements	2½	2½	on aggregate amount.
Marine insurances, effecting, when the premium does not exceed 10 per cent.	½	½	on amount insured.
When the premium exceeds 10 per cent	5	5	on amount of premium.
Adjusting and collecting losses without litigation	2½	2½	on amount recovered.
Fire insurances, effecting	5	5	on amount of premium.
Adjusting and collecting losses	1	1	on amount recovered.
Foreign and inland bills of exchange and notes of hand, drawing or indorsing and negotiating, in all cases	2½	2½	on the proceeds.
Purchase without indorsing	½	½	on cost and charges.
Sale ditto	½	½	on the proceeds.
Collecting	½	½	on amount collected.
Paying over the amount	½	½	on amount paid over.
Remitting	½	½	on amount remitted.
Public stocks, specie, bank notes, or drafts not current, sale	½	½	on proceeds.
Purchase	½	½	on cost and charges.
Collecting dividends on public stock	½	½	on amount collected.
Advances in money, or by coming under acceptance, in all cases	2½	2½	on amount advanced.
Accounts, collecting disputed or litigated accounts, or claims on insolvent estates	5	5	on amount recovered.
Monies, receiving, from which no other commission is derived	½	½	on amount received.
Paying ditto	½	½	on amount paid.
Paying and receiving ditto	1	1	on amount received.
Guarantee, in all cases	2½	2½	on the amount guaranteed.

On bills remitted for collection under protest for non-acceptance or non-payment, ½ commission to be charged.

On consignment of merchandise withdrawn or re-shipped, full commission to be charged to the extent of advances or responsibilities incurred, and ½ commission on the current value of the residue.

On sales of merchandise originally consigned to another house, but withdrawn, and where no responsibilities are incurred, only ½ commission to be charged on the current value.

The current value in all cases to be settled by certificates of 2 respectable merchants, auctioneers, or brokers.

The above commissions to be exclusive of guarantee, brokerage, storage, and every other charge actually incurred.

The risk of loss by fire, unless insurance be ordered, and of robbery, theft, and other unavoidable occurrences, if the usual care be taken to secure the property, is, in all cases, to be borne by the proprietor of the goods.

PHOSPHORUS, a substance of a light amber colour, and semi-transparent; but, when carefully prepared, nearly colourless and transparent. When kept some time, it becomes opaque externally, and has then a great resemblance to white wax. It may be cut with a knife, or twisted to pieces with the fingers. It is insoluble in water; its specific gravity is 1·77. When exposed to the atmosphere, it emits a white smoke, and is luminous in the dark. When heated to 148 it takes fire, and burns with a very bright flame. When phosphorus is inflamed in oxygen, the light and heat are incomparably more intense; the former dazzling the eye, and the latter cracking the glass vessel. — (*Thomson's Chemistry.*)

PIASTRES, *or* DOLLARS, Spanish and American silver coins in very extensive circulation. Value, at an average, about 4*s.* 2*d.* sterling. — (See COINS.)

PILCHARDS, fishes closely resembling the common herring, but smaller, and at the same time thicker and rounder. They are rarely found on the British shores, except on the coasts of Cornwall and Devon, particularly the former, where they are taken in great numbers from the middle of July to the end of November, or even the middle of December. It is a saying of the Cornish fishermen, that the pilchard is the least fish in size, most in number, and greatest for gain, taken from the sea.

Pilchard fishery.—This is carried on along the coasts of Cornwall and Devon, from the Bolt Head in the latter, round by the Land's End to Padstow and Bossiney in the former. Its principal seats are St. Ives, Mount's Bay, and Mevagissey. The fish usually make their appearance in vast shoals in the early part of July, and disappear about the middle of October; but they sometimes reappear in large quantities in November and December. They are taken either by *seans* or by drift nets, but principally, perhaps, by the former. A sean is a net, varying from 200 to 300 fathoms in length, and from 10 to 14½ do. in depth, having cork buoys on one edge and lead weights on the other. Three boats are attached to each sean, viz. a boat (*sean boat*), of about 15 tons burden, for carrying the sean; another (*follower*), of about the same size, to assist in mooring it; and a smaller boat (*lurker*), for general purposes. The number of hands employed in these 3 boats varies from about 13 to 18, but may be taken, at an average, at about 16. When the shoals of fish come so near the shore that the water is about the depth of the sean, it is employed to encircle them; the fishermen being directed to the proper places for casting or shooting the nets by persons (*huers*) stationed for that purpose on the cliffs and in the boats.* The practice is to row the boat with the sean on board gently round the shoal; and the sean being, at the same time, thrown gradually into the water, assumes, by means of its buoys and weights, a vertical position, its loaded edge being at the bottom, and the other floating on the surface. Its 2 ends are then fastened together; and, being brought into a convenient situation, it is moored by small anchors or grapnels; sometimes, however, one or two smaller seans are employed to assist in securing the fish. At low water, the enclosed fish are taken out by a *tuck net*, and carried to the shore. A single sean has been known to enclose at once as many as 4,000 hogs-

* The tunny fish in the Archipelago was caught in a similar way: — "Ascendebat quidam (Anglicè *huer*, Græcè *thunoscopos*) in altum promontorium, unde thunnorum gregem specularetur, quo viso, signum piscatoribus dabat, qui retibus totum gregem includebant." — (*Bishop of London's Notes on the Perse of Æschylus*, quoted by Dr. Paris, in his *Guide to Mount's Bay*, p. 150.)

heads (1,200 tons) of fish! But this was the greatest quantity ever taken, and it is but seldom that as many as 1,200 hogsheads are caught at a time. The "take," in fact, depends on so many accidental circumstances, that while one sean may catch and cure in a season from 1,000 to 2,000 hogsheads, others in the neighbourhood may not get a single fish. In some places, the tides are so strong as to break the seans and set the fish at liberty. When the quantity enclosed is large, it requires several days to take them out, as they must not be removed in greater numbers than those who salt them can conveniently manage.

Drift nets are usually about ¼ mile in length by about 4½ fathoms in depth; they are shot in the open sea, and entangle the fish in their meshes in the same way as the herring nets. The fish thus taken are said to be superior to those taken by the seans, though it be doubtful, from their being strangled in the nets, whether they are so good for curing.

As soon as the fish are brought on shore, they are carried to cellars or warehouses, where they are piled in large heaps, having a sufficient quantity of salt interspersed between the layers. Having remained in this state for about 35 days, they are, after being carefully washed and cleaned, packed in hogsheads, each containing, at an average, about 2,600 fish †; they are then subjected to a pressure sufficient to extract the oil, of which each hogshead yields, provided the fish be caught in summer, about 3 gallons; but those that are taken late in the season do not yield above half this quantity. This oil usually sells for from 12 to 15 per cent. under the price of brown seal oil. The broken and refuse fish and salt are sold to the farmers, and are used as manure with excellent effect. The skimmings which float on the water in which the pilchards are washed are called *dregs*, and are chiefly sold as grease for machinery.

The fresh fish in a hogshead of pilchards weigh about 6 cwt., and the salt about 3½ cwt.; but the weight of the hogshead when cured and pressed is reduced to about 4½ cwt.; including the weight of the cask, from 20 to 24 lbs. We do not know

An Account of the Exports of Pilchards during each of the Ten Years ending with 1842; specifying the Places for which they were exported, the Quantity shipped for each, the Places at which they were taken and cured, and their Price at the Port of Shipment.

Years.	Genoa.	Leghorn.	Civita Vecchia.	Naples.	Ancona, Venice, Trieste.	Malta.	Total.	Where taken and cured.				Prices paid on Shore.
								East of Lizard.	Mounts Bay.	St. Ives.	New-quay.	
1833	617	1,425	566	3,882	3,632	- -	9,921	785	4,140	4,999	- -	50s. 2d hhd.
1834	2,558	4,199	1,457	7,441	9,136	293	25,084	2,929	8,009	12,418	1,728	55s. 6d. to 56s.
1835	1,076	3,281	2,182	8,819	5,964	552	23,814	8,575	4,803	8,556	1,880	40s. to 55s.
1836	827	5,060	- -	3,647	9,184	- -	18,718	5,736	5,202	4,929	2,851	40s. — 56s.
1837	- -	4,171	- -	6,434	4,759	- -	15,364	438	1,134	13,392	400	58s. — 44s.
1838	505	744	- -	4,080	2,298	- -	7,627	1,295	2,740	3,592	- -	55s. — 60s.
1839	640	1,546	550	5,618	4,470	- -	12,824	5,510	508	6,806	- -	55s. — 60s.
1840	600	2,820	1,098	7,967	10,895	- -	23,310	5,493	2,755	15,062	- -	70s. — 60s.
1841	420	2,795	- -	3,629	2,761	- -	9,605	997	1,728	6,880	- -	50s. — 55s.
1842	1,048	4,007	921	6,081	8,146	511	20,714	1,245	432	17,710	1,327	50s. — 40s.
Total	8,291	32,018	6,446	57,598	61,845	1,356	166,984	35,003	31,451	91,344	8,186	

N.B. — Of the quantity sent to the Adriatic full 3-4ths have been sold in Venice, and the remainder chiefly in Ancona.

The export of pilchards has been rather declining of late years. This has been ascribed to various causes, such as the withdrawal of the bounty of 8*s.* 6*d.* a hogshead formerly paid on their export, the relaxed observance of Lent in the countries to which they are principally exported, and the imposition of a heavy duty on their importation into Naples. The falling off in the demand of the latter has, however, been in a great measure compensated by the increased demand at Venice.

Pilchards are not used in England except in Cornwall and Devon, where about 3,000 hhds. a year may at present be made use of. We believe, however, that their consumption in these counties has begun to increase with considerable rapidity.

The sean fishery employs about 1,500 hands regularly throughout the season, and a vast number more when any considerable shoals are inclosed. There are at present (1843) about 260 seans afloat, of which no fewer than 186 belong to St. Ives. The first cost of a sean on the South coast is about 450*l.*; but a St. Ives sean does not cost above 300*l.* The drift fishery employs, during the season, from 900 to 1,000 men, and about 230 boats; the cost of each boat and nets amounting to about 200*l.* The labour in the cure of the fish may be taken at about 5*s.* a hogshead. The total capital embarked in the fishery, in 1832, was estimated by those engaged in it at from 200,000*l.* to 250,000*l.*, and it has not varied materially in the interval.

The drift fishermen employ themselves, when not engaged in the pilchard fishery, in the mackarel, herring, and hook-line fisheries. The sean fishermen consist principally of agricultural labourers, miners, &c., attracted to the business in the expectation (in which, however, they are not unfrequently disappointed) of making a comparatively large sum by a few weeks' exertion. But there are always 3 or 4 individuals of the crew of each sean who are regularly bred, expert fishermen.

Four fifths of the persons employed on shore in the salting, curing, packing, &c. of the fish, are women.

The wages of those employed in the fishery are made sometimes to depend on the number of fish taken; but in other instances they are independent of any such contingency.

The fishery at St. Ives is carried on under a particular act of parliament, passed in 1841. The exaction of a tithe of the fish is a very serious burden on the fishery; sometimes it is taken in kind, but is more generally compounded for. — (*Dr. Paris's Guide to Mount's Bay and the Land's End*, 2d ed. pp. 146—156.; *Beauties of England and Wales*, vol. ii. p. 471.: but we are principally indebted to *private information* obtained from the most authentic sources, and obligingly communicated, by Mr. Coulson, of Penzance.)

PILOTS AND PILOTAGE. The name of pilot or steersman is applied either to a particular officer, serving on board a ship during the course of a voyage, and having the charge of the helm and the ship's route; or to a person taken on board at any particular place, for the purpose of conducting a ship through a river, road, or channel, or from or into a port.

It is to the latter description of persons that the term pilot is now usually applied; and pilots of this sort are established in various parts of the country by ancient charters of incorporation, or by particular statutes. The most important of these corporations are those of the Trinity House, Deptford Strond; the fellowship of the pilots of Dover,

† Mr. Pennant inadvertently states the number of fish in a hogshead at 35,000. — (*British Zoology*, iii. 344. ed. 1776.) Trusting to his authority, we fell into the same error in the 1st edition of this work.

Deal, and the Isle of Thanet, commonly called the *Cinque Port Pilots*; and the Trinity houses of Hull and Newcastle. The 5 Geo. 4. c. 73. established a corporation for the regulation and licensing of pilots in Liverpool.

The principle of the law with respect to pilots seems to be, that where the master is bound by act of parliament to place his ship in charge of a pilot, and does so accordingly, the ship is not to be considered as under the management of the owners or their servants, and they are not to be liable for any damage occasioned by the mismanagement of the ship, unless it be proved that it arose from the negligence or misconduct of the master or men; but when it is in the election or discretion of the master to take a pilot or not, and he thinks fit to take one, the pilot so taken is to be considered as the servant of the owners, who are to be responsible for his conduct. — (*Abbott on the Law of Shipping*, part ii. c. 5.)

The statute of 6 Geo. 4. c. 125. has consolidated the laws with respect to the licensing, employment, &c. of pilots. It is of great length; but all its provisions of any material importance may be embraced under the following heads: —

1. *Appointment of Pilots.* — The corporation of the Trinity House of Deptford Strond are required to appoint and license fit and competent persons, duly skilled, to act as pilots for the purpose of conducting all ships or vessels navigating the Thames, the Medway, and the several channels, creeks, and docks thereof, between Orfordness and London Bridge, as also from London Bridge to the Downs, and from the Downs westward as far as the Isle of Wight, and in the English Channel from the Isle of Wight up to London Bridge; and all ships and vessels navigating as aforesaid (except as herein-after mentioned) shall be conducted and piloted within the aforesaid limits by such pilots, and by no other person whomsoever.

No person shall be licensed by the said corporation as a pilot, who has not served as mate for 3 years on board of, or been for 1 year in the actual command of, a square-rigged vessel of not less than 80 tons register tonnage, as to licences for the *North Channel* upwards; and not less than 150 tons register tonnage, as to licences for the *North Channel*, *Queen's Channel*, *South Channel*, or other channels downwards; or who shall not have been employed in the pilotage or buoyage service of the said corporation for 7 years, or who shall not have served an apprenticeship of 5 years to some pilot vessel licensed under the act passed in the 52d year of the reign of George III., or under this act; and no person so licensed shall take charge as a pilot of any ship or vessel drawing more than 14 feet water, in the river Thames or Medway, or any of the channels leading thereto or thereupon, until such person shall have acted as a licensed pilot for 3 years, and shall have been after such 3 years, on re-examination, approved of in that behalf by the said corporation, on pain of forfeiting 10*l.* for every such offence; and the person employing or permitting such pilot to take charge of such ship or vessel is also to forfeit 10*l.* — § 3.

Every pilot licensed by the corporation of the Trinity House of Deptford Strond is to pay an annual licence of 3*l.* 3*s.*, and 6*d.* in the pound upon his earnings, which sums are to be applied to the uses of the pilots' fund of the said corporation. — § 4.

The said corporation are further authorised to appoint competent persons, not more than *five*, nor less than *three*, at such ports and places as they may think fit (except within the liberty of the Cinque Ports, and such other ports and places as may have been specially provided for by act of parliament, or by charter, for the appointment of pilots), to be called sub-commissioners of pilotage, who are to take the following oath: —

"I, *A. B.*, do swear, that I will diligently and impartially examine into the capacity and skill of [redacted] in the art of piloting ships and vessels into the roadstead, port, or harbour, and upon the coasts following; *videlicet* [here describe the limits within which the person examined is intended to act as pilot], and will make true and speedy return thereof to the [redacted]ation of Trinity House of Deptford Strond, without favour, affection, fee, or reward, other than [redacted]e or reward as is allowed by the by-laws or regulations duly established in that behalf. So help me God."

And upon the recommendation of such sub-commissioners, the Trinity House Corporation may grant licences to pilots. — § 5.

Notices of the appointment of pilots are to be put up in writing at the Trinity House and Custom-house, London, and at the Custom-houses of the ports for which they are licensed, and are to be published in the *London Gazette*. — § 7.

No person shall take charge of any ship or vessel as a pilot belonging to the *Cinque Ports*, before he be examined by the master and two fellows, or by four wardens of the society or fellowship of pilots of Dover, Deal, and the Isle of Thanet, touching his abilities, and shall be approved and admitted into the said society by the Lord Warden of the Cinque Ports, or his lieutenant; and any person presuming to act as a pilot belonging to the said society or fellowship, without having been so examined, approved, and admitted, shall for the first offence forfeit 10*l.*, for the second 20*l.*, and for every other offence 40*l.* — § 15.

No person licensed by the aforesaid society or fellowship is to take charge of any ship or vessel drawing more than 11 feet 6 inches water, until he has acted as a pilot for 3 years; nor of a vessel drawing more than 14 feet water, till he has acted as a pilot for 5 years; nor of a vessel drawing more than 17 feet water, till he has acted as a pilot for 7 years; when he is to be again examined; and if he shall be approved of and licensed upon such second examination, he may take charge of ships of any draught of water. — § 16.

The number of *Cinque Port* pilots used to be fixed at 140; but during peace, no more than each alternate vacancy is to be filled up, unless the number be reduced below 120. — § 24.

All bodies politic and corporate, and all persons authorised to appoint or license pilots for any port or place in England, shall, upon any such appointment being made, forthwith transmit to the Trinity House, London, and to the commissioners of customs, London, the Christian name and surname, age, and place of residence, of every pilot so appointed, distinguishing the limits in which he is to act, and by whom appointed. And the said bodies politic, &c. are to transmit lists, corrected up to the 31st day of December in each year, either on that day, or within a month after, to the said Trinity House and commissioners of the customs, of the names and residences of all the pilots within their respective jurisdictions; stating all the alterations that may have been made within the year in the rates of pilotage charged, and in the rules and regulations for governing pilots within their respective districts. — § 28.

The commissioners of the customs are to transmit to their principal officers, at the different ports, the names and places of residence of all the pilots residing within the limits of each port, as far as they are acquainted with the same; and every pilot is to be furnished with copies of all proclamations and orders in council respecting the performance of quarantine. — § 26.

A particular description of the person of every pilot is to be written upon the back of his licence; and no person shall take charge of any ship or vessel, or in any manner act as a pilot, or receive any compensation for acting as a pilot, until his licence shall have been registered by the principal officers of the Custom-house of the place at or nearest to which such pilot shall reside (which officers are hereby required to register the same without fee or reward), nor without having his licence at the time of his so acting in his personal custody, and producing the same to the master of any ship or vessel, or other person,

who shall be desirous of employing him as a pilot, or to whom he shall offer his services, on pain of forfeiting a sum not exceeding 30*l.* nor less than 10*l.* for the first offence; and for the second or any subsequent offence, a sum not exceeding 50*l.* nor less than 30*l.*; and upon further pain, as to any person licensed as aforesaid, of forfeiting his licence, or being suspended from acting as a pilot, by and at the discretion of the corporation or other authority from which such pilot's licence was derived, either for the first, second, or any subsequent offence. — §§ 65, 66.

2. *Government of Pilots.* — All persons licensed to act as pilots by the Trinity House are subject to the government of the said corporation, which is empowered to make by-laws, rules, &c. specifying what sums shall be paid by such pilots to the sub-commissioners of pilotage for their examination, and for granting or renewing or confirming their licences from time to time, and annexing such reasonable penalties and forfeitures for the breach of such by-laws as to them shall seem expedient. But no such by-laws, regulations, &c. shall have any force till they have been examined, sanctioned, and approved by the chief justice of the Court of King's Bench, or the chief justice of the Court of Common Pleas. — § 11. (The by-laws of the Trinity House, Deptford Strond, sanctioned by Lord Tenterden, are annexed to this article.)

Copies of any proposed by-laws are to be transmitted to the privy council and the commissioners of customs, 3 months before they are submitted to any chief justice for approval; and the commissioners of the customs are to cause such proposed by-laws to be hung up in the several Custom-houses of the principal ports of Great Britain, for the inspection of all parties having an interest therein. And when such by-laws shall have been sanctioned, they shall be hung up in the several Custom-houses within the limits of which the pilots respectively shall be licensed, and also at the Trinity House in London. — §§ 12, 13.

The *Cinque Port* pilots are to be subject to the rules and regulations framed by the Lord Warden of the said ports, or his deputy, with the assent of the majority of the commissioners of *Loadmanage* (master and wardens of the fellowship of pilots of Dover, Deal, and the Isle of Thanet). The privy council may, however, amend, correct, or enlarge such rules or regulations, if they shall appear to them, upon the representation of any person having an interest therein, to be in any material point erroneous, insufficient, or defective. — §§ 21, 22.

The Trinity House Corporation are authorised and required to establish, vary, and alter, from time to time, as circumstances may require, the rates of pilotage performed by pilots licensed by the said corporation, according to the size and draught of water of the vessels, the distance piloted, the detention and responsibility of the pilot, and such other circumstances as they may think fit to take into account. Tables of these rates are to be hung up at the several Custom-houses of the ports to which they apply; and no greater or less rates, or other reward or emolument for such pilotage, shall, under any pretence whatever, be demanded, solicited, paid, received, or offered, on pain of forfeiting 10*l.* for every such offence, as well by the party offering as by the party accepting or soliciting the same. Ships returning by stress of weather, contrary winds, or on account of accident, into ports in the district of the Isle of Wight, Plymouth, and Falmouth, shall be subject to pay half the common pilotage in such ports. — § 8.

If the majority of the pilots licensed by the Trinity House Corporation in any port or place, or any ship owner in the same, be dissatisfied with the rates, they may appeal to the privy council, who may decide upon the matter as they think fit. — § 9.

Every person applying for a licence to act as a pilot, shall, before any such licence be granted to him, execute a bond in a penal sum, at the discretion of the Trinity House Corporation, or of the Lord Warden of the Cinque Ports, to an amount not exceeding 100*l.*, for the better securing his due obedience to the by-laws, rules, regulations, &c. to be made by competent authority. — § 27.

Licences may be annulled, suspended, or adjudged forfeited, at the pleasure of the foresaid corporation and Lord Warden; but pilots whose licences are so annulled, suspended, &c. may appeal to the privy council, who are authorised to make such adjudication in the premises as they may think fit. — §§ 29, 30.

3. *Licences of Pilot Boats.* — The Trinity Corporation and the fellowship of the Cinque Port pilots are authorised to license pilot vessels of such size and description as may appear to them to be proper for having pilots constantly in attendance in such vessels at sea; and the licensed pilots are authorised to form themselves into companies, with consent of the corporations aforesaid, for providing and maintaining such pilot vessels, such companies and vessels being at all times subject to such rules and regulations as shall from time to time be sanctioned by the said corporate bodies. — § 31.

Pilot boats or vessels are to be distinguished by being at all times and on every station fitted with black sides, and having the upper streak next the gunwale painted white; they are, while afloat, to carry a flag of large dimensions, proportioned to the size of the vessel, at the mast head, or on a sprit or staff in some conspicuous situation, which flag shall be half red and half white, in horizontal stripes, the white uppermost. The name of the pilot on board is to be painted in large white letters (3 inches long) on a black ground on the stern, and on each bow the number of the licence of such pilot; and the concealment of such name or number, or the evasion of any of the before-mentioned provisions, incurs a penalty of 20*l.*, to be paid by the senior pilot on board, who is answerable for their observance. Any pilot carried off in a boat other than a pilot boat, is to hoist a flag as previously ordered, on pain of forfeiting 20*l.* unless he show reasonable cause for having omitted it. — § 32.

The owners or master of any boat or vessel carrying a pilot's flag, without having a licensed pilot on board, shall for every such offence forfeit 100*l.* — § 33.

The Trinity House Corporation, the Court of *Loadmanage* of the Cinque Ports, and all other corporations and persons authorised to manage or direct pilots in any part of England, shall, on the 1st of January in each year, or within the month next following, transmit to the officer of the sixpenny duty in the port of London, a list of all the vessels of every description employed by them or by those under them, for the purposes of pilotage, with the number of men and boys belonging to or serving in such vessels. — § 37.

[illegible], it is [illegible] off to any vessel wanting a pilot, upon signal being made by the same, or upon being required to do so by the master of such ship, or by any person interested therein as principal or agent, or by any officer of the corporation to which such pilot shall belong, or by any principal officer of the customs; or who shall, on any frivolous pretext, quit any ship or vessel, or decline piloting thereof, after he has been engaged to pilot the same, or after going alongside thereof, without leave of the master, shall, for every such offence, forfeit not more than 100*l.* nor less than 10*l.* — § 72.

Any licensed pilot employing or making use of, or compelling or requiring any person having the charge of any ship or vessel to employ or make use of, any boat, anchor, or cable, &c. beyond what is actually necessary, shall forfeit and pay for every such offence not more than 50*l.* and not less than 10*l.*, and shall also be deprived of his licence, or suspended, at the discretion of those by whom he was licensed. — § 73.

If any licensed pilot shall lend his licence to an unlicensed person, to assist him in acting or claiming to act as pilot, and if such unlicensed person shall by drunkenness render himself incapable of conducting any ship or vessel, or negligently or wilfully lead, decoy, or betray any ship into danger, or shall unnecessarily or improperly cut any cable or cables belonging to any vessel; or if any such person shall, by wilful misrepresentation of any circumstances upon which the safety of the vessel shall appear naturally to depend, obtain or endeavour to obtain the conduct of such vessel, then, and in every such case, the person so offending, or who shall aid in, procure, abet, or connive at the committing any such offence or offences, shall, *besides being liable to damages at the suit of the party grieved*, forfeit and pay a sum of not more than 100*l.* and not less than 20*l.*; and if the person offending be a pilot, he shall be liable to be deprived of his licence, at the discretion of those by whom he was appointed. — § 74.

Pilots keeping public-houses, or selling wine, spirituous liquors, tobacco, or tea (unless authorised by the competent authorities), or being concerned in any fraud or offence against the revenue laws, or in

relation to any branch of their duty, shall, over and above all mulcts, penalties, &c. for such offences, be adjudged to forfeit their licence, or to be suspended, at the discretion of those by whom they are licensed. — § 68.

A pilot, when taken on board, shall enter his name in the log-book of every ship entering the port of London requiring to be piloted under this act, and if any pilot or other person insert a false name, he is to forfeit 20*l.*; and the name or names of the pilot or pilots so entered in the log-book and employed in piloting the vessel, are to be inserted in the *entry* or *report* of such vessel inwards; and this insertion is to be made (without fee or reward) by the proper officer of the customs, who shall report the same daily to the Trinity House, and monthly to the Lord Warden of the Cinque Ports. The principal searcher or officer of the customs at Gravesend is to demand and take the name or names of the pilot or pilots of all vessels clearing outwards, and shall transmit monthly lists thereof to the Trinity House, on pain of forfeiting a sum not more than 10*l.* nor less than 5*l.*, to be paid by each and every of the persons foresaid who shall neglect to comply with any of the foresaid regulations. — § 43.

Pilots quitting any vessel in the Thames or Medway before she has arrived at the place to which she was bound, without the consent of the captain or other person in command, and unless some other duly qualified person shall with such consent come on board and take charge of the ship, shall forfeit for such offence all pay or reward they might be entitled to, and shall also be subject to such other penalty or punishment as may legally affect them in consequence of any by-law, &c. — § 40.

Pilots neglecting or refusing to obey the orders of the different dock masters within their respective jurisdictions incur a penalty of not more than 50*l.* and not less than 20*l.* for each offence, and may be dismissed or suspended. — § 75.

Licensed pilots may supersede unlicensed ones. And if any unlicensed person shall act after a duly licensed pilot has offered to come on board and take charge of the ship, she being at the time within the limits for which he is qualified, such unlicensed person shall forfeit not more than 50*l.* and not less than 20*l.* — § 70.

But unlicensed persons may act so long as no licensed pilot offers to take charge of the ship, or makes a signal for that purpose, or where and so long as the ship shall be in distress. — § 71.

Licensed pilots who have executed the bond before mentioned shall not be liable to any action for damages on account of neglect or want of skill, at the suit of the party grieved, in any greater sum than the amount which shall have been specified by way of penalty in such bond, and the pilotage payable to him in respect of the voyage during which the neglect or want of skill are alleged to have been exhibited. — § 57.

5. *Fees of Pilotage.* — The charge on account of pilotage is regulated in various places by usage or statute, and generally increases in proportion to the depth of water which the vessel draws. The Trinity House Corporation and the Lord Warden of the Cinque Ports have authority, as before mentioned, to fix the rates on account of pilotage to be charged by all pilots licensed by them. — (Subjoined to this article are Tables of the present rates.)

Any pilot carried to sea beyond the limits of his district without his free consent, except in cases of absolute necessity, shall, over and above his pilotage, receive 10*s.* 6*d.* a day, to be computed from and inclusive of the day next after the day on which the vessel shall pass the limit to which the pilot was engaged to conduct her, and until he shall be returned to the port or place where he was taken on board, or be discharged for a sufficient time to enable him to return there. — § 38.

Pilots are to qualify themselves for conducting vessels in and out of Ramsgate harbour, and the harbours of Dover, Sandwich, and Margate, and shall be entitled to and receive for such pilotage at the rate of 5*s.* for every foot of the draught of water of every vessel so piloted. — §§ 39, 40.

Ships bound to the Thames, repairing to Standgate Creek, or other place appointed for the performance of *quarantine*, are to pay the full charges of pilotage to such place, and a further sum of 8*s.* a day for the days the pilot shall be obliged to remain on quarantine.

Any boat or vessel running before a ship or vessel, not having a licensed pilot on board, when such ship or vessel cannot be boarded, for the purpose of directing her course, the pilot on board such boat or vessel, or, if no pilot be on board, the person having the command thereof, and who shall run before such ship at the request or by the direction of the master, shall be entitled to full pilotage for the distance run. — § 34.

All the sums which shall become due to any licensed pilot for the pilotage of foreign ships or vessels trading to or from the port of *London* may be recovered from the owners or masters of such ships or vessels, or from the consignees or agents thereof, who shall have paid, or made themselves liable to pay, any other charge for the ship or vessel in the port of her arrival or delivery as to pilotage inwards, and in the port whence she shall clear out or sail as to pilotage outwards; and may be levied in like manner, according to the amount, as any penalty may be recovered and levied by virtue of the act, demand thereof being made in writing at least *fourteen* days before such levy. And the master or other person having the charge of ships or vessels, *not having British registers*, which shall enter into or sail from the port of *London*, and which are by law required to be piloted by persons licensed by the corporation of the Trinity House, or the consignees or agents thereof, are to pay at the Trinity House, in *London*, to persons appointed by the corporation of the Trinity House, the full pilotage inwards and outwards; viz. as to pilotage outwards, the amount for the distance which the ship is by law required to be piloted; as to pilotage inwards, where a pilot shall have been on board, the amount for the distance piloted by him, if greater than that which she shall be required to be piloted; if less, or if no pilot shall have been on board, the amount for the distance which she was by law required to be piloted: the pilotage inwards may be levied, &c. upon the master or other person in charge, consignee, or agent, in the same manner as in the case of ships *having British registers*, if such pilotage inwards be not paid within *fourteen* days from the day of the ship's reporting inwards. — §§ 44, 46.

The pilotage outward upon foreign vessels is to be calculated according to the scale or amount of tonnage upon which such ships or vessels are rated in the port of London for payment of light and other dues, or according to the draught of water thereof, as the Trinity House may think most proper. — § 49.

In order to prevent controversies with respect to the draught of water of ships not having British registers, the Trinity House is empowered to appoint an officer to measure the draught of water of ships with respect to which there is any controversy, such officer receiving 1*l.* 1*s.* for his trouble if the ship be below the entrance to the London Docks, and 10*s.* 6*d.* if above such entrance, from the party against whom he may decide. If arriving inwards, application for such officer must be made within 12 hours after the ship has come to her moorings, and before she begin to unlade; and before quitting her moorings, if clearing outwards. — § 50.

The Trinity House are empowered to take measures for the relief of foreign vessels coming to the port of London with fish, corn, and other provisions on board, either from the whole or a part of the charges on account of pilotage that would fall upon them under this act. — § 51.

No foreign vessel shall be cleared outwards until a certificate, signed by the person appointed for that purpose by the Trinity House, that the pilotage has been paid, has been produced; the corporation pay the pilot employed, on proof that he has duly performed his service, the pilotage, after deducting the 6*d.* duty. — § 47.

The consignees or agents of any ship or vessel are authorised and empowered to retain in their hands respectively, out of any monies which they may have received or shall thereafter receive for or on account of such ship or vessel, or the owner or owners thereof, so much as shall be sufficient to pay and discharge such pilotage, and any expenses attending the same. — § 48.

6. *Responsibility, &c. of Masters.* — Ships coming from the westward, bound to any place in the Thames

or Medway, not having a duly qualified Cinque Port pilot on board, shall, on arriving at *Dungeness*, and until they have passed the south buoy of the *Brake*, display and keep flying the usual signal for a pilot to come on board; and the master shall heave to and shorten sail, so as to facilitate the entry of the pilot. Persons not displaying such signal, &c. shall forfeit and pay double the amount of the sum that the charge for pilotage would have amounted to. And it is further provided, that all masters of vessels acting themselves as pilots, or employing any unlicensed person as such, or any licensed person out of the limit of his qualification, after any licensed and qualified pilot shall have offered to come on board, or made a signal for that purpose, shall forfeit double the sum that would have been legally demandable as pilotage, and an additional penalty of 5*l.* for every 50 tons burden of the ship, if the Trinity House or Lord Warden of the Cinque Ports, as the case may be, shall think it proper to certify the same.

But the master of any of the following vessels may pilot the same, *so long as he is not assisted by any unlicensed pilot or other person than the ordinary crew;* viz. the master of any collier, or of any ship or vessel trading to *Norway*, or to the *Cattegat* or *Baltic*, or round the *North Cape*, or into the *White Sea*, on their inward or outward voyages, or of any constant trader inwards, from the ports between *Boulogne* inclusive, and the *Baltic* (all such ships or vessels having *British* registers, and coming up by the *North Channel*, but not otherwise), or of any *Irish* trader using the navigation of the rivers *Thames* and *Medway*, or of any ship or vessel employed in the regular coasting trade of the kingdom, or of any ship or vessel wholly laden with stone from *Guernsey*, *Jersey*, *Alderney*, *Sark*, or *Man*, and being the production thereof, or of any ship or vessel, not exceeding the burden of 60 tons, and *having a British register* (or not exceeding the burden of 60 tons, and *not having a British register*, if authorised so to do by an order of the privy council), or of any other ship or vessel whatsoever, whilst the same is within the limits of the port or place to which she belongs, the same not being a port or place in relation to which particular provision had heretofore been made by any act or acts of parliament, or by any charter or charters for the appointment of pilots. — § § 59, 60.

The master or mate of any vessel, being the owner or part owner thereof, and residing at Dover, Deal, or the Isle of Thanet, shall not be liable to any penalty for conducting or piloting his own ship or vessel up or down the rivers Thames or Medway, or into or out of any place within the jurisdiction of the Cinque Ports. — § 62.

This act shall not extend, or be construed to extend, to subject the master or owner of any ship or vessel to any of the penalties of this act, for employing any person or persons whomsoever, as a pilot or pilots, in and for the assistance of such ship or vessel, whilst the same shall be in distress, or in consequence thereof, or under any circumstances which shall have rendered it necessary for such owner or master to avail himself of the best assistance which at the time could be procured. — § 61.

No owner or master of any ship or vessel shall be answerable for any loss or damage which shall happen to any person or persons whatsoever, from or by reason or means of no licensed pilot or of no duly qualified pilot being on board thereof, unless it shall be proved that the want of such licensed or of such duly qualified pilot respectively shall have arisen from any refusal to take such licensed or qualified pilot on board, or from the wilful neglect of the master of such ship or vessel in not heaving to, or using all practicable means, consistently with her safety, for the purpose of taking on board thereof any pilot who shall be ready, and offer to take charge of the same. — § 53.

Nothing in this act shall extend, or be construed to extend, to make the owner of any ship or vessel liable in any such case, for any loss or damage beyond the value of such ship or vessel and her appurtenances, and the freight due, or to grow due, for and during the voyage wherein such loss or damage may happen or arise. — § 54.

No owner or master of any ship or vessel shall be answerable for any loss or damage which shall happen to any person or persons whomsoever, from or by reason or means of any neglect, default, incompetency, or incapacity of any licensed pilot, acting in the charge of any such ship or vessel, under or in pursuance of any of the provisions of this act, where and so long as such pilot shall be duly qualified to have the charge of such ship or vessel, or where and so long as no duly qualified pilot shall have offered to take charge thereof. — § 55.

Nothing in this act shall be construed to extend to deprive any person or persons of any remedy or remedies upon any contract of insurance, or of any other remedy whatsoever, which he or they might have had if this act had not been passed, by reason or on account of the neglect, default, incompetency, or incapacity of any pilot duly acting in the charge of any ship or vessel, under or in pursuance of any of the provisions of this act, or by reason or on account of no pilot or of no duly qualified pilot being on board of any such ship or vessel, unless it shall be proved that the want of a pilot arises from a refusal on the part of the master to take such pilot on board, or to heave to for him. — § 56.

All masters or other persons having the command of any ship, who shall report, or be privy to any one reporting, a false account of the draught of water of such ship, shall, besides the full pilotage, forfeit double the amount thereof; and any master or other person having any interest, share, or property in any vessel, who shall fraudulently alter any marks on the stem or stern post thereof, diminishing the draught of water, or shall be privy or consent thereto, shall for every such offence forfeit and pay the sum of 500*l.*

7. *Recovery of Penalties.* — Penalties incurred under this act, not exceeding 20*l.*, are to be recovered before a justice by prosecution within *six* months; and penalties *above* 20*l.* by action of debt in any of the courts of record at *Westminster*, to be commenced within *twelve* months; but if it shall be made to appear, as soon after as the circumstances of the case will admit, that the commencement of the prosecution or action has been delayed by reason of the absence of any party or parties, whether offending or complaining, or of any necessary witness, then, upon such circumstances being stated by affidavit, made before any judge of any of his Majesty's courts of record at *Westminster*, any such judge may order or authorise the commencement of the prosecution or action within such further time as he shall think fit to limit.

It is, however, provided that nothing therein contained shall affect or impair the jurisdiction of the Court of Loadmanage, or High Court of Admiralty, nor the right of the city of London, nor (in general) any separate jurisdiction established under any act of parliament or charter. — § § 76, 77, 87, 88, 89.

By Laws, Regulations, and Ordinances as to Pilots, framed by the Trinity Corporation, and sanctioned by Lord Tenterden, 19th of April, 1826.

I. Annuls the previous regulations.

II. It is ordained, that every pilot who shall be ordered to proceed on his Majesty's service, by any order signed by the deputy master or secretary of the said corporation, or by the officer for the time being for the said corporation at Yarmouth, or elsewhere, duly authorised to act in matters of pilotage, or who shall be so ordered, in writing or otherwise, by any officer in his Majesty's service, shall immediately proceed thereon; and every pilot who shall fail so to do, or shall evade the receipt of any such order, or who shall quit or decline such service, shall for the first offence forfeit 5*l.*, and for the second and every subsequent offence 10*l.* each.

III. It is ordained, that every pilot engaged in the charge of any ship employed by government in the transport service, shall observe particularly if any unnecessary delay take place on the part of the master in proceeding towards his destination; and if any delay does take place, such pilot shall, on his return, report the same to the secretary of the said corporation, and upon going on board, such pilot shall give notice to the master that he has orders so to do.

IV. It is ordained, that no pilot having the charge of a merchant ship shall stop the same alongside the

moorings of his Majesty's ships at Deptford, or elsewhere, or between the Round Tree and Bathing-house, Gravesend (except in either of such cases there be an extreme necessity for so doing, or leave be obtained for that purpose from the proper officer or officers in that behalf), and all pilots licensed by the said corporation are at all times to be particularly careful to steer clear of the king's ships in passing them.

V. It is ordained, that every pilot, when called upon or required to pilot any ship or vessel, shall, if under engagement to any other ship, forthwith make known such engagement, and specify the particulars thereof truly and faithfully to the person calling for or requiring such pilot's service; and in case of any concealment, misrepresentation, or falsehood, in respect of such alleged previous engagement, the pilot offending shall forfeit 10*l*.

VI. It is ordained, that every pilot who shall have taken charge of any ship from the river Thames to the Downs, or elsewhere, shall, without any additional compensation in that behalf, wait on board for the space of 3 complete days while such ship may be detained at Gravesend, or elsewhere, for want of seamen, or by any other casualty; nor shall he at the end of 3 complete days be at liberty to quit such ship, or receive any additional compensation, if she shall be further detained by winds, weather, or tides; and should the ship be detained beyond 3 complete days on any other account except winds, weather, or tides, the pilot having the charge thereof shall nevertheless still (if required so to do) remain in the charge of her, provided a compensation of 6*s*. per day be offered to him in that behalf by the master or owner.

VII. It is ordained, that every pilot shall in all cases demean himself civilly and respectfully towards all persons who may require his service, and towards all officers in his Majesty's navy, and shall maintain a strict temperance and sobriety in the exercise of his office, and shall use his utmost care and diligence for the safe conduct of every ship which he shall be intrusted with the charge of, and to prevent her doing damage to others.

VIII. It is ordained, that every pilot who shall undertake the charge of any ship downwards, shall, before his departure, leave, or cause to be left, notice thereof, in writing, at the proper office at the Trinity House in London, with one of the clerks there attending, and shall be considered as disengaged until he shall have done so; and upon such pilot's return, he shall immediately, in his own person, attend at the said office, and make and sign such entry, in a book there kept for that purpose, as the said corporation shall from time to time direct or require.

IX. It is ordained, that every pilot licensed by the said corporation shall, from time to time, and at all times, in obedience to the order or summons of the said corporation, under the hand of the secretary thereof for the time being, duly delivered or offered to such pilot, or left a reasonable time at the usual or last known place of residence of such pilot, attend the said corporation, at their courts, by-boards, or committees, or their secretary for the time being, at the Trinity House in London; and that every pilot licensed by the said corporation, upon a certificate of qualification from sub commissioners of pilotage, shall, in like maner, attend the sub-commissioners of the port or place for which such pilot shall be so licensed, in obedience to the order or summons of the said sub-commissioners, under their hands, or the hands of the major part of them, duly delivered, offered, or left as aforesaid, to answer to any charges brought against such pilots respectively, or for the performance of any public service, or for any other purpose whatsoever; and in default of such attendance, every pilot so offending shall forfeit for the first offence 40*s*., and for the second and every subsequent offence 5*l*. each.

X. It is ordered, and hereby directed, that every pilot licensed or to be licensed by the said corporation, upon their receiving a certificate of examination by any sub-commissioners of pilotage, shall, for such examination, and for granting the licence thereon, pay the sum of 2 guineas to the said sub-commissioners of pilotage by whom he shall be examined, or to one of them; and shall also, for the renewing or confirming such licence from time to time, pay to the sub-commissioners of pilotage for the time being, at or for the port or place specified in such licence, or to 1 of them, the annual sums following; (that is to say,) every pilot so licensed or to be licensed as aforesaid, for the ports of Plymouth, Portsmouth, or Cowes respectively, the annual sum of 2 guineas; and every pilot licensed or to be licensed as aforesaid, for any other port or place, the annual sum of 1 guinea, unless the pilots at or for such port or place shall be divided into 2 classes; and in that case the pilots of the 1st class are to pay the annual sum of 2 guineas each, and pilots not of the 1st class the annual sum of 1 guinea each.

XI. It is ordained, that no pilot shall add to or in any way alter his licence, or make or alter any endorsement thereon, nor shall he be privy to any such licence or endorsement being altered.

XII. It is ordained, that every pilot who shall observe any alteration in any of the sands or channels, or that any of the buoys or beacons of the said corporation are driven away, broken down, or out of place, shall forthwith deliver or send a correct statement thereof, in writing, to the secretary of the said corporation for the time being.

XIII. It is ordained, that every pilot shall, whenever he comes to an anchor, carefully observe the settings of the tide, and the force of the stream; and if it shall happen that he comes near to a sand or other object or cause of danger, and there be any other ships or ship in company likely to fall in therewith, such pilot shall immediately give notice thereof to the captain or principal officer of the ship under his care, that he may make a signal to such other ship or ships for avoiding the same.

XIV. It is ordained, that no pilot shall, on any pretence, aid or assist, either in his own person or with his boat or servants, or by any other means whatever, the landing, removing, or secreting any seaman, from any merchant ship or vessel, to avoid serving in his Majesty's navy, or escape the impress for the same.

XV. It is ordained, that every pilot shall from time to time conform himself strictly to all directions which shall be given to him by any of the harbour masters authorised by act of parliament, under the corporation of the city of London, touching the mooring, unmooring, placing or removing of any ship or vessel under his charge as long as such ship or vessel shall be lying and situate within the limits of the authority of such harbour master.

XVI. It is ordained, that each and every pilot belonging to a licensed pilot vessel shall be at liberty to entertain one apprentice and no more.

XVII. It is ordained, that for any work done on the rivers Thames or Medway by men in boats, being less than the work for the whole tide, the pay shall be, for half a tide's work 4*s*. to each man, and so in proportion for any time less than a whole tide, the pay for which is settled by the said act of the 6th year of the reign of his present Majesty at 8*s*.

XVIII. It is ordained, that in all cases where pecuniary penalties and forfeitures are annexed to the breach of the foregoing by-laws, rules, orders, regulations, and ordinances, the said corporation of Trinity House may mitigate and reduce the same to 1-4th part at their discretion.

XIX. It is ordained, that every pilot who shall offend against any or either of the foregoing by-laws, orders, regulations, and ordinances, shall, for every such offence (whether the same shall subject him to any pecuniary penalty or not, and in addition to such penalty if any), be liable to have his licence annulled and forfeited, or suspended, at the discretion of the said corporation.

N.B. — Besides conforming themselves diligently to the above by-laws, rules, orders, regulations, and ordinances, the pilots licensed by the corporation of Trinity House are, of course, in all things to observe and obey the same enactments and provisions relating to such pilots contained in the said act of parliament made and passed in the 6th year of the reign of his Majesty King George the Fourth, a copy of which act has been delivered to each of the said pilots.

*** The following Tables of the charges on account of pilotage, &c. are the most complete that have hitherto been published. They have all been derived from official sources, so that their accuracy may be depended upon.

CHARGES ON ACCOUNT OF PILOTAGE.

Table of the Rates of Pilotage to be demanded and received by Pilots licensed by the Corporation of Trinity House of Deptford Strond, for piloting Ships and Vessels within the Limits in the said Table mentioned.

From	To	7 Feet and under.	8 Feet.	9 Feet.	10 Feet.	11 Feet.	12 Feet.	13 Feet.	14 Feet.	15 Feet.	16 Feet.	17 Feet.	18 Feet.	19 Feet.	20 Feet.	21 Feet.	22 Feet.	23 Feet and upwards.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
The Sea, Orfordness, the Downs, Hamoaze Bay, and *vice versâ*	Nore or Warps	3 13 6	4 2 9	4 12 0	5 1 3	5 5 9	6 5 0	6 13 6	7 7 3	7 16 6	8 14 9	9 8 6	10 17 0	11 10 0	12 17 6	14 5 3	16 11 3	18 8 0
	Gravesend, Chatham, Standgate Creek, or Blackstakes	4 12 0	5 7 9	6 3 3	6 18 0	7 11 9	8 5 6	8 19 6	9 13 3	10 7 0	11 0 9	11 14 6	12 14 1	13 13 6	14 15 0	16 11 3	18 8 0	20 4 9
	Long Reach	4 16 6	5 12 3	6 8 0	7 2 6	7 18 3	8 14 9	9 8 6	10 0 0	10 16 3	11 10 0	12 5 9	13 1 6	13 17 0	14 12 6	16 8 0	18 3 9	19 19 6
	Woolwich or Blackwall	5 5 9	6 1 6	6 17 0	7 11 9	8 10 3	9 4 0	10 2 6	11 0 9	11 14 6	12 8 6	13 2 3	13 16 5	14 11 0	15 5 9	17 0 6	18 15 3	20 10 0
	Moorings or London Docks	5 16 0	6 9 9	7 3 6	7 17 3	8 19 6	9 13 3	10 11 6	11 10 0	12 8 6	13 2 3	13 14 6	14 8 9	15 2 6	15 17 0	17 12 0	19 6 6	21 1 3
The Nore or Warps, and *vice versâ*	Gravesend, Standgate Creek, or Blackstakes	1 18 9	2 3 3	2 7 0	2 10 6	2 19 9	3 6 3	3 11 9	3 15 6	4 2 9	4 10 3	5 1 3	5 16 0	6 8 9	7 14 6	8 14 0	9 13 3	10 12 6
	Long Reach or Chatham	2 6 0	2 10 6	2 15 3	2 19 9	3 9 0	3 18 3	4 2 9	4 7 0	4 13 9	5 5 0	5 16 0	6 15 3	8 5 6	9 13 3	10 12 6	11 11 9	12 15 3
	Woolwich or Blackwall	2 15 3	3 1 9	3 8 0	3 13 6	4 2 9	4 10 3	4 19 0	5 8 6	5 16 0	6 4 3	7 2 6	8 3 9	9 4 0	11 11 9	12 11 3	13 16 0	
	Moorings or London Docks	3 4 6	3 10 9	3 17 3	4 2 9	4 16 6	5 5 9	5 15 0	6 4 3	6 13 6	7 2 6	8 1 0	9 4 0	11 0 9	12 17 6	13 16 1		
Gravesend Reach, and *vice versâ*	Long Reach	0 9 3	0 14 9	1 0 3	1 5 3	1 10 0	1 14 6	1 19 0	2 3 9	2 8 3	2 13 0	2 17 6	3 2 0	3 6 9	3 11 3	4 12 0	5 10 6	
	Woolwich or Blackwall	1 3 0	1 7 6	1 12 3	1 16 9	2 2 4	2 7 3	2 12 6	2 17 9	3 3 0	3 8 3	3 13 6	4 13 9	5 1 3	6 4 3	7 11 9	8 16 6	9 13 3
	Moorings or London Docks	1 7 6	1 14 0	2 0 6	2 6 0	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	7 7 3	8 14 9			
	Sheerness, Standgate Creek, or Blackstakes	2 15 3	2 19 0	3 1 9	3 4 6	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 5			
	Chatham	3 4 6	3 8 0	3 10 9	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	8 5 6				
Long Reach, and *vice versâ*	Woolwich or Blackwall	0 18 6	1 2 0	1 4 9	1 7 6	1 16 9	2 2 6	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 3 6	5 16 0	6 8 9	7 7 3	8 5 6	
	Moorings or London Docks	1 7 6	1 11 3	1 14 0	1 16 9	2 2 6	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 3 6	5 16 0	6 8 9	7 7 3	8 5 6	9 4 0	
	Sheerness, Standgate Creek, or Blackstakes	3 4 6	3 8 0	3 10 9	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9		
	Chatham	3 13 6	3 17 3	4 0 0	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9			
Woolwich, or Blackwall, and *vice versâ*	Moorings or London Docks	0 18 6	1 2 0	1 4 9	1 7 6	1 16 9	2 2 6	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 3 6	5 16 0	6 8 9	7 7 3	8 5 6	
	Sheerness, Standgate Creek, or Blackstakes	3 13 6	3 17 3	4 0 0	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9			
	Chatham	4 2 9	4 6 6	4 9 3	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9	9 4 0			

Ships not having British registers are to pay 1-4th more than ships having British registers, except when such first-mentioned ships shall be chiefly laden with corn or other provisions, or shall, by any order of his Majesty's most honourable privy council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

For a foot exceeding the above draughts of water, the medium price between the two limits.

For intermediate distances a proportionate rate.

For removing a ship or vessel from moorings into a dry or wet dock, for a ship under 300 tons, 15*s.*; 300 to 600 tons, 1*l.* 1*s.*; 600 to 1,000 tons, 1*l.* 11*s.* 6*d.*; above 1,000 tons, 2*l.* 2*s.* — In the river Thames, above Gravesend, for a boat of a class carrying an anchor of above 4 cwt. with a corresponding tow-line, 2*l.* 2*s.*; ditto, ditto, above 2 cwt. 1*l.* 1*s.*; ditto, ditto, under 2 cwt. 15*s.*, per trip for the whole distance from Gravesend to London; and in proportion for any part of that distance. — And for each man's service in those boats, 8*s.* per tide.

Table of the Rates of Pilotage to be demanded and received by Pilots licensed by the Lord Warden of the Cinque Ports and Constable of Dover Castle, or his Lieutenant for the time being, for piloting Ships and Vessels within the Limits in the said Table mentioned.

From	To	Under 7 Feet.	From 7 Feet to 10 Feet.	11 Feet.	12 Feet.	13 Feet.	14 Feet.	15 Feet.	16 Feet.	17 Feet.	18 Feet.	19 Feet.	20 Feet.	21 Feet.	22 Feet.	23 Feet and upwards.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
The Downs	Nore, Sheerness, Standgate Creek, Gravesend	5 5 0	7 17 6	8 13 3	9 9 0	10 4 9	11 0 6	11 16 3	12 12 0	13 7 9	16 1 3	19 0 0	22 1 0	24 5 0	26 9 0	28 13 3
	Long Reach	5 16 0	8 8 6	9 0 0	9 10 0	11 3 0	11 18 10	12 18 3	13 13 9	14 9 6	16 13 9	19 7 3	22 4 6	24 9 9	26 13 3	28 17 6
	Blackwall or London	6 12 3	8 19 6	10 4 9	11 0 6	12 1 6	12 17 3	13 14 0	14 14 6	16 0 6	18 13 9	21 8 3	24 5 1	26 9 2	28 13 3	30 17 4
Standgate Creek	Gravesend	3 6 8	3 17 0	4 8 2	4 19 0	5 10 3	6 1 3	6 12 3	7 3 3	7 14 4	8 8 8	9 4 8	9 16 4	9 7 4		

From the several rates mentioned in this Table there shall be deducted 5 per cent. when the number of Cinque Port pilots shall be reduced to 120.

Ships not having British registers are to pay 1-4th more than ships having British registers, except when such first-mentioned ships shall be chiefly laden with corn or other provisions, or shall, by any order of his Majesty's most honourable privy council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels, not having British registers, shall pay the like rates of pilotage only as are payable by ships having British registers.

For a foot exceeding the above draughts of water, the medium price between the two limits.

For intermediate distances, a proportionate rate.

For putting a Pilot on board, and for Pilotage of Ships and Vessels to the Anchorage in the Downs.*	60 Tons, and under 150.	150 Tons, and under 250.	250 Tons, and under 400.	400 Tons, and under 600.	600 Tons, and upwards.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
From off Dungeness to off Folkestone; the church bearing N. N. W. by compass -	2 0 0	3 0 0	3 10 0	4 0 0	5 5 0
From off Folkestone to the South Foreland, the lights in one -	1 10 0	2 0 0	2 10 0	3 0 0	4 4 0
From off the South Foreland to the Downs - - -	1 5 0	1 5 0	1 10 0	2 0 0	3 3 0

In the River Thames above Gravesend - { For a boat of a class carrying an anchor of above 4 cwt. with a corresponding sow-line - £2 2 0; Do. do. 2 cwt. - - 1 1 0; Do. do. under 1 cwt. - - 0 15 0 } For trip for the whole distance from Gravesend to London; and in proportion for any part of that distance.

And for each man's service in these boats, 8s. per tide.

Rates charged for the Pilotage of Vessels, with an Account of other Charges affecting them in some of the undermentioned Ports.

Beachard *District*, viz. — From Bungar to a line drawn from Great Ormes Head to Point Lynas; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, unless coming into or going out of port; but if he do take a pilot, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Beachard District.

Inwards.

		£ s. d.
From the outside of the Sound - into the Bay	Under 100 tons -	0 15 0
	100 to 200 - -	1 1 0
	200 — 300 - -	1 11 6
	300 and upwards -	2 2 0
From the inside of the Sound - into the Bay	Under 100 tons -	0 10 6
	100 to 200 - -	0 15 0
	200 — 300 - -	1 1 0
	300 and upwards -	1 11 6

Outwards.

	£ s. d.
Under 100 tons - - - -	0 10 6
100 to 200 - - - -	0 15 0
200 — 300 - - - -	1 1 0
300 and upwards - - - -	1 11 6

Ships not having British registers are to pay ½ more than is stated in the above Table.

	£ s. d.
Should the pilot be landed at Great Ormes Head — extra - - - -	2 2 0
If taken out of the limits of his licence, to Chester or Liverpool - - - -	3 3 0
In case the pilot should happen to have charge of the vessel to either of the said places -	5 5 0

The sum of 7s. 6d. per day is to be allowed to the pilot for every day such pilot may be detained on board in consequence of the ship or vessel performing quarantine, or detained under any other restrictions or circumstances such ship may be liable to.

Belfast.

	Foreign Rate.		British Rate.	
	£ s. d.		£ s. d.	
Tonnage dues - -	0 0 3	per ton	0 0 2	per ton
and never to exceed	3 0 0	per ves.	2 0 0	per ves.
Ballast delivered at the Quay - - -	0 2 6	per ton.	0 2 0	per ton.
Stones — - -	0 4 0	—	0 3 0	—
delivered at Garmoyle	0 4	—	0 2 6	—
Stones — - -	0 4 6	—	0 3 6	—
Pilotage from Whitehouse Roads to Garmoyle, and *vice versâ* - 9 feet	0 14 0	per ves.	0 10 6	per ves.
10 —	1 0 0	—	0 15 0	—
12 —	1 8 0	—	1 1 0	—
14 —	2 16 0	—	2 2 0	—
From Garmoyle to the Quay, and *vice versâ*, 6 feet	0 6 7	—	0 5 0	—
8 —	0 10 8	—	0 8 0	—
7 —	0 13 4	—	0 10 0	—
8 —	0 16 0	—	0 12 0	—
9 —	1 1 0	—	0 15 0	—
10 —	1 10 0	—	1 2 6	—
12 —	2 2 0	—	1 11 6	—
14 —	4 4 0	—	3 3 0	—
From Whitehouse Roads to the Quay, and *vice versâ*, 9 feet	1 15 0	—	1 7 6	—
10 —	2 10 0	—	1 17 6	—
12 —	3 10 0	—	2 12 6	—
14 —	7 0 0	—	5 5 0	—

Barrow. — *Pilotage for the Beaches at Brightholmstone, Hastings, or Rockhill.*

8 Feet and under.	8 to 10 Feet.	Above 10 Feet.
1s. 3d. per foot.	1s. 9d. per foot.	2s. per foot.

The above rates for the harbours and beaches are due both inwards and outwards; but no charge whatever is to be made for the use of pilot boats.

Ships going into the harbours of Rye and Shoreham, and unloading near the harbour's mouth, are subject to ½ pilotage only; but if such ships are afterwards removed by pilots to any dock or wharf near the town, where such ships may be for the purpose of taking in a cargo, in that case the full pilotage is due.

Ships taken charge of in distress are to pay according to circumstances, to be settled by the sub-commissioners.

Ships not having British registers are to pay ½ more of the rates of pilotage for the harbours and beaches, than stated in the above Tables.

Barrow.

		Rate. Per Vessel. £ s. d.
Pilotage from Lundy Island or the westward thereof to Kingroad, under -	100 tons	3 3 0
	100 and under 200 —	4 4 0
	200 — 300 —	5 5 0
	300 and upwards -	6 6 0
From Coombe to Kingroad, under	100 tons	2 2 0
	100 and under 200 —	2 16 0
	200 — 300 —	3 10 0
	300 and upwards -	4 4 0
From Minehead to Kingroad, under	100 tons	1 1 0
	100 and under 200 —	1 8 0
	200 — 300 —	1 15 0
	300 and upwards -	2 2 0
From the Holms to Kingroad, under	100 tons	0 10 6
	100 and under 200 —	0 14 0
	200 — 300 —	0 17 6
	300 and upwards -	1 1 0
From Portishead, Kingroad, Hungroad, or Broad Pill, to Cumberland or Bathurst Basin, or *vice versâ*, under -	40 tons	0 4 60
	40 and under 60	0 5 0
	60 — 80 —	0 7 6
	80 — 100 —	0 10 0
	100 — 200 —	0 15 0
	200 — 300 —	1 0 0
	300 and upwards -	1 5 0
From Portishead, Kingroad, Hungroad, or Broad Pill, to either of them, under	100 tons	0 10 0
	100 and under 200 —	0 15 0
	200 — 300 —	1 0 0
	300 and upwards -	1 5 0

Dartmouth *District*. — From Bob's Nose to the Start, and *vice versâ*, and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, unless going into or coming out of port, within a line drawn from the Mewstone to the Blackstone; but if he do take a pilot between Bob's Nose and the Start, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Dartmouth District. — All British ships, if boarded without the run of the Mewstone East, or the Blackstone West, are to pay as follows; viz. —

Drawing 10 feet of water and under -	Per Foot	s. d. 2 6
10 to 12 feet — -	-	3 0
12 to 14 — -	-	3 6
14 to 16 — -	-	4 0
16 feet and upwards -	-	5 0

All British ships, if boarded within that line, are to pay ½ part less.

All British ships, boarded within the Castle, are to pay only half pilotage; subject to the consideration of the weather, which is to be settled by the sub-commissioners.

In carrying ships out of the harbour, the pilotage is to be in all cases 1-3d less than the inward pilotage.

All ships not having British registers are to pay ½ more than the rates above stated.

Masters of ships taking a pilot at sea; viz. 2 leagues or more from the harbour's mouth, are to pay according to circumstances attending the hazard run, assistance required, &c., which is to be regulated, in case of dispute, by the sub-commissioners. The pilot is to provide a proper row-boat and crew consisting of at least 4 men; for whose services he shall be entitled to charge 2s. 6d. per man per day, in addition to the rate of pilotage; and in case of dispute, to be settled by the sub-commissioners, and the assistants rewarded according to the risk, time, and trouble.

Downs to the Isle of Wight. — *Rates of Pilotage.*

	£ s. d.
Ships drawing 7 feet and under - - -	3 15 0
8 — - - -	4 7 6
9 — - - -	5 0 0
10 — - - -	5 12 6
11 — - - -	6 4 0
12 — - - -	6 15 0
13 — - - -	7 6 0

* When the pilot is put on board by a boat from the shore, one seventh to the pilot, and the remaining six-sevenths to the boat and crew.

	£	s.	d.
Ships, drawing 14 feet	7	17	6
15 —	8	8	0
16 —	9	0	0
17 —	9	9	0
18 —	11	0	0
19 —	13	0	0
20 —	15	0	0
21 —	17	0	0
Above 21 —	18	0	0

DUBLIN.

	Foreign Rate.				British Rate.			
	£	s.	d.		£	s.	d.	
Ballast dues, taken on board within the harbour	0	2	6	℔ ton.	0	1	8	℔ ton.
thrown out	0	0	10	—	0	0	8	—
Tonnage dues	0	1	6	—	0	0	9	—
Inwards.								
Pilotage over the Bar from without the Banks	0	6	0	℔ foot.	0	3	0	℔ foot.
within do.	0	4	0	—	0	2	0	—
within the Heads	0	3	0	—	0	1	6	—
From Poolbeg to the Quays	0	1	6	—	0	1	0	—
Outwards.								
From the Quays to Poolbeg — laden	0	1	6	—	0	1	0	—
From Poolbeg over the Bar — laden	0	1	6	—	0	1	0	—

DUNDEE.

	Foreign Rate.				British Rate.			
	£	s.	d.		£	s.	d.	
Harbour dues. Vessels from India or China	0	5	0	℔ ton.	0	2	6	℔ ton.
West Indies, Azores, Madeira, Teneriffe, Cape de Verd Isles, Greenland, and Davis's Straits	0	1	4	—	0	0	8	—
America, Mediterranean, or any part north of Dronthelm	0	1	0	—	0	0	6	—
Any part between Dunkirk and Gibraltar (including Dunkirk), and from any part in the Baltic	0	0	8	—	0	0	4	—

N. B.—British vessels navigated by non freemen pay ½ more.

Exeter District, viz.—From Lyme to Bolt's Nose, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B.—No master of a ship is compelled to take a pilot within this district, until he comes off the ports of Exmouth and Teignmouth; but if he do take a pilot between Lyme and Bolt's Nose, it must be one of the district pilots, if one offer.

Rates of Pilotage for Vessels in and over Exmouth Bar, to the Moorings in the Bight at Exmouth, and out again over the Bar.

Coasters.

If above per register	60 tons	and not exceeding	80 tons	3	6
	80 —		90 —	4	0
	90 —		100 —	4	6
	100 —		125 —	5	6
	125 —		150 —	6	0
	150 —		175 —	7	0
	175 —		200 —	7	6
	200 —		250 —	9	6
	250 —		300 —	11	6
	300 —		400 —	12	6

Per foot draught of water.

And if carried up to Topsham Quay and back, 1 guinea extra.

Ships from Foreign Parts.

If above per register or measurement	60 tons	and not exceeding	80 tons	6	6
	80 —		100 —	7	6
	100 —		150 —	8	6
	150 —		200 —	10	6
	200 —		250 —	12	6
	250 —		300 —	13	6
	300 —		350 —	15	6

Per foot draught of water.

And if carried up to Topsham Quay and back, 1 guinea extra.

For Vessels in and out, over Teignmouth Bar.

Coasters.

If above per register	60 tons	and not exceeding	100 tons	3	0
	100 —		150 —	3	6
	150 —		200 —	4	0
	200 —		250 —	4	6
	250 —		300 —	5	0
	300 —		400 —	5	6

Per foot draught of water.

Ships from Foreign Parts.

If above per register or measurement	60 tons	and not exceeding	80 tons	3	0
	80 —		100 —	3	6
	100 —		150 —	4	0
	150 —		200 —	4	6
	200 —		250 —	5	0
	250 —		300 —	6	0
	300 —		400 —	7	0

Per foot draught of water.

Ships not having British registers, nor being privileged as British, to pay ½ more than the above rates.

Pilots to provide a boat and crew to assist over the bar to a mooring berth; for which they shall be paid, over and above the pilotage, 2s. 6d. for each man or oar employed for that purpose.

Masters of ships taking a pilot off the Bill of Portland, or the Start (which is optional in them), are to pay, beyond the pilotage from Bolt's Nose, or Lyme, as follows, viz.:—Colliers and coasters, 2 guineas; ships from foreign ports, 3 guineas; and proportionately for intermediate distances.

Falmouth District, viz.—From the Dodman to the *Lizard*, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N.B.—No master of a vessel is compelled to take a pilot within this district, unless going into or coming out of a port within a line drawn from the Manacles to the Dodman; but if he do take a pilot between the Dodman and the Lizard, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Falmouth District.

From.	To	Draught of Water. 6 Feet & under.	6 & 10	11	12	13	14	15	16	17	18	19	20
		s.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.
Sea and *vice versâ*	Carrick Road, Falmouth and St. Mawes Harbours, and St. Just Pool	24	30	35	42	46	50	55	60	67	75	84	94
Do. do.	Helford Harbour	21	24	27	30	34	38	42	47	52	60		
Carrick Roads & *vice versâ*	Falmouth, and St. Mawes Harbours, and St. Just Pool	1s. 6d. per foot of the draught of water.											

Masters of vessels taking a pilot at sea, are to pay—

	£	s.	d.
For putting a pilot on board without a line drawn from the Manacles to the Dodman	2	2	0
Ditto, from the entrance of Helford Harbour to the Gull Rock	1	1	0
Ditto, a mile without the Shag Rock or Pendennis Point	0	10	6
Ditto, off the Lizard, or in the parallel of the Lizard, or meeting a vessel there, and running before her, not being able to put a pilot on board, provided the master of the vessel consents to receive a pilot at that distance	3	3	0

Ships not having British registers are to pay ½ more of the rates of pilotage than stated in the above Table.

N.B.—No allowance for a pilot going on board a ship in the harbour to take her out, except in extremely bad weather, or when ships are on shore or making signals of distress, in which cases a reasonable compensation is to be made.

All vessels belonging to the port of Truro, bound to or from foreign parts, including Guernsey, Jersey, Alderney, or Sark, are to pay no more than ½ the above rates of pilotage, when navigating within the limits of the Falmouth district on their passage to or from Truro. The rate of 1s. 6d. per foot for subsequent removal remaining unaltered.

Fowey District, viz.—From Looe, inclusive, to the Dodman, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N.B.—No master of a vessel is compelled to take a pilot within this district till he comes off the port of Looe; or within a line drawn from Looe to the Gribben Head, for the port of Fowey; or from the Gribben Head to Blackhead, for Polkerris Bay; or from the Gribben Head to the Dodman, for Mevagissey; but if he do take a pilot between Looe and the Dodman, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Fowey District.—All British ships of 14 feet water and upwards, if boarded without the land off Looe or the Dodman, which must be known by the western land, called the Gras, being open off the Dodman, shall pay 3s. per foot pilotage, if carried into the harbour of Fowey, Mevagissey Pier, Charlestown Basin, or Looe.

British ships under 14 feet water, boarded as above stated, to pay 4s. per foot for the like service.

British ships above 14 feet, within that line, to pay only 4s. per foot; and ships under 14 feet, boarded as above, only 3s. per foot for the like service.

All ships not having a British register to pay ½ more than the rates above stated.

All the above rates to be paid in proportion for every ½ foot of water, but no allowance to be made for any draught of water above, or under, ½ a foot.

In carrying ships to sea from the said harbour, the pilotage to be in all cases 1-3rd less than the inward pilotage, as mentioned in the third article.

All ships which may anchor on their arrival either in Mevagissey Bay, or the sands off Fowey, to pay only ½ of the before-mentioned rates of pilotage.

All pilots employed to carry ships from any one of the harbours to another, to be paid the same pilotage as if the said ships had been boarded within the headlands coming from sea.

Masters of ships taking a pilot at sea (which is optional with them)—

	£	s.	d.
3 leagues without a line drawn from the Looe to the Dodman, are to pay	3	3	0
6 leagues ditto	6	4	0
10 leagues ditto	6	6	0

and proportionately for intermediate distances.

GALWAY.

	Foreign Rate.				British Rate.			
	£	s.	d.		£	s.	d.	
Pilotage from Sea to the Roads, and *vice versâ*								
20 to 60 tons	0	10	0	℔ ton.	0	5	0	℔ ton.
60 — 100 —	0	14	0	—	0	7	0	—
100 — 150 —	1	0	0	—	0	10	0	—
150 — 200 —	1	8	0	—	0	14	0	—
200 and upwards	1	16	8	—	0	17	6	—
From the Roads to the Dock, and *vice versâ*								
20 to 60 tons	0	15	0	—	0	7	6	—
60 — 100 —	1	1	0	—	0	10	6	—
100 — 150 —	1	10	0	—	0	15	0	—
150 — 200 —	1	12	0	—	1	1	0	—
200 and upwards	1	12	0	—	1	6	0	—

Gloucestern *District.* — *Rates of Pilotage up and down the River Severn, between King Road and Sharpness Point.*

	On Vessels employed in the Oversea Trade; and on Vessels in the Coasting Trade, to and from Gloucester, of a greater Tonnage than 95 Tons, per Register or Drawing 12 ft. Water and upwards.	On Vessels solely employed in the Coasting Trade, to and from Gloucester, of 95 Tons or less, per Register, or drawing less than 12 ft. Water.	On Vessels solely employed in the Coasting Trade to and from Sydney or Berlo Pill.
	s. d.	*s. d.*	*s. d.*
Vessels drawing less than 7 ft.	5 6 per ft.	4 3 per ft.	1 3 per ft.
drawing 7 ft. and under 10 ft.	5 0 —	3 3 —	1 6 —
10 — 12	5 6 —	3 0 —	1 9 —
12 — 14	6 0 —	- -	2 0 —
14 and upwards	5 0 —	- -	2 6 —

For the pilotage from King Road to Shime Road, or the Old Passage, and vice versâ, the foregoing rates on vessels trading to and from Gloucester

Vessels taking a pilot from Sharpness to Sidney, or from Sidney to Sharpness, and thence to King Road, to be charged with the Gloucester rates.

Vessels towed by steam vessels to be charged ½ less than the above rates.

Pilots detained on board vessels whilst discharging their cargoes, or a part thereof, or loading at any place in the River Severn, short of their ultimate destination, shall be entitled to compensation, in addition to their pilotage, at the rate of 7*s.* 6*d.* per day for such detention

Ships not having British registers are to pay ½ more than ships having British registers, except when such mentioned ships shall, by any order of his Majesty's most honourable privy council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships, in which case such ships and vessels, not having British registers, shall pay the like rates of pilotage only as are paid by ships having British registers.

Note. — Masters of vessels and others requiring information on the foregoing rates, are referred to the sub commissioners of pilotage, at the Custom-house, Gloucester.

Garrock.

	Foreign Rate.	British Rate.
	£ *s. d.*	£ *s. d.*
Harbour dues - - inwards	0 1 4½ per ton.	0 0 9½ per ton.
outwards	0 0 8 —	0 0 4 —
Anchorage - -	0 0 1 —	0 0 0½ —
Pilotage - -	0 0 2½ —	0 0 1½ —

Harwich. — *Rates of Pilotage, for piloting Ships into and out of Harwich Harbour.*

From.	To	Under 10 Feet.	10 to 13 Feet	13 Feet and upwards.
		£ *s. d.*	£ *s. d.*	£ *s. d.*
Sea or Orford-ness -	Harwich Harbour -	2 2 0	3 3 0	4 4 0
The Rolling Grounds -	Harwich Harbour -	1 1 0	1 11 6	2 2 0
Harwich Harbour -	Sea or Orford-ness -	1 11 6	2 2 0	3 3 0
	The Rolling Grounds -	two thirds of the above.		

Ships not having British registers are to pay ½ more of the rates of pilotage than stated in the above Table, to be paid at the Custom-house, Harwich.

Hartlepool District, viz. — To and from the anchorages at Great Ormes Head, along the coast of the Isle of Anglesea and Wales, as far as Hardsey Island, and to and from, and into and out of, all ports and places within those limits (except the bay and harbour of Carmarthen, and the Swallies.

N. B. — No master of a vessel is compelled to take a pilot within this district, till he comes to the North Stack, bound to Holyhead Harbour; but if he do take a pilot between Great Ormes Head and Hardsey Island, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships into and out of the Harbour of Holyhead.

Vessels per Register to pay, for

300 and less than 400 Tons.	200 and less than 300 Tons.	150 and less than 200 Tons.	90 and less than 150 Tons.	60 and less than 90 Tons.	Under 60 Tons.
£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*
2 2 0	2 2 0	1 11 6	1 1 0	0 15 0	0 10 6

Ships not having British registers are to pay ½ more than stated in the above Table.

All ships and vessels, under any circumstances of distress, are to pay such pilot a further sum of money, to be calculated according to the extent and circumstances of such distress, and the service afforded.

Ships and vessels which shall be boarded by pilots at the distance of 3 leagues or farther to the southward and westward of Holyhead (where it is optional to masters of vessels to take pilots), are to pay the several rates following, viz. —

	£ *s. d.*
On having a Liverpool pilot on board, off Point Linas, and landing the Holyhead pilot there -	3 3 0
On landing the pilot at the Great Ormes Head -	4 4 0
If a pilot is taken beyond the limits of his licence to Chester Water or to Liverpool - - -	5 5 0

With the sum of 7*s.* 6*d.* per day for every day such pilot may be detained on board in consequence of the ship or vessel performing quarantine, or detained under any other restrictions such ships may be liable to.

Pilots boarding ships and vessels at a less distance than 3 leagues from the Head, as above, are to receive 10*s.* 6*d.* less for pilotage than the above rates.

It is particularly requested that commanders of ships, on discharging their pilots off Point Linas, or the Ormes Head, should be certain that such pilots will be taken on shore without being delayed on board such vessels or boats as may receive them; as a pilot will be entitled to 7*s.* 6*d.* per day for every day he shall be kept out from landing, after the day he is discharged from the ship or vessel he may have piloted, unless it can be proved that such delay had unavoidably happened from the violence of the wind and weather.

Hull. *Rates of Pilotage.*

From or to	To or from	Per Foot.
		s. d.
The distance at sea where the North Ness of Dimlington bears west-south-west, to the northward of Kilnsea North cliff.	Hawke Roads or Grimsby Roads -	2 6
	Whitebooth Roads -	3 6
	The port of Kingston-upon-Hull -	3 0
The distance at sea where Kilnsea North Cliff bears west-north-west to the northward of the New Sand Buoy or the Floating Light Vessel at the entrance of the River Humber.	Hawke Roads or Grimsby Roads -	1 6
	Whitebooth Roads -	2 6
	The port of Kingston-upon-Hull -	4 0
The said new Sand Buoy or the Floating Light Vessel, at the entrance of the River Humber, to the eastward of the point where the Spurn High Lighthouse bears north east.	Hawke Roads or Grimsby Roads. - -	1 0
	Whitebooth Roads. -	2 0
	The port of Kingston-upon-Hull -	3 6
The Spurn High Lighthouse bearing north-east.	Hawke Roads or Grimsby Roads - -	1 0
	Whitebooth Roads. -	2 0
	The port of Kingston-upon-Hull -	3 6
The Hawke Roads, the buoy of the Barrome or Grimsby Roads.	Whitebooth Roads -	1 6
	The port of Kingston-upon-Hull - -	2 0
Whitebooth Roads.	The port of Kingston-upon-Hull - -	1 [illegible]

Town Dues for Alien Vessels.

	£ *s. d.*
Anchorage, under 100 tons - -	0 1 6
100 and not 200 - -	0 2 0
200 and upwards - -	0 3 0
Jettage, under 100 tons - -	0 15 6
if loads out more - -	0 3 6
100 and not 200 tons - -	0 17 0
if loads out more - -	0 5 0
200 and upwards - -	1 0 0
if loads out more - -	0 7 0
Hostage, per each £1. sterling of the freight inward, - -	0 0 2
Amongst the officers, per ship -	0 3 0
Ballast, per each ton taken on board, outwards	0 0 2

	Foreign Rate.	British Rate.
	£ *s. d.*	£ *s. d.*
Sea Pilotage. From the Humber to Lyme or Boston Deeps - -	0 12 0 per ft.	0 8 0 per ft.
Trinity House Dues.		
Buoyage - under 20 tons	0 11 0 per ves.	0 2 0 per ves.
30	0 11 0 —	0 2 6 —
40	0 11 0 —	0 3 0 —
50	0 11 0 —	0 3 6 —
60	0 11 0 —	0 4 0 —
65	0 11 0 —	0 4 0 —
70	0 14 0 —	0 4 6 —
80	0 14 0 —	0 5 0 —
90	0 14 0 —	0 5 6 —
100	0 14 0 —	0 6 0 —
110	0 14 0 —	0 6 6 —
120	0 14 0 —	0 7 0 —
130	0 14 0 —	0 7 6 —
135	0 14 0 —	0 7 6 —
140	0 17 0 —	0 8 0 —
150	0 17 0 —	0 8 6 —
160	0 17 0 —	0 9 0 —
170	0 17 0 —	0 9 6 —
180	1 0 0 —	0 10 0 —
for every additional 10 -	0 1 0 —	0 0 6 —
Pilot on inspecting a cargo	1 0 0 —	Nil.
Do. exporting —	0 18 4 —	— —
Harbour master's dues -	0 2 8 —	— —

Town Dues for British Vessels.

	Anchorage.	Jettage. Inwards.	Jettage. Outwards.
	£ s. d.	£ s. d.	£ s. d.
Under 40 tons - -	0 1 0	0 1 6	0 1 0
40 and not 45 -	0 1 0	0 2 0	0 1 0
45 — 50 -	0 1 6	0 2 0	0 1 6
50 — 100 -	0 1 6	0 2 6	0 2 6
100 — 150 -	0 2 0	0 3 6	0 3 6
150 — 200 -	0 2 0	0 4 6	0 4 0
200 — 250 -	0 2 6	0 5 0	0 5 0
250 — 300 -	0 2 6	0 6 0	0 6 0
300 and upwards -	0 2 6	0 7 0	0 6 6
	Exempt if belonging to freemen.	Not due unless with goods landed at, or taken in at, Hull, or within the harbour.	

IPSWICH.

From Ipswich Quays to Harwich Harbour, and vice versâ.

Rates of Pilotage for Ipswich.

	Per Foot. £ s. d.
From the dock entrance to Downham Reach, or from Downham Reach to the dock entrance, for every British sloop or vessel with one mast, for every foot of water such sloop or vessel may draw -	0 1 3
For every other British vessel with two or more masts, for every foot of water such vessel may draw	0 1 6
From Downham Reach to Levington Creek, or from Levington Creek to Downham Reach, for every British ship or vessel, for every foot of water such vessel shall draw - - - - -	0 0 9
From Levington Creek to Harwich Harbour, or from Harwich Harbour to Levington Creek, for every British ship or vessel, for every foot of water such ship or vessel shall draw - - -	0 0 6
For every British ship coming inwards from Harwich Harbour to Downham Reach, for every foot of water such British vessel shall draw - -	0 1 3
For every British vessel outward bound from Downham Reach to Harwich Harbour, for every foot of water such vessel shall draw - -	0 1 3
And for every foreign ship or vessel, double the aforesaid rates, of and from such part of the said river Orwell, as such foreign ship or vessel shall be piloted.	

LIVERPOOL.

Rates of Pilotage for British Vessels trading to Foreign Parts.

	Per Foot. £ s. d.
Inward. — From the length of the west end of Great Ormes Head, bearing S. by W., or before Penmanmachan be shut in with Great Ormes Head, at the rate of - - - - -	0 9 0
From the eastward of Great Ormes Head, as above from the only house now on Great Hilbra Island, bearing S. S. W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel -	0 8 0
	0 4 0
Outward. — Whether through the Rock or Formby Channel - - - - -	0 4 0

No British vessel, trading to foreign parts, inward and outward bound, is to refuse a pilot; but if such vessel have passed the Brazil buoy in the Rock Channel, or the Middle Patch buoy in Formby Channel, or if a pilot boat fail in with a vessel in the narrows of the channels in stormy weather, that she cannot board her without imminent danger, the pilot shall then lead the way, and, in either case, be entitled to such pilotage as shall be awarded by the committee at their next meeting.

For Alien Ships and Vessels.

	Per Foot. £ s. d.
Inward. — From the length of Great Ormes Head, as above, at the rate of - - - - -	0 12 0
From the eastward of Great Ormes Head, as above	0 11 0
From the only house now on Great Hilbra Island, bearing S. S. W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel -	0 5 6
Outward. — Whether through the Rock or Formby Channel - - - - -	0 7 0

An alien vessel, inward or outward bound, is not to refuse a pilot, as circumstances are described for English foreign vessels as above.

For Coasting Vessels, and those trading to and from Ireland, the Islands of Faro or Ferro, Jersey, Guernsey, Alderney, Sark, and Man

	Per Foot. £ s. d.
Inward. — From the length of Great Ormes Head, as above, at the rate of - - - - -	0 4 6
From the eastward of Great Ormes Head, as above	0 4 0
From the only house now on Great Hilbra Island, bearing S. S. W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel -	0 2 0
Outward. — Whether through the Rock or Formby Channel - - - - -	0 2 0

No coasting vessel to pay for less than 8 feet of water, nor any vessel to pay for odd inches under ½ a foot. No coasting vessel, inward or outward bound, of the burden of 100 tons or upwards (unless she be in ballast,) is to refuse a pilot, as the master or owner, &c. must pay the full pilotage if one be offered. No vessel to be deemed a coaster unless she has been 6 months in that trade.

Extra Pay.

	Per Day. £ s. d.
In the river, exclusive of the day coming from sea, the day of docking, and the day of going to sea, for the pilot's attendance, if required by the master or owner, &c. - - - - - -	0 5 0
And if the attendance of a pilot boat be requested as above - - - - - -	2 2 0

The pilotage from sea into Hoylake is ½ inward, and from Hoylake out to sea ½ outwards.

*** Notwithstanding the pilot or the boat be not employed a whole day, to be paid for a day.

So far includes all the rates and prices for pilotage and extra pay.

The Pilots' Committee beg leave to recommend to the merchants of Liverpool, &c. that when a pilot conducts a ship or vessel into port to their satisfaction, to employ the same pilot to take the vessel out again; and if he should be absent on duty, that one belonging to the same boat be employed.

Pilots' Rules and Regulations. — Any person acting as a pilot in the port of Liverpool, without a licence, to forfeit 20*l.*

Pilots refusing to conduct ships, or assist ships in distress, to forfeit 10*l.*, and lose their licence.

Masters in coasting trade in ballast, or under the burden of 100 tons, may pilot their own vessels.

Masters of vessels forcibly taking pilots beyond the limits of the port, shall forfeit not exceeding 20*l.*, nor less than 5*l.*

Pilots misbehaving to have their licences recalled, and if they act afterwards, to be liable to the same penalties as if they were not pilots.

Vessels liable to pay pilotage coming into port, to display a signal for a pilot, under a penalty of 5*l.*

Reward for pilots assisting ships in distress to be settled by the committee.

Compensation to be made to pilots for taking vessels out of the port which have been forced back, to be fixed by the committee.

Ships forced back after parting with the pilot, and piloted out again from Hoylake, to pay ½ the prices.

Every master to give the pilot a true account of the draught of water of his ship, and pilots authorised to admeasure.

Pilots to obey the orders of the harbour and dock masters.

No vessels to be brought round the Rock, or into the docks, in the night-time.

LONDONDERRY.

	Foreign Rate. £ s. d.	British Rate. £ s. d.
Quay dues (except French) overseas	0 0 6 ℔ ton	0 0 3 ℔ ton
coasting	- -	0 0 2 —
Harbour dues - overseas	0 0 6 —	0 0 3 —
coasting	- -	0 0 2 —
Inwards.		
Pilotage, 7 feet and under	1 1 0 ℔ vess.	0 14 0 ℔ vess.
Above 7 ft. and under 8 ft.	0 3 0 ℔ foot	0 2 0 ℔ foot
8 — 9	0 3 4 —	0 2 2 —
9 — 10	0 3 8 —	0 2 4 —
10 — 11	0 4 0 —	0 2 8 —
11 — 12	0 4 4 —	0 3 0 —
12 — 13	0 4 8 —	0 3 4 —
13 — 14	0 5 0 —	0 3 8 —
14 — 15	0 5 4 —	0 4 0 —
15 and upwards -	0 5 8 —	0 4 4 —
Outwards.		
7 feet and under - -	0 17 6 ℔ vess.	0 10 6 ℔ vess.
Above 7 ft. and under 8 ft.	0 2 6 —	0 1 3 ℔ foot
8 — 9	0 2 9 —	0 1 9 —
9 — 10	0 3 0 —	0 2 0 —
10 — 11	0 3 3 —	0 2 3 —
11 — 12	0 3 6 —	0 2 6 —
12 — 13	0 3 9 —	0 2 9 —
13 — 14	0 4 0 —	0 3 0 —
14 — 15	0 4 4 —	0 3 3 —
15 and upwards -	0 4 4 —	0 3 6 —

N.B. — All British ships from foreign ports to pay 4*d.* per foot extra; or if bound to foreign parts, having on board ½ a cargo, or with passengers, to pay 4*d.* per foot extra, in addition to the above charges.

LYNN.

	Foreign Rate. £ s. d.	British Rate. £ s. d.
Town dues. Beaconage -	0 0 1½ ℔ ton	0 0 1 ℔ ton
Stackage -	0 0 0½ —	0 0 0½ —
and 1-8th of the beaconage, if at the Boal.		
Ballast - -	0 0 8 ℔ 3 tons	0 0 4 ℔ 3 tons
Mooring dues -	0 0 1½ ℔ ton goods	0 0 0½ ℔ ton goods
which may be increased to -	0 0 2 —	0 0 1 —
Pilotage, 10 feet and under	0 3 0 ℔ foot	0 1 6 ℔ foot
10½ to 12 -	0 3 6 —	0 1 9 —
12½ to 14½ -	0 4 0 —	0 2 0 —
14½ and upwards	0 5 0 —	0 2 6 —

MILFORD *District*, viz. — From Caldy Island, along the coast to St. David's Head, and from thence to Cardigan Island, and rive versâ; and to and from, and into and out of, all ports and places within those limits.

N.B. — No master of a vessel is compelled to take a pilot within this district, unless going into or coming out of port, within a line drawn from Lenny Point to Skokam Island; but if he do take a pilot between Caldy Island and Cardigan Island, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships into the Harbour of Milford, and up and down the said Harbour.

From	To	Rates per Foot: Under 14 Ft.	Rates per Foot: 14 Ft. & upwards.
		£ s. d.	£ s. d.
A line drawn from St. Anne's Point to Sheep's Island	Any part of the harbour below a line drawn from Newton Nose Point to Martin's Haven	0 2 6	0 3 6
A line drawn from St. Anne's Point to Sheep's Island, or from Hubberstone Road	Any place above a line drawn from Newton Nose Point to Martin's Haven, in addition	0 2 0	0 2 6

Additional Rates for Ships boarded without the Entrance of the Harbour.

	£ s. d.
From a line drawn from Lenny Point to Skokam Island, in addition, per foot	0 2 0
If to the southward of St. Govven's Head, ditto	0 1 0
Or from Caldy Island eastward, or from the westward of the Grassholm, or 3 leagues without Lenny Point, in addition to the harbour pilotage	3 3 0
6 leagues ditto	4 4 0
10 leagues ditto	6 6 0

One fourth part is to be added to the harbour rates for ships not having British registers.

Rates for Services and Assistance performed in the Harbour.

For a boat carrying an anchor of above 6 cwt., with a corresponding hawser —

	£ s. d.	
If in Hubberstone Roads	2 2 0	Not exceeding: at the discretion of the sub-commissioners.
Each man in the boat, each tide	0 5 0	
If below Hubberstone Roads, a line drawn from the E. point of Gelliswick, to the E. point of Angle Bay and above the Stark Rock	2 12 6	
Each man in the boat, each tide	0 5 0	
If in Dale Road, and the anchor is brought from Milford	4 4 0	
Or if carried off from Dale	2 12 6	
Each man in the boat, each tide	0 5 0	

For a boat carrying off an anchor of ¾ cwt. and not exceeding 6 cwt., with a corresponding hawser, the boat and men to have ⅔ of the sums above specified.

For a boat with an anchor of ½ cwt. and not exceeding 3 cwt., with a corresponding hawser, the boat and men to have ½ of the said above specified sums.

For unmooring a ship drawing 14 feet water, and upwards, and bringing her alongside the quay, or into Hubberstone Pill—

From the situation, 1st or 2d, before mentioned —

	£ s. d.	
For the pilot	1 1 0	
If with a boat, an additional sum of	0 10 6	Not exceeding: at the discretion of the sub-commissioners.
Each person employed	0 5 0	

From the 3d station specified —

	£ s. d.	
For the pilot	1 11 6	
If with a boat, an additional sum of	0 10 6	Not exceeding: at the discretion of the sub-commissioners.
Each person employed	0 5 0	

And for taking a ship of 14 feet draught of water and upwards, from the quays, or Hubberstone Pill, to moorings in any of the situations before mentioned, the like sums above specified.

Ships under 14 feet draught of water, to or from the situations before mentioned, ⅔ of the sums for the pilot; the boats and men as above specified.

For unmooring a ship drawing 14 feet water, in either of the situations before described —

	£ s. d.	
For the pilot	0 10 6	
If with a boat, an additional sum of	0 10 6	
Each person employed	0 5 0	Not exceeding.

NEWCASTLE.

	Foreign Rate. £ s. d.	British Rate. £ s. d.
Pilotage into or out of the port, or into or out of any of the creeks or members thereof, from 1st April	0 1 9 ℔ foot	0 1 3 ℔ foot
1st October	0 2 0 —	0 1 6 —
Up or down the Tyne between North and South Shields, and any part of the river above Bill Point	0 2 0 —	0 1 6 —
Up or down the river below Bill Point	0 1 6 —	0 1 0 —
	N.B. — 5s. per vessel extra, if with less hands.	
Prorpage and hoonmage. Vessels loaded 50 tons and under	0 1 6 ℔ tons.	0 0 4 ℔ tons.
51 to 100	0 1 6 —	0 0 9 —
101 — 200	0 1 6 —	0 0 11 —
201 — 300	0 1 6 —	0 1 1 —
301 and above	0 1 6 —	0 1 3 —
Town dues. On coals and grindstones exported	0 1 4 ℔ chal.	0 0 2 ℔ chal.
Harbour dues — laden	0 3 10 ℔ tons.	0 4 6 ℔ tons.
ballast	0 3 10 —	0 4 2 —
Some particulars kind of do.	0 3 4 —	0 7 0 —
Without ballast or goods	0 4 10 —	0 3 2 —
Headsman's dues. Grindstones	0 0 8 ℔ chal.	0 0 4 ℔ chal.
Anchorage	0 1 0 ℔ tons.	Nil.

NEWHAVEN and SHOREHAM *District, viz.* — From Dungeness to the Owers, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, until he comes to the entrance of Rye, Shoreham, or Newhaven, and is bound to one of those ports; but if he does take a pilot between Dungeness and the Owers, it must be a district pilot, if one offers.

Rates of Pilotage, for piloting Ships within the Newhaven District, from Dungeness to the west end of the Owers. 7 feet draught and under, 2*l.* 16*s.* 6*d.*; 7 to 10 feet, 4*l.* 4*s.* 6*d.*; 11 feet, 4*l.* 15*s.*; 12 feet, 5*l.* 5*s.* 6*d.*; 13 feet, 5*l.* 8*s.* 6*d.*; 14 feet, 5*l.* 15*s.*; 15 feet, 6*l.* 6*s.*; 16 feet, 6*l.* 15*s.*; 17 feet, 7*l.* 8*s.*; 18 feet, 8*l.* 5*s.*; 19 feet, 9*l.* 15*s.*; 20 feet, 11*l.* 5*s.*; 21 feet, 12*l.* 15*s.*; above 21 feet, 13*l.* 10*s.*

Harbour Pilotage. — *Newhaven.* — 8 feet draught and under, per foot, 1*s.* 6*d.*; 8 to 10 feet, 1*s.* 9*d.*; above 10 feet, 2*s.*

Rye. — 8 feet draught and under, per foot, 2*s.* 6*d.*; 8 to 10 feet, 3*s.*; above 10 feet, 4*s.*

Shoreham. — 8 feet draught and under, per foot, 2*s.* 6*d.*; 8 to 10 feet, 3*s.*; above 10 feet, 4*s.*

NORTH CHANNEL, *&c. upwards from Orfordness to London.* — Of the pilots within this district, some are licensed from the Dudgeon light-vessel to Orfordness, and thence to the Downs; others are further licensed from Smith's Knoll to Orfordness. But the taking of pilots along the coast, to the northward of Orfordness, is optional to masters of vessels; though, if a pilot be employed, he must be licensed as above, if one offers.

Licences granted for the northward of Orfordness do not authorise the pilotage into or out of Yarmouth Roads or Harbour, except as may be requisite in the passage to the Downs or river.

PENZANCE *District, viz.* — From the Lizard to Cape Cornwall, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, until he comes within a line drawn from St. Clement's Isle to Trewavas Head, for Mounts Bay and Penzance; but if he does take a pilot between the Lizard and Cape Cornwall, it must be one of the district pilots, if one offers.

Rates of Pilotage, for piloting Ships within the Penzance District.

From	To	Draft of Water: 9 ft. & under 10	10	11	12	13	14	15	16	17	18	19	20
			£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Sea, and *vice versâ*	Either of the roadsteads or piers in Mount's Bay	10	16	24	30	35	40	45	50	55	60	67	77
All roadsteads, &c. as above	Either of the different piers in Mount's Bay	1*s.* 6*d.* per foot of the draught of water.											

Ships not having British registers are to pay ¼ more than stated in the above Table.

Boats and vessels boarded by pilots at a distance southward of the bay —

	£ s. d.
For putting a pilot on board without a line drawn from the Lizard to Tol Pelen Penwith	2 2 0
Ditto, within a line drawn from the Lizard to Tol Pelen Penwith, and without a line drawn from Carn Dew to Pengwinion Point	1 1 0
Ditto, within a line drawn from Carn Dew to Pengwinion Point, and without a line drawn from St. Clement's Isle to Trewavas Head	0 10 0

And within these limits to be charged inwards.

PLYMOUTH *District, viz.* — To the westward as far as Looe, and eastward as far as the Start; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, except going in or coming out of the port, within a line drawn from the Ram Head to the Mewstone; but if he do take a pilot between the Start and Looe, it must be one of the district pilots, if one offers.

Rates of Pilotage, for piloting Ships within the Plymouth District. — 1. All British ships of 14 feet water and upwards, except East Indiamen, if boarded without the land off Penlee Point or the Mewstone, which must be known by the western land being open of the Ram Head, shall pay 5*s.* per foot pilotage, if carried into the harbour of Hamoaze, Catwater, or Sutton Pool.

2. British ships under 14 feet water, down to 8 feet, boarded as above stated, are to pay 3*s.* per foot for the like service.

3. Ships above 14 feet, within that line, are to pay only 4*s.* per foot; and ships under 14 feet, boarded as above, only 3*s.* per foot, for the like service.

4. All ships under 8 feet water, are to pay as above stated, as if the vessel was of that draught.

5. All the above rates are to be paid in proportion for every ½ foot of water, but no allowance is to be made for any draught of water less than ½ foot.

6. In carrying ships to sea from the said harbours, the pilotage is to be, in all cases, the same as the inward pilotage.

7. All ships which may anchor on their arrival, either in Cawsand Bay or Plymouth Sound, are to pay only ½ of the before-mentioned rates of pilotage.

8. All pilots employed to carry ships from any one of the harbours to another, are to be paid the same pilotage as if the said ship had been boarded within the headlands coming from sea.

9. Should any ship above 17 feet water be boarded while the western land is open off the Ram Head by one of the 2d class pilots, and be runs the ship as far in as either of the buoys, the Panther or Shovel, and is there superseded by one of the 1st class, he shall be entitled to 1 3d of the pilotage.

10. Masters of ships taking a pilot at sea

	£	s.	d.
3 leagues without a line drawn from the Ram Head to the Mewstone, are to pay	3	3	0
6 leagues ditto	4	4	0
10 leagues ditto	6	6	0

and proportionately for intermediate distances.

11. Ships not having British registers are to pay ½ more of the rates of pilotage than is stated in the above Table.

12. If a master choose to retain or employ a pilot whilst at anchor, the rate for the lay days is to be 7s. 6d. a day, not including the day coming in or going out.

Poole District, viz. — From Christchurch, inclusive, to St. Alban's Head, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district until he comes to the entrance of Poole, Studland Bay, or Christchurch, bound to one of those places; but if he do take a pilot between Christchurch and St. Alban's Head, it must be one of the district pilots, if one offer.

Rates of Pilotage for piloting Ships within the Poole District. — For the pilotage of any vessel from Studland Bay to Poole Quay, 3s. per foot.

For the pilotage of any vessel from Studland Bay to Brownsea, 2·3ds of the above.

For the pilotage of any vessel from St. Alban's or Christchurch Head to Poole Quay, 4s. per foot, and in proportion from those heads to Brownsea, &c.

For the pilotage of any vessel from any place between either of those heads and Studland Bay, to Poole Quay, 3s. 6d. per foot; and in proportion from the same places to Brownsea, &c.

For the pilotage of any vessel outwards; the same as for a vessel inwards.

Ships not having British registers are to pay ½ more of the rates of pilotage than above stated.

The pilot having charge of any ship or vessel, either inwards or outwards, and being required by the master or owner to remain on board any such ship or vessel, shall be paid 4s. per day in addition to the limited pilotage, for every day after the first.

The pilot of any vessel shall, if required by the owner or master only, provide a boat, with 4 men to attend her, from Stakes to the Quay, or from the Quay to Stakes, to tow her in or out, or to carry moorings over to the buoys, as may be necessary; for which purpose there shall be paid the sum of 10s.

The pilots shall at all times, when required by the master or owner, lend their assistance to work any vessel to or from the quay, into or out of the harbour; for which service they shall be paid as follows, viz. — For working a vessel to or from the bay, 5s. per man, to or from Brownsea, 3s. ditto, and to or from Stakes, 2s. ditto; and the same for the boat they attend in; and 4s. per day each man, if detained on board after the first day.

Coasting vessels to pay 2·3ds of the above rates of pilotage.

Port Glasgow.

	Foreign Rate. £	s.	d.		British Rate. £	s.	d.	
Harbour dues. If a foreign voyage	0	1	0	per ton	0	0	6	per ton
Above 50 tons coasting	0	0	6	—	0	0	3	—
Pilotage. From any place between Cumrae Light & the Clough Light, or from the anchorage at Farlee Roads, Rothsay Bay, or Quarantine Station, Holy Lock, to Greenock Roads, mooring and berthing, or reverse	0	0	7½	—	0	0	1½	—
From any place inside the Clough Light, or from the anchorage at Greenock Roads, or the Tail of the Bank	0	0	1½	—	0	0	1	—
Vessels inward bound, not boarded until nearer Gourock than the Bay of Quirk	0	0	0½	—	0	0	0½	—
From Greenock to Port Glasgow, which rate is to be added to above for vessels from any of those stations for that port	0	0	1½	—	0	0	1	—

Portsmouth and Cowes District, viz. — From the Owers, within and without the Isle of Wight, to Peverel, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — The pilots of this district have authority to supersede such of the Trafalgar or Cinque Port pilots as are licensed for the charge of vessels to the Isle of Wight, when they arrive near the channels leading into the ports and harbours within the Isle of Wight; but no master of a vessel is compelled to take a Portsmouth or Cowes pilot, till within 3 miles of Bembridge Ledge, or 3 miles of Dunnose, St. Catherine's, or the Needles, or till at St. Helen's, if he is piloted thereto by a duly licensed London or Cinque Port pilot; but if he do take on board a pilot between the Owers and Peverel, it must be one of the district pilots.

Rates of Pilotage, for piloting Ships within the Portsmouth and Cowes District. — From 5 miles without Bembridge Ledge, or 3 miles without Dunnose or St. Catherine's, or 5 miles from the Needles Point, coming in at that passage.

To Spithead, Motherbank, Stokes Bay, or Cowes Road.

	Per Foot.	s.	d.
For ships of every draught, as far as 17 feet inclusive		5	0
From 17 feet to 20 feet draught inclusive		6	0
Above 20 feet draught		7	0

But if the ship be boarded within 2 miles of the buoys off Bembridge, or within 3 miles of the Needles Point, the rate to be 1s. per foot less than the above for each foot the ship draws. And the same rates as the above for pilotage outwards.

Ships inward bound, boarded between the Needles and Hurst Castle, to pay 2s. per foot. Between Hurst Castle and Newton Creek, 1s. per foot.

Ships anchoring and remaining at St. Helen's, Yarmouth, or Lymington, either inward or outward bound, to pay ½ the rate of pilotage.

Pilots taken on board by the captain without the above limits, to receive the following pay; viz.

	£	s.	d.
If at 3 leagues from the Wight	3	3	0
6 ditto ditto	4	4	0
10 ditto ditto	6	6	0

and proportionately for any intermediate distances.

Ships coming into Cowes Harbour to pay 1s. 6d. per foot, and the same on going out, as harbour pilotage.

Pilots of ships drawing 17 feet water and under are to have 2s. per foot in addition to the pilotage from sea, from any place within the Isle of Wight to Portsmouth Harbour, or to Southampton, or to Buckler's Hard, or to Langstone Harbour and Lymington; and for all vessels drawing above 17 feet water, 3s. per foot.

Ships coming from the Downs with a London or Cinque Port pilot, to the Isle of Wight, and he continuing the charge into any of the places within the said island, no duly licensed pilot offering, is to be allowed ½ pilotage from St. Helen's to the anchorage, but not otherwise.

For transporting vessels from one berth to another in Portsmouth harbour —

As far as 200 tons			10s. 6d.
200 to 300	—	—	15s.
Above 300	—	—	£1 1s.

For the pilotage of vessels from Southampton to Redbridge, Eling, Fortham, or Chapel, and *vice versâ*, 1s. per foot; and from Southampton to Hamble, Bursledon, Leap, Buckler's Hard, or Beaulieu, and *vice versâ*, 1s. 6d. per foot; and for any intermediate distance, a proportionate rate.

Ships not having British registers are to pay ½ more of the rates of pilotage than stated in the above Table.

If a master choose to retain or employ a pilot while at anchor, the rate for the lay days is to be 7s. 6d. per day, not including the day coming in or going out.

For every 10 leagues beyond the meridian of Peverel Point, for ships not exceeding 14 feet water, 3l. 3s.; for the same distance for ships of more than 14 feet water, 4l. 4s.; and proportionately for intermediate distances.

All vessels belonging to the port of Southampton bound to or from foreign parts, are to pay no more than ½ the foregoing rates of pilotage, when navigating within the limits of either the Cowes or Portsmouth districts, provided such vessels shall at the time be actually bound to or from the port of Southampton.

All vessels trading to or from the islands of Guernsey, Jersey, Alderney, or Sark, are to pay no more than ½ the foregoing rates of pilotage when navigating within the limits of the Portsmouth or Cowes districts.

Scilly District, viz. — To and from, and into and out of, all ports and places in and about the Scilly Islands.

Rates of Pilotage, for piloting Vessels within the Scilly District, in and out.

	£	s.	d.
Coasting vessels of 60 tons	1	1	0
60 to 75	1	11	6
75 to 100	2	2	0
100 to 200	2	12	6
200 tons	3	3	0
Vessels from foreign ports —			
60 tons	2	2	0
100 —	2	12	6
200 —	4	4	0
300 —	5	15	6
400 —	6	6	0

and in proportion for greater tonnage.

Ships not having British registers are to pay ½ more than is above stated.

Sunderland.

	Foreign Rate. £	s.	d.		British Rate. £	s.	d.	
Harbour dues	0	0	9	℔ ton	0	0	6	℔ ton

	From April 1. to Sept. 30. s.	d.	From Oct. 1. to Mar. 31. s.	d.	From April 1. to Sept. 30. s.	d.	From Oct. 1. to Mar. 31. s.	d.
Inward.								
Pilotage from the Wheatear Rock to the Oyster Island	2	0	2	6	1	6	2	0
Roghler Point to do.	1	6	2	0	1	2	1	6
Outside the Bar to do.	1	1	1	3	0	10	1	0
Sluice side the Bar to do.	0	5	0	7	0	4	0	6
The Island to the Quay	1	6	1	6	1	0	1	0
Do. to the Pool	0	9	0	9	0	6	0	6
Outward.								
From any place to the sea	3	0	3	6	2	0	2	6
	per foot draught of water.							

Stockton.

	Foreign Rate. £	s.	d.		British Rate. £	s.	d.	
Tees Navigation dues. — Vessels trading to or from the river Tees from or to any foreign port (except laden with Norway timber only)	0	1	6	℔ ton	0	0	9	℔ ton
If laden with Norway timber only	0	1	0	—	0	0	6	—
Town dues	0	5	0	℔ ves.	0	2	6	℔ ves.

STOCKTON — continued.

		Foreign Rate. £ s. d.	British Rate. £ s. d.
Pilotage from Sea to the eighth buoy	and vice versâ	0 1 9 ½ foot	0 1 3 ½ foot
From Sea to Cargo Fleet		0 3 0 —	0 2 0 —
From Cargo Fleet to Middleburg		0 1 0 —	0 0 9 —
From Cargo Fleet to Newport or Portrack		0 2 6 —	0 1 3 —
From Cargo Fleet to Stockton		0 3 0 —	0 2 0 —

N.B. — 3s. per vessel extra, if with leeboards.

WATERFORD.

Pilotage. Taking pilots at the following distances.		12 Feet and upwards, between 25th March and 29th September, per Foot.							
		Above Credan Head, and no further than Passage.		To Check Point or Glasshouse Beach, and no further.		Above Glasshouse Beach, up to Waterford.			
Westward.	*Eastward.*	Brit. s. d.	For. s. d.	Brit. s. d.	For. s. d.	Brit. s. d.	For. s. d.	Brit. s. d.	For. s. d.
Great Newtown Head -	Saltees	1 8 3	0 2 7	1 4	0 5 4	0 5 10			
Foulskirt -	Bag & Bun Hd	1 4 2	7 2	3 1	0 9 3	8 3	4		
Below Duncannon, and nearer than Foulskirt or Bag & Bun		1 0 2	1 2	0 3	6 3	4 4	11		

		Between 29th September and 25th March, per Foot.							
Great Newtown Head -	Saltees	2 1 3	6 3	0 4	1 1 4	5 6	3		
Foulskirt -	Bag & Bun Hd	1 8 3	9 2	7 4	5 4	0 5	10		
Below Duncannon, and nearer than Foulskirt or Bag & Bun		1 4 2	7 2	5 4	0 3	8 5	4		

		More than 6 and less than 12 Feet, between 25th March and 29th Sept., per Foot.							
Great Newtown Head -	Saltees	1 2 8	7 1	1 1 3	6 3	2 4	11		
Foulskirt -	Bag & Bun Hd	1 0 2	1 1	9 3	0 3	0 4	5		
Below Duncannon, and nearer than Foulskirt or Bag & Bun		0 9 1	8 1	8 2	7 2	9 4	0		

		Between 29th September and 25th March, per Foot.							
Great Newtown Head -	Saltees	1 8 3	0 2	4 4	0 5	8 5	4		
Foulskirt -	Bag & Bun Hd	1 6 2	7 2	1 3	6 3	0 4	11		
Below Duncannon, and nearer than Foulskirt or Bag & Bun		1 2	1 1	10 3	0 3	2 4	5		

Pilotage outwards, the same as Foulskirt, or Bag and Bun Head.

		Foreign Rate. £ s. d.	British Rate. £ s. d.
Tonnage dues. Vessels reporting at the Custom-house, two-thirds of whose cargo shall be coals, or from any port of Ireland, excepted		0 0 3 per ton	0 0 2½ per ton
Vessels, two-thirds of whose cargo shall be coals		0 0 3 —	0 0 1½ —
Vessels arriving from any port in Ireland		0 0 1 —	0 0 1 —

		If above the River or Pill of Kilmacow, and below the Cove. Per Ton. £ s. d.	If between the River or Pill of Kilmacow and the Cove. If by Lighters. Per Ton. £ s. d.	If at Bale last Quay. Per Ton. £ s. d.
Ballast dues. Taken on board	British	0 3 3	0 1 10	0 1 4
	foreign	0 4 6	0 2 8	0 2 2
Thrown out	British	0 1 10	0 0 11	0 0 9
	foreign	0 2 9	0 1 7	0 1 6

WEYMOUTH *District.* — From St. Alban's Head to Lyme, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N.B. — No master of a vessel is compelled to take a pilot within this district, until he comes within a line drawn from Lulworth Cove to the Shambles, or within the Race, into the ports of Portland and Weymouth, and off those of Bridport and Lyme; but if he do take a pilot between St. Alban's Head and Lyme, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Weymouth District.

From	To	Under 8 Feet. Per Foot.	From 8 Feet to 10 Feet. Per Foot.	Above 10 Feet. Per Foot.
		s. d.	s. d.	s. d.
A line drawn from Lulworth to the outer part of the Race or Shambles	Weymouth or Portland Roads or Bay	2 0	2 6	3 0
Weymouth or Portland Roads or Bay	Weymouth Harbour -	2 0	2 6	3 0
Sea - -	Bridport Harbour -	2 0	2 6	3 0
Ditto - -	Lyme Harbour -	2 0	2 6	3 0

The same rates of pilotage to be paid outwards.

Ships not having British register to pay ½ more of the rates of pilotage than is stated in the above Table.

The pilot of any vessel shall, if required by the owner or master only, provide a boat with 4 men to attend her, from the roads to the quay, or from the quay to the roads, to tow her in or out, or carry ropes on shore or to the pests, &c., as may be necessary, for which service each man is to be paid 4s. per tide; the owner of the boat to be paid the same as a man.

Masters of ships taking a pilot at sea (which is optional to them) to pay as follows, viz. —

	£ s. d.
From St. Alban's Head or Bill of Portland, to off Bridport or Lyme - - - -	2 2 0
If 5 leagues from the limits of Weymouth, Bridport, or Lyme - - - -	3 3 0
If 6 ditto - ditto - -	4 4 0
If 10 ditto - ditto - -	6 6 0

YARMOUTH.

Rates of Pilotage for piloting Ships within the Yarmouth District.

For ships above 14 feet draught of water —

From	To	Amt. £ s.
The Dudgeon Light, its parallel of latitude, or the northward thereof, and *vice versâ* -	Orfordness - - -	10 10
	Yarmouth Road, within or without the sands -	7 7
	Downs - - -	21 0
Yarmouth, and *vice versâ* - -	Orfordness - - -	5 5
	Downs - - -	16 16
Yarmouth Roads -	Sea, through the Cockle, St. Nicholas, or over the Stanford - -	3 3
	Yarmouth Roads, through any of the channels -	5 5
Sea - - -	Orfordness - - -	5 5
Smith's Knoll, and *vice versâ* - - -	The entrance of the fairways leading into Yarmouth Roads - -	3 3
Orfordness - -	The entrance of the fairways leading into Yarmouth Roads - -	3 3

For ships of 14 feet draught of water, and under, 2-3ds of the above rate.

Into and out of the Harbours of Yarmouth or Southwold.

For all laden ships —

		£ s. d.
Of above 50 and not exceeding 60 tons		1 1 0
60	— 70 —	1 4 0
70	— 80 —	1 6 0
80	— 90 —	1 8 0
90	— 100 —	1 10 0
100	— 110 —	1 13 0
110	— 120 —	1 16 0
120	— 130 —	2 0 0
130	— 140 —	2 4 0
140	— 150 —	2 8 0
150	— 175 —	2 15 0
175	— 200 —	3 0 0

The pilotage for ships in ballast is to be 1-3d part of the pilotage of laden ships; and ships returning into port by stress of weather, contrary winds, or on account of accidents, are to pay 2-3ds of their common pilotage. Ships not having British registers are to pay ½ more of the rates of pilotage than stated in the above Table.

PIMENTO, ALLSPICE, or JAMAICA PEPPER (Fr. *Poivre de Jamaïque*; Ger. *Nelkenpfeffer*; It. *Pimenti*), the fruit of the *Myrtus pimenta*, a beautiful tree which grows in great plenty on the hills on the north side of Jamaica. The berries are spherical, and, when ripe, of a black or dark purple colour. But, as the pulp is in this state moist and glutinous, the berries are plucked when green; and being exposed in the sun to dry, they lose their green colour, and become of a reddish brown. They are packed in bags and hogsheads for the European market. The more fragrant and smaller

they are, the better are they accounted. They have an aromatic, agreeable odour, resembling that of a mixture of cinnamon, cloves, and nutmegs, with the warm, pungent taste of the cloves. Pimento is used in medicine; but its principal use is in the seasoning of soups and other dishes.

"The returns," says Mr. Bryan Edwards, "from a pimento walk in a favourable season are prodigious. A single tree has been known to yield 150 lbs. of the raw fruit, or 100 lbs. of the dried spice; there being commonly a loss in weight of ⅓ in curing; but this, like many other of the minor productions, is exceedingly uncertain, and perhaps a very plenteous crop occurs but once in 5 years. The price in the British market, as may be supposed, fluctuates accordingly; but I believe its average for some years past may be set down at 7d. per lb., exclusive of the duty (3d.)."—(Vol. ii. p. 372. ed. 1819.) The price of pimento in bond, in the London market, has varied of late years from 4d. to 5¼d per lb.

At the period when Edwards's work was published, the annual imports of pimento from Jamaica, which supplies more than 9-10ths of the pimento brought to England, amounted to about 672,000 lbs., and were decreasing every year — (*loc. cit.*). But at an average of the 3 years ending with 1832, the annual imports were 2,349,893 lbs.; and in 1833 they amounted to 4,844,973 lbs.; since then, however, there has been a considerable falling off in the imports, which in 1841 were only 1,013,400 lbs. We subjoin

An Account of the Quantities of Pimento entered for Consumption in the U. Kingdom, during each of the 3 Years ending with 1842, and of the Amount of the Duties thereon.

Quantities.											
			1842.								
Cwts.	Cwts.	Cwts.	£	s.	d.	£	s.	d.	£	s.	d.
3,031	2,654	4,074	4,377	2	7	3,990	19	1	1,546	1	4

The duty on pimento, which amounted, when the former edition of this work was published, to 5*d.* per lb., was reduced in 1836 to 3*d.* per lb., and in 1842 to 5*s.* a cwt. Its price averages in the London market from 2½*d.* to 3*d.* per lb, ex. duty.

PINCHBECK (Ger. *Tomback*; Du. *Tombak*; Fr. *Tumbac, Similor*; It. *Tombacco*; Sp. *Tumbac, Tumbaga*), a name given to one of the many imitations of gold. By melting zinc in various proportions with copper or brass, some alloys result, the colours of which approach more or less to that of gold. This composition is frequently employed as a substitute for gold, in the formation of watch-cases, and various other articles of a like description. Pinchbeck is sometimes called *Tumbac*, and sometimes *Similor*, and *Petit-or*.

PINE, OR FIR, a species of forest tree, next, if not superior, to the oak, in point of utility and value. There are above 20 species of pine. They do not bear flat leaves, but a species of spines, which, however, are real leaves. They are mostly, though not all, evergreens; but the appearance of the tree, as well as the quality of the timber, varies with the species, and also with the situation in which it grows. Generally speaking, the timber is hardest and best in exposed cold situations, and where its growth is slow. We shall only notice those species, the timber of which is most in use in this country.

1. SCOTCH PINE (*Pinus sylvestris*) is a native of the Scotch mountains, and of most northern parts of Europe; being common in Russia, Denmark, Sweden, Norway, and Lapland. It is straight, abruptly branched, rising in favourable situations to the height of 80 or 90 feet, and being from 3 to 4 feet in diameter. It is at perfection when 70 or 80 years old. The colour of the wood differs considerably; it is generally of a reddish yellow, or of a honey yellow, of various degrees of brightness. It has no larger transverse septa, and it has a strong resinous odour and taste. In the best timber, the annual rings are thin, not exceeding $\frac{1}{10}$th of an inch in thickness; the dark parts of the rings of a bright reddish colour; the wood hard and dry to the feel, neither leaving a woolly surface after the saw, nor filling its teeth with resin. The best Norway is the finest of this kind, and the best Riga and Memel are not much inferior. The inferior sorts have thick annual rings; in some, the dark parts of the ring are of a honey yellow, the wood heavy, and filled with a soft resinous matter, feels clammy, and chokes the saw. Timber of this kind is not durable, nor fit for bearing strains. In some inferior species, the wood is spongy, contains less resinous matter, and presents a woolly surface after the saw. Swedish timber is often of this kind.

Scotch fir is the most durable of the pine species. It was the opinion of the celebrated Mr. Brindley, "that red Riga deal, or pine wood, would endure as long as oak in all situations." Its lightness and stiffness render it superior to any other material for beams, girders, joists, rafters, &c. It is much used in joiners' work, as it is more easily wrought, stands better, is much cheaper, and is nearly, if not quite, as durable as oak.

Scotch fir is exported from Norway and Sweden, under the name of *redwood*. Norway exports no trees above 18 inches diameter, consequently there is much sapwood; but the heart wood is both stronger and more durable than that of larger trees from other situations. Riga exports a considerable quantity under the name of masts and spars: pieces from 18 to 25 inches diameter are called *masts*, and are usually 70 or 80 feet in length; those of less than 18 inches diameter are called *spurs*.—(See RIGA.) Yellow

deals and planks are imported from various parts of Norway, Sweden, Prussia, Russia, &c. Tar, pitch, and turpentine are obtained from the Scotch fir.—(See these titles.) When the tree has attained to a proper age, it is not injured by the extraction of these products.

2. Spruce Pine.—Of this there are 3 species: the Norway spruce, or *Pinus abies*; white spruce, or *Pinus alba*; and black spruce, or *Pinus nigra*. These are noble trees, rising in straight stems from 150 to 200 feet in height. They yield the timber known by the name of *white fir*, or *deal*, from its always being imported in deals or planks.

Deals imported from Christiania are in the highest estimation.—(See Christiania.) The trees are usually cut into 3 lengths, generally of about 12 feet each: and are afterwards cut into deals by saw-mills, each length yielding 3 deals. The Norway spruce thrives very well in Britain, and produces timber little inferior to the foreign: it is somewhat softer, and the knots are extremely hard.

The white spruce, or *Pinus alba*, is brought from British North America. The wood is not so resinous as the Norway spruce: it is tougher, lighter, and more liable to twist in drying.

The black spruce, or *Pinus nigra*, is also an American tree; but it is not much imported into this country. The black and white spruce derive their names from the colour of the bark; the wood of both being of the same colour.

The colour of spruce fir, or white deal, is yellowish or brownish white; the hard part of the annual ring a darker shade of the same colour; it often has a silky lustre, especially in the American and British grown kinds. Each annual ring consists of two parts; the one hard, the other softer. The knots are generally very hard. The clear and straight-grained kinds are often tough, but not very difficult to work, and stand extremely well when properly seasoned. White deal, as imported, shrinks about $\frac{1}{10}$th part in becoming quite dry.

3. Weymouth Pine, or White Pine (*Pinus strobus*), is a native of North America, and is imported in large logs, often more than 2 feet square and 30 feet in length. It is one of the largest and most useful of the American trees, and makes excellent masts; but it is not durable, nor fit for large timbers, being very subject to dry rot. It has a peculiar odour.

4. Silver Fir (*Pinus picea*) is a native of the mountains of Siberia, Germany, and Switzerland, and is common in British plantations. It is a large tree, and yields the Strasburg turpentine. The wood is of good quality, and much used on the Continent both for carpentry and ship building. The harder fibres are of a yellow colour, compact, and resinous; the softer nearly white. Like the other kinds of fir, it is light and stiff, and does not bend much under a considerable load; consequently, floors constructed of it remain permanently level. It is subject to the worm. It has been said to last longer in the air than in the water; and, therefore, to be fitter for the upper parts of bridges, than for piles and piers.

5. Larch (*Pinus larix*). There are 3 species of this valuable tree; 1 European, and 2 American. The variety from the Italian Alps is the most esteemed, and has lately been extensively introduced into plantations in Great Britain. It is a straight and lofty tree, of rapid growth. A tree 79 years of age was cut down at Blair Athol, in 1817, which contained 252 cubic feet of timber; and one of 80 years of age, at Dunkeld, measured 300 cubic feet. The mean size of the trunk of the larch may be taken at 45 feet in length, and 33 inches diameter. The wood of the European larch is generally of a honey yellow colour, the hard part of the annual rings of a redder cast; sometimes it is brownish white. In common with the other species of pine, each annual ring consists of a hard and a soft part. It generally has a silky lustre; its colour is browner than that of the Scotch pine, and it is much tougher. It is more difficult to work than Riga or Memel timber; but the surface is better when once it is obtained. It bears driving bolts and nails better than any other species of resinous wood. When perfectly dry, it stands well; but it warps much in seasoning.

It is in all situations extremely durable. It is useful for every purpose of building, whether external or internal; it makes excellent ship timber, masts, boats, posts, rails, and furniture. It is peculiarly adapted for flooring boards, in situations where there is much wear, and for staircases: in the latter, its fine colour, when rubbed with oil, is much preferable to that of the black oaken staircases to be seen in some old mansions. It is well adapted for doors, shutters, and the like; and, from the beautiful colour of its wood when varnished, painting is not necessary.—(We have abstracted these particulars from *Mr. Tredgold's* excellent work, *The Principles of Carpentry*, pp. 209—217.)

PINE-APPLE, or ANANAS, though a tropical fruit, is now extensively cultivated in hothouses in this country, and is well known to every one. When of a good sort and healthy, it is the most luscious, and, perhaps, the best fruit that this country produces; and when carefully cultivated, is superior in point of quality to that produced in the West Indies. A pine-apple raised at Stackpool Court, Pembrokeshire, and

served up at the coronation dinner of George IV., weighed 10 lbs. 8 oz. — (*Vegetable Substances*, p. 379.; *Lib. Entert. Knowledge.*)

PINT, a measure used chiefly in the measuring of liquids. The word is High Dutch, and signifies a little measure of wine. The English pint used to be of 2 sorts; the one for wine, the other for beer and ale. Two pints make a quart; 2 quarts a pottle; 2 pottles a gallon, &c. The pint, Imperial liquid measure, contains 34·659 cubic inches.

PIPE, a wine measure, usually containing 105 (very nearly) Imperial, or 126 wine gallons. Two pipes, or 210 Imperial gallons, make a tun. But, in practice, the size of the pipe varies according to the description of wine it contains. Thus, a pipe of port contains 138 wine gallons, of sherry 130, of Lisbon and Bucellas 140, of Madeira 110, and of Vidonia 120. The pipe of port, it is to be observed, is seldom accurately 138 gallons, and it is usual to charge what the vessel actually contains.

PIPE-CLAY, a species of clay abounding in Devonshire, and other parts of England, employed in the manufacture of various sorts of earthenware, and in bleaching.

PIRACY, consists in committing those acts of robbery and violence upon the seas, that, if committed upon land, would amount to felony.

Pirates hold no commission or delegated authority from any sovereign or state, empowering them to attack others. They can, therefore, be only regarded in the light of robbers or assassins. They are, as Cicero has truly stated, the common enemies of all (*communes hostes omnium*); and the law of nations gives to every one the right to pursue and exterminate them without any previous declaration of war; but it is not allowed to kill them without trial, except in battle. Those who surrender, or are taken prisoners, must be brought before the proper magistrates, and dealt with according to law.

By the ancient common law of England, piracy, if committed by a *subject*, was held to be a species of treason, being contrary to his natural allegiance; and, by an *alien*, to be felony only: but since the statute of treasons (25 Edw. 3. c. 2.), it is held to be only felony in a subject. Formerly this offence was only cognisable by the admiralty courts, which proceed by the rules of the civil law; but it being inconsistent with the liberties of the nation that any man's life should be taken away, unless by the judgment of his peers, the statute 28 Hen. 8. c. 15. established a new jurisdiction for this purpose, which proceeds according to the course of common law.

It was formerly a question whether the Algerines, and other African states, should be considered pirates: but, however exceptionable their conduct might have been on many occasions, and however hostile their policy might be to the interests of humanity, still, as they had been subjected to what may be called regular governments, and had been admitted to enter into treaties with other powers, they could not be treated as pirates.

Pirates having no right to make conquests, or to seize upon what belongs to others, capture by them does not divest the owner of his property. At a very early period of our history, a law was made for the restitution of property taken by pirates, if found within the realm, whether belonging to strangers or Englishmen: but any foreigner suing upon this statute must prove that, at the time of the capture, his own sovereign and the sovereign of the captor were in mutual amity; for it is held that piracy cannot be committed by the subjects of states at war with each other.

Piracy was almost universally practised in the heroic ages. Instead of being esteemed infamous, it was supposed to be honourable. — (*Latrocinium maris gloriæ habebatur.* — *Justin.* lib. xliii. c. 3.) Menelaus, in the Odyssey, does not hesitate to inform his guests, who admired his riches, that they were the fruit of his piratical expeditions — (lib. iv. ver. 90.); and such, indeed, was the way in which most of the Greek princes amassed great wealth. — (*Goguet, Origin of Laws*, vol. i. p. 383. Eng. trans.)

The prevalence of this piratical spirit in these early ages may, perhaps, be explained by the infinite number of small independent states into which the country was divided, and the violent animosity constantly subsisting amongst them. In this way ferocious and predatory habits were universally diffused and kept alive; and it is not to be supposed that those who were at all times liable to be attacked by hosts of enemies, should very accurately examine the grounds upon which they attacked others. According, however, as a more improved system of government grew up, Greece, and a few states, as Athens, Corinth, &c., had attained to distinction by their naval power, piracy was made a capital offence: but though repressed, it was never entirely put down. Cilicia was at all times the great stronghold of the pirates of antiquity: and in consequence of the decline of the maritime forces of Athens, Rhodes, &c., which had kept them in check, they increased so much in numbers and audacity as to insult the majesty of Rome herself; so that it became necessary to send Pompey against them, with a large fleet and army, and more extensive powers than had been ever previously conferred on any Roman general.

During the anarchy of the middle ages, when every baron considered himself a sort of independent prince, entitled to make war on others, piracy was universally practised. The famous Hanseatic League was formed chiefly for the purpose of protecting the ships of the confederated cities from the attacks of the pirates by which the Baltic was then infested. The nuisance was not finally abated in Europe till the feudal system had been subverted, and the ascendancy of the law everywhere secured. In more modern times, some of the smaller West India islands have been the great resort of pirates: latterly, however, they have been driven from most of their haunts in that quarter. They are still not unfrequently met with in the Indian seas east of Sumatra.

Besides those acts of robbery and depredation upon the high seas, which, at common law, constitute piracy, some other offences have been included under that term. Thus, by the stat. 11 & 12 Will. 3, c. 7., if any natural-born subject commits any act of hostility upon the high seas against others of his Majesty's subjects, under colour of a commission from any foreign power, this, though it would only be an act of war in an alien, shall be construed piracy in a subject. And further, any commander or other seafaring person betraying his trust, and running away with any ship, boat, ordnance, ammunition, or goods, or *yielding them up voluntarily to a pirate*, or conspiring to do these acts; or any person assaulting the commander of a vessel, to hinder him from fighting in defence of his ship, or confining him, or causing or endeavouring to cause a revolt on board, shall for each of these offences be adjudged a pirate, felon, and robber, and shall suffer death, whether he be principal, or merely accessory by setting forth such pirates, or abetting them before the fact, or receiving them, or concealing them or their goods after it; and the stat. 4 Geo. 1. c. 2. expressly excludes the principals from the benefit of clergy. By the stat. 8 Geo. 1. c. 24., the trading with known pirates, or furnishing them with stores or ammunition, or fitting out any vessel for that purpose, or in any wise consulting, combining, confederating, or corresponding with them; or the forcibly boarding any merchant vessel, though without seizing or carrying her off, and destroying or throwing any of the goods overboard, shall be deemed piracy; and such accessaries to piracy as are described by the statute of King William are declared to be principal pirates, and all pirates convicted by virtue of this act are made felons without benefit of clergy. To encourage the defence of merchant vessels against pirates, the commanders and seamen wounded, and the widows of such seamen as are slain in any engagement with pirates, are entitled to a bounty, to be divided among them, not exceeding the *one fiftieth* part of the value of the cargo saved; and the wounded seamen are entitled to the pension of Greenwich Hospital. — (11 & 12 *Will.* 3. c. 7.; 8 *Geo.* 1. c. 24.) The first of these statutes also enacts, that if any mariner or inferior officer of any English ship decline or refuse to fight when commanded by the master, or shall utter any words to discourage the other mariners from defending the same, he shall lose all the wages due to him, together with such goods as he hath in the ship, and be imprisoned and kept to hard labour for 6 months.

The 6 Geo. 4. c. 49. enacts that a bounty shall be paid to the officers and crews of such of his Majesty's ships of war as may be engaged in the actual taking, sinking, burning, or otherwise destroying any vessel or boat manned by pirates, of 20*l.* for each pirate taken or killed during the attack, and of 5*l.* for every other man of the crew not taken or killed, who shall have been alive on board the said piratical vessel at the attack thereof.

The same statute (§ 3.) enacts that vessels and other property taken from pirates, proved to have belonged to any of his Majesty's subjects, are to be delivered up to them, on their paying a sum of money as salvage, equal to 1-8th part of the true value of the same.

PISTACHIA OR PISTACHIO NUTS (Ger. *Pistaschen*; Du. *Pistasjes*; Fr. *Pistaches*; It. *Pistacchi, Fastucchi*; Sp. *Alfocigos*; Lat. *Pistaciæ*), the fruit of the *Pistachia vera*, a kind of turpentine tree. It grows naturally in Arabia, Persia, and Syria; also in Sicily, whence the nuts are annually brought to us. They are oblong and pointed, about the size and shape of a filbert, including a kernel of a pale greenish colour, covered with a yellowish or reddish skin. They have a pleasant, sweetish, unctuous taste, resembling that of sweet almonds; their principal difference from which consists in their having a greater degree of sweetness, accompanied with a light grateful flavour, and in being more oily. Pistachias imported from the East are superior to those raised in Europe. — (*Lewis's Mat. Med.*)

PITCH (Ger. *Pech*; Fr. *Poix, Brai*; It. *Pece*; Sp. *Pez*; Rus. *Smola gustaja*), the residuum which remains on inspissating tar, or boiling it down to dryness. It is extensively used in ship building, and for other purposes. Large quantities are manufactured in Great Britain; but exclusive of these, 13,284 cwts. imported from foreign countries were entered for consumption in 1841; and as the duty, which was then 10*d.* a cwt., was reduced in 1842 to 6*d.*, a farther increase of consumption may be anticipated.

An allowance is to be made for tare on pitch, of 93 lbs. each on Archangel casks, 36 lbs. each on Swedish do., and 56 lbs. each on American do.

PLANE, a forest tree, of which there are 2 species; the Oriental plane (*Platanus Orientalis*), and the Occidental plane (*Platanus Occidentalis.*)

The Oriental plane is a native of the Levant, and other Eastern countries, and is considered one of the finest of trees. It grows to about 60 feet in height, and has been known to exceed 8 feet in diameter. Its wood is much like beech, but more figured, and is used for furniture and such like articles. The Occidental plane is a native of North America, and is one of the largest of the American trees, being sometimes more than 12 feet in diameter. The wood of the Occidental plane is harder than that of the Oriental. It is very durable in water.

The tree known by the name of plane in England, is the sycamore, or great maple (*Acer pseudo-platanus*). It is a large tree, grows quickly, and stands the sea spray better than most trees. The timber is very close and compact, easily wrought, and not liable either to splinter or warp. It is generally of a brownish white or yellowish white colour, and sometimes it is very beautifully curled and mottled. In this state it

takes a fine polish, and bears varnishing well. It is chiefly used in the manufacture of saddle trees, wooden dishes, and a variety of articles of furniture and machinery. When kept dry, and protected from worms, it is pretty durable; but it is quite as liable as beech to be attacked by them. — (*Tredgold*, p. 196.)

PLANKS (Ger. and Du. *Planken*; Da. *Planker*; Swe. *Plankor*; Fr. *Planches*, *Bordages*; Rus. *Tolstüle olóshu*), thick strong boards, cut from various kinds of wood, especially oak and pine. Planks are usually of the thickness of from 1 inch to 4. They are imported in large quantities from the northern parts of Europe, particularly from the ports of Christiania, Dantzic, Archangel, Petersburg, Narva, Revel, Riga, and Memel, as well as from several parts of North America.

PLANTAIN, or BANANA, the pulpy fruit of the *Musa paradisiaca*, an herbaceous plant, extensively cultivated in most intertropical countries, but especially in Mexico. It is not, like most other fruits, used merely as an occasional luxury, but is rather an established article of subsistence. Being long and extensively cultivated, it has diverged into numerous varieties, the fruit of which differs materially in size, flavour, and colour. That of some is not above 2 or 3 inches long, while that of others is not much short of a foot; some sorts are sweet, and of a flavour not unlike nor inferior to that of a good mellow pear; but the larger kind are, for the most part, coarse and farinaceous. The latter are either used fresh or dried in the sun, in which latter state they are occasionally ground into meal and made into bread. In Mexico, the sweeter sorts are frequently pressed and dried, as figs are in Europe; and, while they are not very inferior to the last mentioned fruit, they are infinitely cheaper.

"I doubt," says M. Humboldt, "whether there be any other plant that produces so great a quantity of nutritive substance in so small a space. Eight or 9 months after the sucker is planted, it begins to develope its cluster. The fruit may be gathered in the 10th or 11th month. When the stalk is cut, there is always found, among the numerous shoots that have taken root, a sprout (*pimpollo*), which, being 2-3ds the height of its parent plant, bears fruit 3 months later. Thus a plantation of bananas perpetuates itself, without requiring any care on the part of man, further than to cut the stalks when the fruit has ripened, and to stir the earth gently once or twice a year about the roots. A piece of ground of 100 square metres of surface will contain from 30 to 40 plants. During the course of a year this same piece of ground, reckoning the weight of the cluster at from 15 to 20 kilog. only, will yield 2,000 kilog., or more than 4,000 lbs., of nutritive substance. What a difference between this product and that of the cereal grasses in most parts of Europe! The same extent of land planted with wheat would not produce above 30 lbs.; and not more than 90 lbs. of potatoes. Hence the product of the banana is to that of wheat as 133 to 1, and to that of potatoes as 44 to 1." — (*Essai sur la Nouvelle Espagne*, tom. ii. p. 388. 2d. ed.)

The banana forms a principal part of the food of the people of Mexico; and the apathy and indolence of the natives in the *tierras calientes*, or hot regions, has been ascribed, and probably with good reason, to the facility with which it supplies them with subsistence. It is by no means in such extensive use in tropical Asia; and comes nowhere in it into competition with corn as an article of food.

PLATE, the denomination usually given to gold and silver wrought into articles of household furniture.

In order partly to prevent fraud, and partly for the purpose of collecting a revenue, the manufacture of plate is placed under certain regulations. Those who carry it on are obliged to take out a licence, renewable annually on the 31st of July. Assay offices are established in different places; and any one selling any article previously to its having been assayed and marked, forfeits 50*l*. — (24 *Geo.* 3. c. 53.) No plate is passed at the assay offices, unless it be of the fineness of the old standard or 11 oz. and 2 dwts., or of the new standard of 11 oz. and 10 dwts. Gold plate, with the exception of gold watch-cases, is to pay a duty of 17*s.* an oz., and silver plate a duty of 1*s.* 6*d.*, but watch-cases, chains, tippings, mountings, collars, bottle tickets, teaspoons, &c. are exempted. The 52 Geo. 3. c. 143. made the counterfeiting, or the transference from one piece of plate to another, of the marks, stamps, &c. impressed on plate by the assayers, felony without the benefit of clergy. But the offence is now punishable by transportation or imprisonment only. — (1 *Will.* 4. c. 66.)

The subjoined account (from *Porter's Progress of the Nation*, iii. 25.) gives a very complete view of the plate manufacture from 1800 downwards. It appears from it that the annual consumption of silver plate has increased from about 800,000 oz. at the commencement of the century, to about 1,050,000 oz. at present. Most persons may, perhaps, be inclined to think that this is not so great an increase as might have been anticipated from the increased wealth and population of the country. But it should be borne in mind that this account refers only to articles of standard silver and gold, and that the great consumption of the precious metals consists in plated and gilt articles, which are now made of a very superior quality. Owing also to the fact of old plate being held in the greatest estimation, but little of it is melted down to be remanufactured, so that the principal consumption is by new families. The returns for the year 1826, in the subjoined Table, afford a striking proof of this. During a considerable portion of that year a crowd of speculators, most of whom were previously worth little or nothing, believed they had made large fortunes, and launched out, with the proverbial ostentation of *parvenus*, into all sorts of lavish expenditure. Hence the wonderful increase in the demand for plate in the course of that year. No doubt, also, the consumption of plate appears less than it really is, from the facility with which the duties are evaded. We subjoin

Account of the Number of Ounces of Gold and Silver Plate upon which Duty was paid, and for which Drawback was allowed, showing the Quantity retained for Home Use in each Year, from 5th January, 1800, to 5th January, 1841

Year ended 5th January.	Duty paid on		Drawback allowed on		Retained for Home Use	
	Gold	Silver	Gold	Silver.	Gold.	Silver
	Ounces	Ounces	Ounces.	Ounces	Ounces.	Ounces
1801	5,451	902,060	77	144,705	5,374	760,301
1802	6,613	925,884	13	114,343	4,600	811,540
1803	5,142	896,381	66	136,858	5,071	859,523
1804	5,115	1,015,267	10	165,915	5,435	949,352
1805	4,854	1,[illegible]	21	111,829	4,833	788,959
1806	5,168	1,[illegible]	9	132,082	5,159	884,611
1807	5,518	1,001,585	43	141,668	5,475	860,917
1808	8,526	1,141,749	20	151,841	8,506	1,000,890
1809	7,183	1,139,112	2	201,316	6,121	1,098,840
1810	6,382	1,248,098	55	271,116	5,289	1,171,094
1811	7,015	1,341,024	102	206,891	7,353	1,234,148
1812	8,210	1,134,238	34	93,715	6,128	1,040,745
1813	5,921	980,963	36	80,534	5,857	933,889
1814	6,115	917,692	14	52,634	7,099	865,463
1815	5,773	874,485	23	56,318	5,750	818,207
1816	7,412	1,[illegible]	43	105,174	7,197	911,454
1817	7,[illegible]	[illegible]	25	85,148	6,[illegible]	824,503
1818	5,[illegible]	1,[illegible]	2,031	10,112	3,396	974,132
1819	5,591	1,[illegible]	2,[illegible]	[illegible]	3,574	1,[illegible]
1820	5,337	1,[illegible]	1,[illegible]	110,[illegible]	3,130	1,115,[illegible]
1821	5,[illegible]	1,[illegible]	1,[illegible]	114,[illegible]	5,[illegible]	957,[illegible]
1822	5,434	1,[illegible]	1,[illegible]	[illegible]	5,[illegible]	980,164
1823	5,302	1,[illegible]	17,[illegible]	[illegible]	[illegible]	964,[illegible]
1824	5,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	976,[illegible]
1825	5,[illegible]	1,[illegible]	40	[illegible]	6,[illegible]	976,[illegible]
1826	5,[illegible]	1,[illegible]	54	[illegible]	5,[illegible]	1,188,[illegible]
1827	5,[illegible]	1,[illegible]	51	11,[illegible]	5,[illegible]	1,[illegible]
1828	5,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	1,[illegible]
1829	5,[illegible]	1,[illegible]	13	[illegible]	[illegible]	1,[illegible]
1830	5,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	1,[illegible]
1831	5,[illegible]	1,[illegible]	12	[illegible]	[illegible]	1,[illegible]
1832	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1833	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1834	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1835	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1836	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1837	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1838	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1839	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1840	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1841	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PLATINA, a metal which, in respect of scarcity, beauty, ductility, and indestructibility, is hardly inferior to gold, was unknown in Europe till about the middle of last century, when it began to be imported in small quantities from South America. It has since been discovered in Estremadura in Spain, and, more recently, in the Ural Mountains in Asiatic Russia, where it is now raised in very considerable quantities.

Platina is of a white colour like silver, but not so bright; it has very little or no smell. Its hardness is intermediate between copper and iron. Its specific gravity is about 21.5 or 22, that of gold being 19.3, so that it is the heaviest body with which we are acquainted. It is exceedingly ductile and malleable, it may be hammered out into very thin plates, and drawn into wires not exceeding 1/196th of an inch in diameter. In these properties it is not absolutely unrivalled, but it seems to surpass all the other metals. Its tenacity is such that a wire of platina 0.0781 inch in diameter is capable of supporting a weight of 274 lbs avoirdupois without breaking. It is one of the most infusible of all metals, but pieces of it may be welded together without difficulty when heated to whiteness. It is not in the smallest degree altered by the action of air or water. — (*Thomson's Chemistry.*)

The late Dr. Wollaston discovered a method of fusing platina, and consequently of rendering it easily available in the arts. The Russians have within these few years issued platina coins of the value of 3, 6, and 12 silver roubles. Platina first began to be an object of attention in Russia in 1824, when 1 pood 3 lbs were collected. In 1836 the produce amounted to 180 poods 42 lbs. In 1831 a piece of native platina was discovered at Demidoff's gold mines, weighing 20 lbs 24 zolt. — (*Official Statements* published by the Russian Government.)

PLATTING, ships of bast, cane, straw, &c. woven or plaited for making into hats &c. — (See HATS, STRAW.)

PLUMS, the fruit of the *Prunus domestica*, are too well known to require any description. They were introduced into England in the 15th century, and are cultivated in all parts of the country. There are said to be nearly 300 varieties of plums.

PLUMBAGO. See BLACK LEAD.

POMEGRANATE, POMEGRANATES (Ger. *Granatapfel*; Fr. *Grenades*; It. *Granati, Melagrani*, Sp. *Granadas*), the fruit of the pomegranate tree (*Punica granatum*). This tree, which grows to the height of 15 or 20 feet, appears to be a native of Persia whence it has been conveyed, on the one side, to Southern Europe, and on the other to the tropical parts of Asia, and eventually to the New World. The fruit is a pulpy many-seeded berry, the size of an orange, covered with a thick, brown, coriaceous rind. The pulp has a reddish colour, and a pleasant subacid taste. The value of the fruit depends on the smallness of the seed and the largeness of the pulp. The finest, called by the Persians, *badana*, or seedless, is imported into India from Caubul and Candahar where the pomegranate grows in perfection. The tree thrives all the way to the equator but, within the tropics, the fruit is hardly fit for use. The pomegranates brought to England from the south of Europe and the West Indies are very inferior to those of Persia. — (*Private information.*)

POPLAR (Ger. *Pappel, Pappelhaum*; Du. *Popelier*; Fr. *Peuplier*; It. *Pioppa*

Sp. *Alamo*; Lat. *Populus*). Of the poplar (*Populus* of botanists) there are about 15 species described; of these 5 are common in England; viz. the common or *White*, the *Black*, the *Aspen* or trembling poplar, the *Abele* or great white poplar, and the Lombardy poplar. In most favourable situations, the white poplar grows with great rapidity, sometimes sending forth shoots 16 feet long in a single season. The wood is soft, and not very durable unless kept dry; but it is light, not apt either to swell or shrink, and easily wrought. The Lombardy poplar grows rapidly, and shoots in a complete spire to a great height; its timber does not differ materially from that of the white poplar. It is very light; and is, therefore, well adapted for the manufacture of packing-cases. None of the species is fit for large timbers.—(*Tredgold's Principles of Carpentry*; *Veget. Sub.*, *Lib. of Entert. Knowledge.*)

POPULATION. It would be quite inconsistent with the objects and limits of this work, to attempt giving in this place any explanation of the laws which regulate the progress of population. It may, indeed, be thought that the word has no business here. However, as it is frequently of importance in commercial questions, and in others affecting commercial interests, to be able to compare the consumption of an article with the population, we believe we shall gratify our readers by laying before them the following Tables, showing the results of the different censuses that have been taken of the population of Great Britain and Ireland, and showing also the increase in the population of the principal British cities.

I. Population of Ireland, as determined by the Censuses taken in 1813, 1821, 1831, and 1841, showing its Amount at each Period in each County, with the Rates of Increase.

Counties, &c.	1813.	Increase per Cent.	1821.	Increase per Cent.	1831.	Increase per Cent.	1841.
Leinster.							
Carlow	69,566	13	78,952	4	81,988	5 Dec.	86,248
Dublin County	110,437	35	150,011	13	380,167	2	140,047
City	176,610	5	185,881			Inc.	232,726
Kildare	85,138	16	99,065	9	108,424	6	114,488
Kilkenny (city not included in 1813)	134,664	35	182,046	6	195,686	4	202,120
King's County	113,226	15	131,088	10	144,225	2	146,852
Longford	95,917	12	107,570	4	112,558	2	115,291
Louth (Drogheda included)	*	-	119,129	5	124,816	5	129,240
Meath	112,479	11	159,183	11	176,856	4	185,828
Queen's County	113,857	17	134,275	9	145,851	5	153,950
Westmeath	*	-	128,319	6	136,372	5	143,540
Wexford	*	-	170,806	7	182,713	11	202,453
Wicklow	83,109	22	110,767	10	121,557	5	126,143
Total	-	-	1,757,492	9	1,909,713	3	1,973,731
Munster.							
Clare	160,603	29	208,089	24	258,322	11	286,394
Cork	588,530	21	730,144	11	810,732	5	854,118
Kerry	178,622	21	216,185	22	263,126	12	293,880
Limerick (city not included in 1813)	103,865	167	277,457	14	315,355	5	330,029
Tipperary	290,551	19	346,896	16	402,563	8	435,553
Waterford	141,924	8	156,521	13	177,054	11	196,187
Total	-	-	1,935,612	15	2,227,152	8	2,396,161
Ulster.							
Antrim	237,684	14	270,883	20	325,615	11	360,875
Armagh	121,449	62	197,427	11	220,134	6	232,593
Cavan	*	-	195,076	17	227,933	7	243,158
Donegal	*	-	248,270	16	289,149	5	303,448
Down	287,290	13	325,110	8	352,012	3	361,410
Fermanagh	111,950	17	130,997	14	149,763	4	156,481
Londonderry	186,181	4	193,869	15	222,012	20	222,174
Monaghan	140,433	24	174,697	6	195,536	8	200,142
Tyrone	250,746	4	261,865	16	304,468	3	312,956
Total	-	-	1,908,494	14	2,286,662	4	2,386,373
Connaught.							
Galway	165,679	103	337,374	23	414,684	6	440,198
Leitrim	94,095	32	124,785	13	141,524	9	155,297
Mayo	237,571	23	293,112	25	366,328	6	388,887
Roscommon	158,110	32	208,739	19	249,613	1	253,589
Sligo	*	-	146,229	17	171,765	5	181,002
Total	-	-	1,110,229	21	1,343,914	5	1,418,973

SUMMARY.

Provinces.	1813.	Increase per Cent.	1821.	Increase per Cent.	1831.	Increase per Cent.	1841.
Leinster	-	-	1,757,492	9	1,909,713	3	1,973,731
Munster	-	-	1,935,612	15	2,227,152	8	2,396,161
Ulster	-	-	1,908,494	14	2,286,662	4	2,386,373
Connaught	-	-	1,110,229	21	1,343,914	5	1,418,973
* Total	-	-	6,801,827	14	7,767,401	5	8,175,238

It is somewhat singular that no such table as the above should be found amid the myriads published in the Report on the Irish census of 1841.

II. Population of Great Britain in 1801, 1811, 1821, 1831, and 1841, showing its Amount at each Period in each County of England and Scotland, and in the entire Principality of Wales; with the Ratio of Increase.

Counties.	Area in English Statute Acres.	1801.	Increase per Cent.	1811.	Increase per Cent.	1821.	Increase per Cent.	1831.	Increase per Cent.	1841.
ENGLAND.										
Bedford	297,632	63,393	11	70,413	19	83,716	14	95,483	13·0	107,956
Berks	473,920	109,215	8	118,277	11	131,977	10	145,389	10·8	161,147
Buckingham	463,880	107,444	9	117,366	14	134,068	9	146,549	6·4	155,985
Cambridge	536,313	89,346	13	101,109	20	121,909	15	143,953	14·2	164,459
Chester	639,080	191,751	18	227,031	19	270,098	24	334,591	18·5	395,660
Cornwall	834,720	188,269	15	216,662	19	257,447	17	300,958	15·4	341,279
Cumberland	969,480	117,230	14	133,744	17	156,124	10	169,681	4·9	178,038
Derby	665,180	161,142	15	185,487	15	213,333	11	237,170	14·7	272,217
Devon	1,656,450	343,001	12	383,308	15	439,010	15	491,178	7·8	533,460
Dorset	627,200	115,319	8	124,093	16	144,009	10	159,252	9·9	175,043
Durham	679,360	160,361	11	178,623	17	207,673	22	255,910	27·7	326,684
Essex	929,480	226,437	11	252,173	15	289,424	10	317,367	8·6	344,929
Gloucester	780,470	250,809	12	280,514	18	331,015	15	387,019	11·4	431,383
Hereford	543,840	89,141	5	94,027	10	103,241	7	111,011	2·4	113,678
Hertford	404,480	97,527	14	111,654	16	129,211	10	143,541	9·6	157,307
Huntingdon	232,320	37,568	14	42,898	15	49,221	9	53,892	10·0	59,249
Kent	972,800	307,624	21	373,083	14	426,016	12	477,155	11·4	548,337
Lancaster	1,117,440	672,731	33	895,189	27	1,052,859	27	1,336,854	24·7	1,667,054
Leicester	511,360	130,981	16	150,419	16	174,571	13	197,483	9·5	215,862
Lincoln	1,665,280	208,557	14	237,921	17	277,038	12	310,566	16·2	360,882
Middlesex	17,920	519,159	17	595,275	30	1,144,531	19	1,358,250	16·0	1,576,636
Monmouth	341,120	45,582	36	62,127	15	71,833	36	98,130	36·9	134,333
Norfolk	1,392,640	273,324	7	291,999	15	344,368	19	409,654	5·7	412,664
Northampton	640,640	131,267	7	141,333	15	162,483	10	179,256	11·0	199,028
Northumberland	1,126,720	157,147	9	172,161	15	197,284	12	221,951	12·2	249,078
Nottingham	543,360	140,569	16	162,440	15	186,253	20	225,547	10·9	249,910
Oxford	462,720	109,299	9	119,191	15	136,921	11	151,761	6·2	161,213
Rutland	97,280	16,356	-	16,389	13	18,487	5	19,365	9·9	21,302
Salop	861,760	167,639	16	194,278	6	206,115	8	222,978	7	239,518
Somerset	1,023,360	273,749	12	305,586	17	357,514	13	404,093	7·6	435,087
Southampton (Hants)	1,018,560	219,549	22	267,598	24	332,268	11	370,103	12·9	417,911
Stafford	756,480	239,153	21	290,153	15	334,000	19	410,212	21·5	498,364
Suffolk	915,760	210,451	11	233,211	15	269,447	9	296,317	6·3	315,073
Surrey	474,880	269,159	20	323,551	23	399,258	22	486,354	19·5	582,078
Sussex	940,800	159,311	19	190,053	22	233,039	17	272,310	10·0	299,253
Warwick	562,560	208,140	17	243,573	21	294,532	23	362,040	19·3	401,715
Westmoreland	485,760	41,830	10	45,924	15	52,859	7	56,611	8·5	56,153
Wilts	860,800	184,107	5	193,528	15	222,112	9	242,156	7·7	258,914
Worcester	455,040	139,333	13	156,940	15	181,824	15	211,265	10·4	233,236
York, East Riding	711,040	110,942	16	128,137	14	146,010	10	160,801	13·2	182,036
City and Ainsty	2,110	24,337	12	27,294	14	31,151	17	36,574	8·3	39,611
North Riding	1,322,240	156,892	7	167,591	11	187,454	9	204,536	7·9	221,127
West Riding	1,620,480	563,854	16	653,916	22	801,624	23	976,540	18·2	1,154,101
Total	31,277,915	8,331,434	14½	9,538,827	17½	11,261,477	16	13,091,989	14·5	14,995,138
WALES	4,754,880	541,546	13	611,788	17	717,438	12	806,182	13·0	911,603

									Increase	Decrease	
SCOTLAND.											
Aberdeen	1,254,720	125,086	10	135,073	15	157,287	14	177,632	9·3		192,387
Argyll	2,032,640	71,850	11	79,709	14	90,810	4	100,973	-	5·7	95,171
Ayr	661,760	91,300	23	112,204	22	137,293	14	156,915	15·3		164,356
Banff	412,800	35,807	2	36,658	13	41,561	12	46,664	2·4		47,774
Berwick	284,800	30,242	1	30,559	8	33,155	8	34,168	1·1		34,535
Bute	143,040	11,721	8	12,671	15	14,757	5	14,151	1·1	-	13,974
Caithness	452,480	22,279	4	23,119	29	29,758	14	33,929	5·2		35,685
Clackmannan	30,720	10,856	11	12,010	10	13,263	11	14,729	30·9	-	19,315
Dumbarton	145,920	20,710	17	24,189	13	27,317	22	33,411	33·4	-	44,546
Dumfries	801,920	54,927	15	62,960	13	70,879	4	73,729	-	1·3	72,800
Edinburgh	296,960	192,994	21	233,007	39	191,514	15	219,543	27·5	-	279,874
Elgin (Moray)	309,760	39,307	5	39,109	11	51,162	10	51,271	2·3	-	52,214
Fife	308,480	95,717	13	107,814	13	121,849	14	138,339	8·8	-	140,140
Forfar	568,320	90,127	4	107,454	6	113,430	25	139,226	22·1	-	170,000
Haddington	174,080	29,986	4	31,161	13	35,147	3	36,145	-	0·7	35,880
Inverness	2,991,360	74,279	5	78,556	15	90,157	5	94,747	5·2	-	97,709
Kincardine	245,760	26,549	4	27,659	6	29,118	8	31,451	5·2	-	33,093
Kinross	46,080	6,745	4	7,045	7	7,562	17	9,028	-	3·5	8,763
Kirkcudbright	545,280	37,411	15	43,044	15	49,548	8	53,580	1·5	-	54,179
Lanark	661,760	146,879	31	191,778	27	244,347	30	317,819	31·5	-	426,074
Linlithgow	76,800	17,844	9	19,451	17	22,675	5	23,791	15·4	-	26,872
Nairn	124,800	8,237	-	8,271	9	9,008	4	9,354	-	1·5	9,217
Orkney and Shetland	419,200	46,824	-	46,133	15	53,184	10	58,358	4·8	-	61,095
Peebles	201,600	8,235	14	9,235	1	10,146	5	10,528	-	0·7	10,199
Perth	1,656,320	126,366	7	135,093	8	139,189	3	143,904	-	4·0	137,999
Renfrew	144,640	78,056	19	92,596	21	112,173	19	133,443	16·2	-	155,072
Ross and Cromarty	1,846,400	55,533	10	61,153	13	68,978	9	74,897	5·2	-	78,783
Roxburgh	657,280	33,648	11	37,350	10	40,892	7	43,663	5·4	-	46,017
Selkirk	166,400	5,070	16	5,847	13	6,637	2	6,833	16·9	-	7,990
Stirling	312,960	30,845	14	36,174	13	43,576	11	48,621	13·0	-	52,057
Sutherland	1,172,800	23,117	2	23,669	-	23,440	7	25,518	-	3·0	24,742
Wigtown	358,400	32,918	17	38,491	23	53,010	9	56,238	8·1	-	59,195
Total	19,944,960	1,599,068	14	1,805,688	16	2,093,456	13	2,365,114	10·7	-	2,620,184

SUMMARY OF GREAT BRITAIN.

England	31,277,915	8,331,434	14½	9,538,827	17½	11,261,477	16	13,091,989	14·5	14,995,138
Wales	4,754,880	541,546	13	611,788	17	717,438	12	806,182	13·0	911,603
Scotland	19,944,960	1,599,068	14	1,805,688	16	2,093,456	13	2,365,114	10·7	2,620,184
Army, Navy, and Registered Seamen, &c. afloat	-	470,999	-	640,509	-	319,300	-	277,017		188,453
Persons travelling on night of the 6th of June 1841	-	-	-	-	-	-	-	-	-	5,016
Islands in the British Seas	-	-	-	-	-	89,508	15·8	103,710	19·6	124,040
Total	56,477,755	10,942,049	15·1	12,596,808	14·9*	14,481,139	14·9	16,643,028	13·8	18,844,434

* For the purposes of comparison with the total of 1811, the population of the Channel Islands, as taken in 1821, has been omitted.

III. An Account of the Population of the principal Cities and Towns of England and Scotland in 1801, 1811, 1821, 1831, and 1841.

Name of Place.		1801.	Inc. or Dec. per Cent.	1811.	Inc. or Dec. per Cent.	1821.	Inc. or Dec. per Cent.	1831.	Inc. or Dec. per Cent.	1841. Same Limits as in 1801—1831.	1841. Present Limits.
ENGLAND.											
The Metropolis	- - -	864,845	Inc. 16·7	1,009,546	Inc. 21·4	1,225,694	Inc. 20·1	1,471,941	Inc. 14·8	1,690,084	1,873,676
Manchester, Salford, and suburbs	-	90,309	22·0	110,211	40·4	154,807	47·2	227,808	30·0	296,183	296,183
Liverpool, with Toxteth Park	-	79,722	25·7	100,246	31·5	131,801	43·6	189,242	39·6	261,298	286,187
Birmingham and suburbs	-	73,670	16·4	85,753	24·5	106,7 2	37·7	140,986	29·6	190,542	182,922
Leeds	Borough -	53,162	17·6	62,534	34·0	83,796	47·2	123,393	23·1	151,874	152,054
Bristol, with Barton Regis	-	63,645	20·1	76,133	14·8	87,779	18 3	103,886	17·7	122,296	122,296
Plymouth, Devonport & Stonehouse	Boroughs -	43,191	29·8	56,060	9·2	61,212	23·4	75,534	6 0	80,059	80,059
Sheffield	Town -	31,314	14·5	35,840	17·6	42,157	40·0	59,011	15·5	68,186	68,186
Rochdale (part of)	Parish -	29,092	28·0	37,229	26·5	47,109	24·1	58,441	16·2	67,889	67,889
Norwich	City -	36,832	1·2	37,256	35·0	50,288	21·5	61,116	2·0	62,344	62,344
Nottingham	Town -	28,861	18·7	34,253	18·0	40,415	2·4	50,680	4·8	53,091	53,091
Portsmouth (including Portsea)	Borough -	33,226	22·1	40,567	12·5	45,648	10·4	50,369	5·2	53,032	53,032
Preston	Borough -	11,887	43·6	17,069	44·0	24,575	34·7	33,112	51·4	50,131	50,131
Newcastle-on-Tyne	Borough -	28,366	Dec. 2·8	27,587	27·5	35,181	21·5	42,760	16·6	49,860	49,860
Leicester	Borough -	16,953	Inc. 36·5	23,146	30·1	30,125	34·5	40,512	25·2	50,733	48,167
Brighton	Parish -	7,339	63·7	12,012	105·4	24,622	66 3	40,634	14·8	46,661	46,661
Stoke-upon-Trent	Parish -	16,414	37·0	22,495	29·9	29,223	27·4	37,220	21·5	46,342	46,342
Ashton-under-Lyne	Parish -	15,032	21·9	19,072	30·8	25,067	29·4	35,597	37·8	46,304	46,304
Oldham	Township	12,024	38·8	16,690	89·7	31,662	49·5	52,381	31·5	42,595	42,995
Hull	Town -	22,161	9·6	24,299	17·6	28,591	15·3	32,958	26·3	41,629	41,629
Bath	City -	27,986	13·8	31,199	16·8	36,811	4·0	38,063	0·7	38,314	38,304
Blackburn	Township	11,980	25·9	15,085	45·4	21,940	23·5	27,091	35·2	36,629	36,629
Wolverhampton	Township	12,565	17·9	14,830	29·3	18,389	34·6	24,732	47·1	36,382	36,382
Merthyr Tydvil	Parish -	7,705	44 1	11,104	56·7	17,404	26·9	22,083	50 8	31,977	31,977
Bradford (York)	Township	6,393	21·5	7,767	68·3	13,064	77 8	23,223	49·5	34,560	31,560
Bolton, Great	Township	12,949	36·0	17,610	29·0	22,037	23·4	26,299	19·8	33,610	33,610
Bolton, Little	Chapelry -	4,867	47·5	7,079	30·8	9,258	59 3	12,596	25·3	16,153	16,153
Chatham and Rochester	Town and City -	17,522	25·4	21,972	10·8	24,063	9·6	26,376	25·7	33,174	33,174
Derby	Borough - -	10,832	20·4	13,043	32·6	17,423	35·6	23,627	38·6	32,741	32,741
Cheltenham	Borough - -	3,076	170·6	8,329	60·9	13,396	71·2	22,942	36·9	31,411	31,411
Exeter	City and County	17,398	8·6	18,896	24·3	23,479	20·3	28,242	10·9	31,312	31,312
Dudley	Parish - -	10,107	37·8	13,925	50·8	18,211	26·5	23,013	35·5	31,232	31,232
Coventry	City - -	16,034	11·8	17,923	18·5	21,242	27·4	27,070	13·6	30,743	30,743
York	City - -	16,145	12·8	18,217	14·1	20,787	20·2	25,000	5 9	27,818	28,818
Stockport	Township -	14,850	18·3	17,565	23·8	21,729	17·2	25,469	11·6	28,431	28,431
Southampton	County of Town	7,913	21·5	9,617	38·9	13,353	44·7	19,324	43·6	27,744	27,744
West Bromwich	Parish - -	5,687	31·6	7,485	27·0	9,505	61·3	15,327	70·4	26,121	26,121
Woolwich	Town and Parish	9,826	73·6	17,054	Dec. 0·3	17,008	3·8	17,661	46·0	25,785	25,785
Wigan	Bor. and Township	10,989	27·0	14,060	Inc. 20·0	17,716	17·3	20,774	22·8	25,517	25,517
Worcester	City - -	11,572	25·3	14,253	19·2	16,986	5 0	17,841	9·3	19,473	25,401
Ipswich	Borough -	11,356	22·8	13,948	25·6	17,475	17·5	20,528	23·1	25,264	25,384
Huddersfield	Bor. and Township	7,268	33·1	9,671	57·4	15,284	43·3	19,035	31·7	25,068	25,068
Cambridge	Borough -	10,087	10·1	11,108	27·3	14,142	47·9	20,917	16·9	24,453	24,453
Bishop's Wearmouth	Township	6,126	15·2	7,060	34·2	9,477	52·6	14,462	67·4	24,206	24,206
Macclesfield	Town - -	8,743	40·7	12,299	44·3	17,748	30·5	23,129	4·4	24,137	24,137
Yarmouth	Borough -	14,845	21·1	17,977	0·4	18,040	17·1	21,115	14·1	24,08 -	24,086
Oxford	City - -	11,694	10·5	12,931	26·5	16,361	26·2	20,649	15·1	23,834	23,834
Deptford	Town - -	17,518	15·0	19,855	0·1	19,862	Dec. 0·3	19,795	17·0	23,165	23,165
Chester	City - -	15,052	7·2	16,140	23·6	19,949	Inc. 9·9	21,344	8·3	23,115	23,115
Carlisle	City - -	10,221	22·6	12,531	23·5	15,476	29·9	20,040	15·0	23,012	23,012
Dukinfield	Township -	1,757	75·8	3,053	66·9	5,096	188·1	14,681	52·5	22,394	22,394
Northampton	Borough -	7,020	20·0	8,427	28·1	10,793	42·2	15,351	38·4	21,242	21,242
Walsall	Borough & Parish	10,399	7·6	11,189	6·5	11,914	26·5	15,076	38 4	20,852	20,852
Bury	Township -	7,072	39·5	9,762	42·3	13,893	40·5	19,506	37·3	26,810	26,810
Bilston	Township and Chapelry	6,276	39·5	9,646	21·4	12,003	20·7	14,492	39·3	20,181	20,181
Eccleshall Bierlow	Township -	5,362	22·5	6,570	38·7	9,113	50·9	14,279	40·0	19,984	19,984
Halifax	Township -	8,886	3·1	9,159	37·9	12,628	21·8	15,382	29·9	19,881	19,881
Gateshead	Township -	8,597	2·2	8,782	34·9	11,767	29·0	15,177	28·5	19,505	19,505
Warrington	Township -	10,567	11·8	11,758	15·6	13,570	18·0	16,018	18·4	18,981	18,981
Reading	Borough -	9,742	10·7	10,788	19·3	12 867	21·2	15,595	21·4	18,937	18,937
Shrewsbury	Borough -	14,739	12·7	16,606	25·1	19,602	8·6	21,297	Dec. 1·8	20,921	18,285
Maidstone	Borough - -	8,027	17·6	9,443	32·3	12,508	23·0	15,387	Inc. 17·3	18,086	18,086
Colchester	Bor. and Liberties	11,520	8·9	12,541	11·7	14,016	15·3	16,167	10·0	17,790	17,790
Sunderland	Town and Parish	12,412	Dec. 1·0	12,289	19·8	14,725	15·9	17,060	Dec. 0·2	17,022	17,022
Saddleworth	Chapelry - -	10,665	Inc. 17·9	12,579	10·5	13,902	15·0	15,986	Inc. 5·3	16,829	16,829
Swansea	Borough -	6,099	31·2	8,005	2·6	10,007	32·4	13,256	26·6	16,787	16,787
Lincoln	City - -	8,676	17·8	10,217	15·3	11,776	12·1	13,203	29·5	16,178	16,178
King's Lynn	Borough -	10,096	1·6	10,259	10·1	12,253	9·1	13,370	20·0	16,039	16,039
Canterbury	City - -	9,400	13·3	10,200	25·3	12,779	7·0	13,679	12·8	15,435	15,435
Wakefield	Township -	8,131	5·7	8,593	25·3	10,764	15·6	12,432	20·6	14,754	14,754
Heaton Norris	Township -	3,768	38·9	5,232	33·0	6,958	61·5	11,238	30·2	14,629	14,629
Kidderminster	Borough -	6,110	31·6	8,038	33·2	10,709	39·9	14,981	Dec. 4·0	14,399	14,399
Gloucester	City and County	7,579	9·3	8,280	17·4	9,744	22·5	11,933	Inc. 18·6	14,152	14,152
Durham	City - -	7,530	5·6	7,953	23·5	9,822	5·2	10,133	39·6	14,151	14,151
SCOTLAND.											
Edinburgh City (including North and South Leith)	- - -	82,560	24·7	102,987	34·2	138,235	17·1	161,909	2·8	166,450	138,182
Glasgow City and suburbs	- -	77,385	30·1	100,749	45·9	147,043	37·7	202,426	35·6	274,533	274,533
Paisley Town and Parish	- -	31,179	17·8	36,722	28·0	47,003	22·3	57,466	5·3	60,487	60,487
Aberdeen City	- - -	27,608	28·6	35,370	26·6	44,796	29·5	58,019	11·6	64,767	63,288
Dundee Burgh and Parish	- -	26,084	13·5	29,616	3·0	30,575	48·0	45,355	38·5	62,794	62,794
Greenock Town and Parish	- -	17,458	9·1	19,012	16·0	22,088	24·8	27,571	34·0	36,936	36,936

PORCELAIN, or CHINA WARE, a very fine species of earthenware. The first specimens of this fabric were brought to Europe from China and Japan. The best Chinese porcelain is of a very fine texture, white, semi-transparent, and sometimes

beautifully coloured and gilt; is infusible, and not subject to break by the sudden application of heat or cold. The Chinese term for the article is *tse-ki*. But the Portuguese, by whom it was first brought in considerable quantities into Europe, bestowed on it the name of porcelain, from *porcella*, a cup.

Common earthenware, sometimes of a very good quality, is manufactured in Canton, Fokien, and several other provinces of China. But it is a curious fact, that the beautiful porcelain imported into Europe is made only in the town of Kingtesing, in the province of Kyangsi. Its manufacture is fully described by Duhalde, in his account of China, under the head "Porcelain and China ware." The porcelain of Japan is decidedly inferior to that of Ch'ina; very little is imported, and it is valued only as a curiosity.

After porcelain began to be imported, its beauty soon brought it into great request, notwithstanding its high price, as an ornament for the houses and tables of the rich and the great. The emulation of European artists was in consequence excited. Very little information was, however, obtained as to the mode of manufacturing porcelain till the early part of last century, when the process was developed in a letter from a French Jesuit in China, who had found means to make himself pretty well acquainted with the subject. The knowledge that thus transpired, and the investigations of Reaumur and other chemists, prepared the way for the establishment of the manufacture in Europe. It was first commenced at Dresden, which has been famous ever since for the beauty of its productions; but the finest and most magnificent specimens of European china have been produced at Sèvres, in France, in the factory carried on at the expense of the French government.

British Porcelain Manufacture. — This, though unable to boast of such fine specimens of costly workmanship as have been produced at Sèvres and Dresden, is of much greater national importance. Instead of exclusively applying themselves to the manufacture of articles fitted only for the consumption of the rich, the artists of England have exerted themselves in preference to produce China ware suitable for the middle classes; and have succeeded in producing articles at once excellent in quality, elegant in form, and cheap. We are principally indebted for the improvements made in this important manufacture to the genius and enterprise of the late Mr. Josiah Wedgwood. This extraordinary man owed none of his success to fortuitous circumstances. Devoting his mind to patient investigation, and sparing neither pains nor expense in accomplishing his aims, he gathered round him artists of talent from different countries, and drew upon the stores of science for aid in pursuing the objects of his praiseworthy ambition. The early and signal prosperity that attended his efforts served only as an incentive to urge him forward to new exertions, and as means for calling forth and encouraging talent in others, in a manner calculated to promote the welfare of his country. Previously to his time, the potteries of Staffordshire produced only inferior fabrics, flimsy as to their materials, and void of taste in their forms and ornaments; the best among them being only wretched imitations of the grotesque and unmeaning scenes and figures portrayed on the porcelain of China. But such have been the effects resulting from the exertions and example of this one individual, that the wares of that district are now not only brought into general use in this country, to the exclusion of all foreign goods, which had been largely imported, but English pottery has since been sought for and celebrated throughout the civilised world, and adopted even in places where the art was previously practised. An intelligent foreigner, M. Faujas de St. Fond, writing on this subject, says, — "Its excellent workmanship, its solidity, the advantage which it possesses of sustaining the action of fire, its fine glaze impenetrable to acids, the beauty and convenience of its form, and the cheapness of its price, have given rise to a commerce so active and so universal, that, in travelling from Paris to Petersburg, from Amsterdam to the farthest part of Sweden, and from Dunkirk to the extremity of the south of France, one is served at every inn upon English ware. Spain, Portugal, and Italy are supplied with it, and vessels are loaded with it for both the Indies and the continent of America." — See the quotation in the *Account of the Porcelain Manufacture*, p. 16., in *Lardner's Cyclopædia*; for the statistical details with respect to the manufacture, see the article EARTHENWARE, in this work.)

The British porcelain manufacture is principally carried on at the potteries in Staffordshire, and at Worcester, Derby, Colebrook Dale, and other places.

Murrhine Cups. — It was long a prevalent opinion among modern critics, that the *vasa murrhina*, so famous in Roman history, were formed of porcelain. Pompey was the first who brought them to Rome from the East, about 64 years before the Christian æra. They were used as drinking cups, and fetched enormous prices; Nero having given, according to the common method of interpreting, 58,4*l*. for a single cup! The extravagance of the purchaser may, in this instance, be supposed to have increased the price; so that the degree of estimation in which these cups were held may be more accurately inferred from the fact, that, of all the rich spoils of Alexandria, Augustus was content to select one for his share. (*Sueton.* lib. ii. c. 71.) Pliny (lib. xxxvii. c. 2.) says they were made in Persia, particularly in Karamania. But those who contend they were China ware, chiefly found on the following line of Propertius: —

Murrheaque in Parthis pocula victor erat. — (Lib. iv. Eleg. 5. lin. 26.)

In despite, however, of this apparently decisive authority, Le Bland and Larcher have, in two very learned dissertations (*Memoires de Littérat.* tom. xliii.), which Dr Robertson has declared are quite satisfactory, endeavoured to prove that the *vasa murrhina* were formed of transparent stone, dug out of the earth in some Eastern provinces, and that they were imitated in vessels of coloured glass. — (*Robertson's Disquisition on India*, note 39.) Dr. Vincent (*Commerce and Navigation of the Ancients*, vol. ii. p. 723.) inclines to the opposite opinion; but the weight of authority is evidently on the other side. At all events, it is plain that if the murrhine cups were really porcelain, it had been exceedingly scarce at Rome, as their price would otherwise have been comparatively moderate. But it is most probable that the ancients were wholly unacquainted with this article; which, indeed, was but little known in Europe till after the discovery of the route to India by the Cape of Good Hope. — (For some further details on this question, see *Kippingii Antiq. Rom* lib. iv. c. 3.)

PORK, the flesh of the hog. Salted and pickled pork forms a considerable article of export from Ireland to the West Indies and other places.

Pork and Bacon exported from Ireland in the under-mentioned Years.

	Pork.		Bacon.			Pork.		Bacon.	
	Quantity.	Value.	Quantity.	Official Value.		Quantity.	Official Value.	Quantity.	Official Value.
	Cwt.	£	Cwt.	£		Cwt.	£	Cwt.	£
1815	151,719	214,278	236,349	327,378	1821	141,711	195,350	366,209	507,019
1816	105,585	143,125	217,668	315,203	1822	115,836	161,747	241,865	334,800
1817	138,095	186,285	191,085	264,498	1823	140,040	186,210	343,673	475,849
1818	119,513	163,462	210,956	297,231	1824	108,543	147,321	313,708	434,155
1819	130,334	166,416	221,134	310,580	1825	108,161	149,734	309,278	511,615
	142,431	197,312	269,736	363,747					

Most part of the bacon is exported to England — (see Bacon), — and also a good deal of the pork. The account cannot be brought further down than 1825, the trade between Great Britain and Ireland having since then been placed on the footing of a coasting trade.

PORT. See WINE.

PORT-AU-PRINCE, the capital of Hayti, or St. Domingo, in lat. 18° 33′ 42″ N., lon. 72° 27′ 11″ W. Population variously estimated, probably from 18,000 to 20,000. It is situated on the west coast of the island, at the bottom of a large and deep gulph. It was founded in 1749; since which, with few intervals, it has been the capital of French St. Domingo, as it is now of the entire island. It is partially fortified; the harbour being protected by a battery on a small island at a little distance from the shore. The country round is low and marshy; and the heat in the summer months being excessive, the climate is then exceedingly unhealthy. The buildings are principally of wood, and seldom exceed 2 stories in height.

Harbour. — The entrance to the harbour is between White Island and the southern shore. The depth of water varies from about 18 feet at ebb to about 21 do. at full tide. It is customary, but not compulsory, to employ a pilot in entering the harbour. They are always on the look-out. Ships moor head and stern, at from 100 to 500 yards from shore; loading and unloading by means of boats, as there are neither docks nor quays to assist these operations. The harbour is perfectly safe, except during hurricanes, which may be expected from August to November.

Hayti is, next to Cuba, the largest of the West India islands. It was discovered by Columbus, on the 5th of December, 1492. Its greatest length may be about 400 miles, and its greatest breadth 155. Its superficies is estimated at about 29,500 square miles. Three principal chains of mountains (from which emanate smaller mountain arms) run from the central group of Cibao. The whole of these are described as fertile and susceptible of cultivation, even to their summits; affording great variety of climate, which, contrary to what is the fact in the plains, is remarkably healthy. The soil of the plains is, in general, a very rich vegetable mould, exceedingly fertile, and well watered. There are several large rivers, and an immense number of smaller streams, some tributary and others independent. The ports are numerous and good. The harbour of Cape St. Nicholas, the fortifications of which are now in ruins, is one of the finest in the West Indies; being inferior only to the Havannah. Timber of the finest description is most abundant; and mines of gold, silver, copper, tin, iron, and rock salt, besides other natural productions, are said not to be wanting. The French were therefore fully justified in designating this magnificent island, *La Reine des Antilles.* The principal towns, besides Port-au-Prince, are Cap Haïtien, formerly Cap François, on the north coast, St. Domingo on the south, Les Cayes, and Jacmel.

Previously to the revolt of the blacks, Hayti was divided in unequal portions between the French and Spaniards; the former possessing the west, and the latter the eastern and larger portion of the island. The revolution began in 1789; and terminated, after the most dreadful massacres, and the destruction of a vast deal of property, in the total abolition of slavery, and the establishment of an independent black republic. The Spanish part of the island and the French were finally consolidated in 1822.

Population. — In 1789, the French part of Hayti was by far the most valuable and flourishing colony in the West Indies. The population was estimated at 524,000; of which 31,000 were white, 27,500 people of colour, and 465,500 slaves. The Spanish part of the island was much less densely peopled; the number in 1785 being estimated at 152,640; of which 122,640 were free people of all colours, mostly mulattoes, and the rest slaves. The population of the entire island, in 1827, was estimated by Humboldt at 820,000, of whom 30,000 were whites: but there are good grounds for thinking that that estimate was exaggerated, and that the present population does not exceed 600,000 or 700,000.

Exports. — There has been an extraordinary decline in the quantity and value of the articles exported from Hayti since 1789. Sugar, for example, has fallen off from 141,000,000 lbs. to almost nothing; coffee from about 77,000,000 lbs. to little more than 25,000,000 lbs.; cotton from 7,000,000 lbs. to perhaps 650,000 lbs.; indigo from 758,000 lbs. to nothing, &c.! Mahogany is almost the only article the exports of which have increased of late years. The following table illustrates what has now been stated. —

A General Table of Exports from Hayti, during the Years 1789, 1801, and from 1818 to 1826, both inclusive.

	Clayed Sugar.	Mu Sugar.		Cacao.	Indigo.		Woods.		Castor Oil.	Mahogany.	Cigars.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*				
1789	47,516,531	93,573,300	76,835,219	7,004,274	758,628	25,749					
1801	16,540	18,518,572	43,420,270	2,480,340	648,518	804	99,419	1,768,634		5,217	
1818	158	5,143,567	26,065,200	474,118	434,568			6,819,300	19,140	129,982	
1819	157	3,790,143	29,240,919	216,103	370,439			5,094,409	39,698	141,577	
1820	2,757	2,514,502	35,137,759	346,839	556,421		- -	1,919,748	97,600	129,506	
1821	-	600,934	29,925,951	820,563	264,792		- -	3,728,186	76,400	55,003	
1822	-	200,454	24,235,372	592,568	461,154		211,927	8,295,080	588,957	2,622,277	279,000
1823		14,920	33,302,837	332,256	335,540		- -	6,607,308	387,014	2,369,047	393,800
1824		5,106	44,269,084	1,028,045	461,694		- -	3,858,151	718,679	2,181,747	175,000
1825		2,020	56,034,800	815,697	339,937		- -	3,948,190	505,425	2,986,468	
1826		32,864	32,189,784	620,972	457,593		- -	5,307,74-		2,136,984	179,500

Gum Gualacum, in 1822, 7,338 lbs. — 1823, 13,056 lbs. — 1824, 68,692 lbs.

Imports. — The principal articles of import are provisions; such as flour, rice, mess and cargo beef, fish, &c., and timber, from the *U.* States; cotton goods of all sorts, Irish and Scotch linens, earthenware, cutlery, ammunition, &c. from England; wines, satins, liqueurs, jewellery, toys, haberdashery, &c. from France; and linens, canvass, gin, &c. from Holland and Germany.

The destruction caused by the excesses which accompanied the revolution explains a part of this extraordinary falling off: but the greater part is to be accounted for by the change in the condition of the inhabitants. The blacks, being no longer compelled to labour, and regarding with abhorrence the culture of sugar and the other occupations in which they had been principally engaged, sunk into a state of idleness and apathy. The condition of all the great branches of industry that were formerly carried on became, in consequence, most deplorable, and the commerce of the island was reduced within the narrowest limits. Its successive rulers have endeavoured, though with little success, to bring about a revival of industry. The *Code Rural*, enacted for this purpose by Boyer in 1826, is exceedingly stringent, its principal provisions being in fact copied from the regulations as to slaves embodied in the *Code Noir*. But even this code has had little influence; and as a proof of the low state of industry in the island, we need only state that sugar has wholly disappeared from the list of exports, and that the exports of coffee and most other articles seem to be diminishing. And this result is, after all, only what should have been anticipated. To expect that half-civilised Africans, under a burning sun, and without the wants or desires of Europeans, should be equally industrious, is to expect what is contradictory, and all but absurd. We subjoin

A Statement of the Quantities of the principal Articles exported from Hayti during each of the 3 Years ending with 1837.

Articles.		Quantities exported.		
		1835.	1836.	1837.
Coffee	lbs.	48,376,371	37,060,076	50,845,080
Logwood	—	15,015,232	6,756,404	6,056,238
Cotton	lbs.	1,061,217	1,075,655	1,013,171
Mahogany	feet	5,411,316	4,004,944	4,708,464
Cocoa	lbs.	592,344	570,484	
Tobacco, &c.	lbs.	2,085,776	1,422,715	
Cigars	No.	8,440	53,000	
Sugar	lbs.	1,092	10,110	
Hides	No.	44,951	14,891	
Old rags	lbs.	51,142	22,457	
Wax	—	1,255	1,720	
Ginger		8,761	13,909	

The trade of this country with Hayti is comparatively inconsiderable, the value of the exports from the U. Kingdom thither, in 1841, having amounted to only 251,979*l.*, of which more than 3-4ths consisted of cottons and linens; the imports consist of coffee, tobacco, and cotton wool; but the quantities of the last two articles are very trifling.

Port Charges. — The charges on a native and foreign ship of 300 tons are the same, and as follows:—

	Dollars.
Tonnage duty	300
Administrative	12
Commandante de place	12
Commissaire de guerre	12
Commandante de port	12
Director of customs	12
Interpreter	12
Treasurer	12
Doctor	12
Stamps for entry and clearing	16 50
Fountain tax	20
Pilotage	2
Total, currency	434 50

Custom house Regulations. — On arrival, the master of the vessel proceeds to the Custom-house with the interpreter, where he makes his declaration whether he discharges his cargo in the port. If he discharge, his invoices are translated, and the goods verified in the presence of the consignee, who is allowed to land and store them. On clearing outwards, the merchant pays the duties on the cargoes both ways, and exhibits a receipt at the office of the commissaire de guerre, commandante de place, and commandante de port, who sign a certificate that the vessel may depart.

Warehousing. — The warehousing and bonding system is established by law, but there are at present no buildings appropriated to the reception of bonded goods. Until very recently, goods were permitted to be bonded under this law in the merchants' stores; a late order has, however, suspended that indulgence. The rate is 1 per cent. per year, and no allowance made for waste or loss. Goods exported in the same vessel they arrive in, pay, if landed, ½ per cent. and wharfage fees.

Money. — The weight of the dollar is 416 grains; the ½ and ¼ dollar being in proportion. But nearly ⅓ the weight of the coin consists of tin or other alloy; so that the value of the dollar does not exceed 1*s.* 6*d.* sterling.

Weights in Hayti are divided as in avoirdupois and apothecaries' weight; but they are about 8 per cent. heavier than British weights.

Measures. — Same as those used in France.

Regulations as to Trade. — It is enacted, that all persons exercising any trade or profession, excepting that of cultivating the soil, must be provided with a patent or licence to carry on such trade or profession; that all strangers admitted as merchants into the republic must, in the first place, procure the permission of the president to take out a patent, which, when obtained, gives authorities them, under severe penalties, to carry on a wholesale business, not with each other, but with the Haytians, in the open ports, which are Port-au-Prince, Gonaives, Cap Haytien, Porta Plate, Santo Domingo, Jacmel, Les Cayes, and Jeremie. The minimum quantities of goods that may be sold are fixed by the same law. The Haytian consignee may be also a retailer, on taking out a corresponding patent.

A charge of 1,000 dollars is made for each patent to a foreigner trading to Port-au-Prince; 1,500 for Les Cayes, Cap Haitien, and Jacmel; and 1,000 for each of the remaining ports.

Duties. — The duties on all imported commodities consigned to foreign merchants are 17½ per cent. on an established tariff, whether they be brought in native or foreign ships, with the exception of those from the United States, which pay an additional 10 per cent. on the amount of the duties. Goods consigned to native merchants pay only 10½ per cent.

The following articles are duty free in all bottoms: Shot of all sizes, grenades, howitzers, bomb-shells, and other projectiles of artillery; iron and bronze cannon, mortars, muskets and bayonets, carbines, pistols, and cavalry sabres, briquets, or short swords for infantry; machines and instruments for simplifying and facilitating the cultivation of the soil, and the preparation of its products; horses and cattle, mules, asses, gold and silver coin; classical and elementary works, sewed in boards, or bound in parchment, for the instruction of youth.

The following is a list of articles absolutely prohibited, without reference to their place of growth: — Mahogany, logwood, lignum vitæ, fustic, coffee, cotton wool, cacao, raw and clayed sugar, rum, tafia, syrup, molasses; canes, whips, and umbrellas, containing swords, stilettoes, or other arms; books and other works, opposed to good morals.

Besides the export, there is also a territorial duty levied equally on the produce of the soil, whether exported in national or foreign ships.

The export of the following articles is strictly prohibited: — Gold and silver coin, side and fire arms, munitions, and other articles of war; old or new iron and copper; horses, brood mares, mules, asses, and wood for ship building.

The coasting trade is entirely confined to Haytian citizens.

The commerce of Port-au-Prince is carried on by various classes of persons. The imports from Europe and America are principally consigned to European and North American commission houses, besides a few Haytian establishments. The capital is one of the ports to which foreign merchants are confined by the law of patents; but they are, or at least were during the time of my residence, restricted by heavy penalties

to wholesale business. Of course they cannot deal with the consumers, but with the native retailers, who are chiefly women, styled "marchandes;" these employ hucksters, also women, who traverse the country, attend the markets, and give an account of their transactions to their employers, either every evening, once a week, or once a month, according to their character for integrity.

As the payments of the importer are generally in money, and there is only one important article of export — coffee — the purchases for returns can only be made after the crops have been gathered; and these are effected by brokers, who often bargain with a class of natives called coffee speculators, from their dealing for the chance of the market with the cultivators, and either sell to the best advantage, or fulfil contracts previously entered into.

Among the respectable *marchandes* there is said to be much good faith; but with the great body of the customers, I believe the merchants are obliged to use the utmost circumspection.

All the ordinary tradesmen, such as tailors and shoemakers, and even a water-proof hat manufacturer, are to be found at Port au-Prince. And I confess I was struck with the respectable appearance of several booksellers' shops, having looked in vain for such things both in Barbadoes and Antigua. The books are generally elementary, French publications, and romances. The works of Voltaire, Rousseau, and others of the same class, abound.

There are also two printing presses; one at which the government Gazette *Le Télégraphe* is printed, and the other from which the *Feuille du Commerce* issues. The former rarely contains more than the documents issued by the government; the latter occasionally some spirited papers, and is conducted by M. Curtois, who was for a short time director of the post-office.

The apothecaries' shops are numerous, as they ought to be in such a horrible climate, and are well supplied with all the contents of the French Pharmacopœia. There are also some tanneries, in which the bark of the mangrove is used as the tanning material. As far as I could ascertain, the great bulk of the border people were either of that class of Europeans, called in the French time "*petits blancs*," or people of colour. The labourers in town and country are generally black.

With the exception already referred to, we have derived these details with respect to Hayti partly from the communications to government, and the published *Notes of* Charles Mackenzie, Esq., late consul in that island; and partly from consular returns.

PORTERS AND PORTERAGE. Porters are persons employed to carry messages or parcels, &c.

In London, they are divided into different classes. It is enacted by 39 Geo. 3. c. 58., that the following rates shall be the maximum charge upon all parcels not exceeding 56 lbs. weight, in London, Westminster, Southwark, and the suburbs; viz.: —

	s.	d.
For any distance not exceeding ¼ of a mile -	0	3
Not exceeding ½ a mile - - - -	0	4
Not exceeding 1 mile - - - -	0	6
Not exceeding 1½ mile - - - -	0	8
Not exceeding 2 miles - - - -	0	10

And so in like manner the additional sum of 3*d*. for every further distance not exceeding ½ a mile.

Tickets to be made out at the inns, and given to the porters, who are to deliver them with the parcels; and any innkeeper not making out such tickets to forfeit not exceeding 40*s*. nor less than 5*s*.; porters not delivering, or defacing the same, to forfeit 40*s*., and if they make any overcharge they are to forfeit 20*s*. Parcels brought by coaches to be delivered *within six hours*, under a penalty not exceeding 20*s*. nor less than 10*s*. Parcels brought by wagons to be delivered *within twenty-four hours*, under a like penalty. Parcels directed to be left till called for, to be delivered to those to whom the same may be directed, on payment of the carriage, and 2*d*. for warehouse room, under like penalty. If parcels be not sent for till the expiration of a week, 1*d*. more for warehouse rent may be charged. Parcels not directed to be left till called for, to be delivered on demand, under the above penalty. *Misbehaviour* of porters may be punished by a fine not exceeding 20*s*. nor less than 5*s*. The porters of London have the exclusive privilege of taking up and carrying goods within the city, and the employment of any one else may be punished by fine.

Porters (Tackle House), are regulated by the city of London. They have the privilege of performing the labour of unshipping, landing, carrying, and housing the goods of the South Sea Company, the East India Company, and all other goods, except from the East country, the produce of the British plantations and Ireland, and goods coastwise. They give bond for 500*l*. to make restitution in case of loss or damage, and are limited to rates fixed by the corporation.

Porters (Tackle), are persons appointed by the city of London, and have granted to them the exclusive privilege of unshipping, loading, and housing pitch, tar, soap, ashes, wainscot, fir, poles, masts, deals, oars, chests, tables, flax and hemp, brought to London from the East country: also iron, cordage, and timber, and all goods of the produce of Ireland and the British plantations, and all goods coastwise, except lead. They are freemen of the city, give security in 100*l*. for fidelity, and have their names and numbers engraved on a metal badge. They are under the tackle porters; who may, in performing the business of the port, employ other labourers, if ticket porters be not at hand. — (*Montefiore's Dictionary.*)

Any person may bring goods into the city of London; but he is liable to a fine if he either take up, or carry, any within the city. It is astonishing that such absurd regulations should be still kept up: why should not the merchants of London, as well as those of Manchester, be allowed to employ any one they please in the conveyance of goods? Does any one doubt that competition would, in this, as in every thing else, be productive of the greatest advantage? The regulations in question merely tend to keep up oppressive privileges, injurious to the public interests, and disadvantageous even to those in whose favour they are enacted.

PORT LOUIS, or NORTHWEST PORT, the capital of the Mauritius, at the bottom of a triangular bay, the entrance to which is rather difficult, in lat. 20° 9′ 56″ S., lon. 57° 28′ 41″ E. Every vessel approaching the harbour must hoist her flag and fire 2 guns; if in the night, a light must be shown; when a pilot comes on board, and steers the ship to the entrance of the port. It is a very convenient port for careening and repairing; but provisions of all sorts are dear. In the hurricane months, the anchorage in Port Louis is not good; and it can then only accommodate a very few vessels. The houses are low, and are principally built of wood. The town and harbour are pretty strongly fortified. Almost all the foreign trade of the island is carried on here.

The Mauritius was so called by the Dutch in honour of Prince Maurice; but it was first settled by the French in 1720; and is indebted for most part of its prosperity to the skilful management of its governor, the famous M. de la Bourdonnais. It was taken by the English in 1810; and was definitively ceded to us in 1814.

Exports and Imports, &c. — Mauritius is pretty fertile, a considerable part of the surface being, however, occupied by mountains. Its shape is circular, being about 150 miles in circumference. The climate is healthy, but subject to hurricanes. The principal product of the island is sugar, which is now cultivated to the almost total neglect of every thing else; but it also produces excellent coffee, indigo, and cotton. The blackwood or ebony of the Mauritius is very abundant, and of a superior quality. Very little corn or grain of any kind is raised in the island; most articles of provision being imported. Previously to 1825, the sugar and other articles brought to Great Britain from the Mauritius were charged with the same duties as the like articles from India: but in the above-mentioned year this distinction was done away, and it was enacted (6 Geo. 4. c. 111. § 44.), that all goods of the growth, produce, or manufacture of the Mauritius, should, upon importation into any port of the U. Kingdom, be subject to the same duties and regulations as the like goods being of the growth, produce, or manufacture of the British colonies in the West Indies; and that the trade with the Mauritius should be placed as nearly as possible on the same footing as that of the West India islands.

This was a great boon to the Mauritius, and the exports of sugar from it have since rapidly increased. According to Milburn (*Oriental Commerce*, ii. 568.), they amounted, in 1812, to about 5,000,000 lbs. In 1818, they amounted to about 8,000,000 lbs.; and in 1824, to 23,334,533 lbs. Since 1826, nine tenths of

the sugar raised in the Mauritius has been shipped for the U. Kingdom. Its wonderful increase is seen in the following table : —

I. Account of the Quantities of Sugar imported into the U. Kingdom from the Mauritius during each of the 14 Years ending with 1842.

Years.	Quantities.	Years.	Quantities.	Years.	Quantities.	Years.	Quantities.
	Lbs.		*Lbs.*		*Lbs.*		*Lbs.*
1829	10,496,976	1830	34,399,580	1835	69,579,544	1840	61,041,008
1826	20,918,564	1831	37,963,936	1836	59,097,936	1841	80,304,544
1827	22,568,528	1832	60,679,760	1837	60,251,632	1842	77,835,580
1828	30,169,800	1833	59,247,424	1838	67,723,152		
1829	33,371,296	1834	67,246,320	1839	65,049,632		

II. Account of the Quantities and Values of the principal Articles of Native Produce exported from the Mauritius in 1836, specifying the Countries to which they were exported and the Quantities sent to each.

Articles.	Great Britain.	France.	Cape of Good Hope.	Madagascar.	Bourbon.	Asia.	Australia.	Foreign Ports.	China.	United States of America.	Total. Quantities.	Total. Value.
												£ s. d.
Arrack and rum - - gall.	2,221	60	1,115,425	-	-	-	3,267	-	-	-	15,021	880 2 0
Ebony - - lbs.	104,299	70,864	-	-	-	165,456	-	-	324,224	-	664,369	2,178 1 11
Cotton - - —	-	1,335	-	-	368	-	-	-	-	-	1,855	21 7 9
Tortoise shell —	-	1,073	-	-	-	-	-	-	-	-	1,441	1,069 2 0
Cloves - - —	-	2,579	5,678	-	-	6,019	-	-	8,755	-	23,031	692 11 10
Sugar - - —	33,758,911	340,184	1,017,344	-	-	45,324	5,915,017	96	1,254,219	85,337,317	786,430 19 5
												£791,134 4 11

The cultivation of sugar being found more profitable than that of coffee, the latter has been all but wholly abandoned. The exports of cotton are also inconsiderable. The exports of ebony in 1826 amounted to 2,082,783 lbs., of the estimated value of 9,017*l.*; but, as seen above, they had sunk in 1836 to 664,369 lbs. The principal imports consist of provisions, particularly grain and flour; the supply required for the use of the island being almost entirely derived from the Cape of Good Hope, Madagascar, India, Bourbon, &c. Earthenware, machinery, furniture, hardware, piece goods, wine, &c. are also largely imported. The total declared value of the exports from the U. Kingdom to the Mauritius in 1842 amounted to 244,922*l.*

In 1836, the population of the Mauritius amounted to 92,147 souls; of whom between 9,000 and 10,000 were whites (exclusive of the king's troops). The population of the Seychelles — small islands dependent on the Mauritius — amounted at the same time to near 8,000.

Monies, Weights, and Measures. — According to the regulations of government, the franc is deemed equal to 10*d.*, and the Spanish dollar to 4*s.* 4*d.* The government accounts are kept in sterling money; but merchants, shopkeepers, &c. keep their accounts in dollars and cents, and dollars, livres, and sous.

The measures and weights are those of France previously to the Revolution. 100 lbs. French = 106 lbs. English; the French foot is to the English foot as 1·06 to 1; but in practice they are supposed to be as 16 to 15. The velte = 1 gallon 7·8 pints English, but in commercial transactions it is always taken at 2 gallons.

Duties, &c. — A duty of 6 per cent. *ad valorem* is laid on all goods imported for consumption in British vessels from all quarters of the world. The duties on the goods imported in foreign ships are, for the most part, also 6 per cent. A duty of 25 cents, or 1*s.* 1*d.*, per cwt. is laid on all sugar exported in British bottoms, to all places except Bourbon; and an additional duty of 5 per cent. *ad valorem* is laid on all goods exported in foreign bottoms. The charges for pilotage, wharfage, &c. are fixed by government, and may be learned at the Custom-house. For the most part they are very moderate.

It will be seen that the Mauritius has not suffered nearly so much from the emancipation of the blacks as the West India islands, though there has been a very great falling off in the imports of sugar in 1843. The continued cultivation of the Mauritius, despite the emancipation of the slaves, has been principally owing to the importation of hill-coolies and other labourers from India; who, in fact, are enticed away by the same arts that were employed to entice the blacks from Africa, and are substantially slaves.

PORTO-RICO, the capital of the valuable Spanish island of the same name, on the north side of the island, on a peninsula joined to the main land by a narrow isthmus, lat. 18° 29′ 10″ N., lon. 66° 13′ 15″ W. The fortifications are very strong: the town, which stands on a pretty steep declivity, is well built, clean, and contains about 30,000 inhabitants.

Harbour. — The harbour of Porto-Rico has a striking resemblance to that of the Havannah, to which it is but little inferior. The entrance to it, about 300 fathoms in width, has the Morro Castle on its east side, and is defended on the west side by forts erected on 2 small islands. Within, the harbour expands into a capacious basin, the depth of water varying from 5 to 6 and 7 fathoms. On the side opposite to the town there are extensive sand banks; but the entrance to the port, as well as the port itself, is unobstructed by any bar or shallow.

The island of Porto-Rico lies in the same latitude as Jamaica. Though the smallest of the greater Antilles, it is of very considerable size. Its form is that of a parallelogram; being about 100 miles in length from east to west, with a mean breadth of about 38, containing an area of 3,750 square miles. Surface pleasantly diversified with hills and valleys; soil generally fertile. It has, however, suffered much from hurricanes; those of 1742 and 1825 having been particularly destructive. Since the breaking up of the old Spanish colonial system, the progress of Porto-Rico has hardly been less rapid than that of Cuba. Her population, which in 1778 was estimated at 80,650, amounted, according to a census taken in 1836, to 357,086, of whom 188,869 were whites, and only 41,818 slaves. It is obvious from this statement that a large proportion of the free inhabitants are coloured: but the law knows no distinction between the white and the coloured *roturier*; and this circumstance, as well as the

whites being in the habit of freely intermixing with people of colour, has prevented the growth of those prejudices and deep-rooted antipathies that prevail between the white and the black and coloured population in the U. States, and in the English and French islands.

Trade. — **Sugar and coffee are by far the greatest articles of export. Next to them are molasses, tobacco, cotton, rum, &c. The imports consist principally of flour, fish, and other articles of provision, lumber, &c. from the U. States; cottons, hardware, machinery, &c. from England; wines, silks, jewellery, perfumery, &c. from Spain and France; linen from the Hanse Towns; iron from Sweden, &c. Large quantities of rice, maize, &c. are raised in the island. The pasture lands in the north and east are superior to any in the West Indies for breeding and fattening cattle.**

Previously to 1815, Porto-Rico, being excluded from all direct intercourse with other countries, excepting Old Spain, was either stationary or but slowly progressive, the entire value of the exports in that year having amounted to only 65,274 dollars! But at that epoch a royal decree appeared, which exempted the trade between Spain and the Spanish colonies and Porto-Rico from all duties for 15 years; and she was then, also, permitted to carry on a free trade, under reasonable duties, with other countries. In consequence principally of these wise and liberal measures, but partly, also, of a considerable immigration of rich Spanish colonists from S. America, Porto-Rico has latterly made a most extraordinary progress. Great improvements have been effected in the police and internal administration, and roads have been constructed in all parts of the island.

The following statements as to the trade of Porto-Rico in 1839, taken from the *Balanza Mercantil*, published in the capital, afford the most conclusive proofs of the advancing prosperity of the island.

Account of the Value of the Imports into and of the Exports from Porto-Rico in 1839, specifying the Values of those imported and exported under different Flags.

Flags.	Imports.		Exports.	
	Dolls.	*Cwts.*	*Dolls.*	*Cwts.*
Spanish (from Spain)	725,740	40	400,401	86
Spanish coasters from St. Thomas	1,951,617	81	414,996	31
American	1,194,670	87	2,588,492	84
English	145,825	80	347,892	81
French	86,382	40	292,054	89
Hamburg, Altona, and Bremen	238,671	53	478,453	7
Dutch	8,615	47	10,965	
Portuguese	833	75	832	25
Swedish	—	—	119	
	4,350,358	3	4,534,198	3
In transit	1,111,848	93	982,413	57
Total	5,462,206	96	5,516,611	60

Account specifying the Quantities and Values of the principal Articles exported from Porto-Rico in 1839.

Articles.	Quantities.	Value.
		Dollars.
Cotton	11,880 cwts.	189,455·76
Sugar	692,458 —	2,423,603·40
Coffee	85,584 —	855,856·29
Molasses	5,311,740 gallons	396,757·99
Tobacco	43,203 cwts.	172,813·28
Rum	650 punchs.	16,241·66
Hides	6,758 cwts.	60,614·92
Horses and mules	293 —	11,563·00
Cattle	3,598 —	120,303·00
Timber	—	24,256·00
Rice, salt, &c.	—	28,308·31
Specie	—	150,389·00
		4,528,531·88
Cocoa, cottons, and other imported goods and exported	—	988,079·72
		5,516,611·60

Arrivals of Shipping in Porto-Rico in 1839.

Flags.	Vessels.	Tons.
Spanish	675	28,976
American	439	65,035
English	114	9,336
French	68	6,204
Danish	47	4,677
Swedish	2	61
Dutch	9	449
Hans Town	16	2,705
Portuguese	2	157
	1,392	116,598

Custom-house duties on imports	734,761·31	dolls.
Do. exports	241,062·09	do.
Do. dues on shipping	88,758·84	do.
Total	1,064,582·24	

PORTS. See HARBOURS.

POSTAGE AND POST-OFFICE. Postage is the duty or charge imposed on letters or parcels conveyed by post; the Post-office being the establishment by which such letters or parcels are conveyed.

1. *Establishment of Post-offices.* — Regular posts or couriers were instituted at a very early period, for the safe, regular, and speedy transmission of public intelligence. Herodotus informs us (lib. viii. c. 98.), that in Persia, men and horses, in the service of the monarch, were kept at certain stations along the public roads; and that the despatches, being given to the first courier, were by him carried to the second, and so on, with an expedition that neither snow, nor rain, nor heat, nor darkness, could check. A similar institution, under the name of *cursus publicus*, was established at Rome by Augustus, and was extended and improved by his successors. Horses and carriages were kept in readiness at the different stations along the public roads, not only for the transmission of despatches, but also for the conveyance of official personages, or others who had obtained an order from authority allowing them to travel post. By this means government was speedily apprised of whatever took place in the remotest corners of the empire; and instructions or functionaries could be sent to, or recalled from, the most distant provinces, with a celerity that would even now appear considerable. — (*Bergier, Histoire des Grand Chemins*, liv. iv. c. 4.; *Bouchaud sur la Police des Romains*, pp. 136—151.)

Posts appear to have been established, for the first time, in modern Europe, in 1477, by Louis XI. They were originally intended to serve merely, as the ancient posts, for the conveyance of public despatches, and of persons travelling by authority of government. Subsequently, however, private individuals were allowed to avail themselves of this institution; and governments, by imposing higher duties or rates of postage on the letters and parcels sent through the Post-office than are sufficient to defray the expense of the establishment, have rendered it productive of a considerable revenue. Nor, while the rates of postage are confined within due limits, or not carried so high as to form any serious obstacle to correspondence, is there, perhaps, a more unobjectionable tax.

English Post-office. — The Post-office was not established in England till the 17th century. Postmasters, indeed, existed in more ancient times; but their business was confined to the furnishing of post-horses to persons who were desirous of travelling expeditiously, and to the despatching of extraordinary packets upon special occasions. In 1635, Charles I. erected a letter office for England and Scotland; but this extended only to a few of the principal roads, the times of carriage were uncertain, and the postmasters on each road were required to furnish horses for the conveyance of the letters at the rate of 2½*d.* a mile. This establishment did not succeed; and at the breaking out of the civil war, great difficulty was experienced in the forwarding of letters. At length a post-office, or establishment for the *weekly* conveyance of letters to all parts of the kingdom, was instituted in 1649, by Mr. Edward Prideaux, attorney-general for the Commonwealth; the immediate consequence of which was a saving to the public of 7,000*l.* a year on account of postmasters. In 1657, the Post-office was established nearly on its present footing, and the rates of postage that were then fixed were continued till the reign of Queen Anne. — (*Black. Com.* book i. c. 8.)

From the establishment of the Post-office by Cromwell, down to 1784, mails were conveyed either on horseback, or in carts made for the purpose; and instead of being the most expeditious and safest conveyance, the post had become, at the latter period, one of the slowest and most easily robbed of any in the country. In 1784, it was usual for the diligences between London and Bath to accomplish the journey in *seventeen* hours, while the post took *forty* hours; and on other roads their rate of travelling was in about the same proportion. In consequence of this difference in point of despatch, a very great number of letters were sent by those conveyances; the law being very easily evaded, by giving them the form of small parcels.

Under these circumstances, it occurred to Mr. John Palmer, of Bath, afterwards comptroller general of the Post-office, that a very great improvement might be made in the conveyance of letters, in respect of economy, as well as of speed and safety, by contracting with the proprietors of the coaches for the carriage of the mail; the latter being bound to perform the journey in a specified time, and to take a guard with the mail for its protection. Mr. Palmer's plan encountered much opposition, but was at length carried into effect. The consequences have proved most beneficial: the use of mail-coaches has extended to every part of the empire; and while the mail is conveyed in less than half the time that was required under the old system, the coaches by which it is conveyed afford, by their regularity and speed, a most desirable mode of travelling. Mr. Palmer was the author of several other improvements in the economy of the Post-office; nor is there any other individual to whose exertions this department owes so much. — (*Macpherson's Hist. of Commerce*, anno 1784.)

The Scotch Post-office was established on its present footing in 1710: but, owing to the backward state of Scotland, the limited amount of its trade and population, and the extreme badness of the roads — (see ROADS), — it was very defective in most parts of the country till after the American war. In proof of this, we may mention that the first mail-coach, from London to Glasgow direct, arrived at the latter on the 7th of July, 1788. Previously to that period, the course of post from London to Glasgow was five days; this, however, is not to be entirely ascribed to the slowness of the conveyance by horseback; for the mail came round by Edinburgh, and was detained there *twelve hours*, or till the usual Edinburgh despatch was made up for Glasgow in the evening!

The construction of railways between most of the great towns of the empire has, within these few years, gone far to supersede the use of mail-coaches on the principal lines of road, and has added prodigiously to the facilities of correspondence and travelling. The journey from London to Liverpool, which had been accomplished by the mail, when in its most improved state, in about 20 or 22 hours, is now accomplished by railway in 9 or 10 hours! and on other roads in the same proportion. The principal expense of the Post-office consists, however, not so much in the conveyance of letters from place to place, though that amounts to a very large sum, as in their previous collection and their subsequent distribution. This necessitates the establishment of a vast number of subordinate offices in the remoter parts of the kingdom, many of which do not repay their expenses. This is particularly the case in Ireland, and in the Highlands and islands of Scotland.

It does not really seem, though the contrary has been sometimes contended, that the Post-office could be so well conducted by any one else as by government. It is indispensable to its satisfactory working that it should be conducted with the greatest regularity and precision; and that all the departments should be made subservient to each other, and conducted on the same plan. It is plain that such results could not be obtained in any extensive country otherwise than by the agency of government; and the interference of the latter is also required to make arrangements for the safe and speedy conveyance of letters to, from, and through foreign countries.

The organisation of the Post-office supplies one of the most striking examples of the advantages resulting from the division and combination of employments. "Nearly the same exertions that are necessary to send a single letter from Falmouth to New York will send 50,000. If every man were to effect the transmission of his own correspondence, the whole life of an eminent merchant might be passed in travelling, without his being able to deliver all the letters which the Post-office forwards to him in a single evening. The labour of a few individuals devoted exclusively to the forwarding of letters, produces results which all the exertions of all the inhabitants of Europe could not effect, each person acting singly." — (*Senior on Political Economy.*)

Rates of Postage. — Previously to the introduction of the new system of a uniform penny rate of postage in 1839, under the provisions of the act 2 & 3 Vict. cap. 52., the following rates of postage, increasing progressively according to the distance, were charged on all letters (not privileged) conveyed by post from place to place in Great Britain and in Ireland, and from places in Great Britain to places in Ireland, and conversely.

Great Britain.			Postage of a Single Letter in Pence.
From any post-office in Great Britain to any place not exceeding 8 miles from such office			2
For any distance above			
8 miles, and not exceeding 15 miles			4
15	20		5
20	30		6
30	50		7
50	80		8
80	120		9
120	170		10
170	230		11
230	300		12

And so in proportion; the postage increasing progressively 1*d.* for a single letter for every 100 miles.

Letters containing 1 enclosure charged with 2 single rates. Letters containing more than 1 enclosure, and not exceeding 1 ounce, charged with 3 single rates. Letters exceeding 1 ounce, whatever the contents may be, were charged with 4 single rates; and for every ¼ of an ounce above that weight, an additional single rate was chargeable.

Ireland.			Postage of a Single Letter in Pence.
From any post-office in Ireland to any place within the same, not exceeding 7 Irish miles from such office			2
Exceeding 7 and not exceeding 15 Irish miles			3
15	25		4
25	35		5
35	45		6
45	55		7
55	65		8
65	95		9
95	120		10
120	150		11
150	200		12
200	250		13
250	300		14

And for every 100 miles, Irish measure, above 300 miles, a further sum of 1*d.* Double and treble letters charged according to the same scale of advance as in England.

Great Britain and Ireland.

Rates of Postage taken in the Currency of the United Kingdom for the Port and Conveyance of Letters and Packets by Post, from any Place in Great Britain to any Place in Ireland, or from any Place in Ireland to any Place in Great Britain.

Distance.	Single Letter.	Double Letter.	Treble Letter or other under an Ounce Weight.	For every Ounce Weight, and for every Packet not exceeding an Ounce in Weight.
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
Not exceeding 15 miles, British measure	0 4	0 8	1 0	1 4
Exceeding 15, and not exceeding 20 such miles	0 5	0 10	1 3	1 8
20 — 30 —	0 6	1 0	1 6	2 0
30 — 50 —	0 7	1 2	1 9	2 4
50 — 80 —	0 8	1 4	2 0	2 8
80 — 120 —	0 9	1 6	2 3	3 0
120 — 170 —	0 10	1 8	2 6	3 4
170 — 230 —	0 11	1 10	2 9	3 8
230 — 300 —	1 0	2 0	3 0	4 0
300 — 400 —	1 1	2 2	3 3	4 4
400 — 500 —	1 2	2 4	3 6	4 8
500 — 600 —	1 3	2 6	3 9	5 0
600 — 700 —	1 4	2 8	4 0	5 4
700 —	1 5	2 10	4 3	5 8

Exclusive of an additional charge for the packets plying between the two countries.

On comparing the number of non-privileged letters conveyed by the general post with the gross amount of postage, it appears that of late years they had paid an average rate of about 7*d.* or 7½*d.* each.

Exclusive, however, of these rates of postage, letters posted in London and other large towns for delivery in such towns, were charged 2*d.* each in London, and 1*d.* each in the other towns in which such local posts were established.

In addition, too, to the letters on which postage was charged, all the principal officers of government, and the members of both houses of parliament, enjoyed (either to a greater or less extent) the privilege of "franking," or of sending and receiving letters by the post free of postage, and this privilege was very extensively exercised.

Post-Office Revenue. — The gross produce, deducting overcharges, of the post-office revenue of Great Britain, exclusive of Ireland, in the undermentioned years, has been —

Years.	Duty.	Years.	Duty.	Years.	Duty.	Years.	Duty.
	£		£		£		£
1722	201,804	1810	1,675,076	1830	2,653,720	1839	2,162,915
1755	210,693	1814	2,005,987	1835	2,107,677	1840	1,249,248
1775	345,321	1820	1,993,885	1837	2,103,994	1841	1,369,134
1793	745,238	1825	2,160,390	1838	2,116,798	1842	1,449,162
1800	1,083,950						

The progress of the Scotch branch of the post-office revenue has been quite extraordinary. In 1698, Sir Robert Sinclair of Stevenson had a grant from William III. of its entire produce, with an extra allowance of 300*l.* a year, on condition of his keeping up the post; but, after trial, he abandoned the undertaking as disadvantageous. In 1709, the Scotch post-office revenue was under 2,000*l.*; whereas its amount in 1838 was 223,491*l.* *gross*, and 211,543*l.* *nett*; having increased more than a *hundred* fold in little more than a century! In 1781, the Glasgow post-office produced only 4,341*l.* 4*s.* 9*d.*, while in 1839 it produced 47,527*l.* — (*Stark's Picture of Edinburgh*, p. 144.; *Cleland's Statistics of Glasgow*; *Finance Book for* 1838 *and* 1839, *&c.*)

The expenses of collecting the post-office revenue amounted, under the old system, to from 24 to 30 per cent. on the gross receipt. In 1842, however, they amounted, for the U. Kingdom, to 966,759*l.*, being no less than 60 per cent. on the gross revenue.

Introduction of the New System. — The increase of the post-office revenue, as evinced by the above statements, has been very remarkable. It is mostly, no doubt, to be ascribed to the increase of population, the diffusion of education, and the growing intercourse among all classes of the community; though a good deal must also be ascribed to the efforts made in the early part of the reign of George III. to suppress some of the grosser abuses that had grown out of the privilege of franking, and still more to the additions that were repeatedly made to the rates of postage. Unfortunately, however, the latter were, in the end, carried far beyond their proper limits, imposing a heavy burden on the public, without any corresponding advantage to the revenue. This is obvious from the fact of the post-office revenue having continued stationary for the 20 years ending with 1839; though, from the great increase of population and commerce during that period, it is obvious, had the rates of postage not been so high as to force recourse to other channels, the revenue must have rapidly increased from the termination of the war downwards. When the rates of postage are moderate, the greater despatch and security of their conveyance by post, prevent any considerable number of letters being sent through other channels. But when the rates become oppressive, when, for example, a postage (as under the late system) of 11*d.* is charged on the conveyance of a single letter between London and York, of 13*d.* between London and Edinburgh, and so on, a serious interruption is given to that facility of intercourse which is so important, at the same time that a very large proportion of the correspondence which is carried on is unavoidably forced into private channels. It was, no doubt, attempted to prevent the transfer of letters from the post, by forbidding, under heavy penalties, their conveyance by private parties. But, as might have been anticipated, this prohibition could not be enforced, and had little or no effect. Considering, indeed, the facilities which have long existed for the transmission of letters in parcels between different parts of the country, and the oppressive rates of postage, the wonder is, not that the post-office revenue was nearly stationary previously to 1839, but that it did not fall off. Although, however, the rates of postage then existing, amounting, as already stated, to an average charge of about 7*d.* or 7½*d.* on all single letters conveyed by the general post, were very decidedly too high, it did not therefore follow that an invariable charge of 1*d.*, whether a letter were conveyed 1 mile or 1,000 miles, or singly or with 10,000 others, was the precise charge that should have been imposed! But, notwithstanding this was rushing blindfold from one extreme, or rather absurdity, to another, and endangering a large amount of revenue without any equivalent advantage, the project, brought forward by Mr. Rowland Hill, for a uniform penny postage, to be paid in advance, was eagerly adopted. It must be admitted, too, that it had various recommendations in its favour. Being calculated to obviate trouble and save expense to the public, it could not fail to be generally acceptable, (what reduction of taxation is not?) especially to mercantile men and others having an extensive correspondence. No doubt, however, the scheme was far more indebted for its popularity to the oppressiveness of the old rates of postage, than to any intrinsic merits of its own. Had these rates been properly reduced in 1837 or 1838, that is, had the postage of letters of ½ oz. weight passing between Scotland and Ireland and London been reduced to 4*d.* or 6*d.*, and other letters in proportion, and mercantile circulars, advertisements, and notices of sales, &c. been allowed to pass under covers open at the ends at 1*d.* or 2*d.* each, we venture to say that the clamour for a uniform penny postage would never have made any way. But government, though hostile to the project, took no step calculated to stop the agitation in its favour.

They neither reduced the old rates of postage, nor attempted to give any increased facilities for the conveyance of letters by post. And it happened in this, as it all but invariably happens on similar occasions, that those who decline making reasonable and necessary concessions at the outset, are, in the end, compelled to concede a great deal more than would at first have been satisfactory. Such, at all events, was the case in this instance. The clamour for a uniform penny rate became too powerful to be resisted; and parliament, whether it were so inclined or not, was obliged to lend its sanction to the measure. The act 2 and 3 Victoria, cap. 52., for regulating the duty on postage, did not indeed enact that the charge for conveying letters of a given weight should, in all cases, be reduced to 1*d.*; but it was introduced for the avowed purpose of enabling the Treasury to take the necessary steps to bring the change about with the least inconvenience to all parties. In this view it gave the Treasury power to alter and reduce the rates of postage, without reference to the distance which letters may be conveyed, according to the weight of the letters, and not to the number or description of their enclosures: it also gave them power to adopt such regulations as they might think expedient as to stamped covers or envelopes; to suspend parliamentary franking, &c.

In virtue of the powers so conveyed, regulations have been issued (rendered permanent by the act 3 & 4 Vict. c. 96.) by which all inland letters, without regard to the number of enclosures or the distance conveyed, provided they be paid when posted or despatched, are —

If not exceeding ½ oz. weight, charged 1*d.*; 1 oz. 2*d.*; 2 oz. 4*d.*; 3 oz. 6d.; and so on, 2*d.* being added for every additional ounce up to 16 oz., beyond which, with the following exceptions, no packet, whether subject to postage or not, is received: —

1. Parliamentary petitions and addresses to her Majesty.
2. Parliamentary proceedings.
3. Letters and packets addressed to or received from places beyond sea.
4. Letters and packets to and from public departments.
5. Deeds, if sent open, or in covers open at the sides. They may be tied with string and sealed, in order to prevent inspection of the contents, but they must be open at the sides, that it may be seen that they are entitled to the privilege.
6. Bankers' parcels, despatched from London, and specially delivered at the General Post Office, under certain regulations.

With these exceptions, all packets above the weight of 16 oz. will be immediately forwarded to the Dead Letter Office.

All letters not paid when they are posted or despatched are charged *double the above rates.*

All parliamentary and official franking has been put an end to; but members of either house of parliament are entitled to receive petitions and addresses to her Majesty, and petitions to parliament, free of charge, provided such petitions and addresses be sent in covers open at the ends, and do not exceed 32 oz. weight.

The punctual delivery of letters may be insured by getting them *registered* when posted. A fee of 1*s.* is charged for the registration of each letter over and above the rate of postage to which it may be liable.

To facilitate the working of the plan, government furnish adhesive stamps of 1*d.* &c. each, which being pasted on letters, they are of course delivered to those to whom they are addressed free of any farther charge for postage; and it also furnishes stamped envelopes at the low rate of 24 for 2*s.* 3*d.*, the 3*d.* being for the paper and manufacture. Hence, as any quantity of stamps or of stamped envelopes may, in most parts of the country, be procured beforehand, the necessity that must otherwise have existed of paying the postage at the moment when letters are posted, has been pretty generally obviated.

Such are the more prominent features of the new system; and no doubt it has the recommendations of simplicity (if we may apply such a phrase to a uniform charge for services costing widely different sums) and cheapness in its favour, and has greatly facilitated correspondence. But it may, notwithstanding, be easily shown that its adoption was most unwise. It is, no doubt, very convenient for merchants, bankers, middlemen, retail dealers, and indeed for most persons, to get letters for 1*d.* that previously cost them 7*d.* or 7½*d.*; but their satisfaction is not the only thing to be attended to in forming a fair estimate of the measure. The public exigencies require that a sum of about fifty millions a year should be raised, one way or other; and so long as we are pressed by an unreasoning necessity of this sort, it is not much to say in favour of the repeal or diminution of any tax, that those on whom it fell with the greatest severity are delighted with the reduction. Sugar has, in England, become a necessary of life; and its consumption, to say the least, is quite as indispensable to the bulk of the people, and especially to the labouring classes, as the writing of letters. But would it, therefore, be a wise measure to repeal the duty on sugar, or to reduce it to 1*s.* a cwt.? It has been alleged, indeed, that taxes on the transmission of letters are objectionable on principle, and should therefore be repealed, independently altogether of financial considerations! But it is easier to make an allegation of this sort than to prove it. All taxes, however imposed, if they be carried (as was the case with the old rates of postage) beyond their proper limits, are objectionable; but provided these be not exceeded, we have yet to learn why a tax on a letter should be more objectionable than

a tax on the paper on which it is written, on the food of the writer, or on fifty other things.

It was contended, when the plan was under discussion, that there would be no loss of revenue, and that the increase of correspondence growing out of the reduction of the postage would be so vast as fully to balance the reduced rate of charge! But though there has been a great increase in the number of letters, it has fallen far short of Notwithstanding all that has been said about the *furor scribendi*, letter-writing is generally looked upon as a duty rather than a pleasure; and it does not follow, when the expense of postage is reduced, that the occasions for writing letters are proportionally increased.

The total *gross* receipt of the Post-office revenue of the U. Kingdom, deducting overcharges and returned letters, amounted in 1838 (before the late changes began) to 2,346,278*l.*, while the expenses of the establishment for the same year amounted to 686,768*l.*, leaving a *nett* revenue of 1,659,510*l.* In 1842, however, two years after the new system had been in full operation, the gross receipt of the Post-office revenue amounted to only 1,578,146*l.*, while the expenses of the establishment for the same year amounted to 977,505*l.*, leaving a nett revenue of only 600,641*l.*, being no less than 1,058,869*l.* under its amount in 1838. This, however, is not all. Of the Post-office revenue in 1838, 45,156*l.* consisted of postage paid by public offices, which, being a mere charge by one government department against others, must be deducted in order to learn the nett available revenue produced by the Post-office. Owing, however, to the abolition of franking, the postage charged against government departments is now greatly increased, and in 1842 amounted to no less than 122,161*l.* Hence it will be found, on deducting these sums, that in 1838 the Post-office produced to government, over and above all charges, a clear available income of 1,614,354*l.*, which in 1842 was sunk to 478,480*l.*, being a nett diminution of 1,135,874*l.*! The subjoined account sets these important particulars in the clearest point of view.

An Account showing the Gross and Nett Post Office Revenue, and the Cost of Management, for the United Kingdom, for each of the Years ending 5th January 1839, 1840, 1841, 1842, and 1843, excluding from the Account, whether of Gross Revenue or Cost of Management, any Advances that may have been made by the English to the Irish Post Office, and Advances to the Money Order Office.

Year ending	Gross Revenue.*	Cost of Management.†	Nett Revenue.	Postage charged on the Government Departments.	Nett Revenue, exclusive of Charges on the Government Departments.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
5th January 1839	2,346,278 10 0½	686,768 3 6½	1,659,510 17 6	45,156 0 11	1,614,353 16 7
" 1840	2,360,783 10 11	720,093 7 4	1,640,690 3 7	44,277 15 3	1,596,412 9 4
" 1841	1,941,294 5 8	858,977 10 5½	1,082,316 14 2½	107,761 3 8	974,555 1 6½
" 1842	1,578,146 4 0½	977,505 13 2½	600,640 11 10	122,161 8 9	478,479 17 1
" 1843	1,558,145 15 7½	922,294 10 3	635,851 5 4½	121,161 8 9	514,689 16 7½

* Namely, the gross receipts, after deducting the returns for "refused letters," &c.

† Includes over and above what are properly the expenses of collection, all payments out of the revenue, in its progress to the Exchequer, amounting to about 10,000*l.* a year in pensions to the Duke of Marlborough and others, except advances to the money order office.

‡ This year includes one month of the fourpenny rate.

It is plain, therefore, that the adoption of the new Post-office system has occasioned the sacrifice of above 1,100,000*l.* a year of revenue. And though it be true that a sacrifice of this amount might not, under other circumstances, have been of much consequence, it is to be borne in mind that it was incurred when the revenue was already inadequate to meet the expenditure, and when, consequently, the deficiency had to be otherwise provided for, though probably in some more onerous way. We should not, however, have thought the loss of revenue, nor even the miserable quackery of a uniform penny rate, a valid objection to the new plan, had there been no means other than its adoption of getting rid of the inconveniences attached to the old system. But such was not the case. All its defects might have been effectually obviated without any, or with but a very inconsiderable, loss of revenue. Had franking been abolished, and the old rates of postage so reduced that the average charge might have been about 2½*d.* or 3*d.* a letter, the revenue would not probably have lost any thing, while every really advantageous object effected by the present system would have been secured. Indeed, we see no good reason why the present rates of postage should not, and very many why they should, be doubled, or increased to 2*d.* for a letter weighing ½ *oz.*, 4*d.* for one weighing 1 oz., and so on. We are well convinced that, were this done, and the troublesome practice of forcing the prepayment of letters abandoned, the revenue would be nearly doubled, with little or no inconvenience to the public.

It will redound nothing to the credit of the new system should the Post-office revenue increase while it is maintained; for this will necessarily follow from the increasing population, wealth, commerce, and education of the country. The revenue would increase quite as fast under any reasonably well contrived system; all taxes on ar-

ticles in general use are sure, provided they be not excessive, to increase with every increase of population and wealth.

The abolition of franking, which, however, is in nowise connected with a penny rate of postage, is by far the least exceptionable of the late alterations. Franked letters were in most instances addressed to those who could best afford to pay the expense of postage; and who in this way escaped a burden that fell with its full weight on their less opulent and less known neighbours.

Money Orders. — The granting of money orders at the different post-offices for the payment of sums of *5l.* and under, is a very great accommodation to the public, and is very extensively resorted to. Such orders cost *3d.* if for *2l.* or under, and *6d.* for all sums between *2l.* and up to *5l.* As orders are not paid unless the parties in whose favour they are drawn, or other parties well known to the postmaster by whom they are payable, appear to receive payment, there is no risk of the money getting into improper hands. The following account shows the great increase in this department.

Return of the Number and Amount of Money Orders issued and paid in England and Wales during the different Quarters, from that ending on the 5th of April, 1839, to that ending on the 5th of July, 1843.

For the Quarters ending	Money Orders issued.		Money Orders paid.		Total Amount passing through the Office.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		£ s. d.		£ s. d.		£ s. d.
1839.						
5th of April - -	28,878	49,496 5 8	25,785	45,237 14 9	54,623	92,734 0 5
5th of July - -	31,612	59,099 9 5	28,615	50,154 18 6	63,757	109,254 7 11
5th of October - -	38,510	64,956 7 8	31,909	54,768 3 3	70,419	118,824 10 11
1840.						
5th of January - -	40,763	67,411 2 7	37,665	60,425 6 1	78,428	127,836 8 8
5th of April - -	76,145	119,932 12 1	70,857	117,940 0 4	147,002	237,872 12 5
5th of July - -	94,215	151,331 15 8	82,358	135,593 0 2	176,573	286,927 15 10
5th of October - -	122,120	196, 07 14 3	110,227	170,084 0 6	232,647	366,991 14 9
1841.						
5th of January - -	189,084	331,651 14 8	165,940	316,628 17 2	355,024	651,281 11 10
5th of April - -	275,870	505,518 12 5	271,201	561,554 14 6	540,071	1,140,095 6 9
5th of July - -	280,884	608,774 11 2	291,884	615,840 7 7	581,768	1,224,614 18 9
5th of October - -	334,071	661,099 9 0	326,193	651,955 18 6	660,264	1,313,055 7 6
1842.						
5th of January - -	390,280	820,576 11 10	376,582	808,699 10 4	766,862	1,629,276 2 2
5th of April - -	419,550	890,575 17 1	415,804	887,927 15 7	835,134	1,778,503 12 8
5th of July - -	427,452	885,803 4 5	408,564	886,140 10 5	831,016	1,771,963 14 10
5th of October - -	452,205	901,510 1 5	423,580	892,491 7 5	855,595	1,794,051 8 10
1843.						
5th of January - -	494,757	1,031,992 7 2	487,137	1,025,900 9 2	981,194	2,057,892 16 4
5th of April - -	512,798	1,080,749 2 2	508,150	1,075,157 18 3	1,021,928	2,155,907 0 5
5th of July - -	490,723	1,035,645 5 11	480,599	1,023,138 12 5	987,422	2,058,781 18 4

Account of the Expense incurred by the Public in the Conveyance of the Mails, &c. in the U. Kingdom in 1842.

Great Britain.	£ s. d.	£ s. d.	Ireland.	£ s. d.	£ s. d.
Conveyance of mails, &c.	-	408,599 2 10	Conveyance of mails, &c.	66,309 11 10½	
Deduct transit postage	39,002 3 6		Deduct ship letter payments	194 8 11	
ship letter payments	12,989 19 6½				66,115 2 11½
		51,992 3 0½			
		£356,106 19 6½			£422,522 2 8½

Despatching of Letters. — Full details as to the posting of letters in London may be found in *Kelly's Post-office Directory* — a useful and valuable publication, to which we beg to refer. It is sufficient here to state that, speaking generally, letters may be put into the receiving boxes of the different post-offices throughout the country at all hours of the day, and mostly, also, of the night. The mails for particular places are made up at certain specified hours, of which public intimation is given; and letters put in after those hours are not of course despatched till next mail.

Letters to be despatched from the General Post-office, London, on the day they are posted, are received at the general post receiving houses till ½ past 5 P. M.; and by the letter-carriers ringing bells (on payment of *1d.* with each letter or newspaper), from ½ past 4 till ½ past 5 P. M.; at the branch post-offices, at Charing Cross, Old Cavendish Street, and Borough, till 45 min. past 6 P. M. with an additional *1d.* stamp; at the branch post-office, Lombard Street, till 7 P. M., with an additional *1d.* stamp; and at the general post-office, in St. Martin's le Grand, till ½ past 7 P. M., upon payment of a fee of *6d.*

Letters to pass by foreign mails, except those for India, *viâ* Marseilles, which must be posted at the same hours and under the same regulations as inland letters, are, on Tuesdays and Fridays, received at the branch offices, Charing Cross, Old Cavendish Street, and 108, Blackman Street, Borough, until 8 P. M.; at the general post-office, St. Martin's le Grand, and at the branch office in Lombard Street, until 10 P. M.; and at St. Martin's le Grand only from 10 until 11 P. M. on payment of a fee of *1d.*, and after 11 and until half-past 11 P. M. on payment of a fee of *6d.* The letter boxes are invariably closed immediately after the striking of the clock.

Foreign and ship letters addressed London only, for persons whose residences are not known, are copied into lists which are hung up daily in the hall of the general post-office. Parties writing their addresses opposite to their names will receive their letters on the following morning.

Non commissioned officers, captains' stewards, seamen, and soldiers, can send and receive letters to and from the East Indies by the overland mails, *viâ* Southampton, under the weight of half an ounce, on their own private concerns only, while they are employed on her Majesty's service, or in the service of the East India Company, for *1d.*

Letters coming from a Seaman, or from a Sergeant, Corporal, Drummer, Trumpeter, Fifer, or private Soldier. — The *1d.* must be paid when the letter is put into the post-office. The name of the soldier or sailor, his class or description, and the name of the ship or regiment, corps or detachment, to which he belongs, must be specified. And the officer having the command must sign his name, and specify the name of the ship or regiment, corps or detachment, he commands.

Letters going to Seamen or Soldiers. — The *1d.* must be paid at posting, and the direction must specify the class of person, and the ship, regiment, or corps to which he belongs.

The postage upon soldiers' and seamen's letters received from parts beyond sea, without the penny having been pre-paid, is *2d.* in addition to the ship letter gratuity, if received by private ships.

3d. postage is charged on letters addressed to soldiers and seamen at the following places:—River Gambia, Sierra Leone, Goree, Senegal, Cape Coast Castle, Fernando Po, Coast of Africa, Ascension (Isle), and China. To St. Helena, the East Indies, and New South Wales, *1d.* Seamen's and soldiers' letters from abroad by private ships are chargeable with *3d.* each.

Warrant officers either in the army or navy, or masters' mates of the navy, are not entitled to receive or transmit letters at less than the usual rates of postage.

Printed votes and proceedings of the imperial parliament, or of the colonial legislatures, are charged —

Under 4 ounces - - - -	- *1d.*
Above 4 and under 8 ounces - -	- *2d.*
Above 8 and under 12 ounces - -	- *3d.*, and so on.

Such votes and proceedings, whether paid or unpaid, pass at these rates between places in the U. Kingdom as well as to the colonies by packet. To those places to which there are no packets, they may be forwarded by private ships, at double the above rates. They are not, however, forwarded to the East Indies, *viâ* Southampton and Alexandria, nor to places through France, under the full rates of letter postage. The postmaster general is authorised (if he shall see fit) to delay the transmis-

sion of printed votes and proceedings in parliament for any space not exceeding 24 hours from the time at which the same would otherwise have been forwarded.

Stamps. — The date shows when the letters were received at the post office.

The circular stamp of black ink, at the back of the letter, is used when the postage is paid on delivery.

Ditto of red ink, on the face of the letter, with the word "Paid," when the postage has been paid at the time of posting the letter.

Ship Letters. — The single uniform rate on letters between the U. Kingdom and places beyond sea, when conveyed by private ships, is 8d., with the following exceptions, viz.: to or from Hamburg, Lubeck, Bremen, and the Duchy of Oldenburg, the rate is 6d.; to or from France, 10d.; and to or from Holland, 1s. On letters forwarded by private ships the postage must be paid in advance, except to France and Holland, to which countries the payment is optional. The respective rates of 10d. to France and of 1s. to Holland includes the French and Dutch postage to destination.

The rates of postage on ship as on other letters are taken by weight: —

Not exceeding ½ oz.	-	Single.
Not exceeding 1 oz.	-	Double.
Not exceeding 2 ozs.	-	Quadruple.
Not exceeding 3 ozs.	-	Sextuple, and so on.

Persons exempted from Ship Letter Postage. — The owners, charterers, or consignees (resident in the U. Kingdom), and the owners, consignees, and shippers of goods on board vessels inward bound, are entitled to receive their letters free from sea postage, to the extent collectively of 6 ounces in weight, by any 1 vessel to any 1 such person. In the case of vessels coming from Ceylon, the Mauritius, the East Indies, or the Cape of Good Hope, for an owner, charterer, or consignee, of such vessel, the letters may be collectively twenty ounces in weight. The owner, charterer, or consignee must be described as such on the address and superscription; and in the case of owners, shippers, or consignees of goods, it must also appear by the ship's manifest that they have goods on board the vessel. Such persons are entitled to have their letters which come within the above conditions before the master of the vessel delivers the other letters in his charge to the post-office.

Every person who shall, with intent to evade any duty of postage, falsely superscribe a letter as being the owner, or the charterer, or the consignee of a vessel conveying the same, or as the owner, or the shipper, or the consignee of goods shipped in such vessel, shall for every such offence forfeit 10*l*.

Mails made up in London. — Letters (except those for India *viâ* Marseilles, which must be posted at the same hours as inland letters) for the foreign mails are received at the branch offices, Charing Cross, Old Cavendish Street, and 108, Blackman Street, Borough, until 8 o'clock at night, on Tuesday and Friday, and till 10 at St. Martin's le Grand and Lombard Street: at St. Martin's le Grand only they will be received after 10, and up to 11 P. M., on payment of a fee of 1d.; and after 11 until half past 11 P. M., on payment of a fee of 6d.

	When made up in London.	When due.
France	Daily	Daily.
Belgium	Monday, Tuesday, Thursday, & Friday	Sunday, Monday, Thursday, & Friday.
Holland	Tuesday and Friday	Monday and Thursday.
Hamburg, Sweden, and Norway	Tuesday and Friday	Tuesday and Saturday, but usually arrive on previous day.
Dublin	Twice a day	Twice a day.
Waterford	Daily	Daily.
Donaghadee	Daily	Daily.
Guernsey and Jersey	Tuesday and Friday	Monday and Thursday.

Lisbon, Madeira, *viâ* Lisbon, Vigo, Cadiz, Oporto, and Gibraltar	Every Thursday morning.
Malta, Greece, and Ionian Islands, *viâ* Southampton	Twice in each month, viz.: — On the first morning of every month, and on the Thursday morning nearest to the 15th of every month.
Syria, Egypt, India, and China, *viâ* Southampton	1st morning in each month.
Brazil, Buenos Ayres, Madeira, and Canary Islands	1st Tuesday in each month.
British North America, Bermuda, and U. States	3rd and 15th of every month, except in the winter months, December, January, February, and March, and then on the 3rd only.
New South Wales	Last day of each month.
Jamaica, Leeward Islands, Hayti, Porto Rico, and Cuba	2nd and 17th morning of every month.
Mexico, Panama, New Grenada, and Venezuela	2nd morning of every month.

The mails despatched every Thursday for Vigo, Oporto, Lisbon, Cadiz, and Gibraltar are forwarded by steam vessels from Southampton to Gibraltar.

The mails for Malta, Greece, and the Ionian Islands, despatched from London on the Thursday nearest to the 15th of the month, are conveyed from Gibraltar to Malta by her Majesty's steam packets employed in the Mediterranean.

The mail of the 1st day in each month is forwarded by the same packet from Southampton to Alexandria, leaving mails at Malta.

The mails for Greece and the Ionian Islands are conveyed from Malta every fortnight, by steam packets, which start after the arrival of the mails from England.

The mails despatched every Thursday for Vigo, Oporto, Lisbon, Cadiz, and Gibraltar are forwarded by steam vessels from Southampton to Gibraltar.

The mails for Egypt, India, and China are forwarded direct from Southampton on the 1st of each month by steam packets.

From August to January inclusive, the packet touches at Pernambuco and Bahia, on her outward passage to Rio Janeiro, and the other 6 months on her homeward.

North America and British and Foreign West Indies, from Liverpool. — The mails for North America are forwarded by steam packets, which leave Liverpool twice a month immediately after the arrival of the London mails of the 3d and 15th, unless either of these should fall on a Sunday, and then on the succeeding day. During the winter months, viz. December, January, February, and March, but one mail, that of the 3d, is despatched.

Rates of Postage within British North America. — Letters forwarded to or from British North America by the Liverpool packets, or by private ships, passing direct between the U. Kingdom and British America, are charged with a uniform colonial rate of 2d. the half ounce when posted or delivered at any other towns than the ports of Halifax, Nova Scotia, or St. John's Newfoundland.

When not conveyed direct between the U. Kingdom and British America, but forwarded through the United States, they are liable to the full internal rates, according to distance.

American and West Indian Letters.

	Rates, paying the Postage optional, excepting Places marked thus *, which must be paid with.		
	Not exceeding ½ Oz.	Not exceeding 1 Oz.	Not exceeding 2 Oz.
	s. d.	s. d.	s. d.
North America, viz. — Quebec, Montreal, and all parts of Canada, Nova Scotia (Halifax excepted), Prince Edward's Island, and New Brunswick, conveyed direct by the contract packets (a packet postage, and 4d. uniform colonial rate)	1 2	2 4	4 8
*If forwarded *viâ* Boston, the above places are charged	1 0	2 0	4 0
Halifax, Newfoundland, * New York, the Bermudas, and the * United States	1 0	2 0	4 0
British West Indies, &c., including Barbadoes, New Providence, Turk's Island, Bahamas, Antigua, Bermuda, Caracoa, Demerara, Dominica, Grenada, St. Lucia, Montserrat, Nevis, St. Vincent's, St. Kitt's, Tobago, Tortola, Trinidad, and the port of Kingston in Jamaica	1 0	2 0	4 0
Jamaica (port of Kingston excepted)	1 8	2 4	4 8
Foreign West Indies, including * Guadaloupe, * Martinique, * St. Thomas, * Curaçoa, *Surinam, *St. Martin's, *Santa Cruz, Porto Rico, and Hayti	1 5	2 10	5 8

Postage on letters to the British West Indies (Jamaica excepted), 1s. for each single letter, and so on in proportion from all parts of the U. Kingdom, without any charge for inland postage.

On letters to Jamaica (with the exception of Kingston, the packet port, to which the postage is 1s. only) the uniform rate is 1s. 2d. the single letter.

All letters addressed to North America are forwarded by the contract steam packets, and charged accordingly, unless the words "By Private Ship" be plainly written on them.

N. B. — Letters for Canada, conveyed by the North American packets from Liverpool, if specially addressed *viâ* "Boston," will be forwarded by that route, in the United States mail, provided the packet postage be paid in advance.

Letters rid France. — A large portion of the letters to and from India, as well as to various parts in Europe, are now sent through France; and a convention has lately been negotiated with that country, by which the transit rate on letters weighing under ½ oz. passing through France, has been fixed at 8d., which is also the British rate on such letters not exceeding ½ an oz. When conveyed beyond the French frontier the additional foreign postage has of course to be paid.

India Letters. — Mails for India are made up on the 4th of every month, and despatched *viâ* Marseilles, whence they are forwarded by British steamers to Alexandria, and again by steamers from Suez to Bombay. All letters are sent by this route unless otherwise addressed. Postage paid in advance 1s. 10d. to Bombay for a letter under ½ oz., and 2s. 3d. for one under 1 oz. Mails for India are also forwarded *viâ* Southampton on the 1st of every month. Postage by this route 1s. for a letter not exceeding ½ oz. Letters intended to go by Southampton must be addressed "*viâ* Southampton."

Russia. — Mails for Russia and the north of Europe are despatched every Tuesday and Friday *viâ* Hamburg. Postage 1s. 8d. not exceeding ½ oz. Letters for Russia may also be sent through France and Holland.

Holland.—Letters forwarded every Tuesday and Friday, paid or unpaid, at the rate of 1*s.* on letters not exceeding ½ oz. The British rate of 8*d.* on letters passing to Germany must be paid in advance.

Letters for the following states are forwarded through the office of the Prince of Tour and Taxis, when sent *viâ* France.

A List of the Northern States of Europe, and the German States, which are served by or forwarded through the office of the Prince of Tour and Taxis.

Northern States.

Brunswick	Mecklenburg Strelitz
Denmark	Oldenburg
Hanover	Saxony
Mecklenburg Schwerin	Sweden and Norway.

German States.

Bremen, Frankfort, Hamburg, Lubeck } Free cities	Reuss
Hesse Darmstadt	Saxe-Altenburg
Hesse (Electoral)	Saxe-Coburg-Gotha
Hesse Homburg	Saxe-Meinengen
Lippe-Detmold.	Saxe-Weimar
Nassau	Schaumberg Lippe
	Schwartzburg-Rudolstadt
	Schwartzburg-Sonderhausen
	Wurtemburg.

Portugal and Spain.—Mails are despatched *viâ* Southampton every Thursday morning. Postage to Portugal, which must be paid in advance, 1*s.* 9*d.* for a letter not exceeding ½ oz.; to Spain 2*s.* 2*d.* Letters for the Peninsula may also be sent daily through France. For farther details as to foreign and other postage see *Kelly's Directory.*

Statement of the Number of Letters delivered in the United Kingdom in one Week of each Calendar Month of 1842 and 1843.

Weeks ending	England and Wales.				Total Ireland.	Total Scotland.	Total United Kingdom.
	Country Offices.	London, Inland, Foreign, and Ship.	London District Post.	Total England and Wales.			
1842.							
23 January	2,165,323	567,636	481,206	3,214,165	421,273	423,245	4,058,683
20 February	2,385,607	581,571	522,634	3,489,812	486,909	471,763	4,448,484
20 March	2,100,176	560,433	448,195	3,108,804	403,714	451,768	3,964,286
24 April	2,061,679	579,332	455,279	3,096,290	428,782	404,441	3,929,513
22 May	1,962,940	544,120	485,350	2,992,390	409,848	406,736	3,808,974
19 June	2,015,659	549,953	467,371	3,032,983	412,689	412,688	3,858,360
24 July	2,093,027	566,462	431,377	3,090,866	414,202	404,464	3,909,532
21 August	2,083,969	544,113	380,682	3,008,764	405,097	420,019	3,833,880
25 September	2,159,975	556,099	382,191	3,098,265	420,078	425,700	3,944,043
23 October	2,166,126	561,487	400,713	3,128,326	429,491	425,948	3,981,768
20 November	2,249,034	595,646	416,341	3,282,021	471,031	446,194	4,209,246
25 December	2,205,521	576,367	496,360	3,278,248	446,534	435,107	4,160,189
1843.							
22 January	2,274,241	583,293	485,376	3,342,910	462,148	445,152	4,250,190
19 February	2,160,241	583,230	536,060	3,279,531	498,084	464,717	4,242,332
19 March	2,251,513	599,972	482,109	3,340,615	451,102	473,521	4,265,158
23 April	2,113,858	567,529	486,699	3,164,066	425,856	430,324	4,020,246
21 May	2,191,226	612,605	525,006	3,331,837	441,866	458,955	4,232,658
21 June	2,161,723	573,628	482,967	3,218,318	457,304	456,246	4,091,868
21 July	2,222,041	596,766	473,697	3,292,504	449,103	446,634	4,188,241
21 August	2,213,345	600,515	413,580	3,227,278	425,578	449,712	4,102,568
21 September	2,269,969	580,596	393,756	3,244,111	443,401	444,055	4,131,747
21 October	2,305,511	592,562	459,478	3,357,551	447,523	446,875	4,251,749
21 November	2,296,189	629,630	475,476	3,401,295	478,911	468,677	4,348,213

Newspapers and Supplements to Newspapers.—It is not compulsory to send newspapers or the supplements by the post, but those that are intended to be so transmitted, and are entitled to pass free, must be put into the receiving houses before 5 P. M.; at the branch post-offices, before half-past 5 P. M.; or at the general post-office, St. Martin's le Grand, before 6 P. M. Newspapers for the colonies and foreign countries cannot be received after 6. All newspapers must be sent in covers, open at the ends, and no words or communication may be printed on such papers after their publication, nor must there be any writing or marks upon any newspaper, or cover, other than the name and address of the person to whom it is sent; nor any paper or thing enclosed or concealed in it, nor any printed words or communication on the cover, except that newsvenders only may print their names and addresses thereon. Newspapers may be examined by the officers of the Post office; and if there be any breach of the above regulations, the packet is chargeable with treble the amount of postage which a letter of the same weight would have been liable to. And any person who shall write or enclose any thing in any newspaper or its cover, or shall print any words or communication on a newspaper, after it has been published, to be sent by the post, or any person who shall knowingly send, or cause to be sent, by the post, a newspaper in respect of which any one of these offences has been committed, may be prosecuted for a misdemeanor.

N.B.—As the mere affixing a newspaper stamp on any new periodical publication will not entitle it, as a matter of course, to pass free by the post, those who may be about to publish, for the first time, any such paper, should submit a copy to the postmaster general, in order that it may be determined whether the publication is of a nature that will entitle it to pass free of postage, it being provided by the act 1 Victoria, c. 34 s. 52,

"That in all cases in which a question shall arise, whether a printed paper is entitled to the privileges of a newspaper or other publication hereby privileged, so far as respects the transmission thereof by the post under the Post-office Acts, the question shall be referred to the determination of the postmaster general, whose decision, with the concurrence of the lords of the treasury, shall be final."

Newspapers from the British colonies are delivered free of postage at any place within the British dominions.

Newspapers may be forwarded to the British colonies and possessions by her Majesty's packet boats, free of the duty of postage, provided they be duly stamped and made up open at the ends, and put into the post-office within 7 days after the day of publication.

Newspapers may also be forwarded to the colonies by private ships for a postage of 1*d.* each, to some foreign ports free, and to others for a postage of 2*d.* each, to be paid at the time of putting in, under the same regulations as to date, &c.

Newspapers printed in the colonies and brought to Great Britain or Ireland by packet boats, if made up without covers, or in covers open at the ends, are delivered in the U. Kingdom free of postage.

Newspapers to the East Indies and China are forwarded by the packet *viâ* Marseilles, on payment of 2*d.* each. The mail is made up on the 4th of every month, except it happens to fall on a Sunday, when it is made up on the following day.

List of Colonies and Foreign Parts to which Newspapers may be sent by Packet free of Postage.

British Colonies.

Aden	Grenada	Nevis
Antigua	Halifax	New Brunswick
Bahama	Heligoland	Newfoundland
Barbadoes	Honduras	Nova Scotia
Berbice	Hong Kong, *viâ* Southampton	Quebec
Bermuda	India, ditto	St. Kitt's
Canada	Ionian Islands, ditto	St. Lucia
Cariacou	Jamaica, ditto	St. Vincent's
Demerara	Malta, ditto	Tobago
Dominica	Montserrat	Tortola
Gibraltar		Trinidad

Foreign Parts.

Brazil	Hayti, or St. Domingo
Bremen	Lubeck
Buenos Ayres	New Granada
Cuxhaven	Oldenburg
Denmark	Peru
France	Spain
Greece	Venezuela
Hamburg	

Foreign Parts to which a Postage of 2*d.* on each Newspaper must be paid when it is posted.

United States of America
Guadaloupe
Martinique
Surinam
St. Croix
St. Thomas
St. Martin's
Cuba
Egypt
Syria

Continent of Europe — With the exception of Holland, and those places mentioned in the preceding list of "foreign parts" as sent free of postage."

South America — With the exception of Brazil, Buenos Ayres, Peru, New Granada, Venezuela

The rate on newspapers to or from Holland, or to or from countries through Holland, is 1*d.*; Greece *viâ* France, 1*d.*; Spain *viâ* France, 4*d.*; the Mediterranean, Egypt, the East Indies, and China, by the closed mail, *viâ* Marseilles, 3*d.*

Newspapers to France are forwarded free of charge to the sender. A rate of 4 centimes (nearly equivalent to ½d.) is charged upon delivery in France.

Newspapers from Abroad. — Newspapers arriving from those foreign parts to which newspapers are despatched free, are delivered free of postage, except those from France, which are charged ½d. each. From places abroad, to which they are not despatched free, newspapers are charged here 2d. each, except as stated in the above paragraph. All newspapers must be printed in the language of the country from which they are sent, unless specially exempted by the lords of the treasury.

Newspapers by private Ships. — If put into the office within 7 days after publication, are forwarded to the Cape of Good Hope, Mauritius, or Isle of France, Hong Kong, Sydney, New South Wales, Van Diemen's Land, Swan River, South Australia, Chili, Peru, Guatemala, and the Western Coast of America, and the East Indies, on payment of 1d. with each paper; to St. Helena and the Western Coast of Africa, viz.: St. Mary's, River Gambia, Sierra Leone, Cape Coast Castle, Fernando Po, and Ascension (Isle), at the same rate; to China (Hong Kong excepted) and places not British, on payment of 2d. each, under the above regulations as to date, &c.

N.B. — All newspapers forwarded through the Ship Letter Office, except those between ports in Great Britain, and Ireland, must be paid for when put in.

Offences against the Post-Office. — The laws relative to offences against the Post-office were consolidated by the act 1 Vict. c. 36., of the more important parts of which we subjoin an abstract.

Contravening the Privilege of Post-Office. — Every person who shall convey otherwise than by the post a letter not exempted from the exclusive privilege of the postmaster general shall for every letter forfeit 5*l.*, and every person who shall be in the practice of so conveying letters not so exempted, shall for every week during which the practice shall be continued forfeit 100*l.*; and every person who shall perform otherwise than by the post any services incidental to conveying letters from place to place, whether by receiving, taking up, collecting, ordering, despatching, carrying, re-carrying, or delivering a letter not exempted from the exclusive privilege of the postmaster general, shall forfeit for every letter 5*l.*; and every person who shall be in the practice of so performing any such incidental services shall for every week during which the practice shall be continued, forfeit 100*l.*; and every person who shall send a letter not exempted from the exclusive privilege of the postmaster general otherwise than by the post, or shall cause a letter not so exempted to be sent or conveyed other than by post, or shall tender or deliver a letter not so exempt in order to be sent otherwise than by post, shall forfeit for every letter 5*l.*; and every person who shall be in the practice of committing any of the acts last mentioned shall for every week during which the practice shall be continued, forfeit 100*l.*; and every person who shall make a collection of exempted letters for the purpose of conveying or sending them otherwise than by the post, or by the post, shall forfeit for every letter 5*l.*; and every person who shall be in the practice of making a collection of exempted letters for either of those purposes, shall forfeit for every week during which the practice shall be continued 100*l.* And be it declared, that the term post shall herein include all post communications by land or by water (except by outward-bound vessels not employed by the post-office or the admiralty to carry post letters); and the above penalties shall be incurred whether the letter be sent singly or with any thing else, or such incidental service be performed in respect to a letter either sent or to be sent singly or together with some other letter or thing; and in any prosecution for the recovery of any such penalty the onus shall lie upon the party prosecuted to prove that the act in respect of which the penalty is alleged to have been incurred was done in conformity to the post-office laws. — § 2.

Ship Letters retained after delivering of Letters to Post-Office. — Every person, being either the master of a vessel inward-bound, or one of the officers, or one of the crew, or a passenger thereof, who shall knowingly have any letter in his possession not exempted from the privilege of the postmaster general, after the master shall have sent any part of his ship's letters to the post-office, shall forfeit for every letter 5*l.*; and every such person who shall detain any such letter after demand made, either by the officer of the customs or by a person authorised by the postmaster general to demand ship's letters, shall forfeit for every letter 10*l.* — § 3.

Clause 4. relates to the abuse of the privilege of franking, and is no longer of importance.

Penalties on Masters of Ships not taking Letter Bags. — Every master of a vessel bound to Ceylon, the Mauritius, the East Indies, or the Cape of Good Hope, who shall refuse to take a post letter bag delivered or tendered to him by an officer of the post-office for conveyance, shall forfeit 200*l.**; and every master of a vessel who shall open a sealed letter bag, with which he shall be intrusted for conveyance, shall forfeit 200*l.*; and every master of a vessel who shall take out of a letter bag with which he shall have been intrusted for conveyance a letter or any other thing shall forfeit 200*l.*; and every master of a vessel who shall not duly deliver a letter bag with the contents at the post-office on his arrival in port, without wilful or unavoidable delay after his arrival, shall forfeit 200*l.*; and every person to whom letters may have been intrusted by the master of a vessel to bring on shore who shall break the seal, or in any manner wilfully open the same, shall forfeit 20*l.*; and every master of a vessel who shall refuse or wilfully neglect to make declaration of having delivered his ship's letters to the post-office, shall forfeit 50*l.*; and every collector, comptroller, or officer of the customs who is required by the act 1 Vict. c. 34. to prohibit any vessel reporting until the requisites of such act have been complied with, who shall permit such vessel to report before the requisites of such act shall have been complied with, shall forfeit 50*l.*; and every master of a vessel (not having been able to send his letters ashore previous to his arrival at the port where the vessel is to report) who shall break bulk or make entry before all letters on board shall be sent to the post-office shall forfeit 20*l.*; and every master of a vessel, or any other person on board any ship liable to the performance of quarantine, who shall neglect or refuse to deliver to the person or persons appointed to superintend the quarantine all letters in his possession, shall forfeit 20*l.* — § 6.

Penalties on the Carelessness of Persons engaged or employed in carrying, conveying, &c. Letters. — Every person employed to convey or deliver a post letter bag or a post letter who shall, whilst so employed, or whilst the same shall be in his custody, care, or possession, leave a post letter bag or a post letter, or suffer any person, not being the guard or person employed for that purpose, to ride in the place appointed for the guard in or upon any carriage used for the conveyance of a post letter bag or post letter, or to ride in or upon a carriage so used and not licensed to carry passengers, or upon a horse used for the conveyance on horseback of a post letter bag or a post letter, or if any such person shall be guilty of any act of drunkenness, or of carelessness, negligence, or other misconduct, whereby the safety of a post letter bag or a post letter shall be endangered, or who shall collect or receive, or convey or deliver, a letter otherwise than in the ordinary course of the post, or who shall give any false information of an assault or attempt at robbery upon him, or who shall loiter on the road or passage, or wilfully mispend his time so as to retard or delay the progress or arrival of a post letter bag or a post letter, or who shall not use due and proper care and diligence safely to convey a post letter bag or a post letter at the rate of speed appointed by and according to the regulations of the post-office for the time being, being thereof convicted, shall forfeit 20*l.* — § 7.

Clauses 8. to 24. inclusive impose penalties on hackney carriages plying for hire opposite the general post-office in London or Dublin; exempt mail coaches from toll; and direct how penalties shall be sued for.

Opening or delaying Post Letters a Misdemeanour. — Every person employed by or under the post-office who shall, contrary to his duty, open or procure or suffer to be opened a post letter, or shall wilfully detain or delay, or procure or suffer to be detained or delayed, a post letter, shall in England and Ireland

* The 3 & 4 Vict. c. 96. extends this penalty to the master of *every* vessel *outward* bound who shall refuse to take a post letter bag delivered or tendered to him for conveyance.

be guilty of a misdemeanor, and in Scotland of a crime and offence, and being convicted thereof shall suffer such punishment by fine or imprisonment, or by both, as to the court shall seem meet: provided always, that nothing herein contained shall extend to the opening or detaining or delaying of a letter returned for want of a true direction, or of a letter returned by reason that the person to whom the same is directed is dead or cannot be found, or shall have refused the same, or shall have refused or neglected to pay the postage thereof; nor to the opening or detaining or delaying of a post letter in obedience to an express warrant in writing under the hand (in Great Britain) of one of the principal secretaries of state, and in Ireland under the hand and seal of the lord lieutenant of Ireland.

Embezzlement, &c. of any Letter or Packet, Felony. — Every person employed under the post-office who shall steal, or shall for any purpose whatever embezzle, secrete, or destroy a post letter, shall in England and Ireland be guilty of felony, and in Scotland of a high crime and offence, and shall, at the discretion of the court, either be transported beyond the seas for the term of 7 years, or be imprisoned for any term not exceeding 3 years; and if any such post letter so stolen or embezzled, secreted or destroyed, shall contain therein any chattel or money whatsoever, or any valuable security, every such offender shall be transported beyond the seas for life. — § 26.

Stealing Money, &c. from or out of Letters, Felony. — Every person who shall steal from or out of a post letter any chattel or money, or valuable security, shall in England and Ireland be guilty of felony, and in Scotland of a high crime and offence, and shall be transported beyond the seas for life.

Persons stealing Post Letter Bags, &c. to be transported for Life. — Every person who shall steal a post letter bag, or a post letter from a post letter bag, or shall steal a post letter from a post-office, or from an officer of the post-office or from a mail, or shall stop a mail with intent to rob or search the same, shall in England and Ireland be guilty of felony, and in Scotland of a high crime and offence, and shall be transported beyond the seas for life.

Persons stealing Post Letter Bags or Post Letters to be transported for 14 Years. — Every person who shall steal or unlawfully take away a post letter bag sent by a post-office packet, or who shall steal or unlawfully take a letter out of any such bag, or shall unlawfully open any such bag, shall in England and Ireland be guilty of felony, and in Scotland of a high crime and offence, and shall be transported beyond the seas for any term not exceeding 14 years.

Receivers of Property sent by the Post and stolen or embezzled, guilty of Felony. — Every person who shall receive any post letter or post letter bag, or any chattel or money or valuable security, the stealing or taking or embezzling or secreting whereof shall amount to a felony under the Post Office Acts, knowing the same to have been feloniously stolen, taken, embezzled, or secreted, and to have been sent or intended to be sent by the post, shall in England and Ireland be guilty of felony, and in Scotland of a high crime and offence, and may be indicted and convicted either as an accessary after the fact or for a substantive felony, and in the latter case, whether the principal felon shall or shall not have been previously convicted, or shall or shall not be amenable to justice; and every such receiver, howsoever convicted, shall be liable to be transported beyond the seas for life.

Fraudulently retaining, after Delivery thereof, &c. — Every person who shall fraudulently retain, or shall wilfully secrete or keep or detain, or being required to deliver up by an officer of the post-office, shall neglect or refuse to deliver up a post letter which ought to have been delivered to any other person, or a post letter bag or post letter which shall have been sent, whether the same shall have been found by the person secreting, keeping, or detaining, or neglecting or refusing to deliver up the same, or by any other person, shall in England and Ireland be guilty of a misdemeanor, and in Scotland of a crime and offence, and on conviction shall be liable to be punished by fine and imprisonment.

Stealing, &c. printed Votes or Proceedings in Parliament, &c. — Every person employed in the post-office who shall steal, or shall for any purpose embezzle, secrete, or destroy, or shall wilfully detain or delay in course of conveyance or delivery thereof by the post, any printed votes or proceedings in parliament, or any printed newspaper, or any other printed paper whatever sent by the post without covers, or in covers open at the sides, shall in England and Ireland be guilty of a misdemeanor, and in Scotland of a crime and offence, and on conviction shall suffer such punishment by fine or imprisonment, or both, as the court shall direct.

Forging the Handwriting of the Receiver General in England or Ireland, Felony. — Every person who shall knowingly and wilfully forge or counterfeit, or cause or procure to be forged or counterfeited, the name or handwriting of the receiver general for the time being of the general post office in England or Ireland, or of any person employed by or under him, to any draft, instrument, or writing whatsoever, for or in order to the receiving or obtaining of any money in the hands or custody of the governor and company of the bank of England or Ireland on account of the receiver general of the post-office, or shall forge or alter, or shall offer, utter, dispose of, or put off, knowing the same to be forged or altered, any draft, warrant, or order of such receiver general, or of any person employed by or under him, for money or for payment of money, with intent to defraud any person whomsoever, shall be guilty of felony, and on conviction shall be transported beyond the seas for life.

Clause 34. relates to the forging or altering franks.

The remaining clauses relate to the punishment of accessaries, determine the mode in which the postage duties shall be sued for, define terms, &c.

Irish Post-office. — The most gross and scandalous abuses were long prevalent in every department of the Irish post-office. The commissioners of Revenue Inquiry exerted themselves to abate the nuisance; but, as it would appear from the evidence of the Duke of Richmond before the committee of the House of Commons on public salaries, without much effect. His Grace, however, laboured with laudable activity and zeal to introduce something like honesty, order, and responsibility into this department. The gross revenue of the Irish post-office amounted, in 1842, to 128,984*l.*, the expenses of collection for the same year being 127,856*l.*; so that it may be fairly said that under the new system Ireland pays no postage

UNITED STATES. — We subjoin an account of the number of post-offices, the extent of post roads, the rates of postage, &c. in the United States.

POST-OFFICES AND POSTAGE.

Post-offices in	1790	75;	extent of post roads in miles,	875
—	1800	903	—	20,817
—	1810	2,300	—	36,406
—	1820	4,500	—	72,492
—	1829	8,004	—	115,000
—	1842	13,733	—	149,732

RATES OF POSTAGE.

For Single Letters, composed of One Piece of Paper —

Any distance not exceeding			30 miles,	6 cents.		
Over	30, and not exceeding		80	—	10	—
—	80	—	150	—	12½	—
—	150	—	400	—	18¾	—
—	400	-	-	-	25	—

Double letters, or those composed of 2 pieces of paper, are charged with double the above rates.

Triple letters, or those composed of 3 pieces of paper, are charged with triple the above rates.

Quadruple letters, or those composed of 4 pieces of paper, are charged with quadruple the above rates.

All letters weighing 1 ounce avoirdupois, or more, are charged at the rate of single postage for each ¼ of an ounce, or quadruple postage for each ounce, according to their weight; and no letter can be charged with more than quadruple postage, unless its weight exceeds 1 ounce avoirdupois.

The postage on ship letters, if delivered at the office when the vessel arrives, is 6 cents; if conveyed by post, 2 cents in addition to the ordinary postage.

Newspaper Postage. — For each newspaper, not carried out of

the state in which it is published, or if carried out of the state but not carried over 100 miles, 1 cent.
Over 100 miles, and out of the state in which it is published, 1½ cent.

Magazines and Pamphlets. — If published periodically, distance not exceeding 100 miles, 1½ cent per sheet.
— over 100 — 2½
If *not* pub. period. dist. not exceed. 100 miles, 4 cts. per sheet
— over 100 — 6 —

Small pamphlets, containing not more than a ½ sheet royal, are charged with ½ the above rates. Eight pages quarto are rated as *one sheet*, and all other sizes in the same proportion.
The number of sheets in a pamphlet sent by mail must be printed or written on one of the outer pages. When the number of sheets is not truly stated, double postage is charged.
Every thing not coming under the denomination of newspapers or pamphlets is charged with letter postage.

The total post-office revenue of the United States, in the year ended the 30th June 1842, amounted to 4,546,246 dollars, the expenditure during the same year being 4,235,052 dollars. — (*American Almanac* for 1844.)

POST ENTRY. When goods are weighed or measured, and the merchant has got an account thereof at the Custom-house, and finds his entry, already made, too small, he must make a *post* or additional *entry* for the surplusage, in the same manner as the first was done. As a merchant is always in time, prior to the clearing of the vessel, to make his post, he should take care not to over-enter, to avoid as well the advance, as the trouble of getting back the overplus. However, if this be the case, and an over-entry has been made, and more paid or bonded for customs than the goods really landed amount to, the land-waiter and surveyor must signify the same, upon oath made, and subscribed by the person so over-entered, that neither he, nor any other person, to his knowledge, had any of the said goods over-entered on board the said ship, or anywhere landed the same without payment of custom; which oath must be attested by the collector or comptroller, or their deputies, who then compute the duties, and set down on the back of the certificate, first in words at length, and then in figures, the several sums to be paid.

POTASH (Da. *Potaske*; Fr. *Potasse*; Ger. *Pottasche*; It. *Potassa*; Pol. *Potasz*; Rus. *Potasch*). If vegetables be burned, the ashes lixiviated, and the solution boiled to dryness in iron vessels, the mass left behind is the *potash* of commerce — the impure carbonate of potass of chemists. It is intensely alkaline, solid, and coloured brown by the admixture of a small portion of vegetable inflammable matter, which generally becomes moist. When potash is calcined in a reverberatory furnace, the colouring matter is destroyed, it assumes a spongy texture, and a whitish pearly lustre; whence it is denominated *pearl-ash*. The latter generally contains from 60 to 83 or 84 per cent. of pure carbonate of potass.

The ashes of those vegetables only which grow at a distance from the sea are employed in the manufacture of potash. Herbaceous plants yield the largest portion, and shrubs more than trees. It is principally manufactured in America, Russia, and Poland, the vast forests of which furnish an inexhaustible supply of ashes.

Potash is of great importance in the arts, being largely employed in the manufacture of flint glass and soft soap, the rectification of spirits, bleaching, making alum, scouring wool, &c. At an average of 1840 and 1841, the entries of pot and pearl ashes for home consumption, amounted to 82,381 cwt. a year. Of 99,295 cwt. imported in 1840, 98,260 cwt. were brought from the British possessions in North America. The ashes of the U. States are the purest, and bring the highest price.

Ashes from Canada are duty free; those from Russia and the United States used pay a duty of 6*s.* a cwt., which was reduced, in 1842, to 6*d.*

POTATOES (Ger. *Kartoffeln*; Du. *Aardappelen*; Fr. *Pommes de terre*; It. *Patate, Pomi di terra*; Sp. *Patatas manchegas*; Rus. *Jabloki semleniie*), the roots of the *Solanum tuberosum*, of innumerable varieties, and too well known to require any description.

1. *Historical Notice.* — The potato, which is at present to be met with everywhere in Europe, and forms a principal part of the food of a considerable proportion of its inhabitants, was entirely unknown in this quarter of the world till the latter part of the 16th century. It is a native of America, but whether of both divisions of that continent is doubtful. — (*Humboldt, Nouvelle Espagne*, liv. iv. c. 9.) Some authors affirm that it was first introduced into Europe by Sir John Hawkins, in 1545; others, that it was introduced by Sir Francis Drake, in 1573; and others, again, that it was for the first time brought to England from Virginia, by Sir Walter Raleigh, in 1586. But this discrepancy seems to have arisen from confounding the common, or Virginian potato (the *Solanum tuberosum* of Linnæus), with the sweet potato (*Convolvulus battatas*). The latter was introduced into Europe long before the former, and it seems most probable that it was the species brought from New Granada by Hawkins. Sweet potatoes require a warm climate, and do not succeed in this country; they were, however, imported in considerable quantities, during the 16th century, from Spain and the Canaries, and were supposed to have some rather peculiar properties. The kissing comfits of Falstaff, and such like confections, were principally made of battatas and eringo roots. — (See Collins' elaborate note to *Troilus and Cressida*, act. v. scene 2.) On the whole, we are inclined to think that we are really indebted for the potato (as well as for tobacco) to Sir Walter Raleigh, or the colonists planted by him in Virginia. Gerarde, an old English botanist, mentions, in his *Herbal*, published in 1597, that he had

planted the potato in his garden at London about 1590; and that it succeeded there as well as in its native soil, Virginia, whence he had received it. Potatoes were at first cultivated by a very few, and were looked upon as a great delicacy. In a manuscript account of the household expenses of Queen Anne, wife of James I., who died in 1618, and which is supposed to have been written in 1613, the purchase of a very small quantity of potatoes is mentioned at the price of 2*s.* a pound. The Royal Society, in 1663, recommended the extension of their cultivation, as a means of preventing famine. Previously, however, to 1684, they were raised only in the gardens of the nobility and gentry; but in that year they were planted, for the first time, in the open fields in Lancashire, — a county in which they have long been very extensively cultivated.

Potatoes, it is commonly thought, were not introduced into Ireland till 1610, when a small quantity was sent by Sir Walter Raleigh to be planted in a garden on his estate in the vicinity of Youghal. Their cultivation extended far more rapidly than in England; and have long furnished from ⅔ to ¾ of the entire food of the people of Ireland!

Potatoes were not raised in Scotland, except in gardens, till 1728, when they were planted in the open fields by a person of the name of Prentice, a day labourer at Kilsyth, who died at Edinburgh in 1792.

The extension of the potato cultivation has been particularly rapid during the last 40 years. The quantity that is now raised in Scotland is supposed to be from 10 to 12 times as great as the quantity raised in it at the end of the American war; and though the increase in England has not been nearly so great as in Scotland, it has been greater than during any previous period of equal duration. The increase on the Continent has been similar. Potatoes are now very largely cultivated in France, Italy, and Germany: and, with the exception of the Irish, the Swiss have become their greatest consumers. They were introduced into India some 70 or 80 years ago; and are now successfully cultivated in Bengal, and have been introduced into the Madras provinces, Java, the Philippines, and China. But the common potato does not thrive within the tropics unless it be raised at an elevation of 3,000 or 4,000 feet above the level of the sea, so that it can never come into very general use in these regions. This, however, is not the case with the sweet potato, which has also been introduced into tropical Asia; and with such success, that it already forms a considerable portion of the food of the people of Java, and some other countries. So rapid an extension of the taste for, and the cultivation of, an exotic, has no parallel in the history of industry; it has had, and will continue to have, the most powerful influence over the condition of mankind. — (For further details with respect to the history of the potato, see *Sir F. M. Eden on the State of the Poor*, vol. i. p. 508.; *Humboldt, Essai sur la Nouvelle Espagne*, iii. 460—465. 2d ed.; *Sir Joseph Banks on the Introduction of the Potato*; *Phillips's History of Cultivated Vegetables*, vol. ii. art. *Potato*.)

2. *Influence of the Cultivation of the Potato on the Number and Condition of the People.* — There is a considerable discrepancy in the statements of the best authors as to the number of individuals that might be supported on an acre of land planted with potatoes, as compared with those that might be supported on an acre sown with wheat; some stating the proportion as high as *six* to *one*, and others at only *two* to *one*. According to Mr. Arthur Young, 1 lb. of wheat is about equal in nutritive power to 5 lbs. of potatoes. But Mr. Newenham, who has carefully investigated this subject, states that "3 lbs. of good mealy potatoes are, undoubtedly, more than equivalent to 1 lb. of bread," — (*Newenham on the Population of Ireland*, p. 340.); and his estimate is rather above Mr. Wakefield's. Supposing, however, that 1 lb. of wheat is fully equal to *four* lbs. of potatoes, still the difference in favour of the superior quantity of food derived from a given quantity of land planted with the latter is very great. According to Mr. Young, the average produce of potatoes in Ireland may be taken at 82 barrels the Irish acre; which, at 20 stone the barrel, is equal to 22,960 lbs.; and this being divided by *four*, to bring it to the same standard, in point of nutritive power, as wheat, gives 5,740 lbs. Mr. Young further estimates the average produce of wheat, by the Irish acre, at 4 quarters; which, supposing the quarter to weigh 480 lbs., gives in all 1,920 lbs., or about ⅓ part of the solid nourishment afforded by an acre of potatoes. — (*Tour in Ireland*, Appen. pp. 12. 24. &c. 4to ed.) This estimate must, however, be somewhat modified, when applied to Great Britain; the soil of which, while it is better adapted to the growth of wheat, is generally supposed not to be quite so suitable for the potato as that of Ireland. But it notwithstanding admits of demonstration, that even here, "*an acre of potatoes will feed double the number of individuals that can be fed from an acre of wheat.*" — (*General Report of Scotland*, vol. i. p. 571.)

It is clear, therefore, on the most moderate estimate, that the population of a potato-feeding country may become, *other things being about equal*, from 2 to 3 times as dense as it would be, were the inhabitants fed wholly on corn. But it is exceedingly

doubtful whether an increase of population, brought about by the substitution of the potato for wheat, be desirable. Its use as a subordinate or subsidiary species of food is attended with the best effects — producing both an increase of comfort and security; but there are certain circumstances inseparable from it, which would seem to oppose the most formidable obstacles to its advantageous use as a *prime* article of subsistence. The discussion of this subject can hardly be said properly to belong to a work of this sort; but its importance may, perhaps, excuse us for making a few observations with respect to it.

It is admitted on all hands, that the rate of wages is principally determined by the species of food made use of in a country. Now, as potatoes form that species which is produced at the very least expense, it may be fairly presumed, on general grounds, that wages will be reduced to a minimum wherever the labouring classes are mainly dependent on potatoes; and the example of Ireland shows that this conclusion is as consistent with fact as with principle. It is clear, however, that when the crop of potatoes happens to be deficient in a country thus situated, the condition of its inhabitants must be in the last degree unfortunate. During a period of scarcity, men cannot go from a low to a high level: if they would elude its pressure, they must leave the dearer and resort to cheaper species of food. *But to those who subsist on potatoes this is not possible; they have already reached the lowest point in the descending scale. Their wages being determined by the price of the least expensive sort of food, they cannot, when it fails, buy that which is dearer; so that it is hardly possible for them to avoid falling a sacrifice to absolute want.* The history of Ireland abounds, unfortunately, in examples of this sort. *Nothing is more common than to see the price of potatoes in Dublin, Limerick, &c. rise, because of a scarcity, to 5 or 6 times their ordinary price, and the people to be involved in the extreme of suffering; and yet it rarely happens, upon such occasions,* that the price of corn is materially affected, or that any less quantity than usual is exported to England.

It may be said, perhaps, that, had potatoes not been introduced, wheat, or barley, or oats would have been the lowest species of food; and that, whenever they happened to fail, the population would have been as destitute as if they had been subsisting on potatoes. It must, however, be observed, that the proportion which the price of wheat, or any species of grain, bears to the price of butcher's meat, tea, beer, &c., is always decidedly greater than the proportion which the price of potatoes bears to these articles: and it therefore follows, that a people who have adopted wheat, or any species of corn, for the principal part of their food, are much better able to make occasional purchases of butcher's meat, &c.; and will, consequently, be more likely to have their habits elevated, so as to consider the consumption of a certain quantity of animal food, &c. as indispensable to existence. And hence it appears reasonable to conclude, that a people who chiefly subsist on corn would, in most cases, subsist partially on butcher's meat, and would enjoy a greater or less quantity of other articles; so that it would be possible for them, in a period of scarcity, to make such retrenchments as would enable them to elude the severity of its pressure.

But, though the population in corn-feeding countries were dependent on the cheapest species of grain, not for a part only, but for the whole, of their food, their situation would, notwithstanding, be less hazardous than that of a population subsisting wholly on potatoes.

In the *first* place, owing to the impossibility, as to all practical purposes at least, of preserving potatoes, the surplus produce of a luxuriant crop cannot be stored up or reserved as a stock to meet any subsequent scarcity. The whole crop must necessarily be exhausted in a single year; so that, when the inhabitants have the misfortune to be overtaken by a scarcity, its pressure cannot be alleviated, as is almost uniformly the case in corn-feeding countries, by bringing the reserves of former harvests to market. Every year is thus left to provide subsistence for itself. When, on the one hand, the crop is luxuriant, the surplus is of comparatively little use, and is wasted unprofitably; and when, on the other hand, it is deficient, famine and disease necessarily prevail.

In the *second* place, the general opinion seems to be, that the variations in the quantities of produce obtained from land planted with potatoes are greater than the variations in the quantities of produce obtained from land on which wheat, or any other species of grain, is raised.

And *lastly*, owing to the great bulk and weight of potatoes, and the difficulty of preserving them on shipboard, the expense of conveying them from one country to another is so very great, that a scarcity can never be materially relieved by importing them from abroad. In consequence, those who chiefly depend on potatoes are practically excluded from participating in the benevolent provision made by nature for equalising the variations in the harvest of particular countries by means of commerce, and are thrown almost wholly on their own resources.

We should, therefore, be warranted in concluding, even though we were not possessed

of any direct evidence on the subject, from the circumstance of the potato being a crop that cannot be kept on hand, from its natural fickleness, and from the incapacity of importing it when deficient, or of exporting it when in excess, that the oscillations in its price must be greater than in the price of wheat; and such, in point of fact, is the case. The oscillation in wheat is thought great when its price is doubled; but in a scarce year the potato is not unfrequently *six* times as dear as in a plentiful one!—(*Minutes of Evidence taken before the Agricultural Committee of* 1821, p. 212.) And the comparatively frequent recurrence of scarcities in Ireland, and the destitution and misery in which they involve the population, afford but too convincing proofs of the accuracy of what has now been stated.

It is, therefore, of the utmost consequence to the well-being of every people, and to their protection in years of scarcity, that they should not subsist principally on the potato. In this country, the pressure of a scarcity is evaded by resorting to inferior species of food, such as potatoes, and a lower standard of comfort; but if our people were habitually fed on the potato, this would be impracticable. The chances of famine would thus be vastly increased; while, owing to the low value of the potato as compared with most other things, the labourers would have less chance of preserving or acquiring a taste for animal food, or other necessaries and luxuries; and, consequently, of changing at any future period their actual condition for a better.

It is not easy to form any very accurate estimate of the profit and loss attending the cultivation of potatoes to the farmer, as compared with other crops. This is a point as to which the statements of those best qualified to give an opinion differ very considerably. Mr. Loudon says, "they require a great deal of manure from the farmer; while, generally speaking, little is returned by them; they are a bulky, unhandy article, troublesome in the lifting and carrying processes, and interfering with the seed season of wheat, — the most important one to the farmer. After all, from particular circumstances, they cannot be vended unless when raised in the vicinity of large towns; hence they are in most respects an unprofitable article to the agriculturist. To him, the real criterion is the profit which potatoes will return in feeding beasts; and here we apprehend the result will be altogether in favour of turnips and *rutabaga*, as the most profitable articles for that purpose."

It seems difficult to reconcile this statement with the rapid progress of the potato cultivation: but those who assent to what has been previously advanced with respect to the mischievous consequences that arise from the mass of the population becoming dependent on the potato as a principal article of food, will not regret though it should turn out to be accurate.

Dr. Colquhoun estimated the entire value of the potatoes annually consumed in Great Britain and Ireland at the end of the late war at *sixteen millions* sterling. But it is needless to say that there are no materials by which to form an estimate of this sort with any pretensions to accuracy. The one in question has been suspected, like most of those put forth by the same learned person, of exaggeration: and we incline to think that, had he estimated the value of the yearly produce of potatoes in the empire at *twelve millions*, he would have been nearer the mark. But on a point of this sort it is not possible to speak with anything like confidence.

POUND, the name given to a weight used as a standard to determine the gravity and quantity of bodies. — (See WEIGHTS AND MEASURES.)

POUND, a money of account, = 20*s*.

POWDER, GUN. See GUNPOWDER.

PRECIOUS METALS, a designation frequently applied to gold and silver. We have given, under the articles GOLD, and SILVER, a short account of each metal; and we now propose laying before the reader a few details with respect to their supply and consumption.

To enter fully into this interesting and difficult subject would require a long essay, or rather a large volume. Mr. Jacob published, in 1831, an "Historical Inquiry into the Production and Consumption of the Precious Metals," in which he takes up the subject at the earliest period, and continues it to the above epoch. And, though neither so complete nor satisfactory as might have been expected, this work contains a good deal of valuable information, and deserves the attention of all who take an interest in such inquiries. We confess, however, that several of the learned author's statements and conclusions seem to us to be not a little wide of the mark. We shall notice one or two of them in the course of this article.

1. *Supply of the Precious Metals.* — Since the discovery of America, the far greater part of the supplies of gold and silver have been derived from that continent. Previously to the publication of Humboldt's great work, *Essai Politique sur la Nouvelle Espagne*, several estimates, some of them framed by individuals of great intelligence, were in circulation, of the quantities of gold and silver imported from America. They, however, differed widely from each other, and were all framed from comparatively limited

sources of information.* But these have been wholly superseded by the more extensive and laborious investigations of Humboldt. This illustrious traveller, besides being acquainted with all that had been written on the subject, and having ready access to official sources of information unknown to the writers already alluded to, was well versed in the theory and practice of mining, and critically examined several of the most celebrated mines. He was, therefore, incomparably better qualified for forming correct conclusions as to the past and present productiveness of the mines, than any of those who had hitherto speculated on the subject. His statements have, indeed, been accused of exaggeration; and we incline to think that there are grounds for believing that this charge is, in some measure, well founded, particularly as respects the accounts of the profits made by mining, and of the extent to which the supplies of the precious metals may be increased. But this criticism applies, if at all, in a very inferior degree, to the accounts Humboldt has given of the total produce of the mines, and the exports to Europe. And making every allowance for the imperfection inseparable from such investigations, it is still true that the statements in question, and the inquiries on which they are founded, are among the most valuable contributions that have been made to statistical science.

According to Humboldt, the supplies of the precious metals derived from America have been as follows: —

	Dollars a Year at an Average.		Dollars a Year at an Average.
From 1492 to 1500	- 250,000	From 1600 to 1700	- 16,000,000
— 1500 — 1545	- 3,000,000	— 1700 — 1750	- 22,500,000
— 1545 — 1600	- 11,000,000	— 1750 — 1803 - -	- 35,300,000

(*Essai sur la Nouvelle Espagne*, iii. 428. 2d ed.)

The following is Humboldt's estimate of the annual produce of the mines of the New World, at the beginning of the present century: —

Annual Produce of the Mines of America at the Commencement of the Nineteenth Century.

Political Divisions.	Silver. Kilogs.	Gold. Kilogs.	Value of the Gold and Silver in Dollars
Vice-royalty of New Spain -	7,000		23,000,000
Vice-royalty of Peru -	3,000	611,000	110,478	6,210,000
Captain-generalship of Chili	12,212	29,700	6,827	2,060,000
Vice-royalty of Buenos Ayres	2,200	481,850	110,764	4,850,000
Vice-royalty of New Granada	20,505	4,714		2,000,000
Brazil - - -	29,900	6,573		4,360,000
Total - -	75,217			43,500,000

Taking the dollar at 4*s.*, this would give 8,700,000*l.* as the total annual produce of the American mines. Humboldt further estimated the annual produce of the European mines of Hungary, Saxony, &c., and those of Northern Asia, at the same period, at about 1,000,000*l.* more.

The *quantity* of gold produced in America at the beginning of the century, was to the quantity of silver as 1 to 46; in Europe, the proportions were as 1 to 40. The *value* of equal quantities of gold and silver were then in the proportion of 15 or 15½ to 1. Latterly, the quantity of gold produced has increased, as compared with the quantity of silver.

From 1800 to 1810, the produce of the American mines was considerably increased; but in the last-mentioned year the contest began, which terminated in the dissolution of the connection between Spain and the South American colonies. The convulsions and insecurity arising out of this struggle; the proscription of the old Spanish families, to whom the mines principally belonged, who repaired, with the wrecks of their fortunes, some to Cuba, some to Spain, and some to Bordeaux and the south of France; caused the abandonment of several of the mines, and an extraordinary falling off in the amount of their produce. There are no means of accurately estimating the precise extent of this decline; but according to Mr. Jacob, who collected and compared all the existing information on the subject, the total average produce of the American mines, inclusive of Brazil, during the 20 years ending with 1829, may be estimated at 4,036,838*l.* a year: being less than ¼ their produce at the beginning of the century! — (*Jacob*, ii. 267.)

Since the publication of Mr. Jacob's work, some farther light has been thrown on the

* Humboldt has brought these estimates together as follows: —

Authors.	*Epochs.*	*Dollars.*	*Authors.*	*Epochs.*	*Dollars.*
Ustariz - -	1492—1724	3,536,000,000	Gerboux -	1724—1800	1,600,000,000
Solorzano - -	1492—1628	1,500,000,000	The Author of the *Recherches sur le Commerce*, Amst. 1779.	1492—1775 -	5,072,000,000
Moncada - -	1492—1595	2,000,000,000			
Navarete - -	1519—1617	1,526,000,000			
Raynal - -	1492—1780	5,154,000,000			
Robertson -	1492—1775	8,800,000,000			
Necker - -	1763—1777	304,000,000			

(*Essai sur la Nouvelle Espagne*, tome iii p. 412.)

subject, principally by the publication of returns transmitted by the British consuls in South America and elsewhere. And notwithstanding the anarchy in which most of the new states in that quarter of the world have been unceasingly involved, the returns in question show that there has been of late years a considerable increase in the produce of the mines. Probably it is all but needless to add, that all investigations into matters of this sort are liable to be affected by so many sources of error, that, even when they are most skilfully and cautiously conducted, their results are not always to be depended on. But these remarks do not apply to the following

Account of the Coinage in Gold and Silver of the Mints of the Mexican Republic in 1840 and 1841. — (*Parl. Paper* No. 476. Sess. 1843.)

Mints.	Gold.		Silver.		Totals.	
	1840.	1841.	1840.	1841.	1840.	1841.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Mexico	71,207	97,628	1,917,617	2,151,496	1,988,824	2,249,124
Zacatecas	- -	- -	4,066,310	4,386,641	4,066,310	4,386,641
Guanaxuato	437,168	440,240	3,459,500	3,296,000	3,896,668	3,736,240
Durango	243,082	155,140	747,907	823,348	990,989	978,488
Chihuahua	- -	63,050	172,406	359,000	172,406	422,050
San Luis	- -	- -	1,137,867	1,110,247	1,137,867	1,110,247
Guadalaxara	- -	- -	881,546	655,015	881,546	655,015
	751,157	756,058	12,383,153	12,781,747	13,134,610	13,537,805

It is well known, however, that a very considerable quantity of gold and silver is raised and exported without being brought to the mints to be coined. Of this no account can be taken, though perhaps we may not be far wrong in estimating it at about 4,000,000 doll., making the entire produce of the Mexican mines about 17,500,000 doll. a year.

Mr. B. H. Wilson, consul for Peru, estimates the produce of the Peruvian mines at about 5,210,000 dollars a year. — (*Parl. Paper* No. 476. Sess. 1843, p. 27.) And he farther supposes that of this sum, about 3,500,000 dollars are exported on English account, and that about 500,000 dollars more are exported on French, German, Spanish, &c. account.

It appears from the consular returns, that the coinage of gold and silver in the Bolivian mints in 1837, and the three preceding years amounted to about 2,300,000 doll. a year; so that, making allowance for the metal raised and not coined, their entire produce can hardly have been under 3,000,000 doll.

The produce of the Chilian mines probably exceeds at this moment the estimate of their produce given by Humboldt. At all events it appears from the statements furnished by the consul, that the exports of silver from the republic amounted in 1841, (taking the marc at 8½ doll.) to 1,191,046 doll.; and those of gold, taking the marc at 144·4 doll.), including the amount coined at the mint, to 613,779 doll. And adding to these the quantities retained for home use and clandestinely exported, we shall probably be within the mark in estimating the produce of the Chili mines at about 2,500,000 doll. a year. — (*Parl. Paper* No. 476. Sess. 1843, p. 36.)

We regret there are no returns, on which any dependence can be placed, from any other part of South or Central America. Considerable quantities of gold are produced in New Granada and Panama: but though there are mines of the precious metals in Ecuador, they are not wrought. Perhaps, on the whole, 1,000,000 doll., principally gold, may be annually exported from Colombia and Central America.

The produce of the Brazilian mines and washings has been supposed to amount, of late years, to about 1,500,000 doll. a year; a sum which is not more than adequate to meet the demands of the country.

The mines that formerly belonged to La Plata, or Buenos Ayres, are now principally included in those of Bolivia; but the produce of those that still belong to the former republic continues to be considerable; and may be moderately estimated at 1,200,000 dollars a year. The above results, when brought together, give —

Estimated Produce of the American Mines, in 1840.

	Dollars.		*Dollars.*
Mexican	17,500,000	Panama	1,000,000
Peruvian	5,210,000	Brazil	1,500,000
Bolivian	3,000,000		
Chilian	2,500,000	Total	30,710,000

We are pretty well satisfied that, speaking generally, these estimates are rather under than over the mark; and that the export of the precious metals from South America and Mexico may, at present (1843), be safely estimated at 28,000,000 doll. or (taking the dollar at 4*s.*) 5,600,000*l.* a year.

Besides the sources now mentioned, a good deal of gold has of late years been ob-

tained from washings in Carolina, Georgia, and other parts of the U. States. Since 1835, however, the supply from this source has been diminished, and it is doubtful whether it will ever be very considerable. We subjoin

An Account of the Value of the Gold annually produced in the U. States, and sent to the different Mints of the Union to be coined, since 1824.

	Dollars.		Dollars.
1824	47,000	1833	698,500
1825	115,000	1836	467,000
1830	426,000	1837	282,000
1831	520,000	1838	435,000
1832	678,000	1839	395,240
1833	868,000	1840	426,185
1834	958,000	1841	542,117

But, exclusive of the late gradual increase in the produce of the S. American and Mexican mines, there has been an unprecedented increase in the produce of the Russian mines and washings, particularly the latter. This is evident from the following

Account of the Produce in Gold of the Washings in Siberia, carried on upon account of the Crown, and of Individuals, from 1830 to 1842, both inclusive.

	Poods.	Lzvrss.	Zolotnicks.		Poods.	Lzvrss.	Zolotnicks.
1830	5	32	59½	1838	193	6	47½
1831	10	18	35½	1839	183	8	16½
1832	21	34	68½	1840	255	27	26½
1833	35	32	53½	1841	358	33	14½
1834	65	18	9½	1842	631	5	21½
1835	93	12	49½				
1836	105	9	41½	Total	2,093	38	46
1837	132	39	5½				

But in addition to the above quantity of 631 poods obtained from washings in Siberia in 1842, the silver obtained from the mines of Kolyvan yielded, in the course of the same year, 30 poods of gold, while the washings and mines of the Oural mountains yielded no fewer than 310 poods; making the total produce 971 poods; equal to 35,030 lbs. avoirdupois, or 42,571 lbs. Troy, which at 46*l.* 14*s.* 6*d.* per lb. is equivalent to 1,989,128*l.* 11*s.*—(*Supplement au Journal de l'Interieur* for 1842, p. 16.)

It is necessary, however, to bear in mind that the Russian government imposes a duty, varying, according to circumstances, from 20 to 25 per cent., on the produce of the mines and washings; and there can be no doubt that the temptation to avoid so heavy a duty, and the peculation on the part of the agents for the crown, must give rise to a great deal of smuggling. Perhaps, under such circumstances, we should not be far wrong if we estimated the metal of which no account is taken at ⅕th part of the above; but taking it at only ⅓th part, we have a sum of no less than 2,386,000*l.* for the produce of the Russian gold mines and washings in 1842.

It may be supposed, perhaps, that it would be wrong to take the produce of the Russian washings and mines in 1842 as a fair criterion of their future produce, seeing that the produce of the washings in that year was not far from being twice as great as it had been in any previous year. But it is to be observed, that the produce in question has been progressively and rapidly augmenting during the 13 years ending with 1842; and it is stated in the official journal whence we have borrowed these details, that *selon toute probabilité, et à moins qu'on ne manque d'ouvriers, le chiffre de l'année* 1843, *offrira de nouveau sur celui de l'année dernière un excédant très considérable.**

In addition to this vast quantity of gold, Russia produces a quantity of silver which may, perhaps, be estimated, at an average, at about 1,300 poods a year, worth, at 5*s.* 2*d.* an ounce, 193,440*l.*

We have seen no very recent accounts of the produce of the Saxon, Hungarian, and other European mines on which it would be at all safe to place much reliance. We incline, however, to think that their produce may be safely estimated at about 750,000*l.* a year.

Hence, supposing we are nearly right in these estimates, the total available produce of the American, European, and Russo-Asiatic mines will be, S. American and Mexican, 5,600,000*l.*; U. States, 100,000*l.*; European, 750,000*l.*; Russo-Asiatic, 2,600,000*l.*; making in all, 9,050,000*l.* And therefore, should these estimates be not very wide of the mark, it may be concluded, in opposition to the commonly received opinions on the subject, that the supply of the precious metals is at present but little inferior to what it amounted to when the American mines were most productive.

2. *Consumption of the Precious Metals.* — Gold and silver serve either as coin, or are made use of in the arts. There are no means whatever by which to discover the proportion in which they are applied, at any given period, to these purposes; and the proportion is perpetually varying with the varying circumstances of each country; as, for

* We have since learned, as this article was going to press, that the produce of the Russian gold mines and washings in 1843 amounted to no less than 1,342 poods! being equivalent, adding 1-5th for the quantity not brought to account, to 3,298,962*l.* 11*s.* 1*d.* sterling; an increase which is altogether extraordinary, and will have the most powerful influence.

example, with the greater or less abundance of paper money, and the degree in which the use of coins is saved by the various devices resorted to by means of banking and otherwise for economising currency, the greater or less wealth of the inhabitants, the fashion as to plate, the feeling of security at the moment, and a thousand other circumstances, — all of which are liable to great and sometimes sudden changes.

According to Mr. Jacob, the value of the precious metals annually applied to ornamental and luxurious purposes in Europe, may be estimated as follows: viz. Great Britain, 2,457,221*l.*; France, 1,200,000*l.*; Switzerland, 350,000*l.*; remainder of Europe, 1,605,499*l.*; making in all, 5,612,711*l.* And adding to this the sums directly applied to the same purposes in America, the whole will be about 5,900,000*l.*

The data upon which this estimate has been founded, were necessarily vague and unsatisfactory. It can hardly, indeed, be looked upon as any thing better than a mere guess, and, as such, we do not know that it was a very happy one. Chabrol (whose researches are far more worthy of confidence than those of Chaptal, to which Jacob refers) estimated the consumption of gold and silver in the arts in Paris at 14,552,000 francs a year — (*Récherches Statistiques sur la Ville de Paris*, 1823, Tab. No. 85.); which corresponds with the elaborate estimate of Benoiston de Châteauneuf — (*Récherches sur les Consommations de Paris en* 1817, 2de partie, p. 78.). Both these authorities agree that the consumption of the precious metals in the arts in Paris is double that of the rest of France; so that we have 21,828,000 francs, or 866,190*l.*, for the consumption of the whole kingdom; and allowing for the increase in the interim, the consumption may now be taken at 1,000,000*l.*

Probably, at the time when Jacob's work was printed, his estimate of the consumption of the precious metals in the U. Kingdom might not have been very far from the mark; but during the last dozen years there has been a greatly increased expenditure on the gilding of houses and furniture, as well as on plate, jewellery, and hardware, harness, bookbinding, &c.; so that, making allowance for this increase, we are not disposed to estimate the present consumption of the U. Kingdom at less than 2,500,000*l.* a year.

The manufacture of gold and silver watches, jewellery, &c. is carried on in Switzerland upon a very large scale; so much so that, notwithstanding its poverty, the consumption of bullion in it may be fairly estimated at 450,000*l.* or 500,000*l.* a year.

There are no means by which to form anything like a correct estimate of the consumption of the other European countries; but, considering the rapid progress of population, wealth, and refinement in Russia, Prussia, Germany, &c., Mr. Jacob's estimate for these countries may now, perhaps, be safely adopted, or even increased.

Mr. Jacob estimated the consumption of the precious metals in the U. States and Canada at 300,000*l.* a year; but their wealth and population have more than doubled in the interval, and we shall certainly be within the mark in estimating their consumption at 500,000*l.* a year

According to this view of the matter, the present annual consumption of the precious metals in the arts will be — the U. Kingdom, 2,500,000*l.*; France, 1,000,000*l.*; Switzerland, 450,000*l.*; the rest of Europe 1,600,000*l.*; in all, 5,550,000*l.* To which adding 500,000*l.* for the consumption of N. America, the total consumption will be 6,050,000*l.*

Those who are inclined to defer to the authority of Humboldt may, perhaps, be disposed to regard this estimate as exaggerated. In the 2d ed. (iii. 464.) of his *Nouvelle Espagne*, he estimated the total consumption of the precious metals in Europe, for other purposes than those of coin, at only 87,182,800 fr., equal, at the exchange of 25·20, to 3,459,714*l.* But we incline to think that it would not be difficult to show that this estimate was at the time considerably below the mark; and, independently of this, it was made a dozen years ago, and there has been a very great increase of population and wealth in the interval, and a proportionally great increase in the consumption of gold and silver.

It is material to observe that a portion of the gold and silver annually made use of in the arts is derived from the fusion of old plate, the burning of lace, picture frames, &c. Here, however, we have to lament the impossibility of ascertaining the proportion the supply from this source bears to the total quantity wrought up. Jacob estimates it at only $\frac{1}{40}$th part, or $2\frac{1}{2}$ per cent.; but so small a sum seems to be quite out of the question. Most part of the precious metals employed in plating, gilding, &c. is destroyed; but the quantity of metal so made use of is admitted by every one to be decidedly less than the quantity used in the manufacture of plate, watch-cases, and other articles of that description. And these, when they either become unfashionable, or are broken or injured, are, for the most part, sent to the melting pot. According to the statement of Necker, quoted and sanctioned by Humboldt, a *half* of the gold and silver used in France by goldsmiths and others in the arts, is supposed to be obtained from the fusion of old plate, &c. — (*Nouvelle Espagne*, tome iii. p. 467.)

But, notwithstanding the high authority by which this estimate is supported, we believe that it is quite as much above the mark as Jacob's is certainly below it.

Assuming, therefore, that, at a medium, 20 per cent. or $\frac{1}{5}$th part of the precious metals annually made use of in the arts is obtained from the fusion of old plate, we shall have, by deducting this proportion from the 6,050,000*l.* applied to the arts in Europe and America, 4,840,000*l.* as the total annual appropriation of the new gold and silver dug from the mines to such purposes, leaving about 4,200,000*l.* a year to be manufactured into coin, and exported to India, Australia, &c.

It is not much more easy to determine the consumption of the precious metals when manufactured into coin, than when in plate. Jacob has entered into some curious details (vol. ii. c. 28.) to determine the abrasion or loss of coins from wear, which he estimates at $\frac{1}{600}$th part a year for gold, and $\frac{1}{200}$th part for silver coins. This, however, does not give the total wear and tear of the coins. To determine the latter, the quantities lost by fire, shipwrecks, and other accidents must be taken into account. The loss from these sources can only be guessed at; but adding it to the loss by abrasion, perhaps we shall not be far wrong in estimating the whole at 1 per cent. And if we estimate the value of the entire metallic currency of Europe and the U. States at 160 millions sterling, 1,600,000*l.* a year will, on this hypothesis, be required to maintain it at its present level.

It is singular that, in estimating the consumption of gold and silver, Jacob should not have made the slightest allusion to the practice which has uniformly prevailed in all countries harassed by intestine commotions, or exposed to foreign invasion, of burying treasure in the earth. Of the hoards so deposited, a very considerable proportion has been altogether lost; and there can be no doubt that this has been one of the principal means by which the stock of the precious metals has been kept down to its present level. Every one is aware that, during the middle ages, *treasure trove*, or money dug from the ground by chance finders, belonged to the Crown, and formed no inconsiderable part of the royal revenue of this and other countries. The practice has always prevailed to a very great extent in the East. — (*Bernier, Voyage de Mogol*, Amst. 1710, tome i. p. 209.; *Scrafton on the Government of Hindostan*, p. 16, &c.) But it is not confined to that quarter. Wherever property is insecure, it is invariably resorted to. Mr. Wakefield tells us that it used to be common in Ireland. (*Account of Ireland*, vol. i. p. 593.); and we believe it is still pretty prevalent in that country. It has always been acted on to a considerable extent in Russia and France; and in the latter, during the revolutionary anarchy, immense sums were buried, of which it is abundantly certain a large proportion will never be resuscitated. The wars and convulsions by which Europe was desolated for more than 20 years extended the practice to all parts of the Continent; withdrawing, in this way, from circulation a very considerable part of the increased produce of the mines. — (*Storch, Economie Politique*, tome i. p. 221. Paris, 1823.) And no doubt considerable sums are still disposed of in this way.

3. *Exportation of the Precious Metals to the East.* — It must be well known to all our readers, that from the remotest æra down to a comparatively late period bullion formed one of the principal and most advantageous articles of export to the East. Humboldt estimated that, of the entire produce of the American mines at the beginning of this century, amounting, as already seen, to 43,500,000 dollars, no less than 25,500,000 were sent to Asia, 17,500,000 by the Cape of Good Hope, 4,000,000 by the Levant, and 4,000,000 through the Russian frontier. — (*Nouvelle Espagne*, iii. 443.) Latterly, however, this immense drain has been very much diminished, and in 1832 and 1833 it actually began to set in an opposite direction. — (See *antè*, p. 206. for an account of the exports and imports of bullion from and into India from 1814–15 to 1839–40.) In so far, however, as respects India, the drain has since recovered its old direction; the excess of the imports of bullion into that country over the exports having amounted during the 3 years ending with 1839–40 to above 2,000,000*l.* a year. — (See *ubi supra.*)

We believe, however, that the great import of bullion into India has been a good deal influenced by the peculiar state of the Indian trade, and that the probability is that it will decline. — (See *ubi supra.*) There has latterly, also, been a very considerable increase in the exportation of bullion from China. We do not now allude to the remittances on account of the payments stipulated in the late treaty, but to the shipments of bullion that were previously made in the ordinary course of trade. These amounted, in 1838, after deducting the imports, to 8,223,341 dollars, or 1,644,668*l.*, partly shipped for Europe, but principally for India. — (See *antè*, p. 235.) A considerable part of this large export consists of native silver, of which there are mines in several provinces. China has also mines of gold; and in some late years her exports of that metal have been rather extensive; she is, however, an importer as well as an exporter of gold, having for a lengthened period drawn considerable supplies of that metal from Borneo, Celebes, and the Malay peninsula. A few years ago, the efflux of bullion from Russia to China, by way of Kiachta, which had continued for a lengthened period, wholly ceased. — (*Jacob*, ii. 320.) But since bullion began to increase so

rapidly in Russia, it is most probable that it is again exported by this route. Indeed, the Russian official accounts of the trade of the empire for 1841 (TABLE XI. p. 51.) admit that the value of the imports from, exceeds the value of the exports to, China.

4. *Influence of the Productiveness of the Mines on Prices.*—It has been customary in this country to ascribe almost the whole fall that has taken place in the price of most commodities since the peace, to the diminished supply of bullion from the mines, which existed down to a recent period. But we doubt whether this circumstance was not fully counterbalanced by others, and whether it had any influence in the way now mentioned. The great diminution of the drain to the East, even admitting that Humboldt over-rated its amount, would of itself have gone far to countervail the decreased productiveness of the mines; and in addition to this, the greater security and tranquillity enjoyed on the Continent since the peace, has not only checked that burying of money, formerly so prevalent, but has caused the bringing to light of a good many of the subterranean hoards. The institution of savings banks, now so common every where, has also, no doubt, tended to prevent hoarding, and to bring a good deal of coin into circulation, that would otherwise be locked up. These circumstances, coupled with others that might be mentioned, such as the cessation of the demand for military chests, the greater employment of bills in mercantile transactions, &c., afford good grounds for doubting whether the quantitity of the precious metals applicable to the purposes of circulation was not about as great in 1825 and 1830 as in 1809 or 1810, when the American mines were at the acmè of their productiveness. No doubt, however, had the produce of the mines continued stationary at their reduced rate, there could hardly have failed to be, in the end, a material rise in the value of bullion. But instead of continuing stationary, or falling off, there has latterly been a very rapid increase in the produce of the mines; and there is no longer any ground for apprehending a rise in the value of the precious metals, but the reverse. The augmentation, as we have seen, has been principally in gold; and should its production continue to increase for a few years more, in any thing like the ratio it has done during the last half dozen years, its value will necessarily sink; and were it to sink to any considerable extent, the circumstance would exercise a powerful and, we believe, a salutary influence over the condition of this and such other countries as have adopted gold for the standard of their currency. These, however, are prospective and contingent results which may never be realised, and on which it would be wrong to lay any considerable stress.

We believe that the increase in the supply of bullion has continued for too short a time, and been too limited, to have hitherto had any sensible influence over prices; but, however this may be, we have no hesitation in affirming that there is not, without any exception whatever, a single commodity that has fallen in price since 1814, the fall of which may not be satisfactorily accounted for without reference to the diminished supply of bullion from 1810 to 1837. — (See *antè*, p. 80.) Multiplied proofs of what is now stated will be found in various articles throughout this work. And we have little doubt that those who investigate this matter with any degree of care, will agree with us in thinking, that were the influence of the former decreased productiveness of the mines on prices estimated at from 3 to 5 per cent., it would be very decidedly beyond the mark. Its influence was, in fact, hardly perceptible.

5. *Probable future Supply of Gold and Silver.* — Little can be added under this head, to what has previously been stated. On the whole, however, we should think that there are not merely probable but good grounds on which to anticipate a large future increase of the annual produce of the mines and washings in most parts of the world. The late increase of the latter in Russia has been quite extraordinary; and if it should go on for any considerable period, it would have a powerful influence over the value of gold, and would not only sink it as compared with silver, but as compared with all other things not produced with the same increased facilities. It is reasonable, also, to suppose that the produce of the South American mines should be gradually increased. The anarchy which has so long disgraced and desolated the country cannot continue for ever; and means have lately been taken for reducing the price of quicksilver, the high cost of which has latterly contributed more, perhaps, than any thing else to paralyse the efforts of the miners.

PREMIUM. See INSURANCE.

PRICES. By the price of a commodity is meant its value estimated in money, or, simply, the quantity of money for which it will exchange. The price of a commodity rises when it fetches more, and falls when it fetches less money.

1. *Price of freely produced Commodities.* — The exchangeable value of commodities — that is, their power of exchanging for or buying other commodities — depends, at any given period, partly on the comparative facility of their production, and partly on the relation of the supply and demand. If any 2 or more commodities respectively required the same outlay of capital and labour to bring them to market, and if the supply of each were adjusted exactly according to the effectual demand — that is, were they all in

sufficient abundance, and no more, to supply the wants of those able and willing to pay the outlay upon them, and the ordinary rate of profit at the time — they would each fetch the same price, or exchange for the same quantity of any other commodity. But if any single commodity should happen to require less or more capital and labour for its production, while the quantity required to produce the others continued stationary, its value, as compared with them, would, in the first case, fall, and in the second, rise; and, supposing the cost of its production not to vary, its value might be increased by a falling off in the supply, or by an increase of demand, and conversely.

But it is of importance to bear in mind that all variations of price arising from any disproportion in the supply and demand of such commodities as may be *freely produced in indefinite quantities*, are *temporary* only; while those that are occasioned by changes in the cost of their production are *permanent*, at least as much so as the cause in which they originate. A general mourning occasions a transient rise in the price of black cloth: but supposing that the fashion of wearing black were to continue, its price would not permanently vary; for those who previously manufactured blue and brown cloths, &c would henceforth manufacture only black cloth; and the supply being in this way increased to the same extent as the demand, the price would settle at its old level. Hence the importance of distinguishing between a variation of price originating in a change of fashion or other accidental circumstance — such, for example, as a deficient harvest — and a variation occasioned by some change in the cost of production. In the former case, prices will, at no distant period, revert to their old level; in the latter, the variation will be lasting.

When the *price* of a freely produced commodity rises or falls, such variation may evidently be occasioned either by something affecting its value, or by something affecting the value of money. But when the generality of commodities rise or fall, the fair presumption is that the change is not in them, but in the money with which they are compared. This conclusion does not, however, apply in all cases; and we believe that most part of that fall in the price of commodities, which has taken place since the peace, and which has been so generally ascribed to a rise in the value of money, occasioned by a decline in the productiveness of the mines, has been caused by the increased productiveness of industry, arising from the abolition of oppressive restraints on commerce, the opening of new and more abundant sources of supply, and the discovery of new means and improved methods of production. — (See PRECIOUS METALS.)

2. *Price of monopolised Commodities.* — Exclusive, however, of the commodities now alluded to, there is a considerable class, whose producers or holders enjoy either an *absolute* or a *partial* monopoly of the supply. When such is the case, prices depend entirely or principally on the proportion between the supply and demand, and are not liable to be influenced, or only in a secondary degree, by changes in the cost of production. Antique statues and gems; the pictures of the great masters; wines of a peculiar flavour, produced in small quantities, in particular situations; and a few other articles; exist under what may be called absolute monopolies; — their supply cannot be increased; and their price must, therefore, depend entirely on the competition of those who may wish to buy them, without being in the slightest degree influenced by the cost of their production.

Monopolies are sometimes established by law; as when the power to supply the market with a particular article is made over to one individual or society of individuals, without any limitation of the price at which it may be sold; which, of course, enables those possessed of the monopoly to exact the highest price for it that the competition of the buyers will afford, though such price may exceed the cost of production in any conceivable degree. Monopolies of this sort used to be common in England, particularly in the reign of Elizabeth: but they were finally abolished by the famous act of the 21 Jac. 1. c. 3. — an act which, by establishing the freedom of competition in all businesses carried on at home, has been productive of the greatest advantage. — (See MONOPOLY.)

The corn laws establish a partial monopoly of the supply of Great Britain with corn in favour of the agriculturists; but, as competition is carried to as great an extent in agriculture as in any other business, this monopoly does not enable them to obtain a higher price for their produce than is sufficient to pay the expenses of its production, though, owing to the peculiar circumstances under which this country is placed, this price is higher than the price in the surrounding countries. Hence it results that the monopoly is injurious to the public, without being of any advantage to those engaged in the business of agriculture. Neither, indeed, can it be truly said to be advantageous to the landlords. — (See *antè*, p. 404.)

The rights conveyed by patents sometimes establish a valuable monopoly; for they enable the inventors of improved methods of production to maintain, during the continuance of the patent, the price of the article at a level which may be much higher than is required to afford them the ordinary rate of profit. This advantage, however, by stimulating invention, and exciting to new discoveries, of which it is the natural and appropriate reward, instead of being injurious, is beneficial to the public. — (See PATENTS.)

There are also partial monopolies, depending upon situation, connection, fashion &c. These, and other inappreciable circumstances, sometimes occasion a difference of 30 per cent. or more in the price of the same article in shops not very distant from each other.

Generally speaking, the supply of monopolised commodities is less liable to vary than the supply of those which are freely produced; and [redacted] prices are commonly more steady. But there are various exceptions to this rule, and of these the corn monopoly is one. The great variations in the harvests of particular countries, and their average equality throughout the world, exposes a nation which shuts foreign corn out of its ports to destructive vicissitudes of price, from which it would enjoy a comparative exemption were the ports open. — (See *antè*, p. 401.) Sometimes the expiration of a monopoly — a patent, for example — has occasioned a sudden and extraordinary increase of supply, and consequent fall of price; entailing, of course, a serious loss on the holders of large stocks of goods produced under the monopoly.

3. *New Sources of Supply.* — The effects on prices produced by the opening of new markets or new sources of supply, are familiar to every one. The fall that has taken place in the price of pepper, and of most sorts of commodities brought from the East, since the opening of the trade in 1814, is a conspicuous proof of what is now stated.

4. *Influence of War on Prices.* — The effect of war in obstructing the ordinary channels of commercial intercourse, and occasioning extreme fluctuations in the supply and price of commodities, is well known. In this respect, however, the latter part of the late war is, perhaps, entitled to a pre-eminence. We had then to deal with an enemy who had extended his sway over most part of the Continent; and who endeavoured, by every means in his power, to shut us out of the Continental markets. Mr. Tooke has given, in his elaborate and valuable work on *High and Low Prices*, a variety of details which strikingly illustrate the effect that the regulations then adopted by the belligerent powers had on prices. "Among the means," says Mr. Tooke, "devised by the ingenuity and enterprise of adventurers to elude or overcome the obstacles presented by the decrees of the enemy, one in particular, which was resorted to on an extensive scale, deserves mention, as illustrating in a striking manner the degree in which those obstacles were calculated to increase the cost to the consumer. Several vessels laden with sugar, coffee, tobacco, cotton twist, and other valuable commodities, were despatched from England, at very high rates of freight and insurance, to Salonica, where the goods were landed, and thence conveyed on mules and horses through Servia and Hungary to Vienna, for the purpose of being distributed over Germany, and, possibly, into France. Thus it might happen that the inhabitants of that part of the Continent most contiguous to this country could not receive their supplies from us, without an expense of conveyance equivalent to what it would be, if they were removed to the distance of a sea voyage twice round the globe, but not subject to fiscal and political regulations." And in consequence of these, and other causes of the same sort, Mr. Tooke mentions that the price of sugar in France, and other parts of the Continent, during the latter years of the war, was as high as 5*s.* and 6*s.* a pound; that coffee rose to 7*s.*, indigo to 18*s.*, and so on.

But the sums charged for freight and insurance were the most extraordinary. Mr. Tooke states, that he has known instances in which the licence, freight, and other charges on account of a vessel of about 100 tons burden, making a voyage from Calais to London and back, have amounted to the almost incredible sum of 50,000*l.*! A ship, of which the whole cost and outfit did not amount to 4,000*l.*, earned during the latter period of the war, a gross freight of 80,000*l.* on a voyage from Bordeaux to London and back! The freight of indigo from London to the Continent does not at present exceed 1*d.* a pound; whereas it amounted, at the period referred to, to about 4*s.* 6*d.* — (*High and Low Prices*, 2d ed. p. 212.)

5. *Influence of Taxes on Prices.* — It is unnecessary to dilate on a topic so familiar to every one. When a tax is laid on a commodity, its price necessarily rises in a corresponding proportion; for otherwise the producers would not obtain the ordinary rate of profit, and would, of course, withdraw from the business. The rise in the price of several of the articles in the annexed table is principally to be ascribed to the increase of taxation.

These statements will probably suffice to give our readers a general idea of the principles which determine the value of commodities. To go deeper into the subject would involve us in discussions that belong to political economy, and are among the most intricate in that science. The influence of speculation on prices must not, however, be passed over in a [redacted] of this sort.

Influence of Speculation on Prices. — It very rarely happens that either the actual supply of any species of produce in extensive demand, or the intensity of that demand, can be exactly measured. Every transaction in which an individual buys produce in order to sell it again, is, in fact, a speculation. The buyer anticipates that the demand for the article he has purchased will be such, at some future period, either more or less

distant, that he will be able to dispose of it with a profit; and the success of the speculation depends, it is evident, on the skill with which he has estimated the circumstances that must determine the future price of the commodity. It follows, therefore, that in all highly commercial countries, where merchants are possessed of large capitals, and where they are left to be guided in the use of them by their own discretion and foresight, the prices of commodities will frequently be very much influenced, not merely by the actual occurrence of changes in the accustomed relation of the supply and demand, but by the anticipation of such changes. It is the business of the merchant to acquaint himself with every circumstance affecting the particular description of commodities in which he deals. He endeavours to obtain, by means of an extensive correspondence, the earliest and most authentic information with respect to every thing that may affect their supply or demand, or the cost of their production; and if he learned that the supply of an article had failed, or that, owing to changes of fashion, or to the opening of new channels of commerce, the demand for it had been increased, he would most likely be disposed to become a buyer, in anticipation of profiting by the rise of price, which, under the circumstances of the case, could hardly fail of taking place; or, if he were a holder of the article, he would refuse to part with it, unless for a higher price than he would previously have accepted. If the intelligence received by the merchant had been of a contrary description, — if, for example, he had learned that the article was now produced with greater facility, or that there was a falling off in the demand for it, caused by a change of fashion, or by the shutting up of some of the markets to which it had previously been admitted, — he would have acted differently: in this case he would have anticipated a fall of prices, and would either have declined purchasing the article, except at a reduced rate, or have endeavoured to get rid of it, supposing him to be a holder, by offering it at a lower price. In consequence of these operations, the prices of commodities, in different places and periods, are brought comparatively near to equality. All abrupt transitions, from scarcity to abundance, and from abundance to scarcity, are avoided; an excess in one case is made to balance a deficiency in another, and the supply is distributed with a degree of steadiness and regularity that could hardly have been deemed attainable.

It is obvious, from what has now been stated, that those who indiscriminately condemn all sorts of speculative engagements, have never reflected on the circumstances incident to the prosecution of every undertaking. In truth and reality, they are all speculations. Their undertakers must look forward to periods more or less distant; and their success depends entirely on the sagacity with which they have estimated the probability of certain events occurring, and the influence which they have ascribed to them. Speculation is, therefore, really only another name for foresight; and though fortunes have sometimes been made by a lucky hit, the character of a successful speculator is, in the vast majority of instances, due to him only who has skilfully devised the means of effecting the end he had in view, and who has outstripped his competitors in the judgment with which he has looked into futurity, and appreciated the operation of causes producing distant effects. Even in the securest businesses, such as agriculture and manufactures, there is, and must be, a great deal of speculation. An unlooked for change of season frequently disappoints the apparently reasonable expectations of those who undertake the former; while the equally capricious variations of fashion have to be encountered by those engaged in the latter; and each is, besides, liable to be affected by legislative enactments, by new discoveries in the arts, and by an endless variety of circumstances which it is always very difficult, and sometimes quite impossible, to foresee. On the whole, indeed, the gains of the undertakers are so adjusted, that those who carry them on obtain, at an average, the common and ordinary rate of profit. But the inequality in the gains of individuals is most commonly very great: and while the superior tact, industry, or good fortune of some enable them to realise large fortunes; the want of discernment the less vigilant attention, or the bad fortune of others, frequently reduces them from the situation of capitalists to that of labourers.

The great cotton speculation of 1825 took its rise partly and chiefly from a supposed deficiency in the supply of cotton, partly from an idea that there was a greatly increased demand for raw cotton in this country and the Continent, and partly from a belief that the stocks on hand were unusually low. Now it is obvious that the success of those who embarked in this speculation depended entirely on two circumstances; viz. *first*, that they were right in the fundamental supposition on which the whole speculation rested, that the supply of cotton was no longer commensurate with the demand; and *second*, that their competition did not raise the price so high as to diminish the consumption by the manufacturers in too great a degree to enable them to take off the quantity to be actually brought to market. If the merchants had been well founded in their suppositions, and if their competition had not raised the price of cotton too high, the speculation would certainly have been successful. But, instead of being well founded, the hypothesis on which the whole thing rested was perfectly visionary. There was no deficiency in the supply of cotton, but, on the contrary, a great super-

abundance; and though there had been such a deficiency, the excess to which the price was carried must have checked consumption so much as to occasion a serious decline. The falling off in the imports of cotton from America, in 1824, seems to have been the source of the delusion. It was supposed that this falling off was not accidental, but that it was a consequence of the price of cotton having been for a series of years so low as to be inadequate to defray the expenses of its cultivation. The result showed that this calculation was most erroneous. And besides, in entering on the speculation, no attention was paid to Egypt and Italy, — countries from which only about 1,400,000 lbs. of cotton were obtained in 1824, but from which no less than 23,800,000 lbs. were obtained in 1825! This unlooked-for importation was of itself almost enough to overturn the combination of the speculators; and, coupled with the increased importation from America and other countries, actually occasioned a heavy glut of the market.

The risk to which merchants are exposed, when they either sell off any commodity at a reduced price in anticipation of a fall, or buy at an advanced price in anticipation of a future rise, is a consequence principally of the extreme difficulty of ascertaining the true state of the fact with respect to the grounds on which an abundant or a deficient supply, or an increasing or decreasing demand, may be expected. Rules can here be of no service; every thing depends upon the talent, tact, and knowledge of the party. The questions to be solved are all practical ones, varying in every case from each other; the skill of the merchant being evinced by the mode in which he conducts his business under such circumstances, or by his sagacity in discovering coming events, and appreciating their character and the extent of their influence. Priority, but, above all, accuracy of intelligence, is, in such cases, of the utmost consequence. Without well authenticated data to go upon, every step taken may only lead to error. The instances, indeed, in which speculations, apparently contrived with the greatest judgment, have ended in bankruptcy and ruin, from a deficiency in this essential requisite, are so very numerous, that every one must be acquainted with them. Hence the importance of selecting acute and cautious correspondents; and hence, also, the necessity of maturely weighing their reports, and of endeavouring, by the aid of information gleaned from every authentic accessible source, to ascertain how far they may be depended upon.

When a few leading merchants purchase in anticipation of an advance, or sell in anticipation of a fall, the speculation is often pushed beyond all reasonable limits, by the operations of those who are influenced by imitation only, and who have never, perhaps, reflected for a moment on the grounds on which a variation of price is anticipated. In speculation, as in most other things, one individual derives confidence from another. Such a one purchases or sells, not because he has any really accurate information as to the state of the demand and supply, but because some one else has done so before him. The original impulse is thus rapidly extended; and even those who are satisfied that a speculation, in anticipation of a rise of prices, is unsafe, and that there will be a recoil, not unfrequently adventure, in the expectation that they will be able to withdraw before the recoil has begun.

It may, we believe, speaking generally, be laid down as a sound practical rule, to avoid having any thing to do with a speculation in which many have already engaged. The competition of the speculators seldom fails speedily to render an adventure that might have been originally safe, extremely hazardous. If a commodity happen to be at an unusually reduced price in any particular market, it will rise the moment that different buyers appear in the field; and supposing, on the other hand, that it is fetching an unusually high price, it will fall, perhaps far below the cost of production, as soon as supplies begin to be poured in by different merchants. Whatever, therefore, may be the success of those who originate a speculation, those who enter into it at an advanced period are almost sure to lose. To have been preceded by others ought not, in such matters, to inspire confidence; on the contrary, it ought, unless there be something special in the case, to induce every considerate person to decline interfering with it.

The maintenance of the freedom of intercourse between different countries, and the more general diffusion of sound instruction, seem to be the only means by which those miscalculations, that are often productive of great national as well as private loss, can be either obviated or mitigated. The effects consequent to such improvident speculations being always far more injurious to the parties engaged in them than to any other class, the presumption is that they will diminish, both in frequency and force, according as the true principles of commerce come to be better understood. But, whatever inconvenience may occasionally flow from them, it is abundantly plain, that instead of being lessened, it would be very much increased, were any restraints imposed on the freedom of adventure. When the attention of many individuals is directed to the same line of speculation; when they prosecute it as a business, and are responsible in their

An Account of the Contract Prices of the following Articles of Provision, &c. at the Royal Hospital, by the Authorities

Years.	Flesh, per Cwt. £ s. d.	Bread, per Lb. Average.	Flour, per Sack. £ s. d.	Butter, per Lb. s. d.	Cheese, per Lb. s. d.	Peas, per Bushel. s. d.	Oatmeal, per Bushel. £ s. d.	Salt, per Bushel. s. d.	Malt, per Quarter. £ s. d.	Hops, per Cwt. £ s. d.	Beer, per Barrel. £ s. d.
1729	1 5 8	1d. for 2 6/16 oz.	- -	0 4 1/2	0 5 1/2	4 0	0 4 6	5 0	1 9 0	2 5 0	- -
1730	1 5 8	1d. for 14 1/2 oz.	- -	0 5	0 5 1/2	4 0	0 4 6	5 0	1 0 6	2 5 10	0 3 9
1735	0 16 11	1d. for 12 1/4 oz.	- -	0 5 1/2	0 2 1/2	3 6	0 4 0	4 0	1 0 3	3 9 6 1/2	0 4 12
1740	1 8 0	1d. for 9 3/16 oz.	- -	0 5	0 5 1/2	3 6	0 4 0	4 0	1 7 5 1/2	2 10 7 1/2	0 5 2 1/2
1745	1 2 2	1d. for 15 9/16 oz.	- -	0 5 1/2	0 2 1/2	3 6	0 4 0	4 0	1 3 1	3 11 1	0 5 11
1750	1 6 6	1d. for 13 1/2 oz.	- -	0 5 1/2	0 3 1/2	3 6	0 4 0	4 0	1 4 0	5 4 0	0 5 8 1/2
1755	1 7 9 1/2	1d. for 14 6/16 oz.	- -	0 5 1/2	0 3 1/2	3 6	0 4 0	4 0	1 2 0	2 15 0	0 4 5 1/2
1760	1 11 6	1d. for 13 1/2 oz.	- -	0 5 1/2	0 3 1/2	3 6	0 4 0	4 0	1 4 9	4 13 4	0 5 7 1/2
1765	1 7 3	1d. for 9 1/2 oz.	- -	0 5 1/2	0 3 1/2	3 6	0 4 0	4 0	1 10 8	7 3 6	0 7 2 1/2
1770	1 8 6	1d. for 11 3/16 oz.	- -	0 6 1/2	0 3 1/2	4 3	0 4 9	4 8	1 8 3	5 16 4	0 5 10
1775	1 13 5	1d. for 9 5/16 oz.	- -	0 6 1/2	0 5 1/2	7 6	0 5 3	4 8	1 17 3	4 16 6	0 7 1 1/2
1780	1 12 6	1d. for 11 6/16 oz.	- -	0 6 1/2	0 3 1/2	7 6	0 5 3	4 8	1 11 1	2 14 8	0 7 3 1/2
1785	1 17 6 1/2	1d. for 10 1/2 oz.	- -	0 6 1/2	0 3 1/2	7 6	0 5 3	4 8	2 0 3	5 6 4	0 8 2 1/2
1790	1 16 10	- -	2 3 4	0 6 1/2	0 4	7 6	0 5 3	4 8	1 15 6	6 13 9	0 8 7
1795	2 2 10	- -	3 5 8	0 8 1/2	0 5 1/2	9 6	0 6 4 1/2	6 1 1/2	2 8 3	7 7 10	0 10 4 1/2
1800	3 4 4	- -	4 16 0	0 11 1/2	0 6 1/2	13 5	0 14 0	14 0	4 4 0	16 15 9	1 0 4 1/2
1805	3 0 4	- -	4 2 3	0 11 1/2	0 7 1/2	7 9	0 12 0	16 10 1/2	4 5 7	6 11 6	0 17 9 1/2
1806	3 1 0	- -	3 9 6 1/2	0 11 1/2	0 7 1/2	8 4 1/2	0 10 3	19 9	3 16 0	6 7 9	0 16 3 1/2
1807	3 3 0	- -	3 3 8 1/2	1 0 1/2	0 7 1/2	14 4 1/2	0 9 4 1/2	19 9	3 13 1 1/2	5 19 0	0 15 5
1808	3 3 0	- -	3 9 10 1/2	1 0 1/2	0 7 1/2	19 2 1/2	0 10 10	19 9	3 16 1 1/2	4 12 6	0 16 5 1/2
1809	3 6 6	- -	4 5 1 1/2	1 1	0 8	14 10 1/2	0 11 9	19 9	4 4 5 1/2	7 6 8	0 17 0
1810	3 12 0	- -	4 8 4	1 1 1/2	0 8 1/2	9 5	0 11 7	19 9	4 4 5	7 6 8	0 17 10
1811	3 14 0	- -	4 11 0	1 1 1/2	0 8 1/2	8 9	0 11 6	19 9	3 13 6	7 13 6	0 16 3 1/2
1812	3 16 0	- -	5 7 5	1 1 1/2	0 8 1/2	12 8 1/2	0 13 3	19 9	4 18 6	9 17 0	1 0 9 1/2
1813	4 5 0	- -	4 13 0	1 1 1/2	0 8 1/2	13 8 1/2	0 13 3	19 9	4 16 6	11 11 8	1 1 10 1/2
1814	3 14 6	- -	3 10 6	1 2	0 8 1/2	9 4	0 10 4	19 9	3 17 8	9 10 0	0 17 3 1/2
1815	3 8 0	- -	2 4 9	1 2	0 8	6 7 1/2	0 10 1/2	19 9	3 9 7 1/2	9 13 7	0 15 4 1/2
1816	2 11 4	- -	3 4 1	0 9 1/2	0 6 1/2	7 0 1/2	0 9 2	19 9	3 9 4 1/2	14 0 0	0 15 8
1817	2 11 4	- -	4 6 4	0 8 1/2	0 5 1/2	8 6 1/2	0 13 9	19 9	4 6 10 1/2	22 4 0	1 0 7
		d.								Pockets.	
1818	2 17 1	Per lb. 2 6/12	3 8 5 1/2	0 11	0 6	9 3 1/2	0 13 5 1/2	19 9	4 1 8 1/2	8 8 0	0 19 11 1/2
1819	3 4 3	— 1 11/12	2 17 5	0 11	0 8	7 8	0 12 9	19 9	3 12 11 1/2	4 12 0	0 15 3 1/2
1820	3 10 4 1/2	— 1 11/12	2 15 1	0 9 1/2	0 7	7 5 1/2	0 13 4 1/2	19 9	3 8 8 1/2	4 0 0	0 13 10 1/2
1821	2 18 10	— 1 1/12	2 5 3 1/2	0 8 1/2	0 6	5 9	0 8 8 1/2	19 4 1/2	3 1 11	3 12 0	0 12 10 1/2
1822	1 19 5 1/2	— 1 9/12	1 17 5 1/2	0 7 1/2	0 5	5 0 1/2	0 8 6	18 0	2 12 8 1/2	3 10 0	0 11 5 1/2
1823	2 2 7 1/2	— 1 1/2	2 2 5	0 7 1/2	0 4	5 6	8s. 3d. per buah. 15s. 6d. per cwt.	4 10	2 19 11	9 19 0	0 12 5 1/2
1824	2 2 8 1/2	— 1 1/12	2 6 2	0 8 1/2	0 4 1/2	5 11	17s. per cwt.	4 9	3 2 1	7 5 0	0 14 10 1/2
1825	2 19 6 1/2	— 1 1/12	2 13 4	0 10 1/2	0 5 1/2	split peas 11s.	0 17 6	2 10	3 11 10 1/2	23 0 0	0 16 6 1/2
1826	2 17 8	— 1 1/12	2 5 2 1/2	0 9 1/2	0 6 1/2	11 0	0 19 0	1 10 1/2	3 5 1	15 5 0	0 17 5 1/2
1827	1 15 4 1/2	— 1 1/12	2 3 6	0 8 1/2	0 5 1/2	10 6	1 5 0	1 8	3 4 10	4 10 0	0 13 8 1/2
1828	2 10 7 1/2	— 1 208/360	2 6 0 1/2	0 8 1/2	0 5 1/2	9 6	0 18 6	1 10	3 1 7	- -	0 13 1
1829	2 6 3 1/2	— 2 1/360	2 15 10 1/2	0 8	0 5	8 9	0 18 6	1 8	3 1 10 1/2	5 9 6	0 13 4
1830	2 3 6	— 1 220/360	2 14 11	0 6 1/2	0 4	8 0	0 16 11	1 8	2 16 1 1/2	- -	0 12 6 1/2
1831	2 4 3 1/2	— 2 261/360	3 0 5 1/2	0 9 1/2	0 4 1/2	9 0	0 17 6	1 8	3 10 5 1/2	5 11 0	0 16 0 1/2
1832	2 6 2 1/2	— 1 250/360	2 13 1	0 8 1/2	0 3 1/2	8 9	0 17 0	1 8	2 18 8	6 15 0	0 13 1 1/2
1833	2 6 6	— 1 161/360	2 4 1 1/2	0 8 1/2	0 4 1/2	9 0	0 16 0	1 6	2 14 6	- -	0 12 2
1834	2 3 9	— 1 207/360	1 17 6 1/2	0 7 1/2	0 4 1/2	8 6	0 13 6	1 6	2 15 1 1/2	5 1 0	0 12 3 1/2
1835	2 0 7 1/2	— 1 236/360	1 11 0 1/2	0 7 1/2	0 4	8 0	0 14 6	1 3	3 1 4 1/2	5 11 0	0 13 9 1/2
1836	2 1 3 1/2	— 1 240/360	1 13 1 1/2	0 9 1/2	0 4 1/2	7 9	0 14 6	1 3	3 6 4	- -	0 14 0
1837	2 10 11 1/2	— 1 1/2	2 1 11 1/2	0 10 1/2	0 5	8 9	0 18 6	1 3	3 8 2	4 10 0	0 13 1 1/2
1838	2 2 5	— 1 244/360	2 6 1	0 9 1/2	0 5	7 9	0 15 0	1 3	3 0 11 1/2	3 19 0	0 13 0 1/2
1839	2 7 7 1/2	— 1 196/360	2 12 2	0 10 1/2	0 5	9 0	1 0 6	1 6	3 9 5 1/2	3 19 0	0 14 7
1840	2 14 0	— 1 185/360	2 11 9 1/2	0 10	0 4 1/2	8 3	0 18 9	1 6	3 8 4 1/2	3 6 0	0 14 3
1841	2 16 0 1/2	— 1 128/360	2 12 2 1/2	0 11 1/2	0 5 1/2	7 6	0 14 6	1 3	3 5 5 1/2	7 13 0	0 15 1 1/2
1842	2 12 8 1/2	— 1 238/360	2 5 8 1/2	0 8 1/2	—	8 9	0 18 0	1 6	3 1 7	—	0 14 7

[illegible] were contracted for in suits; and it is

Greenwich, for the Years under-mentioned. — (Partly extracted from *Parl. Papers*, and partly furnished at the Hospital.)

Carpenters, per Day.	Bricklayers, per Day.	Masons, per Day.	Plumbers, per Day.	Candles, per Doz. Lb.	Shoes, per Pair.	Coals, per Chaldron.	Mops, each.	Stockings, per Pair.	Hats, each.	Complete Suits of Bedding.	Suits of Clothes.	Coats, each.
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	£ s. d.	£ s. d.	s. d.	s. d.	£ s. d.	£ s. d.	£ s. d.
- -	- -	- -	- -	6 5	4 0	1 8 5	0 0 10½	1 9	2 8	3 5 0	2 12 0	
							per dozen.			or		
Carps. 2 6	2 6	2 6	3 0	6 4	4 0	1 4 6	0 10 0	1 6	2 8	2 13 0	2 12 0	
Joiners 2 6½										Blankets each.		
- - 2 6½	2 6	2 6	3 0	4 2	4 0	1 5 0	0 10 6	1 6	2 3	0 4 0	2 2 6	
- - 2 8½												
- - 2 6½	2 6	2 8	3 0	5 6	3 10	1 9 0	0 10 0	1 6	2 0	0 4 6	2 3 6	
- - 2 8½												
- - 2 6½	2 6	2 8	2 6	6 0	3 6	1 10 0	0 11 0	1 6	2 0	0 4 6	- -	1 2 4
- - 2 8½												
- - 2 6½	2 6	2 8	2 6	6 2	3 9	1 7 7½	0 10 9	1 6	2 0	0 4 6	- -	1 1 5
- - 2 8½												
- - 2 6½	2 6	2 8	2 6	6 10	4 0	1 8 7½	0 11 0	1 8	2 0	0 4 4½	- -	1 1 6
- - 2 8½												
- - 2 6½	2 6	2 8	2 6	6 6	4 0	1 12 8	0 12 0	1 8	2 0	0 4 4½	- -	1 1 0
- - 2 8½												
- - 2 6½	2 4	2 8	3 0	6 2	4 0	1 12 4½	0 11 3	1 8	2 6	0 4 6	- -	1 1 6
- - 2 8½												
- - 2 6½	2 4	2 8	3 0	6 10½	4 0	1 9 1½	0 11 0	1 6	2 6	0 4 6	- -	1 0 5
- - 2 8½												
- - 2 6½	2 4	2 10	3 0	6 3	3 10	1 10 11½	0 10 6	1 4	2 2	0 5 4½	- -	0 19 11
- - 2 8½												
- - 2 6½	2 4	2 10	3 0	6 9½	3 11½	1 17 3½	0 12 0	1 6	2 2	0 5 4½	- -	0 19 5
- - 2 8½												
- - 2 6½	2 4	2 10	3 3	6 6	3 6	1 14 2½	0 11 0	1 6	2 4	0 5 4½	- -	1 0 3
- - 2 8½												
- - 2 6½	2 4	2 10	3 3	7 9	3 11½	1 14 4½	0 14 0	1 6	2 6	0 5 4½	- -	1 0 8
- - 2 10½												
- - 2 6½	3 0	2 10	3 3	9 2	4 0	1 19 9	0 15 0	1 6	2 3	0 6 6	- -	1 0 2
- - 2 10½												
- - 3 2½	3 0	2 10	3 3	10 4	5 8	2 11 7	0 15 0	1 6	2 3	0 6 6	- -	1 0 0
4 6	4 10	5 0	4 6	10 7	5 9	2 11 8½	0 17 0	2 2	3 0	0 8 9	- -	1 1 10
4 6	4 8	5 0	4 6	10 3	5 9	2 13 4	0 17 0	2 2	3 0	0 8 9	- -	1 1 10
5 0	4 8	5 0	4 6	9 10	5 0	2 14 0	0 17 0	2 2	3 0	0 8 9	- -	1 1 6
5 0	5 0	5 0	4 6	13 2½	5 0	2 15 9½	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 4	5 1	5 1	5 3	14 5½	5 6	3 0 9½	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 8	5 2	5 2	5 9	12 0	5 6	3 0 8	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 6	5 5	5 9	5 9	10 9½	4 11	3 1 6	0 17 0	2 2	3 0	0 8 9	- -	1 2 2
5 5	5 5	5 9	5 9	12 6	4 11	2 16 1	0 17 0	2 6	3 0	0 8 9	- -	1 2 2
5 6	5 5	5 9	5 9	14 2	4 8	2 15 7½	0 18 0	2 6	3 0	0 8 9	- -	1 2 2
5 6	5 5	5 9	5 9	14 6	4 8	3 2 2½	1 10 6	3 3	3 0	0 11 6	- -	1 4 6
5 6	5 1	5 9	5 9	11 7	4 7	2 15 6½	1 10 0	3 3	3 0	0 11 3	- -	1 4 9
5 2	5 1	5 3	5 5	9 3	4 7	2 9 6½	1 10 0	2 9	3 0	0 9 4½	- -	1 4 9
5 2	5 1	5 3	5 9	9 10	3 10	2 6 7	1 10 0	2 9	3 0	0 9 4½	- -	1 0 7
							Each.			Suits.		
5 3	5 1	5 3	5 9	11 5½	3 10	2 8 6	0 2 6	2 10	3 0	2 19 10½	2 1 0½	1 1 7
5 3	5 1	5 3	5 9	8 6½	4 2½	2 6 8	0 2 6	2 11	3 0	2 19 10½	2 1 7½	1 1 10½
5 3	5 1	5 3	5 9	8 2½	4 4½	2 5 9	0 1 10½	2 9½	3 0	2 19 10½	2 3 3½	1 2 7
5 3	5 1	5 3	5 9	7 1½	4 3	2 6 6	0 1 4½	2 8	3 0	2 19 10½	2 1 9	1 1 11
5 1½	5 0	5 1½	5 7½	6 1½	4 2½	2 4 6½	0 1 3½	2 5	3 0	2 19 10½	2 0 2½	1 1 3
5 0	4 10	5 0	5 6	5 6	4 7½	2 6 7	0 1 2	2 2	3 0	2 19 10½	1 19 11½	1 1 1½
5 0	4 10	5 0	5 6	5 6	4 9½	2 3 8	0 1 1½	2 1½	3 0	2 19 10½	1 19 11½	1 1 2
5 0	4 10	5 0	5 6	6 0	4 6	2 3 2	0 1 2½	2 1½	3 0	2 19 10½	2 0 8½	1 1 8
5 9	4 10	5 6	5 6	5 9½	4 5	2 0 4	0 1 1½	2 0½	3 0	2 19 10½	2 1 6½	1 2 2
5 9	4 10	5 6	5 9	5 10	4 3½	2 1 5½	0 1 1½	1 10½	3 0	2 8 3	1 19 10½	1 1 4
5 8½	4 10	5 6	5 9	5 10½	4 5	2 0 8½	0 1 2	1 9½	3 0	2 5 9	1 18 1	1 0 7
5 8	4 10	5 6	5 5	5 6½	3 9½	1 16 7	0 1 1½	1 9½	3 0	2 5 9	1 18 6½	
5 6	4 9	5 5	5 6	5 3½	3 6	1 12 11	0 0 10½	1 6½	3 0	1 17 10½	1 18 6½	
5 5	do.	5 3	5 6	6 0	3 6	1 7 0	0 11½ 6/12	1 6½ 6/12	3 0	1 17 10½	2 0 11 6/12	
						Per Ton.						
do.	do.	5 3	5 6	5 2½	3 6	1 4 3	0 1 1½	1 7½ 6/12	3 0	1 19 3½	2 3 4	
do.	do.	do.	5 5	5 2½	3 4½	0 15 11	do.	1 7 5/12	do.	do.	2 3 8½	
do.	do.	do.	do.	5 6	do.	0 14 11	do.	1 8½	do.	do.	2 7 2½	
do.	do.	do.	do.	5 2	3 3½	0 16 8	do.	1 9½	do.	do.	2 6 1	
do.	4 10 / 4 8	do.	do.	5 2	3 3½	0 17 3	0 1 1½	1 9½ 11/12	do.	2 5 7	2 7 2½	
do.	4 10 / 4 8	do.	do.	5 4	3 3½	1 1 3	0 1 2	1 9½ 11/12	do.	2 5 7	2 6 5½	
do.	4 10 / 4 8	do.	do.	5 3	3 2½	1 0 11	0 1 1½	1 10 6/12	do.	2 5 7	2 5 5½	
do.	4 10 / 4 8	do.	do.	6 5½	3 2½	1 0 2	0 1 1½	1 10 6/12	do.	2 0 9½	2 6 5½	
do.	4 10 / 4 8	do.	do.	5 6	3 2½	0 19 8	0 1 1½	1 8½	do.	2 2 6½	2 5 1½	
5 8	5 5 / 5 0	5 5	5 9	5 8	3 2½	0 19 5	0 1 1½	1 8½	2 1	2 2 6½	2 5 5½	
5 8	5 5 / 5 0	5 5	5 9	5 8	3 1½	0 18 9	0 1 1½	1 7 8/12	2 1	2 2 11½	2 5 5½	

Notes applied since 1828.

so stated in the account. It is also necessary to remark, that the blue cloth now used for the Pensioners' coats is of a quality duction of 10 per cent.; and in the case of bricklayers', masons', and plumbers' wages, to a deduction of 7½ per cent.

own private fortunes for any errors they may commit; they acquire a knowledge of the various circumstances influencing prices, and give by their combinations a steadiness to them, which it is easy to see could not be attained by any other means. It is material, too, to bear in mind, as was previously stated, that many, perhaps it might be said *most*, of those who press so eagerly into the market, when any new channel of commerce is opened, or when any considerable rise of price is anticipated, are not merchants, but persons engaged in other businesses, or living, perhaps, on fixed incomes, who speculate in the hope of suddenly increasing their fortune. This tendency to gambling seldom fails to break out upon such occasions; but, fortunately, these are only of comparatively rare occurrence; and in the ordinary course of affairs, mercantile speculations are left to be conducted by those who are familiar with business, and who, in exerting themselves to equalise the variations of price caused by variations of climate and of seasons, and to distribute the supply of produce proportionally to the effective demand, and with so much providence that it may not at any time be wholly exhausted, perform functions that are in the highest degree important and beneficial. They are, it is true, actuated only by a desire to advance their own interests; but the results of their operations are not less advantageous than those of the agriculturist who gives greater fertility to the soil, or of the mechanist who invents new and more powerful machines.

7. *Tables of Prices.* — It is superfluous, perhaps, to observe, that the precious metals are liable to all the variations of value already alluded to. Not only, therefore, are prices, as was already remarked, affected by variations in the cost and supply of commodities, but they are also affected by changes in the cost and supply of gold and silver, whether arising from the exhaustion of old, or the discovery of new mines, improvements in the art of mining, changes of fashion, &c. Hence it is, that Tables of the prices of commodities extending for a considerable period, communicate far less solid information than is generally supposed, and, unless the necessary allowances be made, may lead to the most unfounded conclusions. The cost or real value of any commodity depends on the quantity of labour required for its production; but supposing that we were to set about inferring this cost, or the ultimate sacrifice required to obtain the commodity, from its price, it might happen (had the quantity of labour required for its production declined, but in a less degree than the quantity required to produce gold and silver) that its value would appear to rise, when it had really been diminished. When, however, the rate of wages, as well as the price of commodities, is given upon authentic data, a Table of prices is valuable, inasmuch as it shows the extent of the command over the necessaries and conveniences of life enjoyed by the bulk of the community during the period through which it extends. The foregoing Table (pp. 1012, 1013.) of the prices of various commodities, and of the wages paid to different descriptions of tradesmen, at Greenwich Hospital, for the last 100 years, is the most complete of the sort that has been published; and is one of the few that are founded upon data the accuracy of which cannot be questioned. Unfortunately, it applies only to a small part of the country. But many important conclusions may, notwithstanding, be deduced from it. The reader will find, under the more important articles described in this work, pretty ample accounts of their prices. Sometimes, as in the case of corn, these accounts go back to a very distant period.

Those desirous of detailed information as to the prices of commodities in Great Britain, in remoter ages, may consult the elaborate Tables in the 3d volume of Sir F. M. Eden's work on the *Poor;* and the 4th volume of *Macpherson's Annals of Commerce*. *Arbuthnot's Tables of Ancient Coins, Weights, Measures, Prices, &c.* are well known; but the statements are not much to be depended upon. The *Traité de Métrologie* of M. Paucton, 4to, Paris, 1780, is the best work on this curious and difficult subject.

PRICE CURRENT; a list or enumeration of the various articles of merchandise, with their prices, the duties (if any) payable thereon when imported or exported, with the drawbacks occasionally allowed upon their exportation, &c. Lists of this description are published periodically, generally once or twice a week, in most great commercial cities and towns. — (For examples, see the articles GENOA, HAVRE, TRIESTE, &c. in this work.)

PRIMAGE, is a certain allowance paid by the shipper or consignee of goods to the mariners and master of a vessel for loading the same. In some places it is 1*d.* in the pound; in others 6*d.* for every pack or bale; or otherwise, according to the custom of the place.

PRINTS, impressions on paper, or some other substance, of engravings on copper, steel, wood, stone, &c., representing some particular subject or composition.

Prints, like paintings, embrace every variety of subject; and differ very widely in the manner in which they are engraved. Their prices vary according to the style of the engraving, the fineness of its execution, the goodness of the impression, its rarity, &c. The art seems to have taken its rise in the 15th century. But, as a dissertation on one of the most beautiful of the fine arts would be singularly out of place in a work of this

sort, we have introduced it for the purpose merely of stating the law with respect to the copyright of prints.

This is laid down in the acts 8 Geo. 2. c. 13., 7 Geo. 3. c. 38., and 17 Geo. 3. c. 57. By these acts, the copyright of all sorts of prints, including maps and charts, is secured to the engraver, or author, for *twenty-eight* years. The last-mentioned act declares that every individual who shall, within the said 28 years, engrave, etch, or work, or in any other manner copy, in the whole or in part, by varying, adding to, or diminishing from the main design; or shall print, reprint, or import for sale, or shall publish, sell, or otherwise dispose of any copy of any print whatever, which has been or shall be engraved, etched, drawn, or designed in Great Britain, without the express consent of the proprietor thereof first obtained in writing, signed by him with his own hand, in the presence of, and attested by, two or more credible witnesses, then every such proprietor may, by a special action upon the case to be brought against the person so offending, recover such damages as a jury, on the trial of such action, or on the execution of a writ of inquiry thereon, shall give or assess, together with double costs of suit.

In questions as to the piracy of prints, the courts proceed upon the same principles that are followed in those with respect to the piracy of books. — (See Books; see also *Mr. Godson's* excellent work on the *Law of Patents and Copyright*, pp. 287—301.)

Regulations as to Importation. — Where prints or maps are contained in and form part of a book, and serve merely to explain or illustrate the subject of such book, they are to be deemed a part of the work, and be charged with duty, by weight, as books; but when prints or maps are bound or stitched together without letter-press, or when the letter-press is merely descriptive of the prints or maps, then they are to be charged with duty by tale, as prints or maps. — (*Min. Com. Cus.* 5th of Sept. 1829.) But if satisfactory proof be adduced, that prints or maps, although imported separately, do really form part of a work, they may be charged with the book duty by weight; but in other cases they are to be charged with duty by tale. — (*Treas. Order*, 2d of June, 1830.)

Pictures, sketches, and drawings, brought from the Continent, and accompanied by the proprietor, are to be admitted to entry free of duty, upon proof, by oath of the proprietor, that the same were wholly executed by him for his amusement, and not intended for sale in this country. — (*Treas. Order*, 5th of Aug. 1817.)

PRISAGE, or BUTLERAGE, was a right of taking 2 tons of wine from every ship importing into England 20 tons or more; which was changed by Edward I. into a duty of 2*s.* for every ton imported by merchant strangers, and called butlerage, because paid to the king's butler. The term is now fallen into disuse. — (*Blackstone.*)

PRIVATEERS, ships of war fitted out by private individuals, to annoy and plunder the public enemy. But before commencing their operations, it is indispensable that they obtain *letters of marque and reprisal* from the government whose subjects they are, authorising them to commit hostilities, and that they conform strictly to the rules laid down for the regulation of their conduct. All private individuals attacking others at sea, unless empowered by letters of marque, are to be considered pirates; and may be treated as such, either by those they attack, or by their own government.

1. *Policy of Privateering.* — The policy of this system is very questionable. It seems to be a remnant of that species of private war exercised by all individuals in early ages, but which gradually disappears as society advances. In wars carried on by land, the property of the peaceable inhabitants who take no part in the operations of the armies is uniformly protected; and it is difficult to discover any solid grounds why the same rule should not be followed at sea. Privateers rarely attack ships of war. Their object is merely to plunder and destroy merchantmen. They cause an infinite deal of mischief to individuals, and aggravate all the miseries of war, without having the slightest influence on the result of the contest. Experience has also shown that it is not possible, whatever precautions may be adopted, to prevent the greatest abuses from being perpetrated by privateers. The wish to amass plunder is the only principle by which they are actuated; and such being the case, it would be idle to suppose that they should be very scrupulous about abstaining from excesses. A system of this sort, if it be ever useful, can be so only to nations who have little trade, and who may expect to enrich themselves during war by fitting out privateers to plunder the merchant ships of their enemies. In all other cases it seems to be productive only of mischief; though it is, of course, most injurious to those states that have the greatest mercantile navy. Instead, therefore, of encouraging the practice of privateering, we think that a due regard to the rights and interests of humanity would suggest to the great powers the expediency of abolishing it altogether. A few efforts have, indeed, been already made towards this desirable object. Thus, it was stipulated in the treaty between Sweden and the U. Provinces, in 1675, that neither party should, in any future war, grant letters of marque against the other. In 1767, Russia abstained from licensing privateers: and in the treaty between the U. States and Prussia, in 1785, a stipulation was inserted as to privateers, similar to that in the treaty between Sweden and the U. Provinces in 1675. But nothing short of a convention and agreement to that effect amongst the great powers will be able to effect this desirable object. — (*Martens, Essai concernant les Armateurs*, 1794.)

2. *Appointment of Privateers.* — The captain of a privateer is nominated by the owners, who may dismiss him at pleasure. The commission or letters of marque given to the owners, authorises them to attack and seize the ships of the power or powers specified therein; but they are not to look upon them as their property, or to appropriate them, or any part of them, to their own use, *till they have been legally condemned.* Besides the stimulus afforded by the hope of booty, government has been in the habit of allowing them 5*l.* for every man on board such enemy's ships of war or privateers as they may capture. — (33 *Geo.* 3. c. 66.) A privateer cruising under letters of marque against one state may, on obtaining authentic information of hostilities being commenced by her government against another, capture its ships

with full advantage to herself. The king has in all cases the right to release any prize previously to its condemnation; this being an implied exception in the grant of prises by the Crown.—(*Chitty on Commercial Law*, vol. i. c. 8.)

In some privateering adventures, the crew are engaged on the terms of no prise no pay; and, in such cases, the produce of whatsoever prizes may be taken goes half to the ship (for the owners), and half to the men, divided among them according to the articles of agreement; but when the men sail for wages, the captures belong entirely to the owners, except a small share, which is commonly stipulated to be given to the crew, over and above their wages, in order to stimulate their enterprise. Both ways of arming are regulated by the articles entered into between the owners and crews.

Privateers are forbidden from doing any thing contrary to the law of nations, as to assault an enemy in a port or haven, under the protection of any prince or republic, be he friend, ally, or neutral; for the peace of such place must be preserved inviolable.—(*Molloy, De Jure Maritimo*, book i. c. 3.)

When letters of marque are granted, it is usual, in most countries, to exact security that the regulations with respect to the conduct of privateers shall be observed. In Great Britain, a bond for 1,500*l.* must be given by responsible persons, not concerned in the ship, for all ships carrying less than 150 men, and 3,000*l.* for every ship carrying more, that they will give full satisfaction for any damage or injury they may commit at sea, contrary to the regulations under which they are to act, and to their duty as privateers.

If privateers wilfully commit any spoil, depredation, or other injury, on friendly or neutral ships, or on the ships or goods of their fellow subjects, they are to be punished, according to the crime, either with death, or otherwise; and the vessels are subject to forfeiture.

Whether a ship taken be lawful prize, or not, shall be tried in the admiralty; and no ship or cargo, or part of a ship or part of a cargo, is to be sold, or disposed of in any way, till after judgment has been obtained.

If 2 ships with letters of marque accidentally meet with a prize at sea, though only one attack and take her, yet the other, being in sight, shall have an equal share of the prize, though he afforded no assistance in the capture; because his presence may be presumed to have struck terror into the enemy, and made him yield; which perhaps he would not have done, had his conqueror been single: so that all ships that are in sight, though they cannot come up to assist in the engagement, are entitled by the *common law* to a distribution of the spoil.—(*Beawes, Lex Mercatoria*, art. *Privateers.*)

If those to whom letters of marque are granted, should, instead of taking the ship and goods appertaining to that nation against which the said letters are awarded, *wilfully* take or spoil the goods of another nation in amity with us, this would amount to *piracy*; and the person so offending would, for such fault, forfeit their vessel, and the penalties in which their securities are, according to custom, bound on taking out such letters. But such penalties would not follow, unless the capture were made in a piratical manner. For if the circumstances incident to the captured vessel were such as to afford a strong presumption that she really belonged to the country against which the letters were granted, the captors would not be liable to punishment, though they might be to damages. "It being impossible," says Beawes, "always to determine an affair of this sort at sea, it is allowable to bring a dubious capture into port, in order to more nice and just scrutiny and inspection; otherwise the goods of an enemy would often escape. However, to guard against unlawful seizures, the government have wisely directed sufficient caution to be given (as before mentioned) for the due observance of the letters according to law, before they permit their issuing; and when there is a breach committed, the penalties are inflicted."—(*Lex Mercatoria*, art. *Privateers.*)

3. *Regulations for the Government of Privateers, &c.*—The following instructions to privateers were issued under an order in council, at the commencement of the last war with France, 16th of May, 1803:—

Art. I. *Against what, and where, Letters of Marque may act hostilely.*—It shall be lawful for the commanders of ships authorised by letters of marque and reprisals for private men-of-war, to set upon by force of arms, and subdue and take the men-of-war, ships and vessels, goods, wares, and merchandises, belonging to the French republic, or to any persons residing subjects to the French republic, or inhabitants within any of the territories of the French republic; but so that no hostility be committed, nor prize attacked, seized, or taken within the harbours of princes or states in amity with us, or in their rivers or roads, within the shot of their cannon, unless by permission of such princes or states, or their commanders or governors in chief of such places.

Art. II. *Captures to be brought into Port.*—The commanders of the ships and vessels so authorised as aforesaid, shall bring all ships, vessels, and goods, which they shall seize and take, into such port of *England*, or some other port of our dominions, as shall be most convenient for them, in order to have the same legally adjudged by our High Court of Admiralty of *England*, or before the judge of any other admiralty court, lawfully authorised, within our dominions.

Art. III. *Conduct of the Captors after the Capture is brought into Port.*—After such ships, vessels, and goods shall be taken and brought into any port, the taker, or one of his chief officers, or some other person present at the capture, shall be obliged to bring or send, as soon as possibly may be, 3 or 4 of the principal of the company (whereof the master, supercargo, mate, or bostswain, to be always 2) of every ship or vessel so brought into port, before the judge of our High Court of Admiralty of *England*, or his surrogate, or before the judge of such other admiralty court as within our dominions, lawfully authorised aforesaid, or such as shall be lawfully commissioned in that behalf, to be sworn and examined upon such interrogatories as shall tend to the discovery of the truth, concerning the interest or property of such ship or ships, vessel or vessels, and of the goods, merchandises, and other effects found therein; and the taker shall be further obliged, at the time he produceth the company to be examined, and before any monition shall be issued, to bring in and deliver into the hands of the judge of the High Court of Admiralty of *England*, his surrogate, or the judge of such other admiralty court within our dominions lawfully authorised, or others commissioned as aforesaid, all such papers, passes, sea-briefs, charterparties, bills of lading, cockets, letters, and other documents and writings, as shall be delivered up or found on board any ship: the taker, or one of his chief officers, or some other person who shall be present at the capture, and saw the said papers and writings delivered up, or otherwise found on board at the time of the capture, making oath that the said papers and writings are brought and delivered in as they were received and taken, without any fraud, addition, subduction, or embezzlement whatsoever, or otherwise to account for the same upon oath to the satisfaction of the court.

Art. IV. *Not to break Bulk before Judgment.*—The ships, vessels, goods, wares, merchandises, and effects taken by virtue of letters of marque and reprisals as aforesaid, shall be kept and preserved, and no part of them shall be sold, spoiled, wasted, or diminished, and the bulk thereof shall not be broken, before judgment be given in the High Court of Admiralty of *England*, or some other court of admiralty lawfully authorised in that behalf, that the ships, goods, or merchandises are lawful prize.

Art. V. *Privateers to assist Ships in Distress.*—If any ship or vessel belonging to us, or our subjects, shall be found in distress by being in fight set upon or taken by the enemy, or by reason of any other accident, the commanders, officers, and company of such merchant ships or vessels as shall have letters of marque and reprisals as aforesaid, shall use their best endeavours to give aid and succour to all such ship and ships, and shall, to the utmost of their power, labour to free the same from the enemy, or any other distress.

Art. VI. *Application to the Admiralty for Letters of Marque.*—The commanders or owners of such ships and vessels, before the taking out letters of marque and reprisals, shall make application in writing, subscribed with their hands, to our high admiral of *Great Britain*, or our commissioners for executing that office for the time being, or the lieutenant or judge of the said High Court of Admiralty, or his surrogate, and shall therein set forth a particular, true, and exact description of the ship or vessel for which such letter of marque and reprisals is requested, specifying the burden of such ship or vessel, and the number and nature of the guns, and what other warlike furniture and ammunition are on board the same, to what place the ship belongs, and the name or names of the principal owner or owners of such ship or vessel, and the number of men intended to be put on board the same, and for what time they are victualled; also the names of the commanders and officers.

Art. VII. *Correspondence with the Admiralty.*—The commanders of ships and vessels having letters of marque and reprisals as aforesaid shall hold and keep, and are hereby enjoined to hold and keep, a correspondence, by all conveniences, and upon all occasions, with our high admiral of *Great Britain*, or our commissioners for executing that office for the time being, or their secretary, so as from time to time to render or give him or them, not only an account or intelligence of their captures and proceedings by virtue of such commission, but also of whatever else shall seem unto them, or be discovered and declared to them, or found out by them, or by examination of, or conference with, any marines or passengers of or in the ships or vessels taken, or by any other ways or means whatsoever, touching or concerning the designs of the enemy, or any of their fleets, ships, vessels or parties, and of the stations, sea-ports, and places, and of their intents therein; and what ships or vessels of the enemy bound out or home, or where cruising, as they shall hear of; and of what else material in these cases may arrive at their knowledge; to the end such course may be thereon taken, and such orders given, as may be requisite.

Art. VIII. *What Colours a Privateer is to wear.*—No commander of any ship or vessel having a letter of marque and reprisals as aforesaid shall presume, as they will answer it at their peril, to wear any jack, pendant, or other ensign or colours usually borne by our ships; but, besides the colours usually borne by merchants' ships, they shall wear a red jack, with the union jack described in the canton, at the upper corner thereof, near the staff.

Art. IX. *Not to ransom any Capture.*—No commander of any ship or vessel, having a letter of marque and reprisal as

aforesaid, shall ransom, or agree to ransom, or quit or set at liberty, any ship or vessel, or their cargoes, which shall be seized and taken.

Art. X. *To deliver their Prisoners to the proper Commissioners.* — All captains or commanding officers of ships having letters of marque and reprisals shall send an account of, and deliver over, what prisoners shall be taken on board any prizes, to the commissioners appointed, or to be appointed, for the exchange of prisoners of war, or the persons appointed in the sea-port towns to take charge of prisoners; and such prisoners shall be subject only to the orders, regulations, and directions of the said commissioners; and no commander or other officer of any ship, having a letter of marque or reprisal as aforesaid, shall presume, upon any *pretence* whatsoever, to ransom any prisoner.

Art. XI. *Commission forfeited for acting contrary hereto.*—In case the commander of any ship, having a letter of marque and reprisals as aforesaid, shall act contrary to these instructions, or any such further instructions of which he shall have due notice, he shall forfeit his commission to all intents and purposes, and shall, together with his bail, be proceeded against according to law, and be condemned to costs and damages.

Art. XII. *Copies of Journals.* — All commanders of ships and vessels having letters of marque and reprisals shall, by every opportunity, send exact copies of their journals to the secretary of the admiralty, and proceed to the condemnation of the prizes as soon as may be, and without delay.

Art. XIII. *To observe all Orders.* — Commanders of ships and vessels having letters of marque and reprisals shall, upon due notice being given to them, observe all such other instructions and orders as we shall think fit to direct from time to time, for the better carrying on this service.

Art. XIV. *Violating these Instructions.* — All persons who shall violate these or any other of our instructions, shall be severely punished, and also required to make full reparation to persons injured contrary to our instructions, for all damages they shall sustain by any capture, embezzlement, demurrage, or otherwise.

Art. XV. *Bail to be given.* — Before any letter of marque or reprisal for the purposes aforesaid shall issue under seal, bail shall be given with sureties, before the lieutenant and judge of our High Court of Admiralty of *England*, or his surrogate, in the sum of 3,000*l.* sterling, if the ship carries above 150 men; and if a less number, in the sum of 1,500*l.* sterling; which bail shall be to the effect and in the form following: —

Which day, time and place, personally appeared
and who
submitting themselves to the jurisdiction of the High Court of Admiralty of *England*, obliged themselves, their heirs, executors, and administrators, unto our Sovereign Lord the King, in the sum of pounds of lawful money of *Great Britain*, to this effect; that is to say, that whereas is duly authorised by letters of marque and reprisals, with the ship called the of the burthen of about tons, whereof he the said goeth master, by force of arms to attack, surprise, seize, and take all ships and vessels, goods, wares, and merchandises, chattels and effects, belonging to the French republic, or to any persons being subjects of the French republic, or inhabiting within any of the territories of the French republic; excepting only within the harbours or roads within shot of the cannon of princes and states in amity with his Majesty. And whereas he the said hath a copy of certain instructions, approved of and passed by his Majesty in council, as by the tenour of the said letters of marque and reprisals, and instructions thereto relating, more at large appeareth: if therefore nothing be done by the said or any of his officers, mariners, or company, contrary to the true meaning of the said instructions, and of all other instructions which may be issued in like manner hereafter, and whereof due notice shall be given him; but that such letters of marque and reprisals aforesaid, and the said instructions, shall in all particulars be well and duly observed and performed, as far as they shall the said ship, master, and company any way concern; and if they shall give full satisfaction for any damage or injury which shall be done by them or any of them to any of his Majesty's subjects, or of foreign states in amity with his Majesty, and also shall duly and truly pay, or cause to be paid, to his Majesty, or the customs or officers appointed to receive the same for his Majesty, the usual customs due to his Majesty, of and for all ships and goods so as aforesaid taken and adjudged as prize; and moreover if the said shall not take any ship or vessel, or any goods or merchandise, belonging to the enemy, or otherwise liable to confiscation, through consent or clandestinely, or by collusion, by virtue, colour, or pretence of his said letters of marque and reprisals, that then this bail shall be void and of none effect; and unless they shall so do, they do all hereby severally consent that execution issue forth against them, their heirs, executors, and administrators, goods and chattels, wheresoever the same may be found, to the value of the sum of pounds before mentioned; and in testimony of the truth thereof they have hereunto subscribed their names.

By his Majesty's command.

(Signed) PELHAM.

PROMISSORY NOTES. See BANKS AND BANKING.

PROTECTION, in mercantile navigation, a privilege granted to certain descriptions of seamen, by which they are protected from impressment. — (See IMPRESSMENT.)

PROVISIONS. Under this term, taken in its most extensive sense, in reference to man, may be comprised all those articles used as food by the inhabitants of this and other countries; but among British merchants and in parliamentary language, it is understood to comprise only fresh and salted butchers' meat, hams, and bacon, butter and cheese, eggs, and a few other articles. We shall, however, avail ourselves of this opportunity to give, in addition to the details of the recent importation of the above articles, an account of the recent importation of cattle.

Our readers are aware that previously to the 9th of July, 1842, the importation of cattle, sheep, and hogs, and of all sorts of fresh butchers' meat, was prohibited; and that a duty of 12*s.* a cwt. was imposed on all foreign salt meat when entered for consumption, and of 28*s.* a cwt. on bacon and hams. But in the tariff act of 1842, which came into operation at the above date, the prohibition of importing foreign cattle, sheep, hogs, and fresh meat was repealed, and their entry for home consumption admitted under fair and reasonable duties; the duty on salted meat being, at the same time, reduced from 12*s.* to 8*s.*, and that on bacon and hams from 28*s.* to 14*s.* a cwt. We have already (art. CATTLE) endeavoured to show that this wise and liberal measure, which will always reflect the highest credit on the administration of Sir Robert Peel, would not, as was generally supposed, occasion either a large importation of provisions or of cattle, and would, most probably, have but little influence over prices. And the experience of the period that has elapsed since the tariff took effect, more than justifies these conclusions. In fact, though we expected nothing great, we are a good deal surprised at the inconsiderable extent of the importation; it sets in the most striking point of view the exaggeration and fallacy of the statements so frequently made of the comparatively high price of provisions in this country. We have already seen (*antè*, p. 257.) that from the 9th of July, 1842, when the new system came into operation, down to the 5th of January, 1843, only 4,277 head of cattle, including calves, were imported, and only 648 sheep and lambs: and it appears from the subjoined official return that this importation, trifling as it was, has fallen off rapidly in the course of last year (1843). The entries of foreign meat, pork, bacon, and hams, for consumption, are also quite trifling.

Account of the Numbers of Cattle, Sheep, Hogs, &c., and of the Quantities of Provisions, imported and entered for Consumption in the U. Kingdom, with the Rates of Duty on the same, in the 11 Months from the 5th of January to the 5th of December, 1843.

Articles.	Imported.	Entered for Consumption.	Rates of Duty. From Foreign Countries. With the 5 per Cent. added.	Rates of Duty. From British Possessions. With the 5 per Cent. added.
From 5th January, to 5th December, 1843; 11 months.	*Number.*	*Number.*	£ s. d. *Each.*	£ s. d. *Each.*
Oxen and bulls	1,084	1,084	1 1 0	0 10 6
Cows	358	358	0 15 9	0 7 10½
Calves	39	39	0 10 6	0 5 3
Sheep	199	199	0 3 1½	0 1 6¾
Hogs	339	339	0 5 3	0 2 7½
Lambs	6	6	0 2 1	0 1 0½
	Cwts.	*Cwts.*	*Per Cwt.*	*Per Cwt.*
Bacon	784	790	0 14 8½	0 3 8
Beef, salted, not corned, of British possessions	11,095	1,503	0 8 4¾	0 2 1
Ditto, foreign	30,917	805		
Beef, fresh, or slightly salted	66	38	0 8 4¾	0 2 1
Butter	138,238	136,195	1 1 0	0 5 3
Cheese	142,701	144,961	0 11 0½	0 2 7½
From 5th January to 5th November, 1843; 10 months.				
Hams	5,642	3,696	0 14 8½	0 3 8
Meat, salted or fresh, not otherwise described	81	32	0 8 4¾	0 2 1
Pork, salted, British possessions	11,661	3,984	0 8 4¾	0 2 1
Ditto, foreign	14,417	1,891		

N.B. — For the importation, &c. of eggs, see that article. The duty on their being entered for consumption was not varied in 1842.

It is impossible to say in how great a degree these importations may be increased in time to come; but it is most probable that they will be gradually augmented according as foreigners become better acquainted with the qualities suitable for our markets. We have, however, no idea that they will ever amount to any considerable proportion of our supply. The truth is, that the cheapness of cattle and provisions in foreign markets, of which we used to hear so much, was in great part imaginary; and that, where it did occur, it depended more on the difficulty of conveying them to other markets, or on their inferiority, than on any thing else. The imports of Holstein and Normandy cattle, Hamburg beef, and American pork, with which our breeders and graziers were to be swamped, have all dwindled into insignificance; the former being too high priced for our markets, and the latter too coarse and inferior. And we have little doubt that such, also, in ordinary seasons, would be the case with corn, were the ports always open to its importation under a reasonable fixed duty.

PRUNES AND PRUNELLOES, a species of dried plums, of which there are many varieties. The finest are imported from France, in the south of which this fruit is very abundant. The best prunes are packed in hampers or baskets made of white osiers, weighing from 6 to 10 lbs. each; the second quality in quarters, and the third in puncheons. The duty on prunes, which was previously fixed at the extravagant rate of 27*s.* 6*d.* a cwt., was most properly reduced in 1834 to 7*s.* a cwt. This reduced duty produced, in 1840, 5,776*l.*, showing that 16,563 cwts. had been entered for consumption. Previously to the reduction of the duty, the entries seldom exceeded 6,000 cwt.

Prunes, the produce of Europe, may not be imported for home consumption except in British ships, or ships of the country of which they are the produce, or from which they are exported, on penalty of the forfeiture thereof and of 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 52. §§ 2. 22.)

PRUSSIAN BLUE, or PRUSSIATE OF IRON (Ger. *Berlinerblau*; Fr. *Bleu de Prusse*; It. *Azurro Prussiano*; Sp. *Azul de Prussia*; Rus. *Lasor Bexlinskuja*), a beautiful deep blue powder, accidentally discovered at Berlin in 1710. It is of considerable importance in the arts, being extensively used by painters: it is manufactured in this country. Many attempts have been made to render Prussian blue available for the dyeing of broad cloths, but without much success. The difficulty is to diffuse the colour equally over the surface; for, from its extraordinary vivacity and lustre, the slightest inequalities strike and offend the eye. Prussian blue resists the air and sun extremely well; but it cannot be used in the dyeing of cottons, or any sort of stuff that is to be washed with soap, as the alkali contained in the soap readily dissolves and separates the colouring matter. — (*Bancroft on Colours*, vol. ii. pp. 60—94.)

Blue is a favourite colour with the Chinese, and in 1810-11, the imports of Prussian blue into Canton from England amounted to 1,899 piculs, or 253,200 lbs. But, for some years past, the Chinese have not imported a single pound weight. The cause of the cessation of the trade deserves to be mentioned. A common Chinese sailor, who came to England in an East Indiaman, having frequented a manufactory where the drug was prepared, learned the art of making it; and on his return to China, he established a

similar work there, with such success that the whole empire is now amply supplied with native Prussian blue! The West has derived many important arts from the East; but we incline to think that this is the first well authenticated instance of any art having ever been carried from the West to the East, by a native of the latter. But, in all that respects industry, ingenuity, and invention, the Chinese are incomparably superior to every other people to the east of the Indus.

PRUSSIAN OR GERMAN COMMERCIAL UNION. Next to the efforts of the Prussian government to diffuse the blessings of education, their efforts to introduce a free commercial system into Germany constitute their best claim to the gratitude and esteem of their own subjects, and of the world. Germany, as every one knows, is divided into a vast number of independent, and mostly petty, states. Until a very recent period, every one of these states had its own custom-houses, and its own tariff and revenue laws; which frequently differed very widely indeed from those of its neighbours. The internal trade of the country was, in consequence, subjected to all those vexatious and ruinous restrictions that are usually laid on the intercourse between distant and independent states. Each petty state endeavoured either to procure a revenue for itself, or to advance its own industry, by taxing or prohibiting the productions of those by which it was surrounded; and customs officers and lines of custom-houses were spread all over the country! Instead of being reciprocal and dependent, every thing was separate, independent, and hostile: the commodities admitted into Hesse were prohibited in Baden, and those prohibited in Wirtemberg were admitted into Bavaria. It is admitted on all hands that nothing has contributed so much to the growth of industry and wealth in Great Britain, as the perfect freedom of internal industry we have so long enjoyed, and that intimate correspondence among the various parts of the empire, which has rendered each the best market for the products of the other. How different would have been our present condition had each county been an independent state, jealous of those around it, and anxious to exalt itself at their expense! But, until within these few years, this was the exact condition of Germany; and, considering the extraordinary obstacles such a state of things opposes to the progress of manufactures, commerce, and civilisation, the wonder is, not that they are comparatively backward in that country, but that they should be so far advanced as they really are.

But, thanks to the intelligence and perseverance of Prussia, this selfish anti-social system has been well nigh suppressed; and the most perfect freedom of commerce is now established among the great bulk of the Germanic nations. The disadvantages of the old system had long been seen and deplored by well-informed men; but so many interests had grown up under its protection, and so many deep-rooted prejudices were enlisted in its favour, that its overthrow seemed to be hopeless, or, at all events, exceedingly distant. The address and resolution of the Prussian government have, however, triumphed over every obstacle. Being fully impressed with a strong sense of the many advantages that would result to Prussia and Germany from the introduction of a free system of internal intercourse, they pursued the measures necessary to bring it about with an earnestness that produced conviction, and with a determination, *coute qui coute*, to carry their point.

The first treaties in furtherance of this object were negotiated by Prussia with the principalities of Schwarzburg Sondershausen and Schwarzburg Rudolstadt, in 1818 and 1819, on the principle that there should be a perfect freedom of commerce between these countries and Prussia; that the duties on importation, exportation, and transit, in Prussia and the principalities, should be identical; that these should be charged along the frontier of the dominions of the contracting parties; and that each should participate in the produce of such duties, in proportion to its population. All the treaties subsequently entered into have been founded on this fair and equitable principle; the only exceptions to the perfect freedom of trade in all the countries comprised within the league or tariff alliance being confined, 1st, to articles constituting state monopolies, as salt and cards, in Prussia; 2d, to articles of native produce, burdened with a different rate of duty on consumption in one state from what they pay in another; and, 3d, to articles produced under patents conferring on the patentees certain privileges in the dominions of the states granting the patents. With these exceptions, which are not very important, and are daily decreasing, the most perfect freedom of commerce exists among the allied states.

Since 1818, when the foundations of the alliance were laid, it has progressively extended, till it now comprises more than three fourths of the Germanic states, exclusive of Austria. Ducal Hesse joined the alliance in 1828, and Electoral Hesse in 1831; the kingdoms of Bavaria, Saxony, and Wirtemberg joined it afterwards, as have Baden, Nassau, and almost all the smaller states by which it had not been previously joined, with the exception of Mecklenburg Schwerin, and Mecklenburg Strelitz. Hanover is not included within the league.

In December, 1840, the tariff alliance comprised —

	German Sq. Miles.	Population.
Prussia, without Neufchatel, but inclusive of the small parcels of other territories surrounded by her states	5,188	15,276,582
Bavaria and her detached territories	1,994	4,576,586
Saxony (Kingdom of)	272	1,705,276
Wirtemberg and Hohenzollern Sigmaringen	366	1,705,256
Hesse (Electoral)	205	702,596
Hesse (Duchy of) and Homburg	154	820,907
The Thuringian States	237	956,214
Baden (Duchy of) and part of Hohenzollern	275	1,294,131
Brunswick (Duchy of)	58	155,607
Nassau	85	398,095
Frankfort	2	66,538
Totals	8,236	27,448,592

Throughout the whole extent of this immense country, from Aix-la-Chapelle, on the confines of the Netherlands, eastward to Tilsit, on the confines of Russia, and from Stettin and Dantzic southwards to Switzerland and Bohemia, there is nothing to interrupt the freedom of commerce. A commodity, whether for consumption or transit, that has once passed the frontier of the league, may be subsequently conveyed, without let or hindrance, throughout its whole extent. Instead of being confined within the narrow precincts of their own territories, the products of each separate country of the alliance may now be sent to every one else; each will, in consequence, apply itself, in preference, to those departments in which it has some natural or acquired advantage; and each will have to depend for its success, not on the miserable resource of customs regulations, but on its skill and industry. The competition thence arising will be most salutary; and, should the peace of Europe be preserved, we run little risk in saying, that all sorts of industry will make more progress among the states comprised within the tariff alliance, during the next ten years, than they have done during the previous half century.

An assembly of representatives from the allied states meets annually, to hear complaints, adjust difficulties, and make such new enactments as may seem to be required. The Prussian tariff has been adopted, with certain modifications. The duties are received into a common treasury, and are apportioned according to the population of each of the allied states. In addition to its other advantages, the new system has reduced the cost of collecting the duties to a mere trifle, compared with its former amount; and has enabled hundreds of custom-houses, and thousands of customs officers, to be employed in the different departments of industry.

The existing discrepancy in the weights and measures used in different parts of Germany occasions considerable inconvenience; and we are glad to observe that the equalisation of weights and measures, and their reduction to a common standard in all the allied states, is declared to be one of the objects of the league.

It is also expressly provided that the tolls, or other charges in lieu thereof, shall, in all cases, whether they belong to the public or to private individuals, be limited to the sums *required to keep the roads in a proper state of repair*; and that the tolls existing in Prussia shall be considered as the highest that are to be levied, and shall not in any case be exceeded.

It was at first supposed by many persons in this country, and the opinion is not yet entirely abandoned, that the Prussian league was in some degree directed against us, and that, at all events, it threatened to be very injurious to our trade with Germany; we do not, however, believe that there is any foundation whatever for either of these opinions. The alliance was planned, and brought to its present advanced state, in the view, and with the intention, of putting down the galling and innumerable restraints by which the intercourse of the German states with each other was formerly interrupted; and not with the intention of throwing any obstacles in the way of the trade of the alliance with foreign countries: it is, indeed, quite absurd to suppose that it should have this effect. The freedom of internal commerce will do ten times more to promote the industry and prosperity of the allied states than any other measure, or system of measures, that their governments could have adopted; and, as population increases, and the inhabitants become more industrious and wealthy, there will, no doubt, be an augmented demand for foreign products. The league is now no new thing. It was formed several years since, and has been progressively augmented: but, hitherto, it has not had the slightest influence in diminishing our intercourse with Germany; our exports to it, including Holland and Belgium, being greater at present than at any former period!—(See *antè*, p. 691.) Generally speaking, the duties on imports are reasonable; at least, on all the finer descriptions of goods. It never, in fact, can be the policy of the alliance to make them oppressive; for, though certain states might erroneously suppose that their interests would be promoted by such means, others would undoubtedly be of a different opinion, and would resist any attempt to carry them beyond a reasonable amount. It is a mistake to suppose that Prussia has an overwhelming influence in the assembly. She must conciliate the other states, and carry them along with her; and this can only be

done by acting on liberal principles, and with a view to the common interest of the alliance.

Besides, if any of the existing duties be exorbitant, or if any of them, that are at present moderate, should be subsequently raised to an exorbitant pitch; does any one suppose that the over-taxed articles would not be immediately smuggled into all parts of the league? We, who occupy an island, and have revenue cruisers and coast guards on all the seas and shores most accessible to the smuggler, know from experience that it is not possible to hinder over-taxed commodities from making their way, in immense quantities, into our markets. But the facilities for smuggling into the territories of the league are incomparably greater. It has a land frontier of several thousand miles: and though the whole Prussian army were employed for that purpose, it would be found that it would utterly impotent to prevent the territories of the league from being deluged with such over-taxed commodities as were in demand by the inhabitants.

It must be admitted that we have done not a little to provoke Prussia, and that we had no reason to be surprised had she manifested symptoms of irritation. She has only three great staple articles of export — corn, timber, and wool. Now, of these, we admit only the last on anything like fair terms; in ordinary years we entirely exclude corn, and we lay a duty of no less than 25*s.* and 32*s.* a load on Prussian timber, while we admit the inferior timber of N. America on payment of a duty of 1*s.* and 2*s.*! Had, therefore, the Prussian tariff been levelled against us, we should have had but slender grounds for complaint; but such is not really the case. It may, indeed, be fairly inferred, that, by agreeing to lower the oppressive duties on timber and corn, we might prevail on Prussia to use her influence to get the alliance duties on cotton stuffs, hardware, &c. abated; but, till we consent to moderate our duties on the articles in question, it is not to be supposed that Prussia will pay much attention to the exceptions we may take to any of the duties.

We are glad to be able to strengthen our view of the influence and objects of the Prussian commercial league, by laying before the reader the following extract from a work printed by order of the House of Representatives of the American States. "Prussia," it is there said, "has evidently taken the lead in this wise and important measure, to which the smaller states have gradually acceded. The whole commercial policy of this enlightened power has been distinguished for its liberality, being founded on the desire of placing her intercourse with all nations on the basis of reciprocity. The commercial league of Germany is intended to carry out this principle, and not to be directed, as has been supposed, against any particular nation; as it is well known that Prussia, in her treaties with maritime powers, has invariably adopted the system of reciprocity, to whatever extent those with whom she negotiates are willing to carry it. The establishment of this community of commercial interests forms a part of the fundamental compact, by which the new Germanic confederation was created, after the dissolution of the Confederation of the Rhine; to be subsequently adopted, however, at the option of such of the co-states as should choose to accede to it. Its effects cannot fail to promote commerce, and every other branch of industry, as it removes all those vexatious and endless difficulties which previously obstructed the freedom of intercourse. Navigable rivers and highways are now opened to the unfettered use of the German people; the custom and toll houses, with their officers and barriers, have been withdrawn from the interior, and the whole intercommunication resembles that of the subjects of any one of the states within its own territories. To these benefits may be added the assured prospect of improvement in the finances of the great and smaller sovereignties composing the league. This advantage will grow out of the simplicity or unity of the new system, a saving in the cost of collection, and from the increased consumption which renovated industry and progressive prosperity so invariably cause." — (*Digest of Customs Laws*, vol. iii. p. 227.)

Prussian Duty on Cottons. — The duty on cotton goods being that in which we are most interested, we have taken some pains to ascertain its real influence. This duty amounts (see *post*) to 50 rix-dollars per Prussian quintal on all cotton goods, without respect to quality or price; and, taking the quintal at 113 lbs. avoirdupois, and the rix-dollar at 3*s.*, it is equal to 7*l.* 10*s.* per 113 lbs. Now, we have learned from statements obligingly furnished to us by a large wholesale house in the city, —

1st. That a quintal (113 lbs.) of *coarse shirting*, worth 4*d.* per yard, contains 497 yards; it consequently costs 8*l.* 6*s.*, and the Prussian or tariff alliance duty of 7*l.* 10*s.* on it is, therefore, equivalent to an *ad valorem* duty of 90 per cent.

2d. That a quintal of *superior shirting*, worth 1*s.* a yard, contains 457·65 yards; it consequently costs 22*l.* 17*s.* 7*d.*, making the Prussian duty on such goods 32½ per cent.

3d. That a quintal of *printed cottons*, worth 1*s.* 6*d.* a yard, contains 633 yards; it consequently costs 47*l.* 9*s.*, making the Prussian duty on such goods 15½ per cent.

4th. That a quintal of *fine printed cottons*, worth 2*s.* 6*d.* a yard, contains 678 yards; it consequently costs 84*l.* 15*s.*, making the Prussian duty on such goods 8½ per cent.

It is plain, therefore, that, except on the coarsest and cheapest species of goods, the

Prussian or tariff alliance duty is very far from being oppressive; and, as the value of coarse goods is principally dependent on the cost of the raw cotton and the wages of labour, being but little influenced by superiority of machinery, it is not very probable that we should export them largely to Prussia, even were the duty materially reduced. No doubt, however, it would conduce greatly to the interests of the people comprised within the league, though we do not know that it would sensibly affect us, were the duty assessed on an *ad valorem* principle, and made 20 or 30 per cent. on all goods; and we should think that this might be done without any material difficulty.

The subjoined translation of the more important clauses of the customs treaty of the 22d of March, 1833, sets the principles on which the alliance is founded in the clearest point of view.

Customs Treaty, concluded the 22d March, 1833, between the Kings of Bavaria and Wirtemberg, on the one part; and the King of Prussia, the Prince Electoral Co-regent of Hesse, and the Grand Duke of Hesse, on the other part.

I. The existing customs unions between the states above named shall henceforth constitute a general Union, united by a common system of customs and commerce, embracing all the countries comprised therein.

II. In this general re-union are also comprised the states which have already adhered, either for the whole of their territory, or for a part, to the system of customs and commerce of one or other of the contracting states, having regard to their special relations, founded upon the conventions of adhesion concluded with the states which have intervened.

III. But there will remain excluded from the general re-union the parts separated from the countries of the contracting states which, because of their situation, are not yet included either in the re-union of the Bavarian or Wirtemberg customs, nor in those of Prussia and Hesse. Nevertheless, the regulations now in force to facilitate the commerce of these territories with the principal country will be maintained. Other favours of this kind cannot be accorded without the unanimous consent of the contracting states.

IV. In the contracting states there shall be established uniform laws for the duties of import, of export, and of transit, except such modifications as, without injury to the common object, result necessarily from the particular legislation of each contracting state, or from local interests.

Thus, exceptions and modifications to the common tariff may take place, as to rates of duties of entry, of export, and of transit, (according as the direction of the routes of commerce may require,) established upon articles recognised as of minor consequence in extensive commerce; provided always, that these modifications be preferred by separate states, and that they shall not be disadvantageous to the general interests of the Association.

The administration of the duties of import, export, and transit, as well as the organisation of the authorities which are engaged therein, in all the states of the Association, shall be established upon a uniform footing, having regard, however, to the particular relations existing in those countries. The laws and ordinances which, according to those principles, ought to be uniform in the contracting states, and which are to constitute the law of the tariff and the regulations of the customs, shall be considered as an integral part of the present treaty, and shall be published at the same time.

V. There can neither be alterations, or additions, or exceptions, to the acts above mentioned (Art IV.), but by the unanimous consent of all the contracting parties, and [illegible] form required for the making (*confection*) of the laws.

The preceding applies equally to all the ordinances which would establish, for the administration of the customs, dispositions entirely different.

VI. Liberty of commerce, and community of the receipts of customs, as regulated by the following article, will commence simultaneously with the operation of the present treaty.

VII. Dating from this epoch, all duties of import, of export, and of transit shall cease on the common frontier of the Bavaro-Wirtemberg and Prusso-Hessian customs re-unions. All articles of free commerce in one of those territories may be imported freely and without duty into all the others, except only as follows: —

A. Articles monopolised by the states (playing cards and salt) conformably to Articles IX. and X.

B. Indigenous articles, now subject in the interior of the contracting states to different duties, or excepted from all duty in one state, and imported into another, and which according to article II. ought consequently to be subject to a duty of compensation.

Finally, C. Articles which, without prejudice to patent rights or conceded privileges in one of the contracting states, cannot be imitated or imported, and ought consequently to be excluded during the existence of the patents and privileges from importation into the state which has granted them.

VIII. Notwithstanding the freedom of commerce, and the exemption from duties, established by Article VII., the transport of articles of commerce, subject by the common tariff to duties of import or export on the frontiers of the Association, cannot take place between the states of Bavaria and Wirtemberg, and the states of Prussia, of Electoral Hesse, or of Grand Ducal Hesse, and reciprocally, except by the public roads, military routes, and navigable rivers. For this purpose there shall be established, on the interior frontiers, common *bureaus* of verification, to which the conductors of merchandise must, on exhibiting their licences, declare what are the articles which they are employed to transport from one territory to another.

This disposition will not be applicable to retail commerce in raw materials, nor to the petty commerce of the frontiers or the fairs, nor to the effects of travellers. Process for the verification of merchandise will go no farther than is required for security of the duties of compensation. — (See Art. VII. B.)

XIII. The contracting parties reciprocally renew their adhesion to the principle, that the tolls, or other charges in lieu thereof, shall only be sufficient to defray the expense of maintenance and repairs of the roads; whether the tax be for the state or for private rights. It was thus that has been approved the supplement to the duty of customs, created in Bavaria and Wirtemberg, to replace the duty of tolls, paving, causeways, bridges, and generally of all analogous taxes.

The tolls, &c. now existing in Prussia, according to the general tariff of 1828, shall be considered as the *highest rates*, and shall not be exceeded in any of the contracting states.

In accordance with the principle thus announced, the individual duty for closing the gates of cities shall be abolished; as also the duty of paving of causeways, where it still exists; and all paved roads will be considered as causeways of a description liable only to the duty on causeways established by the general tariff.

XIV. The contracting governments agree to unite their efforts to introduce into the states a uniform system of coins, weights, and measures; to commence immediately the requisite negotiations for this purpose; and, subsequently, to direct their efforts towards the adoption of uniform custom-house weights.

The contracting states, in the impossibility of establishing this uniformity before this treaty goes into operation, agree, for facilitating the forwarding of merchandise where it has not already been done, to revise their tariff as to weights and measures, assuming for a basis the tariffs of the other contracting

states. They will cause such modifications to be published, for the government of the public and of their custom-house *bureaus*.

The common tariff (Art. IV.) shall be divided into two principal divisions, according to the system of weights, measures, and monies of Bavaria, and that of Prussia.

The declaration of the weights and measures of articles subject to duty shall, in Prussia, be according to Prussian weights and measures; in Bavaria and Wirtemberg, according to those of Bavaria; and in the two Hesses, according to the weights and measures there legally established.

In expediting custom-house acts, the quantity of merchandise must be expressed according to the two principal divisions of the common tariff.

Until the contracting states agree upon a system of common money, the payment of duties in each state shall be made in the same currency as is in use for payment of its other taxes.

But, from the present time, the gold and silver coins of all the contracting states, with the exception of small money (*scheidemunze*), shall be received in all the *bureaus* of receipt of the Association; and for this purpose, tables of value shall be published.

XV. The duties of navigation upon the rivers, comprising therein those which apply to vessels, shall always be mutually acquitted according to the acts of the Congress of Vienna, or of special conventions, upon all the rivers to which these regulations apply, unless other determinations be adopted in this respect.

The contracting states agree to enter, without delay, into negotiations for that which particularly regards the navigation upon the Rhine and the neighbouring streams, in order to effect an arrangement by which the import, export, and transit of the productions of all the states of the Union upon said streams shall be, if not absolutely free, at least relieved as far as possible from duties of navigation, under the reserve of charges of reconnoissance.

All the advantages granted by one state of the Union to its subjects, in the exercise of the navigation upon said streams, shall extend equally to the navigation of the other associated states.

Upon the other streams to which neither the acts of the Congress of Vienna, nor any other treaties apply, the duties of navigation shall be according to the special regulations of the governments interested. Nevertheless the subjects of the contracting states, their merchandise and vessels, shall throughout be treated on those streams with perfect equality.

XVI. Dating from the day on which the general custom-house regulations of the Union shall come into operation, the duties of public stores (*étapes*), and of trans-shipments (*umschlagnechte*), which still exist in the territories belonging to the Association, shall cease, and no one shall be liable to forced delay, nor to the discharging and storage of his merchandise, except in cases authorised by the common regulations of the customs or navigation.

XVII. No duties shall be claimed for canals, locks, bridges, ferries, cranes, weighing and storage; and the establishments destined to facilitate commerce shall not be allowed rent, except when actually used. Charges cannot be increased; and the subjects of the other contracting states shall be on a perfect equality with the subjects of the country having those establishments.

If the establishments for weighing and cranes are only used by the custom-houses, no charge shall be made, if the articles have been previously weighed at a custom-house.

XVIII. The contracting states engage to continue their common efforts for the encouragement of industry by the adoption of uniform regulations, so that the subjects of each state may enjoy, as extensively as possible, the privilege of seeking work and occupation in every other state.

From the coming into operation of the present treaty, the subjects of any one of the contracting states, trading or seeking employ in the territory of any other of those states, shall not be subject to any impost which does not equally affect the native similarly employed. Manufacturers and merchants who are only making purchases for their trade, or travellers who have not goods with them, but simply patterns for the purpose of soliciting commissions, shall not, when thus employed, have any duty to pay in another state, if authorised to carry on such commerce in the state where they have their domicile; or if employed in the service of native manufacturers or merchants.

When trading in the markets and fairs, or when they are selling the produce of the soil and fabrics, in any one of the states of the Association, the subjects of the other contracting states shall be treated in all respects as subjects of the same states.

XIX. The seaports of Prussia shall be open for commerce to all the subjects of the states of the Union, on payment of the same duties as are paid by Prussian subjects, and the consuls of the several states in the seaports or places of foreign commerce, shall be bound, in cases of need, to assist with their advice and support the subjects of the other contracting states.

XX. To protect against contraband their common custom-house system, and to insure the regular payment of the duty of consumption in the interior, the contracting states have concluded a reciprocal cartel, which shall be enforced as soon as possible, but, at the farthest, at the same time with the present treaty.

XXI. The community of receipts of the contracting states, stipulated by the present treaty, shall comprehend the product of duties of entry, of export, and of transit, in the Prussian states, the kingdoms of Bavaria and Wirtemberg, the Electorate, and the Grand Duchy of Hesse, comprising therein those countries which have down to the present time acceded to the custom-house system of the contracting states.

The following are excluded from the community of receipts, and remain reserved for the particular benefit of the respective governments:—

1. The imposts collected in the interior of each state on indigenous products, comprising therein the compensatory duties reserved in Article XI.
2. The toll on rivers, to which are applicable the regulations of the acts of the Congress of Vienna, or special conventions. (Article XV.)
3. Duties of paving, of causeways, of bridges, of ferries, of canals, of locks and ports, charges of weighing and storage, as well as similar receipts, whatever may be their name.
4. The fines and confiscations which, beyond the part allowed to informers, remain the property of each government throughout its territory.

XXII. The produce of the duties received into the common treasury shall be divided among the states of the Association, in proportion to the population which may be found in the Union, subject to deduction, 1st, of the expenses specified in Article XXX.; 2d, of the restitution of erroneous receipts; 3d, of the restoration of duties and diminutions made in consequence of special common conventions.

The population of every state which has entered or may enter into the Association, by treaty with one or other of the contracting states, under the engagement made by the latter, to make an annual contribution, for the participation of the former to the common revenue of the customs, shall be added to the population of the states which make this contribution.

There shall be made every three years, dating from a period to be hereafter fixed, an exact enumeration of the population of the associated states: the states shall reciprocally communicate the results thereof.

XXIII. All restitutions of duties not authorised by the legislation of the customs, shall remain charged to the treasury of the government which shall have granted it.

Conventions, hereafter to be concluded, will regulate in what cases similar restitutions may be accorded.

XXIV. In conformity with the object of this association of customs tending to facilitate a freer and more natural commercial intercourse, the favours accorded for the payment of custom-house duties at certain places in which fairs are held, especially the privileges of abatement (*rabat privilegien*), cannot be extended to those states of the Association where they do not exist; on the contrary, they shall be

restricted and abolished as far as possible, regard being had to the means of subsistence of the places heretofore favoured, and to the commercial relations which they have with foreigners; but others can on no account be granted without the general consent of the contracting parties.

XXXIII. There shall every year, on the 1st day of June, be an assembly of plenipotentiaries of the governments of the Union empowered generally to deliberate; and each state may send thither a duly authorised representative.

The plenipotentiaries will choose from among themselves a president, who, however, shall have no pre-eminence over the other members.

The first assembly shall be held at Munich.

At the close of each annual assembly, the place of next meeting will be determined, having reference to the nature of those subjects which will then come under discussion.

XXXIV. The assembly of plenipotentiaries will have under its consideration the following subjects: —

A. To consider the complaints which may have arisen in any of the states of the Association, concerning the execution of the general treaty, of special conventions, of the law, and of custom-house regulations; also of the tariff, when these shall not have been adjusted during the year by correspondence between the different ministers.

B. The definitive reparation among the states of the Union of the total common receipts, based upon the observations made by the superior authorities, and verified by the central *bureau*, as may be rendered necessary by the common interest.

C. To deliberate upon propositions and suggestions made by the governments for the perfection of the administration.

D. Discussions upon alterations demanded by any of the contracting states, in the laws, tariffs, and custom-house regulations, as well as in the organisation of the administration, and in general upon the development and perfection of the general system of customs and commerce.

XXXV. If, in the course of the year, when the plenipotentiaries are not in session, extraordinary incidents should occur, which require prompt decision on the part of the states of the Union, the contracting parties will consult upon these through their diplomatic agents, or they will order an extra sitting of their plenipotentiaries.

Royal Tariff of the Prussian States, and of the German Customs Union.

To be in force from the 1st January, 1843.

I. *Articles not liable to any Duty.*

Trees for transplantation, and vines; bee-hives with live bees; blood of slaughtered cattle, both in a liquid and dry state; gas of brandy (hogwash); animal and other sorts of manure; eggs; clay and ore, not specifically charged with duty, as below, pumicestone, bloodstone, brownstone, plaster, yellow clay, &c.; agricultural produce, and cattle of an estate separated by the frontier; fresh fish and crabs; grass, fodder, and hay; fresh garden produce, — as, flowers, vegetables, succory (not dried), potatoes and turnips, eatable roots, &c.; poultry and small game of every kind; potters' ore (sigillaria); gold and silver, coined, in bars and fragments, excluding foreign small coin of silver; furniture and effects, worn clothes and linen, tools that have been used by individuals settling in the country; also, by particular permission, new clothes, linen, and effects, if they belong to persons settling in the country through marriage; wood (both for fuel and timber), if transported by land and not destined for shipping; copse wood and brooms, and willow for baskets; travellers' and seamen's clothes and linen, and travellers' carriages, waggons, and boats for transporting persons and goods, furniture of vessels, and provisions used for travelling; instruments, and patterns carried by travellers for their own use only; peat and tan for fuel); gallt; fresh fruit; paper chippings and written papers (deeds, waste paper, &c.); seeds of forest trees, shave grass, reeds for roofing, &c. refuse wool; stones, hewn and rough, chalk, slate, tiles and bricks, mill and grindstones transported by land, and not destined for shipping; straw, chaff, cut straw; all kinds of animals for which no duty is mentioned in the tariff; turf and charcoal; husks of grain and of grapes.

II. *Articles which are liable to Duty on Importation or Exportation.*

Fifteen silver groschen, or half a dollar, is the general duty on importation for one quintal (hundred weight) Prussian gross weight; and no further tax on consumption is levied in the country, nor then when the article is exported.

Exceptions, however, occur with all articles, which either, according to the preceding regulations, are entirely exempt from duty, or, according to the following sections, are liable to duty; as —

Articles subject to a higher or lower import duty than half a dollar for one quintal; or,

Articles subject to a duty on exportation.

The following are those articles on which the affixed duties are levied: —

[We subjoin a note of the duties imposed on some of the principle articles of import. *]

* The Prussian dollar, of 30 silver groschen, is equal to about 2*s.* 11½*d.* sterling; but in estimating duties it is usually taken at 3*s.* The quintal or centair of 110 lbs. is equal to 113,581 lbs. averdupois.

Names of Articles.	Weight or Number.	Duty on Importation. R. Doll.	Duty on Importation. Gros.	Duty on Exportation. R. Doll.	Duty on Exportation. Gros.	Reduction for Tare on the Quintal, gross Weight.
	Quin.					
Beer of all sorts	1	2	15			
Brandy, rum, and arrack	1	8	-	-	-	25 lbs. in boxes, 18 in baskets, 7 lbs. in double casks. 22 lbs. in barrels and cases, 14 lbs. in baskets, 7 lbs. in bags. 14 lbs. barrels of oak and other hard woods, 10 lbs. barrels of soft wood and in baskets, 4 lbs. bgs. 12 lbs. in casks.
Cacao, ground, chocolate, and chocolate succory	-	11	-	-	-	
Cacao	-	-	-	-	-	
Coffee and coffee succory	1	6	20	-	-	
Cheese	1	3	20	-	-	
Coal	1	-	12½	-	-	
Cotton and cotton goods: —						
Raw cotton	1	Free.	-	-	15	
Cotton yarn, unbleached, of 1 and 2 threads, and wadding, warped, glazed or unglazed	1	3	-	-	-	18 lbs. in barrels and boxes, 7 lbs. in bales.
Doubled, twisted thread (thread, knitting yarn) & all sorts of dyed yarn, also bleaching yarn	1	5	-	-	-	

Names of the Articles.	Weight or Number.	Duty on Importation. R. Doll.	Duty on Importation. Gros.	Duty on Exportation. R. Doll.	Duty on Exportation. Gros.	Reduction for Tare on the Quintal, gross Weight.
	Quin.					
Cotton stuffs, and cotton and linen goods, without any admixture of silk and wool; stockings, lace, buttons, and fancy articles; tissues, and galoons of tinsel and cotton, or cotton and linen, *without* any admixture of silk; wool, iron, glass, wood, leather, brass, steel, and other materials	1	50	-	-	-	20 lbs. in barrels and chests, 8 lbs. in bales.
Copper and brass: —						
Brass and copper in pigs, crude or black copper, pure (or rose) copper, old pieces of copper and brass, as also filings of copper and brass, bell metal, copper, and other small coin for melting (the latter on especial permission), may be imported on paying the general importation duty.						
Wrought, rolled, and cast copper and brass for utensils, &c.; also copper kettles as they came from under the hammer, brass plates, common and plated wire with polished, rolled, and plated tables, and plates	1	6	-	-	-	15 lbs. in barrels and chests, 8 lbs. in baskets 4 lbs. in bales.

Names of the Articles.	Weight or Number.	Duty on Importation. R. Doll.	Duty on Importation. Gros.	Duty on Exportation. R. Doll.	Duty on Exportation. Gros.	Reduction for Tare on the Quintal, gross Weight.
Manufactured goods; as, kettles, pans, &c. &c.; all other articles of copper and brass, candlesticks, bells, brass-work for harness, &c., pins, if they are not combined with the precious metals; also painted japanned copper and brass wares -	Quin. 1	10	-	-	-	13 lbs. in chests 6 lbs. in baskets, 4 lbs. in bales.
Fancy articles (Birmingham ware, *quincaillerie*), manufactured wholly or partly of gold, silver platina, similar or other admixtures of precious metals, inlaid with gold or silver bronze (plated), mother of pearl, coral & precious stones; articles in connection with alabaster, amber, ivory, whalebone, plaster of Paris, glass, wood, horn, bone, conque, varnish, leather, marble, Turkish tobacco, pipe clay, base metals, tortoiseshell, and false stones, &c. &c.; perfumes, cases for instruments, &c., watches, clocks, and pendulums, lustres of bronze, plated with gold or silver; superfine wares of metals japanned, or pasteboard (papier maché), umbrellas, parasols, fans, artificial flowers, plumes of feathers, locks, periwigs, &c. &c. In fine, all kinds of fancy wares (quincaillerie), unless otherwise specified, with articles spun of cotton, linen, silk, wool, which are connected with iron, glass, wood, leather, brass, or steel; for instance, caps of cloth, and other stuffs, combined with leather, buttons, tassels, &c. &c.	1	50	-	-	-	20 lbs. in casks & chests.
Glass and articles of glass: —	Quin.					
Green bottle glass - *Note.* — When loosely packed, 5½ cubic feet are estimated as 1 quintal.	1	1				
White bottle glass, cut or with cut bottoms (Hultencande), brims, and table glass, without distinction of colour - - -	Quin. 1	3				
Cut glass, gilt, painted, &c., with all kinds of massive and cast glass, drops for chandeliers, knobs, brads, and enamels - -	1	-	-	-	-	25 lbs. in casks and chests, 14 lbs. in baskets.
Looking glasses, with or without quicksilver: — *Cast*; if the piece do not measure more than 1 square foot	1	6	-	-	-	5
Blown; if the piece do not measure more than 2 sq. ft., like table glass	-	3	-	-	-	18 in chests.
Cast; if the piece measure 144 to 288 sq. inches	1	8	-	-	-	
Cast and blown, without distinction.	Piece. *sq. in.* *sq. in.* 288 to 576	1	1			
	576 — 1,000	1	3			
	1,000 — 1,400	1	8			
	1,400 — 1,900	1	20			
	1,900 -	1	30			
Glass wares connected with common metals and other materials not woven; also looking glasses of every kind - - -	Quin. 1	10	-	-	-	22 lbs. in casks and chests, 14 in baskets.
Gunpowder - -	1	2	-	-	-	14 lbs. in casks.
Hardware: — Common cast articles; as, stores, plates, railings, &c.	1	1				
Common goods made of cast iron, iron and steel, iron plates, steel, and iron wire connected with wood; goods of the same description which are tinned but not polished; as, axes, sword blades, files, hammers, hatchets, hinges, screws, flax combs, coffee roasters and mills, chains, machines of iron, nails, pans, shovels, locks, buckles and rings (not polished), vices, scythes, sickles, chisels, horse combs, steeple clocks, scissors, balance beams, tongs, &c. &c. -	1	6	-	-	-	10 lbs. in casks and chests, 6 baskets, 4 in bales.
Fine hardware, whether made entirely of fine cast iron, fine polished iron or steel, or from these combined with wood, horn, bone, leather, copper, tin (polished), brass, and other common metals; as, fine cast iron wares, cutlery, needles and pins, scissors, edged tools, swords, &c.: as also japanned iron wares, and all kinds of fire arms	1	50	-	-	-	20 lbs. in casks and chests, 13 baskets, 9 bales.
Herrings - - -	Ton. 1	1				
Horses - - -	Piece. 1	1				
Iron and steel: — Bar and bolt iron, not manufactured, and iron ore of every kind; old iron, iron filings, hammerings, &c. -	Quin. 1	Free.	-	-	7½	
Note. — Iron ore is exempted from exportation duty in the western provinces.						
Cast iron; as, bar scrolled, slat, rolled, or hammered, hoop, locks, &c. &c.; as also blistered and soldering steel, cast and refined steel, also rails for railways - -	1	1				
Exceptions: — Unmanufactured steel, imported exclusively from the Russian frontiers to the mouth of the Vistula, is subject only to the general importation duty.						
Hammered iron, which has been manufactured into finer sorts under the stretch and cut works, as also black iron sheeting and iron plates -	1	3	-	-	-	11 in casks and chests, 7 in baskets, 4 in bales.
White iron sheeting, as also iron wire, anchors, and anchor chains -						
Lead: —						
Lead, unwrought, in blocks - - -	1	-	7½			
Coarse articles of lead; as, kettles, pipes, shot, plates, &c. &c.	Quin 1	2	-	-	-	7 in casks and chests.
Fine articles of lead; as, toys, &c. wholly or partly of lead; also japanned articles of lead - - -	1	10	-	-	-	22 in casks nd chest 14 in baskets.
Molasses - -	1	5	-	-	-	12 lbs. in barrels.
Paper and articles of pasteboard: — Grey blotting and packing paper, general importation duty is paid. Flimsy or thin printing paper, coarse (white and coloured) packing paper, and pasteboard	1	1				

Names of the Articles.	Weight or Number.	Duty on Importation. R. Doll.	Duty on Importation. Gros.	Duty on Exportation. R. Doll.	Duty on Exportation. Gros.	Reduction for Tare on the Quintal, gross Weight.
	Quin.					
All other sorts of paper	P	5	-	-	-	18 lbs. in chests, 7 lbs. in bales.
Note. — Paper which is lithographed, printed, or ruled (to be used in this state for accounts, labels, invoices, &c. &c.) belongs to those sorts of papers mentioned above.						
Paper tapestry - -	1	10	-	-	-	18 in chests, 14 in baskets, 7 lbs. in bales.
Bookbinders' work of paper and pasteboard, also coarse japanned wares out of such prime materials (matters) - - -	1	10	-	-	-	18 in chests, 14 in baskets, 7 in bales.
Pepper, pimento, saffron, vanilla, cinnamon -	1	6	20	-	-	20 lbs. in chests, 18 lbs. in barrels, 14 baskets, and 4 in bales.
Potters' clay and potters wares: —						
Potters' clay for China manufactures -	1	Free.	-	-	1	
Common potters' floor stones and crucibles -	1	-	10			
(Single) coloured or white crockery ware, earthern pipes -	1	5	-	-	-	25 lbs. in chests, 14 lbs. in baskets.
Painted, printed, gilded, or silvered, crockery ware - - -	1	10	-	-	-	
White china - -	1	10	-	-	-	
Coloured china, and also white with coloured stripes, painted or gilded - - -	1	25	-	-	-	25 in chests, 14 in baskets.
Crockery and other earthenware, and white china and enamel, connected with the baser metals -	1	10	-	-	-	25 lbs. in chests, 14 lbs. in baskets.
The same connected with gold, silver, platina, similar and other admixture of fine metals, as also all other china ware combined with fine or common metals - -	1	50	-	-	-	22 lbs. in chests 13 lbs. in baskets
Silk and silk goods: —						
Dyed and white or floret silk (twisted and untwisted), also thread of raw silk -	Quin. 1	8	-	-	-	18 in chests, 10 in bales.
Silk stuffs, and stockings, cloth shawls, ribands, lace, blond lace, gauze, buttons, &c., needlework, and milliners' articles; woven silk and galoon, mixed with metal thread, unconnected with iron, glass, wood, leather, brass, or steel; finally, all the above wares made of floret silk (bourre de soie) or silk - -	Lb. 1	1	-	-	-	22 in chests, 13 in bales
All the above articles mixed with other woven materials exclusive of silk; as, wool, or other hair, of animals, cotton, and linen	1	15	-	-	-	22 in chests, 12 in bales.
Tea - - - -	1	11	-	-	-	23 lbs. in chests
Sugar - - -						14 lbs. in oaken barrels, 10 lbs. in other ditto, 13 lbs. in chests.
Refined and brown sugar - - -	1	10	-	-	-	7 lbs. in bales, 8 lbs. in baskets.
Raw sugar for inland sugar houses, under control of the proper officers - -	1	5	-	-	-	14 lbs. in oaken casks, 10 lbs. in casks of soft wood.
Raw sugar, and farina and sugar meal -	-	9	-	-	-	16 lbs. in chests of 8 qtls. and above 13 lbs. in chests under 8 quintals.
Tin and articles of tin: —						
Coarse tin wares; as, dishes, plates, spoons, kettles, pots, and other vessels, pipes, and plates -	1	2	-	-	-	11 in chests, 7 in baskets.
Fine and japanned tin wares, toys, &c. &c.	1	10	-	-	-	22 in chests, 14 in baskets.
Note. — Tin in blocks, and old tin, pays the general importation duty.						
Tobacco leaves - -	1	5	15	-	-	12 lbs. in casks 10 lbs. in baskets, 7 lbs. in bales.
Tobacco: —						
Manufactured - -	1	11	-	-	-	16 lbs. in barrels, 13 in baskets, 6 in bales.
Wool and woollen goods: —						
Raw sheep's wool	1	Free.	-	2		
White threefold or manifold twisted woollen and camel yarn, and all other sorts of dyed yarn - - -	1	-	-	-	-	17 lbs. in casks and chests, 7 lbs. in bales.
Woollen cloths, and hosiery cloths, shawls, felted goods, cords, buttonry, net and fancy woollens, mixed with iron, glass, wood, leather, bronze and steel, also with wild animals' hair, or wool with any materials except silk - -	1	30	-	-	-	20 lbs. in chests, 7 lbs. in bales.
Unmilled woollens and mixed wares of cotton and wool, if printed, embroidered, or worked, &c. - -	1	50				
Carpets of wool and other animals' hair mixed with linen -	1	20	-	-	-	20 lbs. in chests, 7 lbs. in bales.
Note. — Oil cloths made of horse hair pay the general importation duty.						

N.B. — The duty on wheat, beans, and peas, imported into Prussia from Poland by the Viatula and the Niemen and exported by Dantzic, &c., has recently been raised to 3 silver *gros* per scheffel; do. on rye, barley, and oats, 2 silver do. Formerly it was only half as much. This increase of duty, intended to operate as a retaliation on Russia, shows pretty conclusively that in commercial affairs Russian influence does not go for much in Prussia.

PUBLICANS, are persons authorised by licence to retail beer, spirits, or wines. Under the term publicans are comprised innkeepers, hotel keepers, alehouse keepers, keepers of wine vaults, &c. An inn differs from an alehouse in this, — that the former is a place intended for the lodging as well as the entertainment of guests, whereas the latter is intended for their entertainment only. If, however, ale or beer be commonly sold in an inn, as is almost invariably the case, it also is an alehouse; and if travellers be furnished with beds, lodged, and entertained in an alehouse, it also is an inn. It is not material to the character of an innkeeper that he should have any sign over his door;

it is sufficient that he makes it his business to entertain passengers and travellers, providing them with lodgings and other accommodations.

1. *Licensing of Publicans.* — The provisions with respect to the licensing of public houses are embodied in the 9 Geo. 4. c. 61., of which we subjoin an abstract.

General Meetings. — There shall be annually holden in county divisions, cities, and towns, a special session of justices, to be called the "*General Annual Licensing Meeting*," for the purpose of granting licences to persons keeping or about to keep inns, alehouses, &c.; such meetings to be held, in Middlesex and Surrey, within the first 10 days of the month of March; and in every other place between the 20th of August and the 14th of September, both inclusive.

Notice of General Meeting. — Within every division, 21 days before the annual licensing meeting, a petty session of justices to be held, a majority of whom shall fix the day and hour for holding the general annual meeting; and shall direct a precept to the high constable, requiring him, within 5 days after the receipt thereof, to order the petty constables to affix on the door of the church, chapel, or other public place, a notice of such annual meeting, and give or leave at the dwelling-house of each justice acting for the division, and of each person keeping an inn, or who shall have given notice of his intention to apply for a licence to keep an inn, a copy of such notice. — § 2.

The annual meeting may be adjourned, but the adjourned meeting is not to be held on any of the 5 days immediately following the adjournment; and every adjournment to be held in the month of March in Middlesex and Surrey, and in August or September in every other county. — § 3.

Sessions for Transfer of Licences. — At the annual meeting, justices to appoint not less than 4 nor more than 8 special sessions, to be held as near as possible at equidistant periods, for the purpose of transferring licences. — § 4.

Notice of holding any adjourned meetings, or of any special session for the transfer of licences, to be given in the same manner and to the same parties as mentioned above. — § 5.

Justices disqualified. — No justice who is a common brewer, distiller, maker of malt for sale, or retailer of malt or any exciseable liquor, shall act or be present at any annual licensing meeting, or adjournment, or special session for transferring licences, or take part in the adjudication upon any application for a licence, or upon an appeal; nor in the case of licensing any house, of which he is owner, or agent of the owner, or of any house belonging to any common brewer, maker of malt, &c. to whom he shall be, either by blood or marriage, the father, son, or brother, or with whom he shall be partner in *any other trade*; in any of these cases knowingly or wilfully to act, subjects to a penalty of 100*l*. But disqualification does not arise, where a justice, having no *beneficial interest* in a house licensed or about to be licensed, holds only the legal estate therein as trustee or for a charitable or public use. — § 6.

When in any liberty, city, or town, 2 qualified justices do not attend, the county justices may act. — § 7.

The power given to county justices not to extend to the Cinque Ports. — § 8.

Questions respecting licences to be determined, and licences to be signed, by a majority of the justices present. — § 9.

Application for a Licence. — Persons intending to apply for a licence to a house *not before licensed*, to affix a notice on the door of such house, and on the door of the church or chapel of the parish, and, where there shall be no church or chapel, on some other conspicuous place within the parish, on *three several Sundays*, between the 1st of January and the last day of February in the counties of Middlesex and Surrey, and elsewhere between the 1st of June and the last day of July, at some time between the hours of 10 in the forenoon and 4 in the afternoon, and shall serve a copy of such notice upon one of the overseers of the poor, and upon one of the constables or peace-officers of the parish, within the month of February in the counties of Middlesex and Surrey, and elsewhere within the month of July, prior to the annual meeting; such notice to be in a legible hand, or printed and signed by the applicant. The application must state the Christian and surname of the party, with the place of his residence, and his trade or calling during the 6 months previous to the serving of the notice. — § 10.

Notice to transfer Licence. — Persons desirous of transferring a licence, and intending to apply to the next special sessions, must, 5 days previously, serve a notice upon one of the overseers and one of the constables of the parish. Persons hindered, by sickness or other reasonable cause, from attending any licensing meeting, and proof thereof adduced *on oath*, may authorise another person to attend for them. — § 12.

Licences to be in force, in Middlesex and Surrey, from the 5th of April; elsewhere from the 10th of October, for one whole year. — § 13.

Provision for Death or other Contingency. — If any person licensed shall die, or become incapable, or a bankrupt or insolvent, or if he or his heirs, executors, or assigns, shall remove or neglect to apply for a continuation of his licence, the justices at special session may grant a licence to the heirs, executors, or assigns of such party, or to any *new* tenant; or if any man's house should be, or be about to be, pulled down for a public purpose, or rendered, by fire, tempest, or other unforeseen calamity, unfit for the purposes of an inn, licence may be granted to the occupier, if he intend to open another house as an inn. Such transferred licences shall continue only in force to the end of the year; and in case of removal to another house, notice must be given on some Sunday, within 6 weeks before the special session, in the manner and form before described. — § 14.

Fees for Licences. — The clerk of the justices may lawfully receive from every person to whom a licence is granted, for trouble and *all expenses*, the following sums: —

	s.	*d.*
For constable or officer serving notices - - - - -	1	0
For clerk of justices for licence - - - - -	5	0
For precept to the high constable, and notices to be delivered by the petty constable	1	6

Clerks demanding or receiving more than these fees, to forfeit 5*l*. — § 15.

No sheriff's officer, or officer executing the process of any court of justice, qualified to hold or use any licence under this act. — § 16.

Excise Licences. — No licence for the sale of any exciseable liquors, to be consumed on the premises, shall be granted by the excise to any person, unless such person be previously licensed under this act. — § 17.

Penalties. — Any person *without a licence* selling or exchanging, or for valuable consideration disposing of, any exciseable liquor by retail, to be consumed in his premises; or *with a licence*, and so selling in premises other than those specified in his licence, shall for every offence, on conviction before 1 justice, forfeit not exceeding 20*l*. nor less than 5*l*. with costs; but the penalty not to attach in case of death or insolvency, and sale by the heir or assigns, prior to the next special sessions. — § 18.

Every licensed person shall, if required, sell all liquors by retail (except in quantities less than a ½ pint) by the gallon, quart, pint, or ½ pint, sized according to the standard; in default thereof to forfeit the illegal measure, and pay not exceeding 40*s*. with costs, to be recovered within 30 days before 1 justice. — § 19.

In cases of riot, or probability of riot, houses licensed in the neighbourhood may be closed by the order of 2 justices. — § 20.

Any person convicted of a *first offence*, before 2 justices, against the tenour of his licence, to forfeit not exceeding 5*l*. with costs; guilty of a *second offence* within three years of the first, to forfeit not exceeding 10*l*. with costs; and guilty of a *third offence* within 3 years, to forfeit not exceeding 50*l*. with costs: or

the case in the last instance may be adjourned to the petty sessions, for the annual meeting, or the general quarter sessions; and if the offender is found guilty by a *jury*, he may be fined 100*l*., or adjudged to forfeit his licence or both, and rendered incapable of selling any excisable liquor in any inn kept by him for 3 *years*. — § 21.

Proceedings at the session in certain cases may be directed by the justices to be carried on by the constable, and the expenses defrayed out of the county rates. — § 22.

Witnesses refusing to attend without lawful excuse may be fined not more than 10*l*. — § 23.

Penalties against justices may be sued for in any court of Westminster; a moiety to the king and a moiety to the party suing. — § 24.

Penalties adjudged by justices may be recovered by distress or the party imprisoned 1, 3, or 6 calender months. — § 25.

The next sections relate to the mode of prosecuting actions.

The last section of the act bears that the word "*inn*" shall include any inn, alehouse, or victualling house, in which is sold by retail any excisable liquor, to be drunk or consumed on the premises; and the words excisable liquor are to include all such fermented or spirituous liquors as may now or hereafter be charged with any custom or excise duty. — § 37.

The act does not affect the Universities, nor the privileges of the Vintners' Company, except those freemen who have obtained their freedom by redemption; and it does not alter the time of granting licences in the city of London.

Innkeepers are bound, by the tenour of their licence, to keep order in their houses, to prevent drunkenness and disorderly conduct, and gambling. If they fail in these respects, they forfeit their licence, and subject themselves to the penalties mentioned before. Allowing seditious or immoral books to be read in an inn, also forfeits the licence, and subjects to penalties. — (39 *Geo.* 3. c. 79. § 31.)

2. *Duties of Innkeepers.* — Innkeepers are bound by law to receive guests coming to their inns, and they are also bound *to protect their property when there*. Thy have no option to reject or refuse a guest, unless their house be already full, or they are able to assign some other reasonable and sufficient cause. Neither can they impose unreasonable terms on such as frequent their houses: if they do, they may be fined, and their inns indicted and suppressed. An innkeeper who has stables attached to his premises, may be compelled to receive a horse, although the owner does not reside in his house; but he cannot, under such circumstances, be compelled to receive a trunk or other dead thing. By the annual Mutiny Act, constables, or, in their default, justices of the peace, may quarter soldiers in inns, livery-stables, alehouses, &c., under the conditions and regulations set forth in the statute.

3. *Responsibility of Innkeepers.* — An innkeeper is bound to keep safely whatever things his guests deposit in his inn, or in his custody as innkeeper; and he is civilly liable for all losses, except those arising from *irresistible force*, or what is usually termed the act of God and the king's enemies. "It has long been holden," says Sir William Jones, "that an innkeeper is bound to restitution, if the trunks or parcels of his guests, committed to him either personally or through one of his agents, be damaged at his inn, or stolen out of it by any person whatever (except the servant or companion of the guest); nor shall he discharge himself of this responsibility by a refusal to take care of the goods, because there are suspected persons in the house, for whose conduct he cannot be answerable; it is otherwise, indeed, if he refuse admission to a traveller because he really has no room for him, and the traveller, nevertheless, insist upon entering, and place his baggage in a chamber without the keeper's consent. Add to this, that if he fail to provide honest servants and honest inmates, according to the confidence reposed in him by the public, his negligence in that respect is highly culpable, and he ought to answer civilly for their acts, even if they should rob the guests that sleep in their chambers. Rigorous as this law may seem, and hard as it may actually be in one or two particular instances, it is founded on the great principle of public utility, to which all private considerations ought to yield; for travellers, who must be numerous in a rich and commercial country, are obliged to rely almost implicitly on the good faith of innholders, whose education and morals are usually none of the best, and who might have frequent opportunities of associating with ruffians or pilferers, while the injured guest could never obtain legal proof of such combinations, or even of their negligence, if no actual fraud had been committed by them. Hence the prætor declared, according to Pomponius, his desire of securing the public from the dishonesty of such men; and by his edict gave an action against them, if the goods of travellers or passengers were lost or hurt by any means except by inevitable accident (*damno fatali*): and Ulpian intimates, that even this severity could not restrain them from knavish practices or suspicious neglect."—(*Essay on the Law of Bailments*, 2d ed. pp. 95, 96.)

Even if an innkeeper bid the guest take the key of his chamber and lock the door, telling him that he cannot undertake the charge of the goods, still, if they be stolen, he is held to be responsible. In all such cases it is not competent to the innkeeper to plead that he took *ordinary* care, or that the *force* which occasioned the loss was truly irresistible. A guest is not bound to deliver the goods in special custody to the innkeeper, nor, indeed, to acquaint him that he has any. If he have property with him, or about his person, the innkeeper must be responsible for it without communication. But the innkeeper may require that the property of his guest be delivered into his hands, in order that it may be put into a secure place; and if the guest refuse, the innkeeper is not liable for its safety. The guest exonerates the innkeeper from liability when he takes upon himself the exclusive custody of the goods, so as to deprive the innkeeper of having

any care over them: thus, if a guest demand and have exclusive possession of a room, for the purpose of a shop or warehouse, he exonerates the landlord from any loss he may sustain in the property which he keeps in that apartment: but it is otherwise if he have not *the exclusive possession of the room.* The innkeeper cannot oblige the guest to take charge of his own goods; for this, in effect, would be a refusal to admit them into the inn. And it is no excuse for an innkeeper to say that he delivered the key of the chamber whence the property was stolen to the guest, who left the door open. A case of this sort occurred a few years ago, at Brighton. A lady having left the door of her bed-room, of which she had the key, open for a few minutes, 50*l.* were abstracted from her reticule. The innkeeper contended that the plaintiff, by selecting particular apartments, and taking the key, had exonerated him from his liability. The jury found for the plaintiff; and upon a motion for a new trial, Lord Tenterden said, — "By the common law of this country, and also by the civil law, the principle of the liability of innkeepers was founded on two reasons: first, to compel the landlord to take care that no improper company was admitted into his house; and, secondly, to prevent collusion. — The principle, as stated in the civil law, was this — '*Ne, quisquam putet graviter hoc in eos constitum esse; nam est in ipsorum arbitrio nequem recipient; et nisi hoc esset statutum, materia daretur cum furibus, adversus eos quos recipiunt, coeundi: cum ne nunc quidem abstinent hujusmodi fraudibus.*' It was true that, in the present state of society, it was very difficult to prevent the intrusion of improper company into inns. But still the principle was such as he had stated it to be, and it would be dangerous to relax it; and he did not think that the taking rooms in this way was sufficient to discharge the landlord. Then, as to the objection that the cases did not extend to money, it was clear that money was as much within the principle as goods, and that no substantial distinction could be made. He was therefore of opinion that the verdict was right."— Rule refused.

A landlord may exempt himself from liability, if he can show that the loss was occasioned by the misconduct of the guest; as, if his goods are stolen by his own servant or companion.

It has been decided that a man is a guest at an inn, if he leave his horse at it, though he has not gone into it himself. If a man come to an inn, and make a contract for lodging for a set time, and do not eat or drink there, he is no guest, but a lodger, and, as such, not under the innkeeper's protection; but if he eat and drink, or pay for his diet there, it is otherwise. Any innkeeper or alehouse keeper, knowingly receiving and harbouring any person convicted of an offence against the revenue laws, for which he has been in prison, or for which he has fled, shall forfeit 100*l.*, and have no licence for the future.

4. *Remedy of an Innkeeper against his Guest.* — An innkeeper may, without any agreement to that effect, detain the person of a guest who has eaten in his house, until payment; and he may do the same by the horses in his s[illegible].

An innkeeper is not entitled to recover for spirits supplied to his guests, of the value of 20*s.* and upwards, unless supplied or contracted for at one time. — (23 *Geo.* 2. c. 40.)

By the custom of London and Exeter, if a man commit a horse to an hostler, and the expense of his keep become equivalent to his price, the hostler may appropriate the horse to himself upon the appraisement of four of his neighbours, or may have him sold. But innkeepers in other parts of the country have no power to sell horses detained by them.

A horse committed to an innkeeper cannot be detained as a security for the board of his master.

It is enacted by 11 & 12 Will. 3. c. 15. that innkeepers, alehouse keepers, &c., refusing to specify in an account the number of pints or quarts for which demand is made, or selling in unmarked measures, shall have no power to detain any goods or other things belonging to the person from whom demand is made, but shall be left to their action for recovery of the same.

PUMICE-STONE (Ger. *Bimstein*; Fr. *Pierre pouce*; It. *Pietra pomice*; Sp. *Piedra pomez*; Lat. *Pumex*), a light, spongy, vitreous stone, found usually in the neighbourhood of volcanoes. It is used for polishing metals and marble, and smoothing the surface of wood and pasteboard. It is said to form a good glaze for pottery. The lighter pumice stones swim on water, their specific gravity not exceeding ·914. The island of Lipari, in the Mediterranean, is chiefly formed of pumice stone, and may be said to be the magazine whence all Europe is supplied with this useful article. There are several species of pumice stones; but those only that are light and spongy are exported. The price varies in the London market from 8*l.* to 10*l.* a ton.

PUTCHOCK. An article of this name is imported in considerable quantities from the north-west coast of India into China, and is regularly quoted in the Canton price currents. It is the root of a plant that grows abundantly in Sinde. When burned, it yields a fine smoke, and a grateful and diffusive smell. The Chinese beat it into a fine powder, which they burn as incense in the temples of their gods. — (*Hamilton's New Account of the East Indies*, vol. i. p. 126.)

Q.

QUARANTINE, a regulation by which all communication with individuals, ships, or goods, arriving from places infected with the plague, or other contagious disease, or

supposed to be peculiarly liable to such infection, is interdicted for a certain definite period. The term is derived from the Italian *quaranta*, forty; it being generally supposed, that if no infectious disease break out within 40 days, or 6 weeks, no danger need be apprehended from the free admission of the individuals under quarantine. During this period, too, all the goods, clothes, &c. that might be supposed capable of retaining the infection, are subjected to a process of purification. This last operation, which is a most important part of the quarantine system, is performed either on board ship, or in establishments denominated *lazarettos*. — (See *post.*)

Policy of Quarantine. — The regulations as to quarantine are entirely precautionary; they have their origin in the belief that various diseases, but especially the plague, are contagious; and supposing such to be the case, the propriety of subjecting those coming from an infected or suspected place to a probation is obvious. Indeed, no government could, until the belief in question be proved to be ill founded, abstain from enforcing precautionary measures, without rendering itself liable to the charge of having culpably neglected one of its most important duties, — that of providing, by every means in its power, for the safety of its subjects. Latterly, however, it has been contended that the plague is never imported; that it is always indigenous; originating in some peculiar state of the atmosphere, or in something peculiar in the condition of the people; and that, consequently, quarantine regulations merely impose a heavy burden on commerce, without being of any real utility. But though there does not seem to be any reason for doubting that infectious diseases have originated in the way described, the fact that they have, in innumerable instances, been carried from one place to another, seems to be established beyond all question. Even if the evidence as to the importation of infectious diseases were less decisive than it is, or the opinions of medical men more divided, it would not warrant the repeal of the restraints on the intercourse with suspected ports. This is not a matter in which innovations should be rashly introduced; wherever there is doubt, it is proper to incline to the side of security. In some cases, perhaps, quarantine regulations have been carried to a needless extent; but they have more frequently, we believe, been improperly relaxed.

Institution of Quarantine. — The notion that the plague was imported from the East into Europe, seems to have prevailed in all ages. But it would appear that the Venetians were the first who endeavoured to guard against its introduction from abroad, by obliging ships and individuals from suspected places to perform quarantine. The regulations upon this subject were, it is most probable, issued for the first time in 1484. — (*Beckmann, Hist. of Invent.* vol. ii. art. *Quarantine.*) They have since been gradually adopted in every other country. Their introduction into England was comparatively late. Various preventive regulations had been previously enacted; but quarantine was not systematically enforced till after the alarm occasioned by the dreadful plague at Marseilles in 1720. The regulations then adopted were made conformably to the suggestions of the celebrated Dr. Mead, in his famous "Discourse concerning Pestilential Contagion."

Lazarettos or Pest-houses are establishments constructed to facilitate the performance of quarantine, and particularly the purification of goods. They have usually a port in which ships from a suspected place may anchor; and, when perfect, are provided with lodgings for the crews and passengers, where the sick may be separated from the healthy; and with warehouses, where the goods may be deposited; all intercourse between the lazaretto and the surrounding country being, of course, interdicted, except by permission of the authorities. The lazarettos at Leghorn, Genoa, and Marseilles are the most complete of any in Europe. The facilities they afford to navigation are very great; for, as ships from suspected places may discharge their cargoes in the lazaretto, they are not detained longer than they would be were there no quarantine regulations. The goods deposited in the lazaretto, being inspected by the proper officers, and purified, are then admitted into the market.

Compared with these, the quarantine establishments in this country are exceedingly defective. There is not, even in the Thames, a lazaretto where a ship from a suspected place may discharge her cargo and refit: so that she is detained, frequently at an enormous expense, during the whole period of quarantine; while, if she have perishable goods on board, they may be very materially injured. It is singular that nothing should hitherto have been done to obviate such grievances. The complaints as to the oppressiveness of quarantine regulations are almost wholly occasioned by the want of proper facilities for its performance. Were these afforded, the burdens it imposes would be rendered comparatively light; and we do not know that many more important services could be rendered to the commerce of the country, than by constructing a proper quarantine establishment on the Thames.

Bills of Health. — The period of quarantine varies, as respects ships coming from the same place, according to the nature of their bills of health. These are documents, or certificates, signed by the consul or other competent authority in the place which the

ship has left, describing its state of health at the time of her clearing out. A *clean* bill imports that at the time of her sailing, no infectious disorder was known to exist. A *suspected*, or, as it is more commonly called, a *touched* bill, imports that rumours were afloat of an infectious disorder, but that it had not actually appeared. A *foul* bill, or the *absence of clean bills*, imports that the place was infected when the vessel sailed. — (See BILLS OF HEALTH.) The duration of the quarantine is regulated by the nature of these instruments. They seem to have been first issued in the Mediterranean ports in *1665*, and are obviously of great importance.

Quarantine Regulations. —The existing quarantine regulations are embodied in the act 6 Geo. 4. c. 78., and the different orders in council issued under its authority. These orders specify what vessels are liable to perform quarantine; the places at which it is to be performed; and the various formalities and regulations to be complied with. The publication in the *Gazette* of any order in council with respect to quarantine is deemed sufficient notice to all concerned; and no excuse of ignorance is admitted for any infringement of the regulations. To obviate, as far as possible, any foundation for such plea, it is ordered that vessels clearing out for any port or place with respect to which there shall be at the time any order in council subjecting vessels from it to quarantine, are *to be furnished* with an abstract of the quarantine regulations; and are *to furnish themselves* with quarantine signal flags and lanterns, and with materials and instruments for fumigating and immersing goods. The following are the clauses in the act as to signals: —

Every commander, master, or other person having the charge of any vessel liable to quarantine, shall, at all times, when such vessel shall meet with any other vessel at sea, or shall be within 2 leagues of the coast of the U. Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man, hoist a signal to denote that his vessel is liable to quarantine; which signal shall in the day time, if the vessel shall have a clean bill of health, be a large yellow flag, of 6 breadths of bunting, at the main-topmast-head; and if such vessel shall not have a clean bill of health, then a like yellow flag, with a circular mark or ball, entirely black, in the middle thereof, whose diameter shall be equal to 2 breadths of bunting; and in the night time, the signal shall in both cases be a large signal lantern with a light therein (such as is used on board his Majesty's ships of war), at the same mast-head: and such commander, master, or other person, shall keep such signals hoisted during such time as the said vessel shall continue within sight of such other vessel, or within 2 leagues of the said coast or islands, and while so in sight, or within such distance, until such vessel so liable to quarantine shall have arrived at the port where it is to perform quarantine, and until it shall have been legally discharged from the performance thereof; on failure whereof, such commander, master, or other person shall forfeit 100*l*. — § 8.

Every commander, master, or other person having the charge of any vessel on board whereof the plague or other infectious disease highly dangerous to the health of his Majesty's subjects shall actually be, shall at all times, when such vessel shall meet with any other vessel at sea, or shall be within 2 leagues of the coast of the U. Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man, hoist a signal, to denote that a vessel has the plague or other infectious disease; which signal shall be in the day time a flag of yellow and black, borne quarterly, of 8 breadths of bunting, at the main-topmast-head; and in the night time, the signal shall be 2 large signal lanterns, commonly used on board ships of war, one over the other, at the same mast-head: and such commander, master, or other person shall keep such signal hoisted during such time as the said vessel shall continue within sight of such other vessel, or within 2 leagues of the coast or islands aforesaid, while so in sight, or within such distance, until such vessel shall have arrived at the port where it is to perform quarantine, and until it shall have been legally discharged from the performance thereof; on failure whereof, such commander, master, or other person shall forfeit 100*l*. — § 9.

If any commander, master, or other person, knowing that the same is not liable to the performance of quarantine, shall hoist such signal, by day or night, such commander or other person shall forfeit 50*l*. — § 10.

But, instead of printing the act, and the various orders in council that have grown out of it, it will be sufficient to lay the following abstract of them before the reader. This abstract has been prepared by the Custom-house; and contains a distinct summary of the various rules and regulations to be complied with.

ABSTRACT OF QUARANTINE REGULATIONS.

It is in the first place to be observed, that all persons are presumed to know and are bound to take notice, not only of the quarantine regulations established by act of parliament (as they are of any other public act), but likewise of every order in council made for the performance of quarantine, and published in the *London Gazette*; and as it is easily in their power to inform themselves of such regulations, and particular care is taken by this and other means to promulgate such of them as apply to their respective situations, *previously to their being actually put under quarantine*, when they will receive directions for their guidance from the quarantine officers, no plea of ignorance will be admitted as an excuse for any neglect, breach, or violation thereof; but, for the sake of example, and for the security of the public health, the pains, penalties, and punishments of the law will be enforced with the utmost severity.

Duty of Commanders and Masters of Vessels.

Upon arrival off the coast of the U. Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man,

To deliver to the pilot who shall go on board, a written paper, containing a true account of the name of the place at which his ship loaded, and of all the places at which he touched on the homeward voyage. Neglecting or refusing to deliver such papers, or making any false representation or wilful omission therein, subjects him to a penalty of 100*l*.

Upon entering or attempting to enter any port, and being spoke by any quarantine officers,

To give a true answer in writing or otherwise, and upon oath or not upon oath (according as he shall be required), to the preliminary questions put to him by such quarantine officer, for the purpose of ascertaining whether his vessel is or is not liable to quarantine. Neglecting or refusing to bring his vessel to as soon as it can be done with safety, in obedience to the requisition of the quarantine officer, subjects him to a penalty of 100*l*.

Refusing to answer such questions, or giving any false answer thereto (if not upon oath), subjects him to a penalty of 200*l*.

If upon oath, to the punishment for wilful and corrupt perjury.

If any infectious disease shall appear on board, the master is to repair to such place as his Majesty shall direct, and make known his case to the officer of customs, and he is to remain at that place until directions are given by the Lords of the Privy Council. He is not to permit any of the crew or passengers on board to go on shore, and he, his crew and passengers, are to obey such directions as are received from the Lords of the Privy Council.

Not acting in conformity to the regulations herein directed, or acting in disobedience to such directions as shall be received from the privy council, he incurs the penalty of 100*l*.

If informed by the pilot that his vessel has become liable to quarantine, by reason of any proclamation made subsequent to his departure, to hoist and keep hoisted a like signal, under the same penalty of 100*l*.

To give to the pilot coming on board a written paper containing a true account of the different articles composing his cargo. Neglecting or refusing to do so, or making a false representation or wilful omission, subjects him to a penalty of 50*l*.

Masters of vessels liable to quarantine, and other persons on board them or having communication with them, are to repair to the appointed quarantine stations, and may be compelled to do so by force.

The master of any vessel having disease on board, on meeting with any other vessel at sea, or within 2 leagues of the coast of the U. Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark or Man, is to hoist a signal to denote that his vessel has such disease on board, and is to keep such signal hoisted during such time as he shall continue within sight of such vessel, or within 2 leagues of the coast or islands aforesaid, while so in sight or within such distance, until the vessel shall arrive at the port where she is to perform quarantine, and until she shall be legally discharged from the performance thereof. Failing herein, the master incurs the penalty of 100*l*.

If he shall refuse or omit to disclose the circumstances of such infection prevailing either at any place at which he has been, or on board his vessel, in his answers to the preliminary questions put to him by the quarantine officer, or if he shall wilfully omit to hoist, and to keep hoisted, the proper quarantine signal to denote that his ship is liable to quarantine, he incurs the penalty of 300*l*.

Upon attempting to enter any port, which is not the port at which he ought to perform quarantine, he may be compelled to desist therefrom, in order that he may proceed to the proper quarantine ports, by guns being fired upon the ship, or any other kind of force being used that may be necessary for the attainment of that object.

Quitting or knowingly suffering any seamen or passenger to quit his ship, by going on shore, or by going on board any other vessel or boat, before discharged from quarantine, or,

Not repairing to the proper quarantine station within a convenient time after due notice given, incurs a penalty of 100*l*.

To repair in all cases to the proper quarantine port, as herein-after stated in the Appendix, according as he shall or shall not be furnished with a clean bill of health, and according to the port or place to which he shall be bound, as herein stated.

But if through ignorance, or by stress of weather, damage, loss, or accidents of the seas, he shall have passed the proper quarantine port, he may (having a clean bill of health on board, and upon giving satisfactory proof thereof upon oath, and by the oath of the pilot, if any on board, and that the same was not wilfully or intentionally done or occasioned) be permitted to proceed to some other quarantine port, in the discretion of the quarantine officer, keeping the proper quarantine signal hoisted during the whole time.

Upon his arrival at the proper quarantine port, to give true answers upon oath to all the quarantine questions, and to make oath to the truth of his log-book, and the times at which the entries were therein made: failing herein, he incurs the penalty of wilful and corrupt perjury.

He is also to repair to the particular station which shall be appointed by the quarantine officer for the said ship or vessel.

To deliver up to the quarantine officer his bill of health, manifest, log-book, and journal.

Wilfully refusing or neglecting so to do, subjects him to a penalty of 100*l*.

If not bound to any port of the U. Kingdom, or the islands aforesaid, and attempting to enter any port thereof (except to wait for orders, or in consequence of stress of weather or accidents of the seas), he shall give satisfactory proof thereof to the quarantine officer, and give true answers upon oath to the preliminary questions, and strictly conform to all such directions as he shall receive from the quarantine officer, touching his continuance at such port, or departure from thence, or repairing to any other; and also with respect to all other quarantine regulations; in default of which, he may be compelled to proceed to sea by any means or by any kind of force that shall be necessary for that purpose.

Having performed quarantine in any foreign lazaret, the vessel is to be put under quarantine at some of the ports herein-after appointed, until the master shall produce to the quarantine officer the proper documents in proof thereof; upon production whereof the said vessel shall not be obliged to perform quarantine, but shall remain at such station until released by order in council.

Unshipping, or moving in order to unship, any goods from on board any vessel liable to quarantine, subjects to a penalty of 500*l*.

Clandestinely conveying, or secreting or concealing for the purpose of conveying, any letter, goods, or other articles, from any vessel actually performing quarantine, subjects to a penalty of 100*l*.

Note. — Every commander or master of any vessel clearing out or about to sail for any port or place in the Mediterranean, or in the West Barbary on the Atlantic Ocean, or for any port or place respecting which there shall at the time be any order of his Majesty in council in force, subjecting vessels coming from thence to quarantine, is to receive from the principal officer of the customs at such port or place, this printed Abstract of the Quarantine Regulations, which such commander or master is to cause to be affixed on some convenient and conspicuous part of his said vessel, and to remain so affixed until his return with his said vessel to some port or place in the U. Kingdom or the islands aforesaid.

And every such commander and master is likewise to provide and take on board 1 at least of each of the proper quarantine signal flags and lanterns, and likewise materials and instruments for fumigation and immersion, and to keep the same on board, to be used upon his return to the U. Kingdom or the islands aforesaid.

Duty of Pilots.

Pilots are strictly to observe the following directions: —

To receive an account in writing from every commander or master of any vessel coming from foreign parts, of the places at which his vessel loaded, and at which he touched on his said homeward voyage.

To give notice to such commander or master of any proclamation, or order in council, made after the departure of such vessel from the U. Kingdom or the islands aforesaid, and then in force, by which vessels coming from any place mentioned in such account shall be liable to quarantine. Neglecting or omitting to give such notice subjects them to a penalty of 100*l*.

To give a like notice of any proclamation then in force, by which vessels having on board any of the articles mentioned in the master's account shall be liable to quarantine. Neglecting or omitting to give such notice subjects them to a penalty of 100*l*.

To remain on board in the same manner as any of the officers, crew, or passengers, and not to quit the said vessel before or after the arrival, either by going on shore, or by going on board any other vessel or boat with intent to go on shore, until she is regularly discharged from quarantine; and they may be compelled by any persons whatsoever, and by any kind of necessary force, to return on board the same. If they offend herein, they incur a penalty of 300*l*. and 6 months' imprisonment.

Not to bring any such vessel into any port or place other than the port or place appointed for the reception of vessels so liable to quarantine as stated in the Appendix, unless compelled by stress of weather, adverse winds, or accidents of the seas, of which the pilot, as well as the commander or master of the vessel, is to give satisfactory proof upon oath. If they offend herein, they incur a penalty of 200*l.*

To bring the ship to, as soon as it can be done with safety, in obedience to the requisition of the quarantine officer. Failing herein subjects them to a penalty of 100*l.*

Duty of other Persons.

When any infectious disease actually appears on board any vessel, all persons on board are to obey the direction of the privy council, under a penalty of 100*l.*

Not to quit such vessel, either by going on shore, or by going on board any other vessel or boat with intent to go on shore, until regularly discharged from quarantine; and if they quit the ship, they may be compelled by any persons whatsoever, and by any kind of necessary force, to return on board the same; and are also liable to a penalty of 300*l.* and 6 months' imprisonment.

Whether liable to quarantine, or actually performing quarantine, or having had any intercourse or communication with any such persons so liable to or under quarantine, all persons are to obey all such orders as they shall receive from the quarantine officer, and to repair to the lazaret, vessel, or place appointed for the performance of quarantine. Wilfully refusing or neglecting to repair forthwith, when required so to do by such officers, or escaping from or out of such lazaret, vessel, or place may be compelled to repair or return thereto by any kind of necessary force, and are subject to a penalty of 200*l.*

Landing or unshipping, or moving in order to the landing or unshipping, of any goods, packets, packages, baggage, wearing apparel, books, letters, or any other articles whatever, from vessels liable to quarantine, are liable to a penalty of 500*l.*

Clandestinely conveying, or secreting or concealing for the purpose of conveying, any goods, letters, or other articles as aforesaid, from any vessel actually performing quarantine, or from the lazaret or other place where such goods or other articles shall be performing quarantine, are liable to a penalty of 100*l.*

Having quitted or come on shore from any vessel liable to or under quarantine, or having escaped from any lazaret or other place appointed in that behalf, may be seized and apprehended by any constable or other peace officer, or by any other person whatever, and carried before a justice of the peace, who may grant his warrant for conveying such person to the vessel, lazaret, or other place from which he shall have escaped, or for confining him in any place of safe custody (not being a public gaol) until directions can be obtained from the privy council.

Knowingly and wilfully forging or counterfeiting, interlining, erasing, or altering, or procuring to be forged, &c., any certificate directed by any order in council touching quarantine, or publishing the same as true, or uttering any such certificate with intent to obtain the effect of a true certificate, knowing its contents to be false, are guilty of felony.

What Vessels are liable to Quarantine.

All vessels (as well ships of war as all others) with or without clean bills of health, coming —

From or having touched at any place in the Mediterranean, or the West Barbary on the Atlantic Ocean.

From any other place from which his Majesty shall from time to time adjudge it probable (and shall so declare by proclamation or order in council) that the plague, or any other infectious disease or distemper highly dangerous to the health of his Majesty's subjects, may be brought.

Note. — They are considered as liable to quarantine from the time of their leaving any of the said places.

All vessels having communication with any of the before-mentioned ships or vessels, or receiving —

Any person whatever from or out of such vessel, whether such person shall have come from any of the said places, or shall have gone on board of such vessel, either in the course of her voyage, or upon her arrival off the coast of the U. Kingdom, &c. — Or,

Any goods, wares, or merchandise, packets, packages, baggage, wearing apparel, goods, letters, or any other articles whatever, from or out of such ship or vessel.

Note. — They are liable to quarantine from the time of their receiving any such persons or goods.

All vessels coming from any port or place in Europe without the Straits of Gibraltar, or on the continent of America, and having on board —

Any of the articles enumerated (a list of which articles see in the Appendix);

And not producing a declaration upon oath, made by the owner, proprietor, shipper, or consignee, stating either that such articles are not the growth, produce, or manufacture of Turkey, or of any place in Africa within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or stating of what place they are the growth, produce, or manufacture.

All vessels and boats receiving —

Any of the said goods, wares, and merchandise, or other articles enumerated.

Signals.

For vessels with the plague or other highly infectious disease actually on board —

In the day time — A flag of yellow and black, borne quarterly, of 8 breadths of bunting, at the main topmast-head.

In the night time — Two large signal lanterns, with a light therein, such as are commonly used on board his Majesty's ships of war, one over the other, at the same mast-head.

For vessels with clean bills of health —

In the day time — A large yellow flag, of 6 breadths of bunting, at the main-topmast-head.

In the night time — A large signal lantern, with a light therein, such as is commonly used on board his Majesty's ships of war, at the same mast-head.

For vessels without clean bills of health —

In the day time — A large yellow flag, with a circular mark or ball, entirely black, in the middle thereof, whose diameter shall be equal to 2 breadths of bunting, at the main-topmast-head.

In the night time — Same as for vessels with clean bills of health.

Note. — Every commander or master of a vessel about to sail for the Mediterranean, or for any place respecting which an order in council shall be in force, subjecting vessels coming from thence to quarantine, to be provided with the quarantine signals above mentioned, and to keep the same on board, to be used on his return to the U. Kingdom.

Any commander or master hoisting either of the said quarantine signals, by day or night, knowing that his vessel is not liable to quarantine, incurs a penalty of 50*l.*

APPENDIX. — *A List of Articles enumerated considered as most liable to Infection.*

Apparel of all kinds
Artificial flowers
Bast or any articles made thereof
Beads, bracelets, or necklaces in strings
Beds and bed ticks
Books
Brooms of all kinds
Brushes of all sorts
Bunlets
Camlets
Canvass
Carmenia wood
Carpets
Cordage not tarred
Cotton wool
Cotton yarn
Cotton thread
All articles wholly made of or mixed with cotton, silk, wool, thread, or yarn
Down
Feathers
Flax
Furriers' waste
Goats' hair
Gold or silver on thread, cotton, hair, wool, or silk, or any other substance herein-before mentioned
Grogram
Hats, caps, or bonnets of straw, chip, cane, or any other material

Hemp
Hoofs
Horn and horn tips
Hair of all sorts
Leather
Linen
Lute strings, bathings or harp strings
Maps
Mattresses
Mats and matting
Mohair yarn
Nets new or old
Paper
Packthread
Parchment
Pelts
Platting of bast, chip, cane, straw, or horse hair
Quills
Rags
Sails and sail cloths
Silk, viz.—crapes, and tiffanies, husks and knubs, raw silk, thrown and organzine silk, waste silk, wrought silk
Skins, hides, and furs, and parts or pieces of skins, hides, and furs, whether undressed, or in part or wholly tanned, tawed, or dressed
Sponges
Straw, or any article made or mixed with straw
Stockings of all sorts
Thread, tow, vellum, whisks, wool whether raw or anywise wrought
Yarn of all sorts
And all other goods whatsoever, if they shall have arrived in or with packages consisting wholly or in part of any of the said articles.

QUARANTINE PORTS. — *For Vessels liable to Quarantine not coming from any Place actually infected, nor having any Infection actually on Board.*

Without clean Bills of Health.

All vessels, ships of war, &c. as herein-after specified, to perform quarantine at *Standgate Creek* or *Milford Haven*.

Ships of war, transports, or other ships in the actual service of government, under the command of a commissioned officer in the service of his Majesty's navy, whithersoever bound, to perform quarantine at the *Motherbank*, near *Portsmouth*, at a place marked out by yellow buoys.

With clean Bills of Health.

All ships and vessels bound to the following places, to perform quarantine at *Standgate Creek* : —

London, Rochester, Faversham, or any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Whitebooth Road*, between *Hull* and *Grimsby* : —

Leigh	Wi beach
Maldon	Burton
Colchester	Grimsby
Harwich	Hull
Ipswich	Bridlington
Woodbridge	Scarborough
Aldborough	Whitby
Southwold	Stockton
Yarmouth	Sunderland
Blackney and Clay	Newcastle
Wells	Berwick
Lynn	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Bamboro' Pool* near *Liverpool*, or *Milford Haven* : —

Carlisle	Liverpool
Whitehaven	Chester
Lancaster	Beaumaris
Preston	Isle of Man

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at the *Motherbank*, near *Portsmouth* : —

Sandwich	Arundel
Deal	Chichester
Dover	Portsmouth
Rye	Southampton
Newhaven	Cowes
Shoreham	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *St. Just's Pool*, within the mouth of the harbour of *Falmouth* : —

Poole	Fowey
Weymouth	Falmouth
Lyme	Gweek
Exeter	Penryn
Dartmouth	Truro
Plymouth	Penzance
Looe	Scilly

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *King Road* and *Portshute Pill* : —

Bridgewater	Chepstow
Minehead	Cardiff
Bristol	Swansea
Gloucester	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Milford Haven* : —

St. Ives	Llanelly
Padstow	Pembroke
Bideford	Milford
Barnstaple	Cardigan
Ilfracombe	Aberystwith

Or any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at the *Motherbank*, near *Portsmouth*, or *St. Just's Pool*, within the mouth of the harbour of *Falmouth* : —

Jersey	Sark
Guernsey	Alderney

Or either of them, or any part of them, or either of them.

All ships and vessels bound to the following places, to perform quarantine at *Inverkeithing Bay* : —

The eastern coasts of Scotland, comprehending the ports of Leith	Anstruther
	Prestonpans
	Dunbar
Burrowstones	Perth
Alloa	Montrose
Dunbar	Aberdeen
Kirkaldy	

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Holy Loch*, in the *Frith of Clyde* ; —

The western coast of Scotland, comprehending the ports of Glasgow	Rothsay
	Port William
	Ayr
Greenock	Port Patrick
Irvine	Stranraer
Campbell Town	Wigtown
Oban	

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Inverkeithing Bay* : —

The northern ports of Scotland, comprehending the ports of Inverness	Orkney
	Caithness
	Stornaway
Zetland	

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Holy Loch*, in the *Frith of Clyde* : —

The south-west ports of Scotland, comprehending the ports of Dumfries and Kircudbright, or any member, creek, or other place belonging to or within any or either of the above ports.

Preliminary Questions.

1. What is the name of the vessel, and the name of the commander or master?
2. Are you the commander or master? Where does she belong?
3. From whence do you come?
4. To what place are you bound?
5. At what ports have you touched since you left the port of your lading on your homeward voyage?
6. What vessels have you had intercourse or communication with on your passage, and from whence did they come?
7. Did the plague or any other infectious disease or distemper prevail in any degree at the place from whence you sailed on your homeward voyage or at any of the places at which you have touched? If at any, say at which, and when. Are any persons on board your ship suffering under any infectious disease? or have any persons died or been ill of a disease of that nature on the homeward passage? and if any, what number? And if any have died or been ill of such disease, were their bedding and clothes destroyed.

[If the vessel shall have sailed from any port in Europe without the Straits, or on the continent of America.]

8. Have you on board any goods enumerated in this list [Handing a list of articles enumerated.]

If you have, specify the same, and whether they are of the growth, produce, or manufacture of Turkey, or of any place in Africa within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or of what other place? Have you any declaration to prove of what place they are the growth, produce, or manufacture?

[If the vessel comes from the Mediterranean, or from any other place respecting which there is any order in council in force concerning quarantine.]

9. Have you any, and what bill of health?
10. What number of officers, mariners, and passengers have you on board?

[And in cases of vessels coming from or having touched at any port or place on the continent of America, or the islands adjacent thereto, or coming from or having touched at any ports in the West Indies, the following questions are to be put, in addition to the aforesaid questions:]

11. In the course of your voyage have any persons on board suffered from sickness of any kind? What was the nature of such sickness? and when did it prevail? How many persons were affected by it? and have any of them died in the course of the voyage?
12. How long after sailing from your port of lading, or having touched at any port on the continent of America or the islands adjacent thereto, or any of the ports in the West Indies, was the first appearance of disease observed?
13. How had the persons attacked been employed before they came on board?
14. Had they been employed in loading or unloading the vessel before they left the port?
15. Had the place which they inhabited, before they sailed, the reputation of being healthy? or was it subject particularly to the fever incident to the country?
16. Had the fever been frequent in the place before the vessel sailed?
17. Did the persons who were ill on board your vessel fall sick nearly about the same time, or within a few days of each other? Or, did the disorder spread successively from one to another, and increase considerably? Or, did it abate gradually, and cease to multiply as the distance from the ports you sailed from or touched at as aforesaid increased?
18. What was the greatest number of persons ill at the most sickly period of your voyage?
19. What was the whole number of persons on board your vessel when you sailed?
20. What is the whole number of persons now ill on board your vessel?

21 Can you state what were the symptoms of illness with which your crew were first attacked; and what was the daily succession and change in them till their death?
22 Whether any and what medicines have been used? and what methods have been adopted to prevent its spreading among the crew?
23. Whether attention has been paid to cleanliness and ventilation on board your vessel?
24. When did you sail from the port or place from whence you took on board your outward cargo? and at what place did you touch before you arrived at the port or place where you took in your present cargo?
25. Did you carry any bill of health with you to the port or place where you took in the cargo you have now on board? From what place? Were the said bills of health clean unclean, or suspected?

Quarantine Questions.

1. What is the name of the vessel, and the name of her commander or master?
2. Are you the commander or master?
3. To what port or place does she belong?
4. When did you sail from the port or place from whence you took on board your outward cargo? and at what places did you touch before you arrived at the port or place where you took in your present cargo?
5. Did you carry any bill or bills of health with you to the port or place where you took in the cargo you have now on board? From what places? Were the said bills of health clean, unclean, or suspected?
6. From what port or place does she now come? When did you sail from such port or place? and at what place or places have you touched in the course of the voyage?
7. Have you any bill or bills of health on board? From what place or places? Are the same clean, unclean, or suspected? Produce them.

[If the vessel shall have sailed from any port or place in Europe without the Straits, or on the continent of America.]

8. Of what articles does your cargo consist? Have you on board any goods enumerated in this list?

[Handing up a list of articles enumerated.]

If you have, specify the same, and whether they are of the growth, produce, or manufacture of Turkey, or of any place in Africa, within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or of what other place. Have you any declaration to prove of what place they are the growth, produce, or manufacture?
9. At what place or places was the cargo or any part thereof taken on board? On what day did you arrive at the place or places where you took in the whole, or any and what part of the cargo? And on what day did you sail from such place or places? And what part of your cargo was taken in at each place, and when?
10. Did the plague or any other infectious disease or distemper prevail in any degree at the places from whence you sailed, or at any of the places at which your cargo was taken on board, or at which you touched? If at any, say at which, and when.
11. Did you hear of any report, or are you aware of any suspicion having existed, at the time of your sailing, that the plague or any other infectious disease prevailed at the place from whence you sailed, or at any other place in the Mediterranean (or in America or the West Indies, as the case may be)?
12. What number of officers, mariners, passengers, or other persons have you on board? Describe the number of each.
13. At what port did you take on board your passengers?
14. Were they residents at that place, or had they been embarked as passengers on board any other vessel from any other places? and from what places and at what time?
15. Do the said officers, mariners, passengers, and other persons consist of the same individuals as were on board at the port from which you sailed upon your homeward voyage? If any other persons have been taken on board, or if any of your officers, crew, or passengers have quitted your vessel since you sailed from such port, or before your arrival at this place, or if any other alterations in that respect have taken place, specify the same, the causes and the time or times of such alterations.
16. What number of persons (if any) have died on board during the voyage outwards and homewards, or at any port at which you have touched? When, and in what part of the voyage did such person or persons die? Of what disease or distemper?
17. Have any of your officers, mariners, or other persons of your crew, who sailed with you on your outward voyage, died or left the vessel?
18. In the course of your voyage outwards or homewards, or at any port at which you have touched, have any persons on board suffered from sickness of any kind? What was the nature of such sickness? When did it prevail? How many persons were affected by it? Are there any convalescents on board? Or, are all persons on board at present in good health?
19. Were any of those who died, or who have been sick in the course of the voyage, or any port at which you have touched, affected, or suspected to have been affected, by any infectious disease or distemper? Were the bedding and clothes of such diseased and sick persons destroyed? If so, when and in what manner were any of the persons immediately employed about the sick afterwards taken ill? If so, of what disease? and in how many days after having been so employed?
20. At what precise time did such deaths happen? In how many days after being indisposed did the sick die? What were the most obvious appearances of the disease?
21. Have you spoken to or otherwise had any communication with any vessels at sea, during the voyage? What were the names of such vessels? and to what country, port, or place did they belong? From what ports or places were they coming, or at what ports or places had they touched on their voyage? and to what country, ports, or places were they bound? What was the nature of the communication held? What do you know respecting the state of health on board such vessels?
22. Have there been any letters, parcels, or other articles delivered out of or received into your vessel, from any vessel or boat met with on the voyage, or before or since your arrival at this place? And what were such letters, parcels, or articles? And where were the same delivered or received? and into or out of what vessel or boat?
23. Have you any packages or parcels which you have taken charge of? If so, what are their contents? and when and where did you take them on board?
24. What pilots or other persons from the shores of the U. Kingdom, or from the islands of Scilly, Guernsey, Jersey, Alderney, Sark, or Man, have been or are now on board your vessel, or have had any communication whatever with the ship's company, or any of the passengers, during the voyage homewards, or before or since your arrival at this place? If any such pilots or other persons have come on board, and have afterwards quitted your vessel, specify the names of such persons, and the time, manner, and circumstances of their so quitting your vessel.
25. Did you leave any British vessels at any of the ports you sailed from? If you did, mention their names and the names of their commanders.
26. Were such vessels loading? were they near their departure? and whither were they bound?
27. Did you meet with any British vessels at any of the places you touched at? If you did, say when, where, and what were the names and destinations of such vessels; and to what ports or places did they belong?
28. Do you know whether any foreign vessels loading at the port from which you sailed, were bound beyond the Straits of Gibraltar? And if so, what were they? and whither were they bound?
29. Do you know whether any person whatever employed in loading your vessel, or in bringing any articles into it, or having any communication on board thereof, was taken ill during such employment or communication? or whether, by the absence of such person or persons in the course of such employment, any suspicion was entertained of their having been ill? If so, of what disease?
30. Do you know whether or not your cargo, or any part thereof, had been long in warehouse before its being taken on board? If you do, say how long. Have you any knowledge of its being packed or handled on shore, or conveyed from shore, or stowed on board, by persons affected with the plague or any other infectious disease or distemper?

QUASSIA (Ger. *Quassienholz*; Fr. *Bois de quassie*; Sp. *Leno de quassia*), a beautiful tall tree (*Quassia amara*), growing in North and South America, and the West Indies. The wood is of a pale yellow colour, and inodorous; it, as well as the fruit and bark of the tree, has a place in the materia medica. Its taste is intensely bitter. It is said to have been sometimes used by the brewers in the preparation of beer, instead of hops; but the use of it for this purpose is prohibited, under severe penalties.—(See ALE AND BEER.) The price of quassia in bond varies from 1*l.* 4*s.* to 1*l.* 6*s.* a cwt. The duty is 8*l.* 17*s.* 6*d.*; it is, of course, intended to be prohibitory; and is one of the few imposed for such a purpose, against which no good objection can be urged.

QUEBEC, the capital of Canada, and of the British possessions in North America, on the north-west bank of the river St. Lawrence, about 340 miles from its mouth, in lat. 46° 48′ 49″ N., lon. 71° 10′ 45″ W. Population, in 1842, 31,809.

Quebec is situated on a ridge, or promontory, formed by the St. Lawrence on the S. and W., and the river St. Charles on the E. The extremity of this headland, called Cape Diamond, is about 345 feet above the level of the water, and on it the citadel is built. The town extends from the citadel, principally in a north-east direction, down to the water; and is, from the difference of elevation, divided into the upper and lower towns. The fortifications, which are very strong, extend across the peninsula; the circuit within them being about 2¾ miles. From their situation, many of

the streets are uneven; they are also, for the most part, narrow; but they are either well paved or Macadamised. The greater number of the houses are built of stone, with shingle roofs. Some of the public buildings are elegant, and well adapted for their purposes. The harbour, or basin, lies between the town and the island of Orleans. It is safe and commodious: the water is about 28 fathoms deep, with a tide rising from 17 to 18 feet; and at springs from 23 to 25 ditto. Quebec was founded by the French in 1608. In 1629, it was taken by the English; but was restored in 1632. It was again taken by the English under General Wolfe, who fell in the engagement, in 1759; and was finally ceded to us by the treaty of Paris in 1763.

The rapid increase of population in, and of emigration to, Upper Canada has occasioned a proportional increase of intercourse between Quebec and Montreal, and the Canadian ports on Lakes Ontario and Erie, &c. The first steam boat that plied on the St. Lawrence was launched in 1812; but there are now a great number of steamers, some of them of large burden, employed in the conveyance of goods and passengers between Quebec and Montreal; and in the trade between Quebec and Halifax in Nova Scotia. And by means of the Rideau and Welland canals, an uninterrupted line of steam communication is formed between the Atlantic and Amherstburgh, one of the remote settlements of Upper Canada, — a distance of more than 1,500 miles; which we may soon expect to see extended to the head of lake Huron, and eventually to the western extremity of lake Superior, about 700 miles beyond Amherstburgh; giving to Quebec a command of internal navigation inferior only to that of New Orleans. The navigation at Quebec closes at the end of November or beginning of December, and opens in April. Below Quebec the river is seldom frozen over; but the masses of floating ice, kept in constant agitation by the flux and reflux of the tide, render navigation impracticable. The waters of the St. Lawrence are very pure; and in point of depth and magnitude it is one of the noblest rivers in the world. — (*Bouchette's British Dominions in America*, vol. i. p. 272.) Quebec is a free warehousing port.

Immigration. — The conveyance of emigrants to Quebec is a principal part of the trade with Canada, and is the only one, perhaps, that is not forced and factitious. The vast extent of this trade is evident from the following

Account of the Number of Immigrants that have annually arrived at Quebec, since 1829, specifying the Countries whence they emigrated, and the Number of Immigrants from each. — (*Part. Paper* No. 109. Sess. 1843, p. 11.)

Places of Departure.									1837.	1838.	1839.	1840.	1841.	842.	Total.
England and Wales	3,565	6,799	10,343	17,481	5,198	6,799	3,067	12,185	5,580	990	1,586	4,567	5,970	12,191	96,324
Ireland - -	9,614	18,300	34,133	28,204	12,013	19,206	7,109	12,590	14,538	1,456	5,113	16,291	18,317	25,532	222,415
Scotland - -	2,643	2,450	5,351	5,500	4,196	4,591	2,127	2,224	1,509	547	485	1,144	3,559	6,095	42,424
New Brunswick and Nova Scotia, and ports on the river St. Lawrence -	193	451	424	546	345	339	225	235	274	273	255	232	210	556	4,518
Continental ports -	-	-	-	15	-	-	-	485	-	-	-	-	-	-	
Total - -	15,915	28,000	50,254	51,746	21,752	30,935	12,527	27,772	21,901	3,266	7,439	22,234	28,086	44,374	366,181

This immense mass of emigrants proceed principally to Upper Canada, whence large numbers are in the habit of re-emigrating to the U. States. A tax of *5s.* currency was imposed in 1842 on all adult emigrants arriving in the ports of the colony, the produce of which is expended in affording assistance to the poorer descriptions of immigrants.

The average length of the voyages made by the ships with emigrants from the U. Kingdom to Quebec, in 1841, amounted to very near 45 days; and in 1842 to 46¼ days. The shortest passage made in the two years was 24, and the longest 78 days.

Exports and Imports. — The trade with Canada is, as already seen, (see *antè*, p. 322.) in great part, a consequence of the high discriminating duties laid on the importation of timber and other products from the North of Europe. The influence of this system in forcing importation from Canada, is evident from the subjoined statement, which shows that of the total value of the exports from Canada in 1837, amounting to 908,702*l.*, timber made no less than 651,786*l.*! though, had the duty in England on this timber been the same as on that brought from the Baltic, it is more than doubtful whether the export would have reached 200,000*l.* The only other articles of any importance exported from Canada, down to a very late period, have been potashes, furs, and fish. Within the last 3 or 4 years, however, a good deal of flour has been brought from Canada; and it is not improbable that its importation may be increased under the provisions of the late act. — (See *antè*, p. 398.)

Account of the Quantities of Ashes, Wheat and Wheat Flour, and Fish, imported from the British North American Colonies into the U. Kingdom, and entered for Consumption, in each of the 12 Years ended with 1842.

Years.	Ashes, Pearl and Pot.		Wheat.		Wheat Flour.		Fish.	
	Imported.	Entered for Consumption.	Imported.	Entered for Consumption.	Imported.	Entered for Consumption.	Imported.	Entered for Consumption.
	Cwts.	*Cwts.*	*Quarters.*	*Quarters.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
1831	169,891	168,234	189,724	109,442	96,295	82,417	66,627	66,627
1832	179,305	179,131	89,517	161,643	48,734	73,440	85,459	85,459
1833	162,919	163,228	79,410	58,352	73,891	46,306	141,216	141,216
1834	84,937	84,937	44,907	42,389	40,350	44,171	50,895	50,895
1835	126,545	126,545	14,326	14,842	9,735	26,910	68,214	68,214
1836	141,358	141,358	- -	17,754	18,023	14,458	85,445	85,445
1837	141,818	140,915	- -	22,113	9,523	12,710	122,884	122,884
1838	125,014	125,051	- -	7,235	39,332	42,856	102,106	102,106
1839	112,562	112,439	27	27	27,067	27,019	84,315	84,315
1840	98,261	98,405	8,192	4,701	477,978	364,299	118,499	118,499
1841	89,571	89,571	68,859	64,755	626,567	650,710	130,374	130,374
1842	116,304	116,304	33,375	37,674	518,022	551,322	127,754	127,754

We have already given (see *antè*, p. 338.) sundry statements as to the amount and value of the trade and navigation of Canada, and our other possessions in North America. The acts 3 & 4 Will. 4. c. 59., regulating the colonial trade and the duties upon the different articles imported into Canada and the other colonies, are also given (*antè*, pp. 339—347.) But the following statements illustrate some of these points in detail, while others refer particularly to the trade, charges, &c. peculiar to Quebec and the St. Lawrence.

Statement showing the Coins chiefly in use in the British North American Colonies, with their Values in the respective Colonies, in Halifax Currency (Fractions omitted).

Coins.	Eastern (Lower) Canada.	Western (Upper) Canada.	Nova Scotia.	New Brunswick.	Newfoundland.	Prince Edward's Island.	
						Island Currency.	Halifax Currency.
GOLD.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
British sovereign	1 2 2	1 4 4	1 5 0	1 2 3	- -	1 10 0	1 2 2
British guinea	1 3 4	1 5 6	- -	1 3 4			
American eagle, coined before July 1. 1834	2 10 0	2 13 4					
Ditto, coined since	2 10 0	2 10 0	2 10 0	2 10 0	- -	3 2 6	2 10 0
Spanish milled doubloon	3 14 6	3 14 6	4 0 0	3 15 6	3 16 6		
SILVER.							
British crown (half-crown in proportion)	0 5 6	0 6 0	0 6 3	0 5 6	0 5 6	0 7 6	0 5 6
Shilling (sixpence in proportion)	0 1 1	0 1 3	0 1 3	0 1 1	0 1 2	0 1 6	0 1 1
French crown	0 5 6	0 5 6	-	0 5 6			
French half-crown	0 2 9						
American dollar	0 5 0	0 5 0	0 5 0	0 5 0	0 5 0	0 6 3	0 5 0
Spanish milled dollar	0 5 0	0 5 0	0 5 0	0 5 0	0 5 0	0 6 3	0 5 0
South American dollar	0 5 0	- -	0 5 0	0 5 0	- -	0 6 3	0 5 0
Mexican dollar (coined in 1831, 1832, or 1833)	0 5 0						
Pistareen	0 0 10						
French five-franc piece	0 4 8						

Account of the Quantities and Value of the various Articles of Merchandise exported from Lower Canada, in 1837.

Description of Goods.	Quantities.	Value in Sterling Money.		Description of Goods.	Quantities.	Value in Sterling Money.	
		£	£				£
Ashes, pot and pearl	143,168	- -	180,571	Live stock, horses			935
Bacon and hams	2,121	- -	61	Oil, train and spermaceti			1,757
Beef and pork, British and colonial barrels	4,252	- -	12,467	Spirits, brandy			
Beer and ale gallons	7,090	- -	391	Tea lbs.			
Bread and biscuit barrels	346	- -	373	Tobacco, unmanufactured			
Butter firkins	142	- -	250	Vegetables of all sorts value			
Coals tons	30	- -	35	Wood and lumber, — oak timber tons	22,163	71,018	
Corn, other than wheat bushels	1,119	166		pine timber	278,217	259,712	
wheat flour, colonial	7,794	15,129		elm	24,013	27,883	
other sorts of meal, colonial	30	36		ash, birch, &c.	4,142	4,396	
Total value of corn and meal			15 331	masts, yards, &c. number	2,949	8,349	
Fish, cod, dry quintals	4,933	5,880			18,769	2,434	
herrings { boxes	19	348		deals and deal ends, battens — }	2,825,043	184,605	
{ barrels	402			boards and planks — }			
mackerel —	266	398		shingles —	121,000		
salmon —	436	1,430		lathwood cords	2,719	4,007	
other sorts value	- -	93		staves number	5,945,200	86,606	
Total value of fish			6,149	other sorts value		2,725	
Fruit of all sorts —	- -	- -	334	Total value of wood			651,786
Furs —	- -	- -	29,081	Miscellaneous articles			7,890
Hides and skins, — seal skins No.	2,800	- -	205	Specie			818
other sorts value	- -	- -	39	Total value of exports from the colony			903,702
Iron, wrought	- -	- -	8				

Paper Currency. — There is no established government bank in the province; but there are several private chartered banks, of which the Quebec Bank is the principal. We subjoin a statement of the affairs of this institution.

General Statement of the Affairs of the Quebec Bank to the 31st May, 1843.

Dr.	£	s.	d.
To capital stock paid in	94,952	10	0
Amount of notes in circulation	31,359	5	0
Dividend payable 1st June, 1843	2,884	6	1
Contingent fund at credit of profit and loss and exchange accounts	6,407	18	3
Less dividend reserved	2,884	6	1
			3,523 12
Balances due to other banks			0 0
Balance due on exchange			6,706 12
Cash deposited: —			
Bearing interest	17,110	0	0
Not bearing interest	22,615	5	3
			39,725 5 3
			£179,151 10 11

Cr.	£	s.	d.	£	s.	d.
By amount of current coins and gold and silver bullion	28,311	14	5			
Bank notes and checks of other banks -	9,824	16	11			
				38,139	11	4
Value of buildings and other real estate belonging to the corporation -				5,496	10	11
Balance due on exchange transactions in New York - - -				1,626	14	1
Provincial securities in debentures -				2,950	0	0
Balance due by other banks and bankers				965	16	1
Amount of debts owing to the corporation, viz.: —						
Discounted notes -	123,410	18	10			
Mortgages and other securities - -	6,561	19	8			
				129,972	18	6
				£179,151	10	11

Accounts kept in Halifax currency

Weights same as in England.

Measures. — Standard wine gallon, liquid measure of the province. The Canada minot for all grain, &c. except where specially agreed upon to the contrary; and this measure is about 1-8th larger than the Winchester bushel. The English Winchester bushel, when specially agreed for. The Paris foot, for all measures of lands granted previous to the conquest, and all measures of length, except an agreement is made to the contrary. The English foot, for measure of lands granted since the conquest, and wherever specially agreed upon. The standard English yard for measuring all cloths or stuffs, sold by the yard or measure of length. The English ell, when specially agreed upon.

Rates of Pilotage for the River St. Lawrence.

	Per Foot. £	s.	d.
From Bic to Quebec (153 miles distance) —			
From the 2d to the 10th April, inclusive -	1	0	0
From the 1st May to the 10th Nov., inclusive -	0	18	0
From the 11th to the 18th November, inclusive -	1	0	0
From the 19th Nov. to the 1st March, inclusive -	1	8	0
From Quebec to Bic —			
From the 2d to the 30th April, inclusive -	0	18	0
From the 1st May to the 10th November, inclusive	0	15	9
From the 11th to the 18th November, inclusive -	1	0	9
From the 19th Nov. to the 1st March, inclusive	1	5	9

Rates of pilot water and poundage on pilot money are payable at the Naval Office, by masters and commanders of vessels, viz. —

For every foot of water for which masters or commanders of vessels are bound to pay their pilots, from Bic to Quebec, and from Quebec to Bic, 2s. 6d. currency per foot —

For vessels going to Three Rivers or Montreal,

	£	
Of 100 to 150 tons, inclusive - - -	2	currency.
Of 151 to 200 tons, inclusive - - -	3	—
Of 201 to 250 tons, inclusive - - -	4	—
Of 251 tons and upwards - - -	5	—

On settling with pilots, masters or commanders of vessels, or the consignees of such vessels, are to deduct 1s. in the pound for the amount of the sums to be paid for pilotage, which will be exacted by the naval officer at clearing out; the same being funded by law, under the direction of the Trinity House, for the relief of decayed pilots, their widows and children.

Regulations for the Payment of Pilotage above Bic to Quebec.

At or above the anchorage of the Brandy Pots, 2-3ds of the present rate for a full pilotage.

Above the point of St. Roc, 1-3d do.

Above the Point aux Pins, on the Ile aux Grues, and below Patrick's Hole, 1-4th do.

	£	s.	d.
At and above Patrick's Hole - - - -	1	3	4
For shifting a vessel from one wharf to another, between Brehaut's wharf and Point à Carcis; or from or to the stream, from or to any of the above wharfs	0	11	8
For shifting a vessel from the stream, or from either of the above wharfs to St. Patrick's Hole, or to the basin of Montmorency, or to the ballast-ground, the basin of the Chaudiere, Wolfe's Cove, and as far as the River Cap Rouge - - -	1	3	4

Rates above the Harbour of Quebec.

From Quebec to Port Neuf, 4l. currency.	For vessels of registered measurement not exceeding 200 tons - -	To Quebec from Port Neuf, 2l. 10s. currency.
— 5l.	If above 200 and not exceeding 250 tons	— 5l. 10s.
— 6l.	If above 250 tons	— 4l.
To Three Rivers, or above Port Neuf, 6l. currency - -	For vessels not exceeding 200 tons	From Three Rivers, and above Port Neuf, 4l. currency.
— 7l.	If above 200 tons and not exceeding 250 tons - -	— 4l. 10s.
— 8l.	If above 250 tons	— 5l. 10s.
To Montreal, and above Three Rivers, 11l. currency - -	For vessels not exceeding 200 tons	From Montreal, and above Three Rivers, 7l. 10s. currency.
— 13l.	If above 200 tons and not exceeding 250 tons - -	— 8l. 15s.
— 16l.	If above 250 tons	— 10l. 13s.

Pilots are at liberty to leave vessels 48 hours after the arrive at the place of their destination.

Quebec Almanac for 1841.

Account of the Quantities and Value of the principal Articles of British Produce and Manufacture exported to the British North American Colonies during each of the Five Years ending with 1841.

Principal Articles.	1837.		1838.		1839.		1840.		1841.	
	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.	Quantity.	Declared Value.
		£		£		£		£		£
Apparel, slops, and haberdashery £	- -	175,703	- -	156,355	- -	260,216	- -	250,151	- -	293,
Brass and copper manufactures cts.	3,725	19,596	5,801	29,672	6,651	33,509	6,128	30,837	5,478	29,
Cordage - - - —	29,009	50,035	33,672	58,313	45,290	97,327	52,080	103,250	39,149	78,
Cotton manufactures entered by the yard - - yards	14,270,749	383,393	14,935,429	371,326	29,348,371	688,403	24,139,692	530,927	25,416,390	551,
Hosiery, lace, and small wares £	- -	39,968	- -	31,656	- -	55,788	- -	69,694	- -	60,
Twist and yarn - - lbs.	260,732	14,307	362,720	14,824	553,427	21,066	464,408	18,312	464,282	17,
Earthenware of all sorts - pieces	3,463,988	37,061	2,446,631	25,773	1,637,506	34,825	3,978,462	44,875	4,076,014	41,
Glass entered by weight - cwts.	30,539	93,153	17,207	32,967	16,358	32,361	24,244	41,092	27,978	49,
Hardware and cutlery - —	19,120	102,582	16,497	76,794	32,513	114,103	31,636	131,326	36,745	155,
Hats, beaver and felt - dozen	4,275	14,367	3,915	13,516	4,446	14,031	4,860	15,580	4,104	14,
Iron and steel, wrt. and unwrt. tons	11,493	156,935	13,159	165,491	19,921	248,431	23,282	288,840	25,693	253,
Leather, wrought and unwrt. lbs.	458,321	66,639	356,914	41,057	553,186	64,661	587,741	71,214	649,192	79,
Linen manufactures entered by the yard - - yards	2,367,128	88,017	2,640,283	93,476	3,214,104	125,318	3,660,373	143,488	3,926,924	129,
Silk manufactures - - £	- -	76,598	- -	74,561	- -	136,750	- -	125,840	- -	93,
Soap and candles - - lbs.	2,108,091	39,931	3,476,288	58,773	4,536,813	77,661	5,948,700	67,991	5,944,077	61,
Stationery of all sorts - £	- -	27,463	- -	27,354	- -	46,705	- -	46,201	- -	46,
Sugar, refined - -	13,603	25,865	24,507	47,722	28,343	50,104	30,127	56,248	54,768	87,
Woollen manufactures entered by the piece - - pieces	86,420	297,983	88,978	264,103	121,226	379,159	119,384	335,530	133,206	360,
Ditto by the yard - - yards	874,768	64,544	829,680	62,179	1,119,037	81,930	1,016,050	72,017	1,535,989	108,
Ditto hosiery and small wares £	- -	29,350	- -	33,350	- -	50,101	- -	36,816	- -	46,
All other articles - - —	- -	348,137	- -	317,925	- -	413,232	- -	413,511	- -	389,
Totals -	- -	2,141,035	- -	1,992,457	- -	3,047,671	- -	2,847,913	- -	2,947,

Total value of Exports to British North American Colonies in 1841, £2,333,585.

MONTREAL, the second town of Canada, is situated on the south side of an island of the same name, in the St. Lawrence, about 180 miles above Quebec, in lat. 45° 31′ N., lon. 73° 35′ W. Population, in 1842, 40,203, being very considerably greater than that of Quebec, or of any other town in British America. The harbour is not large, but it is safe and commodious; the facilities for navigation afforded by the noble rivel on which it is situated being such, that vessels of 600 tons burden may ascend thus far without difficulty. The North American fur trade principally centres in Montreal; which also enjoys the principal share of the commerce between Canada and the U. States. It is increasing faster than Quebec, or than any city in British America. Imports and exports included in those of Quebec.

QUERCITRON BARK, the bark of a species of oak growing in many parts of North America. It is used in dyeing yellow colours. — (See BARK.)

QUILLS (Fr. *Plumes à écrire*; Ger. *Posen, Federkiel*; It. *Penne de scrivere*; Rus. *Stivoli*; Sp. *Canones para escribir*), the hard and strong feather of the wings of geese,

ostriches, swans, turkeys, crows, &c. used in writing. They are classified according to the order in which they are fixed in the wing; the second and third quills being the best. Crow quills are chiefly used for drawing. The goodness of quills is judged partly by the size of the barrels, but more by the weight; hence the denomination of quills of 14, 15, &c. loths per *mille*, each mille consisting of 1,200 quills. The duty on goose quills, which was then 2*s.* 6*d.* per 1,000, produced, in 1840, 2,753*l.*, showing that 22,024,000 quills had been entered for home consumption in that year. In 1842, the duty was reduced to 6*d.* per 1,000. Quills are principally imported from Riga and other ports on the Baltic; but those imported by the Hudson's Bay Company and sold at their sales are superior to all others. We subjoin an

Account of the Prices of the various Descriptions of Quills in the London Markets in January, 1844.

	£	s.	d.	£	s.	d.	
Undressed goose quills, imported from the Baltic and assorted into loths	0	6	0	to 3	10	0	per mille.
Swan quills, imported from the Baltic and assorted in loths	0	5	0	— 1	0	0	per 100.
Goose quills, mixed, imported by the Hudson's Bay Company and sold at their annual sale	0	10	0	to 5	0	0	per mille.
Mixed swan quills, by the same	3	0	0	— 8	0	0	—
Irish goose quills, mixed	0	0	6	— 0	1	0	per lb.
English, ditto	0	5	0	— 0	12	0	per mille.
Turkey quills, ditto	0	4	0	— 0	7	0	—
English crow, ditto	0	4	0	— 0	7	0	—
English duck, ditto	0	2	6	— 0	4	0	—

R.

RAGS (Du. *Lompen, Vodden;* Fr. *Chiffes, Chiffons, Drapeaux, Drilles;* Ger. *Lumpen;* It. *Strasci, Strazze;* Rus. *Trepje;* Sp. *Tropos, Harapos*), shreds or fragments of worn linen, woollen, or cotton cloth. Though commonly held in little estimation, rags are of great importance in the arts, being used for various purposes, but especially in the manufacture of paper, most of which is entirely prepared from them. As the mode in which British rags are collected must be well known to every one, the following statements apply only to the trade in foreign rags.

Woollen Rags. — Woollen and linen rags are imported in considerable quantities from the continent of Europe, and from Sicily. The woollen rags are chiefly used for manure, especially in the culture of hops; but rags of loose texture, and not too much worn or decayed, are unravelled and mixed up with fresh wool in the making of yarn; a practice more favourable to the cheapness than to the strength and durability of the fabrics into which this old wool is introduced. Woollen rags are also used for making flocks or stuffing for beds, &c.: this process is performed chiefly by the aid of the same kind of engines that prepare pulp for paper; these wash the rags thoroughly, at the same time that they grind and tear them out into separate threads and fibres. The chief importation of woollen rags is from Hamburg and Bremen; and there are some got from Rostock, but the quantity is trifling. The total average importation may be taken at 1,100 tons, and the price ranges from 5*l.* to 6*l.* per ton, duty (6*d.*) and freight paid on such as are used for manure; and from 10*l.* to 13*l.* for coloured woollens of loose texture, and 15*l.* to 18*l.* for white of the same description.

Linen Rags are principally imported from Rostock, Bremen, Hamburg, Leghorn, Ancona, Messina, Palermo, and Trieste. Their export from Holland, Belgium, France, Spain, and Portugal, is strictly prohibited. The imports usually amount to about 10,000 tons; worth, at an average, from 20*l.* to 21*l.* per ton, duty (6*d.*) and freight included. Exclusive of the very large quantity collected at home, all the rags imported were, until very recently, employed in the manufacture of paper; but the Americans, who have for some years been large importers from the Mediterranean and Hamburg, occasionally come into the London market, and purchase large quantities: a circumstance sufficiently indicative of the languid state of the paper manufacture in this country. — (See PAPER.)

The imported rags are coarser and inferior in appearance to the English; but, being almost exclusively linen, they are stronger, and bear a price disproportioned to the apparent difference in quality: this disproportion has been materially augmented since the introduction of the process of boiling the rags in ley, and afterwards bleaching them with chlorine, has rendered foreign rags fit for making fine paper, and indeed, in some respects, preferable for that purpose, by their affording greater strength of texture combined with equal whiteness of colour.

There is considerable variety in the appearance of rags from different ports; but, in general, those from the north of Europe are darker and stronger than those from the Mediterranean ports. The latter are chiefly the remains of outer garments, and have become whitened by exposure to the sun and air; but since the improvements in bleaching, this does not enhance their value in the British market. The rags shipped from Trieste are chiefly collected in Hungary. It is only within these few years that we have brought rags from this port, which now furnishes us with considerable supplies. Most part of the rags collected in the Tuscan states, to the extent of 10,000 or 12,000 bags a year, goes to America.

Freights are, at an average, about — Hamburg and Bremen, Hanse 15s. per ton, woollen, 20s.; Rostock, 30s.; Ancona and Leghorn, 25s. to 35s.; Trieste and Sicily, 28s. to 35s. Linen rags are almost all selected and assorted previously to their shipment from the foreign port. Their distinguishing marks and prices per cwt. in the London market, January, 1844, were as follows: viz.

Rostock.	Bremen.	Hamburg.	Trieste.	Leghorn.
S P P P - 35s.	S P P P - 26s.	S P P P, 24s. to 25s.	S P P P, 25s.	Fines, 23s. to 24s.
S P P - 25s.	S P P - 25s. 6d.	S P P 21s. to 21s. 6d.	S P P 20s. to 22s. 6d.	Seconds, 18s. to 19s.
P P - 21s.	P P 18s. to 19s.	P P 18s. to 19s.	S P 17s. to 21s.	Thirds, 13s. to 14s. 6d.
P X 15s. to 16s 6d.	P X 15s.	P X 18s. 6d. to 13s.	S P X 13s. to 17s.6d.	Sicily, 16s. to 17s.

RAIL-ROAD, TRAM or WAGGON ROAD, a species of road having tracks or ways formed of iron, stone, or other solid material, on which the wheels of the carriages passing along it run. The object in constructing such roads is, by diminishing the friction, to make a less amount of power adequate either to impel a carriage with a greater velocity, or to urge forward a greater load.

Construction of Rail-roads.—The friction on a perfectly level rail-road, properly constructed, is estimated to amount to from $\frac{1}{15}$th to $\frac{1}{9}$th only of the friction on an ordinary level road; so that, supposing the same force to be applied in both cases, it would move a weight from 10 to 7 times as great on the former as on the latter. But if there be a very moderate ascent, such as 1 foot in 50, which in an ordinary road would hardly be perceived, a great increase of power on the rail-road is required to overcome the resistance that is thus occasioned. The reason is, that the ordinary load on a *level* rail-road is about *seven times as great* as on a common turnpike road; so that when the force of gravity is brought into operation by an ascending plane, its opposing power, being *proportioned to the load*, is 7 times as great as on a common road. Hence the vast importance of having rail-roads either level or as nearly so as possible.

It is also of great importance that rail-roads should be straight, or, at least, free from any abrupt curves. Carriages being kept on the road by *flanges* on the wheels, it is obvious, that where the curves are quick, the friction on the sides of the rails, and consequent retardation, must be very great. In the Manchester and Liverpool rail-road, the curves form segments of a circle which, if extended, would embrace a circumference of 15 miles.

Iron rail-roads, the kind now generally used, are of 2 descriptions. The *flat rail*, or *tram road*, consists of cast-iron plates about 3 feet long, 4 inches broad, and ½ inch or 1 inch thick, with a flaunch, or turned up edge, on the inside, to guide the wheels of the carriage. The plates rest at each end on *sleepers* of stone or wood, sunk into the earth, and they are joined to each other so as to form a continuous horizontal pathway. They are, of course, double; and the distance between the opposite rails is from 3 to 4½ feet, according to the breadth of the carriage or waggon to be employed. The *edge rail*, which is found to be superior to the tram rail, is made either of wrought or cast iron; if the latter be used, the rails are about 3 feet long, 3 or 4 inches broad, and from 1 to 2 inches thick, being joined at the ends by cast metal sockets attached to the sleepers. The upper edge of the rail is generally made with a convex surface, to which the wheel of the carriage is attached by a groove made somewhat wider. When wrought iron is used, which is in many respects preferable, the bars are made of a smaller size, of a wedge shape, and from 12 to 18 feet long; but they are supported by sleepers, at the distance of every 3 feet. In the Liverpool railroad the bars are 15 feet long, and weigh 35 lbs. per lineal yard. The waggons in common use run upon 4 wheels of from 2 to 3 feet in diameter. Rail-roads are either made double, 1 for going and 1 for returning; or they are made with *slidings*, where the carriages may pass each other.—(See the able and original *Essays on Rail-roads, by Charles Maclaren, Esq*, in the *Scotsman* for 1824; see also *Mr. Booth's Pamphlet on the Liverpool and Manchester Rail-road*; the articles on *Railways*, in the *Encyc. Britannica*, the *Penny Cyclopædia*, *&c.*)

Speed of Carriages on Rail-roads, &c.—The effect of rail-roads in diminishing friction is familiar to every one; and they have long been used in various places of this and other countries, particularly in the vicinity of mines, for facilitating the transport of heavy loads. But it is only since the application of locomotive engines as a moving power, that they began powerfully to attract the public attention, and that their value has been fully appreciated. These engines were first brought into use on the Darlington and Stockton rail-road, opened on the 27th of December, 1825; but it was not till the opening of the rail-way between Manchester and Liverpool that the vast importance of this novel means of intercourse was fully perceived. This splendid work, though now far surpassed in magnitude by other rail-roads, cost nearly a million sterling. It has the advantage of being nearly level; for, with the exception of a short distance at Rainhill, where it is inclined at the rate of 1 foot in 96, there is no greater inclination than in the ratio of 1 foot in 880. The length of the railway is about 31 miles; and it was usual

from its opening to perform this journey in handsome carriages attached to the locomotive engines, in 1½ hours, or less! So far, indeed, as respects the facility of passing from the one to the other, this railway has brought Manchester and Liverpool as near to each other as the western part of London is to the eastern part!

The opening of this railway having more than verified the most sanguine anticipations as to the success of such undertakings, and gone far, in fact, to strike time and space out of the calculations of the traveller, gave an extraordinary stimulus to similar undertakings in all parts of the country; and, in no long period, there were hardly any two considerable places in Great Britain, how distant soever, which it was not proposed to connect by railways. An immense number of companies were formed, and a very large amount of capital subscribed, for carrying on these undertakings; and though, as was to be anticipated, not a few of them appear to have been commenced without due consideration, and hold out very indifferent prospects to the subscribers, there can be no doubt that the country has profited very largely by the railway system, the facility of intercourse having been prodigiously extended, at the same time that the greater number of the principal lines of road have proved, in a pecuniary point of view, exceedingly beneficial to the parties engaged in them.

Among the greater lines of railway now (1843) existing, may be specified that from London to Manchester and Liverpool, which has been already extended to Lancaster, and will probably, at no distant period, be farther prolonged to Glasgow; but, taking it as it now stands, it is one of the greatest public works ever executed in any country, and is a striking result of the wealth, science, and civilisation of modern times. The railway from London to Bath and Bristol is also a magnificent work; and is, in some respects, superior to any other in the kingdom. Among the other leading railways may be specified those from London to Southampton, Brighton, and Dover; the Eastern Counties, Midland, North Midland, and North of England railways; and those from Carlisle to Newcastle, from Edinburgh to Glasgow and Ayr, with a host of others.

Railway Legislation.—But, notwithstanding the vast advantages which the opening of so many new and improved lines of communication have conferred on the country, we cannot help thinking that these advantages might have been much greater, and that, in the instance of railway legislation, the public interests have been overlooked to a degree that is not very excusable. It is, we admit, no easy matter to decide how far the interference of government should be carried in matters of this sort. But, at all events, this much is obvious, that when parliament is called upon to pass an act authorising private parties to execute a railway or other public work, it is bound to provide, in as far as practicable, that the public interests shall not be prejudiced by such act, and that it should be framed so that it should not, either when passed, or at any future period, stand in the way of the public advantage. We believe, however, that a little consideration will serve to satisfy most persons that this important principle has, in the case of railways, and indeed of most descriptions of public works, been, in this country, all but wholly neglected.

The practice is for a railway act to authorise the company in whose favour it is granted, to appropriate a certain line of road, and to charge certain specified rates of toll on the passengers and goods to be conveyed by such road, not for 15, 20, or even 50 years, but *in all time to come!* Now, as it appears to us, this is a singularly injudicious arrangement on the part of the public. There is, between any two or more places that may be named, a certain railway line that is preferable to any other that can be pointed out. The probability is that this line will in all cases be the first to be selected; and the act that gives it up to a company confers on the latter a virtual and substantial monopoly. The rates of charge imposed by the act are calculated to remunerate the projectors, supposing every thing to remain on its present footing. But the probability is that manufactures and population, in the places communicating by most lines of railway, will continue to increase in time to come, as they have done in time past; and it is all but certain that great improvements will be effected in the construction of roads and engines. Whatever, therefore, may be the chances of success at the outset, the fair presumption is, that most great lines of road will in the end be exceedingly productive. But, if we continue to abide by the present system, the public will be effectually excluded from all participation in these prospective advantages; and a few private associations will be able to make enormous profits, by monopolising improvements, and keeping up the expense of transit at an exorbitantly high level. It is idle to trust to competition to remedy a grievance of this sort. There may only be one practicable line of railway between two places; and if so, no other can, of course, come into competition with it. But though this were not the case, a company in possession of the best line might, if an opposition were threatened, reduce its rates till the opposition was defeated, and then raise them to the old level. Supposing, however, that a second road is made, its managers would most likely come to an understanding with the first,

so that the tolls, instead of being reduced by the instrumentality of the new road, may be raised; and were it otherwise, the question is, was the second road really necessary? Could not the first road have sufficed for the whole traffic to be carried on by both lines? If this be the case, it is clear the second road has been merely resorted to as a device for reducing the tolls charged on the first; as a means, in fact, for doing that, by an outlay of some hundreds of thousands, or, it may be, millions of pounds, which might have been quite as effectually done by limiting the duration of the act authorising the first road, or by inserting a clause in it providing for the periodical revision of the tolls.

We are clear, indeed, that no act, authorising a private association to construct a railway or canal, to lay down gas pipes, to convey water into a town, or for any such purpose, should ever be passed without reserving to parliament power periodically to revise the tolls granted under it. Such revision would secure to the public a participation in future improvements, not in the contemplation of the parties when the project was entered upon; and it would do this without in any degree clogging the spirit of enterprise. Undertakings of this sort are not engaged in because there is a vague expectation, or even a considerable probability, of their yielding 20 or 30 per cent. profit some 30 or 40 years hence; but because it is believed that they will immediately, or in the course of a few years, yield a reasonable profit; that is, a return of 8, 10, or 12 per cent. The chances of realising more than this at the distance of 20 or 25 years are rarely taken into account, and are worth very little indeed. This, however, is *all* that would be taken away by the revision in question; and, while a reservation of this sort would not stand in the way of any legitimate enterprise, the history of several of our existing companies shows that it may come to be of essential service to the public. Had this principle been formerly acted upon in the formation of companies for the execution of public works, the charges on some of the principal lines of canal might, long since, have been reduced to less than half their present amount; and the water brought into the city of London by the New River Company might have been sold for less than one fourth part of what it now costs; and so in a vast number of cases.

It has been objected to the proposal now made, that the reserving to the public of power to revise the charges on railways, and other public works, would be of no use, inasmuch as the parties would contrive so to swell their charges as to make their revenue appear not more than a fair return on their outlay. And such, most probably, would be the case, were the statements of the parties to be taken without examination. But who ever proposed that this should be done? If charges are to be revised, government must be authorised to appoint parties to inquire carefully into the management of all concerns with which it is proposed to interfere: and it would be the duty of such parties to proscribe every useless expense; and to ascertain how the railway could be carried on, supposing it were wrought under a system of open competition, and at the least expense, and to frame their report accordingly.

We do not even know that it is now too late to interfere with existing railways, in some such way as has been here suggested. Suppose it were enacted that it should be lawful for government to revise the rates of charge, and to lay down new regulations for the government of all railways, at 25 or 30 years hence, very little injury would be done to the existing interests of individuals, at the same time that provision would be made for securing those of the public. The fact that the rates of charge on the Birmingham and Great Western railways were to be revised, and most probably reduced, in 1869 or 1874, would have little or no influence over the present value of shares in these concerns; and such being the case, the proposed reduction could entail no real injury on the railway proprietors, inasmuch as those who may not choose to be subject to future revision may withdraw at present from the concerns, with little or no loss.

The well-informed author of an elaborate pamphlet on "Railway Reform," proposes that government should buy up all the railways at the prices of the day, take them into its own charge, and subject them to a uniform and economical system of administration! But, were it really desirable, which is by no means clear, it is needless to say there is not the smallest prospect of any such sweeping change being ever effected in our railway system. And it would be most unwise, by wasting our energies in attempting to bring about unattainable reforms, to miss the good that may be within our reach.

Regulations for the Prevention of Accidents. — Considering the great extent of railways in this country, and the vast number of passengers conveyed by them, the fewness of accidents is most remarkable. Indeed their greater security appears to be nowise inferior to their greater speed. Still, however, this is a matter in which as little as possible should be left to accident or individual discretion; and considering the immense number of persons frequently conveyed by a single train, and the tremendous consequences that might ensue from a collision or other accident, we do think that a carefully drawn up code of regulations should be enacted with a view to secure the

safety of travellers by railways; and that, should an accident occur, either through the neglect of such regulations, or from not complying with their provisions, the offending parties should be subjected to penalties of a severe and stringent description. A government which neglects taking precautions of this sort, neglects one of its most important functions; and allows the lives of those whom it is bound to protect to be endangered or sacrificed by the cupidity, ignorance, or carelessness of the managers and servants (how incompetent soever they may be) of every railway association in the kingdom. We subjoin

An Account of the Length, Number of Shares, Sums paid up, Selling Price of the Shares, &c., of the principal British and French Railways, in December 1843.

Railroads.	Length in Miles.	Number of Shares.	Amount of Shares.	Shares paid up.	Selling Price per Share.	Dividend per Annum.	Dividend payable.
Birmingham and Derby	48½	6,300	100*l.*	100*l.*	56*l.* to 58*l.*	2*l.* 10*s.* per cent.	
Ditto thirds, Iss. 8½ dls.	—	6,300	33⅓*l.*	25*l.*	18 — 18½	13*s.* 4*d.*	
Ditto eights	—	—	—	12*l.* 10*s.*	25½ — 26	—	
Birmingham and Gloucester	45	9,500	100*l.*	100*l.*	62 — 64	2*l.* 10*s.*	Jan. & July.
Ditto new, Iss. 7½ dls.	—	—	—	75*l.*	15⅝ — 16⅛	12*s.* 6*d.*	
Bolton and Preston	14½	—	50*l.*	50*l.*	25½ — 26	—	
Bristol and Exeter	76	15,000	100*l.*	70*l.*	64 — 64½	4*l.* per cent.	Apr. & Oct.
Cheltenham and Great Western	44	7,500	100*l.*	80*l.*	— —	2*l.* 10*s.*	
Chester and Birkenhead	14½	—	50*l.*	50*l.*	25 — 25½		
Ditto new, created at 5*l.* dis.	—	—	25*l.*	20*l.*	12 — 12⅝		
Clarence	36	3,000	100*l.*	100*l.*			
Dublin and Drogheda	32	—	75*l.*	50*l.*	50 — 51		
Eastern Counties	126	64,000	25*l.*	25*l.*	11 — 11½	2*s.* 9*d.*	April.
Ditto scrip	—	—	—	8*l.* 6*s.* 8*d.*	13 — 13½		
Ditto new registered	—	—	—	—	12½ — 12¾	3*s.*	
Ditto debentures	—	64,000	8*l.* 6*s.* 8*d.*	All	— —	3½ per cent.	Mar. & Sep.
Glasgow, Paisley, and Ayr	40	12,500	50*l.*	50*l.*	57½ — 58½	3*l.* per cent.	—
Edinburgh and Glasgow	46	18,000	50*l.*	50*l.*	57½ — 58½	3*l.* per cent.	—
Ditto new	—	18,000	12*l.* 10*s.*	12*l.* 10*s.*	14½ — 14¾		
Glasgow, Paisley, and Greenock	22½	16,000	27*l.*	25*l.*	13½ — 14	7*s.* 6*d.* per share	Jan. 27.
Grand Junction	82½	10,918	100*l.*	100*l.*	225 — 227	10*l.* per cent.	Jan. & July.
Ditto ½ shares	—	11,000	50*l.*	50*l.*	112½ — 113½	5*l.* per cent.	—
Ditto ¼ shares	—	—	25*l.*	25*l.*	41½ — 42½		
Great North of England	76	10,000	100*l.*	100*l.*	85½ — 86½	2½ per cent.	May & Nov.
Great Western	118	25,000	100*l.*	65*l.*	96½ — 97½	1*l.* 5*s.* per share	Feb. & Aug.
Ditto new	—	25,000	50*l.*	50*l.*	69 — 70	3*l.* 5*s.* per share	—
Ditto fifths	—	37,500	20*l.*	12*l.*	18½ — 19	5*s.* per share	—
Ditto bonds, 1849							
Ditto bonds, 1850, letter C.							
Hull and Selby	31	8[illegible]	50*l.*	50*l.*	58 — 59	1*l.* per share	March 15.
Lancaster and Preston	20½	—	50*l.*	47*l.* 10*s.*	34 — 34½		
Ditto ¼ shares created at 12½ dls.	—	—	37*l.* 10*s.*	19*l.*	22⅜ — 22⅝		
Leeds and Selby	20	2,100	100*l.*	100*l.*	— —	— —	August.
Liverpool and Manchester	31	5,100	100*l.*	100*l.*	227 — 229	— —	Jan. & July.
Ditto ½ shares	—	7,968	50*l.*	50*l.*	110 — 112		
Ditto ¼ shares	—	11,175	25*l.*	25*l.*	56 — 57		
London and Brighton	42	36,000	50*l.*	50*l.*	42 — 42½	1*l.* 10*s.* per share	August.
Ditto loan notes	—	—	10*l.*	10*l.*	10½ — 11		
London and Blackwall	3½	48,000	—	Av. 16*l.* 13*s.* 4*d.*	5⅝ — 6⅛	— —	March.
London and Greenwich	4	43,077	—	Av. 12*l.* 15*s.* 1*d.*	5⅛ — 6	3*s.*	August.
Preference or privilege	—	11,136	—	Av. 18*l.* 17*s.* 2*d.*	— —	5*l.* per cent.	Jan. & July.
Ditto bonds (183,300)	—	—	—	—	— —	5*l.* per cent.	—
London and Birmingham	112	25,000	100*l.*	100*l.*	255 — 258	10*l.* per share.	Feb. & Aug.
Ditto ½ shares	—	25,000	25*l.*	25*l.*	29 — 29⅛	2*l.* 10*s.*	—
Ditto thirds	—	31,250	32*l.*	32*l.*	41⅛ — 41⅜	3*l.* 4*s.*	—
Ditto new	—	—	32*l.*	2*l.*	— —	2*l.* 11*s.*	—
Ditto bonds, 1843.							
London and South Western	93	46,200	—	Av. 41*l.* 6*s.* 10*d.*	74½ — 75	3*l.* 2*s.* 6*d.* per sh.	Mar. & Sep.
Ditto bonds, 1842.							
London and Croydon	9	33,000	—	Av. 13*l.* 15*s.* 9*d.*	15 — 15½	15*s.* 4*d.* per share	March.
Manchester and Leeds	50½	15,000	100*l.*	70*l.*	97 — 98	3*l.* 17*s.* per share	Mar. & Sep.
Ditto new shares	—	15,000	50*l.*	50*l.*	43½ — 44	1*l.* 13*s.* per share	—
Ditto ½ shares	—	—	—	2*l.*	7⅛ — 7⅜	4*s.*	—
Manchester and Birmingham	45½	30,000	70*l.*	40*l.*	39½ — 40	1*l.*	
Ditto extension	—	—	—	7*l.*	— —		
Midland Counties	57	10,000	100*l.*	100*l.*	85 — 86		
Ditto ½ shares, Iss. 10 dls.	—	10,000	25*l.*	15*l.*	21 — 21½	3*l.*	—
Ditto fifths	—	10,000	20*l.*	2*l.*	2⅛ — 2⅜	15*s.*	
Manchester, Bolton, and Bury	10	—	100*l.*	93*l.*	88 — 90		
Newcastle & Darlington Junction	—	—	25*l.*	9*l.*	— —	6*s.*	May.
North Midland	73	15,000	100*l.*	100*l.*	89 — 91	3*l.* 5*s.*	Apr. & Oct.
Ditto ½ share, Iss. 10 dls.	—	15,000	50*l.*	40*l.*	44½ — 45½	1*l.* 13*s.* 4*d.*	
Ditto thirds, Iss. at 14*l.* 13*s.* 4*d.* dls.	—	22,500	21*l.* 13*s.* 4*d.*	—	29 — 30	1*s.* 8*d.*	
North Union	22¼	—	100*l.*	75*l.*	88 — 90		
Northern and Eastern	30	10,256	50*l.*	45*l.*	51 — 51½	2*l.*	Jan. & July.
Ditto scrip, issued at 5*l.* dis.	—	3,136	50*l.*	15*l.*			
Ditto ¼ shares	—	12,208	12*l.* 10*s.*	11*l.* 5*s.*			
Paris and Orleans	—	80,000	20*l.*	20*l.*	32 — 32½		
Paris and Lyons	—	—	20*l.*	2*l.*	31¾ — 32		
Paris and Rouen	—	72,000	20*l.*	20*l.*	10¾ — 11		
Rouen and Havre	—	40,000	20*l.*	4*l.*			
Sheffield, Ashton-under-Lyne, and Manchester	40	7,000	100*l.*	82*l.* 10*s.*	54 — 55	5*l.* per cent.	—
Ditto, quarters	—	—	—	2*l.*	4⅛ — 4⅜		
Sheffield and Rotheram	5½	1,000	25*l.*	25*l.*	— —	1*l.* 15*s.*	August.
Stockton and Darlington	54	1,500	100*l.*	100*l.*	— —	15*l.* per cent.	Apr. & Oct.
South Eastern and Dover	66	8,000	50*l.*	50*l.*	34½ — 34⅝		
Ditto new, Iss. 25 dls.	—	48,000	25*l.*	25*l.*	34⅛ — 35		
York and North Midland	23½	6,700	50*l.*	50*l.*	119 — 121	10*l.* per cent.	Jan. & July.
Ditto new shares	—	6,700	25*l.*	20*l.*	53½ — 54½	10*l.* percent.	—
Ditto, new ½ shares	—	—	—	—	14½ — 15½		

We have taken the following statement, with respect to some of the principal railways of the U. Kingdom, from the pamphlet on "Railway Reform."

Account of the Length in Miles, Cost, present Value, Revenue, Expenditure, &c. of some of the principal British Railways in 1842.

Railways.	Miles in Length	Cost per Mile.	Total Cost.	Value.	Receipts for 1842.	Expenditure.	Nett Profit.	Paid per Cent. per Annum.
		£	£	£	£	£	£	£ s. d.
London and Birmingham - -	112½	32,780	3,923,000	11,450,000	809,000	272,300	536,900	11 2 0
Great Western - -	118	55,330	6,540,000	8,205,000	670,000	277,100	393,100	7 0 0
South Western - -	99½	27,750	2,581,000	3,650,000	314,800	141,000	173,800	6 10 0
Grand Junction - -	83½	22,740	2,319,000	4,640,000	413,200	162,500	250,700	10 0 0
Liverpool and Manchester -	30½	49,390	1,515,000	2,849,000	237,700	110,600	127,100	10 0 0
London and Brighton - -	40½	64,370	2,586,000	2,016,000	168,500	77,400	91,100	4 0 0
Manchester and Leeds - -	51	59,800	3,050,000	3,234,000	298,800	101,400	197,400	5 10 0
North Midland - -	72½	45,780	3,332,000	2,550,000	216,500	90,900	125,600	3 5 0
Midland Counties - -	57	29,790	1,698,000	1,965,000	135,000	78,000	57,000	3 0 0
Edinburgh and Glasgow -	46	34,630	1,513,000	1,496,000	93,700	30,200	63,500	5 0 0
Glasgow and Ayr - -	40	24,750	989,000	771,000	56,700	25,400	31,300	3 0 0
North Union - -	22	27,820	612,000	610,000	55,800	21,400	34,400	6 13 0
Stockton and Darlington -	25	22,400	560,000	975,000	85,100	35,000	50,100	15 0 0
Stockton and Hartlepool -	15	22,000	330,000	300,000	67,000	27,200	39,800	9 0 0
York and North Midland -	27	24,110	651,000	1,110,000	85,200	29,700	55,500	10 0 0
Newcastle and Carlisle -	60½	17,190	1,062,000	975,000	77,500	30,100	47,400	4 0 0
Dublin and Kingstown -	6	56,660	340,000	351,000	42,100	20,600	21,500	5 0 0
Ulster - - -	25	13,800	345,000	285,000	21,100	10,500	10,500	4 0 0
Brandling Junction - -	25	17,400	435,000	410,000	40,400	18,200	22,200	4 10 0
Chester and Birkenhead -	14½	37,480	538,000	276,000	30,600	15,200	15,400	4 0 0
Newcastle and North Shields	7	31,570	242,000	200,000	20,500	8,100	12,400	4 0 0
Dundee and Arbroath -	16½	8,600	144,000	144,000	17,100	4,900	7,900	5 0 0
Sheffield and Rotherham -	7½	9,470	71,000	85,000	18,700	10,800	7,900	6 0 0
	1,014		37,376,000	48,218,000	3,901,600	1,599,100	2,302,500	Av. 6 6 7

A duty is paid to government, by the railway companies, of 5 per cent. of all the sums received by them for the conveyance of passengers. In 1842 this duty produced about 168,000*l.*; but about 140,000*l.* was repaid by government to the different railway companies for the conveyance of the mails. When the post-office and a railway company differ as to the sum to be paid to the latter for conveying the mail, the matter is referred to arbitration.

Continental Railways. — The railway system has made great progress on the Continent and in the U. States. Paris and Rouen have already been united by a railway, which is in the course of being extended to Havre. A railway has also been constructed from Paris to Orleans; and one is now being made from Paris to Lyons, which will most probably be prolonged to Marseilles. This last will be of peculiar importance to this country, from the influence it will have in facilitating the correspondence with the East. A large amount of English capital has been invested in the French railways; and some of them have been constructed by English engineers.

Belgium, as everybody knows, has numerous railways; and they have already been extended to a degree that one could hardly have anticipated. We subjoin a return taken from the *Algemeine Zeitung*, being

An Account of the various Railways open in Germany in September 1843, specifying their Length (in English Miles), the Number of Passengers conveyed along them in that Month, and in the Nine Months ending therewith.

Name.	Length.	Passengers in Sept.	Passengers in first 9 Months of 1843.	Name.	Length.	Passengers in Sept.	Passengers in first 9 Months of 1843.
Linz to Budweis (just opd.)	77½	2,195	13,104	Berlin to Frankfort -	43½	23,965	189,179
Linz to Gmunden -	42½	16,994	105,720	Breslau to Oppeln -	49½	25,170	181,541
Ferdinand's North Road -	187½	68,705	502,112	Leipzig to Altenburg -	24	23,008	150,972
Vienna to Glognitz -	46	166,543	1,095,353	Leipzig to Dresden -	71½	47,855	315,915
Munich to Augsburg -	37½	23,876	159,285	Magdeburg to Leipzig -	61½	75,591	478,901
Nurnburg to Furth -	5½	42,761	322,709	Magdeburg to Halberstadt	35½	29,563	210,549
Frankfort to Wiesbaden -	26½	100,992	611,342	Brunswick to Oschersleben	29	37,192	253,866
Carlsruhe to Manheim -	42½	90,152	646,847	Dusseldorf to Elberfeld -	16	33,115	214,403
Hamburg to Bergedorf	10	23,158	163,109	Cologne to Aix la Chapelle	43	33,953	217,843
Berlin to Anhalt -	93½	37,430	262,146				
Berlin to Potsdam -	16	45,905	350,393	Total -	1,083		
Berlin to Stettin -	82½	29,542	170,241				

The number of passengers in September 1843 was 966,535. In September 1842 it was 761,866.
The receipts in September 1843 were 1,252,921 florins, or 125,000*l.* In September 1842 they were 90,000*l.* Other railways are now, also, in the course of being constructed in various parts of Germany, some of which are of great length and importance.

In a late number of the *Scotsman* some peculiarities of the German railways are noticed as follows: —

1st. A great number of them have been undertaken either directly at the expense of the state, or upon security being given by the state for 3 per cent. interest on the capital invested. To prevent jobbing in shares, a law has been enacted in most German states, that 10 per cent. of the sum must be paid forthwith after subscribing.

2d. German railways would appear to pay better than English ones. It is said that two yield 15 per cent. clear profit; others from 7 to 10 per cent.; and none has begun with less than 4 per cent. dividend. This, we presume, must be owing to the greater facility with which the railways have been constructed, and the all but total want of any other means of expeditious travelling.

The railways of the U. States are exceedingly numerous, and some of them are of

great length. But, speaking generally, they are not so substantially executed, and have not been nearly so expensive, as those of this country. Many of them consist only of a single pair of rails, with double pairs at certain intervals to admit of the trains passing.

RAISINS (Fr. *Raisins secs, ou passés*; Ger. *Rosinen*; It. *Uve passe*; Por. *Passas*; Rus. *Issum*; Sp. *Pasas*), the dried fruit of the vine. They are produced from various species of vines; deriving their names partly from the place where they grow, as Smyrnas, Valencias, &c.; and partly from the species of grape of which they are made, as muscatels, blooms, sultanas, &c. Their quality appears, however, to depend more on the method of their cure than on any thing else. The finest raisins are cured in two methods; — either by cutting the stalk of the bunches half through, when the grapes are nearly ripe, and leaving them suspended on the vine till the watery part be evaporated, and the sun dries and candies them; or by gathering the grapes when they are fully ripe, and dipping them in a ley made of the ashes of the burnt tendrils; after which they are exposed to the sun to dry. Those cured in the first way are most esteemed, and are denominated raisins of the sun. The inferior sorts are very often dried in ovens. — (*Thomson's Dispensatory.*)

Raisins are imported in casks, barrels, boxes, and jars. The finest come in jars and ¼ boxes weighing about 25 lbs. Some of the inferior sorts are brought to us in mats.

Malaga raisins are in the highest estimation. The muscatels from Malaga fetch fully a third more than any other description of raisins. The Smyrna black is the cheapest variety, and may average from 27*s.* to 30*s.* a cwt., duty included; muscatels vary from 35*s.* to 60*s.*, duty included. But the price depends much on the season, and the period of the year. — (See MALAGA.)

The duty on raisins, which formerly amounted to 20*s.* a cwt. on the inferior sorts, and to 42*s.* 6*d.* on the finest, was reduced in 1834 to 15*s.* a cwt. on all classes. This reduction has occasioned a very considerable increase of consumption; but the truth is, that the duty is still quite exorbitant, being no less than 100 per cent. *ad valorem* (and sometimes more) on the price of most descriptions. Raisins are a luxury that can at present be enjoyed only by the richer classes. But were the duty reduced, as it should be, to 5*s.* a cwt. on the cheapest sorts, and 10*s.* on the dearest, we are well assured that they would be very largely consumed by the middle and even lower classes. Nothing but the magnitude of the duties prevents them from becoming of very considerable importance as an article of food: and it is really quite monstrous, that the public should be debarred from the use of a desirable article, on the stupid pretence of its being necessary, in order to keep up the revenue, that it should be loaded with an oppressive duty. We admit the importance of keeping up the revenue; but so far from exorbitant duties having such an effect, they contribute more than any thing else to its reduction. They invariably limit the consumption of the articles on which they are laid to the very richest classes, or cause them to be clandestinely supplied, or force recourse to other articles; reducing the revenue as well as the consumption far below the level to which it would attain were the duties moderate. But it is needless to reason speculatively on such a point. Have we not seen the revenue derived from spirits increased, by reducing the duty from 5*s.* 6*d.* a gallon to 2*s.* 6*d.*? and the revenue derived from coffee quadrupled by reducing the duty from 1*s.* 7*d.* per lb. to 6*d.*? And, as most qualities of raisins are but little less overtaxed, have we not every reason to expect that a like effect would be produced by an adequate reduction of the duties by which they are burdened?

Exclusive of raisins, a considerable quantity of undried grapes is annually imported from Spain and Portugal, in jars packed in sawdust. The duty on these grapes, which is 5 per cent. *ad valorem*, produced, in 1840, 1,686*l.*

Raisins, the produce of Europe, may not be imported for home consumption, except in British ships, or in ships of the country of which they are the produce, or from which they are imported, on forfeiture of the goods and of 100*l.* by the captain of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

No abatement of duty is made on account of any damage received by raisins. — (3 & 4 *Will.* 4. c. 52. § 32.)

Account of the Quantities of Raisins imported into the U. Kingdom during each of the 7 Years ending with 1841, specifying the Countries whence they were brought, and the Quantities brought from each.

	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Spain and the Balearic Islands	117,338	104,535	119,722	162,418	180,009	166,505	161,005
Italy and the Italian Islands	2,369	4,932	3,627	160	441	1,568	233
Turkey - -	47,559	71,317	45,091	28,912	22,050	54,333	52,979
All other countries -	2,100	1,672	1,147	3,946	3,411	2,575	2,524
Total imported -	169,366	182,286	169,590	195,466	205,911	224,781	216,741
Retained for consumption	160,811	156,194	152,162	155,174	179,335	178,116	240,887

The duty on raisins produced, in 1842, 147,031*l.* 12*s.* 4*d.*

RANGOON, a commercial port and town of the Burmese dominions, about 26 miles from the sea, on the left bank of the eastern branch of the river Irawaddy, in lat. 16° 42′ N., lon. 96° 20′ E. The town and suburbs extend lengthwise about 1 mile along the bank of the river, being about ¾ of a mile in depth: but the houses are very unequally scattered over this area. The fort, or rather wooden stockade, which contains the town, properly so called, is a regular square about 14 feet high, composed of heavy beams of teak timber. It appears from a census, taken a short time previously to the commencement of the war in 1824, that the population was 18,000, which, probably, is not far from its present amount, though it has been stated considerably higher.

Rangoon is the chief, and, indeed, almost the only port of foreign trade in the Burmese dominions, which extend from between the 15th and 16th, up to the 26th and 27th degrees of N. lat., and from the 93d to the 98th degree of E. lon., containing an area of about 184,000 square miles, with a population of about 4,000,000. Its situation is extremely convenient for commercial purposes, being situated so near the sea, and commanding the navigation of the Irawaddy, which extends to Ava, the capital, a distance of

nearly 800 miles. Rangoon is accessible to ships of even 1,200 tons burden; the navigation, although somewhat intricate, being safe and practicable with the assistance of the ordinary native pilots.

The town has many advantages for ship building. At neaps the tide rises and falls about 18 feet; and at springs from 25 to 30 feet. The principal teak forests are, at the same time, at a comparatively short distance, and there is a water conveyance for the timber nearly the whole way. Ship-building has, in fact, been carried on at Rangoon since 1786, and in the 38 years which preceded our capture of it, there had been built 111 square-rigged vessels of European construction, the total burden of which amounted to above 35,000 tons. Several of these were of from 800 to 1,000 tons. Under the direction of European masters, the Burmese were found to make dexterous and laborious artisans; in this respect, greatly surpassing the natives of our Indian provinces.

There are 2 considerable markets, where the ordinary necessaries of life, according to Burmese usage, are cheap and abundant: these are rice, excellent fish, and poultry.

Money.—The Burmese currency consists, for small payments, of lead; for larger ones, of gold and silver, but chiefly of the latter. There are no coins. At every payment, the metal must be weighed, and very generally assayed, — a rude and very inconvenient state of things. The weights used in the weighing of money are the same as those used on ordinary occasions; the kyat or tical, and the paiktha or vis, being by far the most frequent. Silver may be considered as the standard. Gold is generally held to be about 17 times more valuable than silver. The weighing and assaying of the metals, used as currency, gives employment to a class of persons as brokers, money changers, and assayers. Every new assay costs the owner, if the metal be silver, 2½ per cent.; 1½ per cent. being the established commission of the assayers, while 1 per cent. is lost, or supposed to be lost, in the operation. If it be repeated 40 times, it follows that the original amount is wholly absorbed — a fact which shows the enormous waste of metal arising out of this rude substitute for coin.

Weights. — The weights in use at Rangoon, and throughout the Burman dominions, are as follow: —

2 Small Rwés (red beans) = 1 Large Rwé.	2 Mus = 1 Mat'ha.
4 Large do. = 1 Bal.	4 Mat'hs = 1 Kyat, *vulgo* Tical
2 Bals = 1 Mu.	100 Kyats = 1 Paiktha, *vulgo* Vis, = 3·65 lbs. avoir.

Measures of capacity are as follow: —

2 Lamyets	= 1 Lamé	4 Saléz	= 1 Pyi.	2 Salts	= 1 Satt.
2 Lamés	= 1 Salé.	2 Pyis	= 1 Sarot.	4 Salts	= 1 Ten.

This last measure is what is usually called by us "a basket," and ought to weigh 16 vis of clean rice, or 58·4 lbs. avoirdupois: it has commonly been reckoned at ¼ a cwt. All grains, pulses, certain fruits, natron, salt, and lime are bought and sold by measure: other commodities by weight.

Commercial Regulations. — The following commercial treaty, entered into between the government of England and the Court of Ava, in 1826, regulates the intercourse between the two countries: —

Art. 1. — Peace being made, &c. &c. — when merchants with an English certified pass from the country of the English ruler, and merchants from the kingdom of Burma pass from one country to the other, selling and buying merchandise, the sentinels at the passes and entrances, the established gate-keepers of the country, shall make inquiry as usual, but without demanding any money; and all merchants coming truly for the purpose of trade, with merchandise, shall be suffered to pass without hindrance or molestation. The governments of both countries, also, shall permit ships with cargoes to enter ports and carry on trade, giving them the utmost protection and security. And in regard to duties, there shall none be taken beside the customary duties at the landing places of trade.

Art. 2. — Ships whose breadth of beam on the inside (opening of the hold) is 8 royal Burman cubits, of 19·1 English inches each, and all ships of smaller size, whether merchants from the Burmese country entering an English port under the Burmese flag, or merchants from the English country, with an English stamped pass, entering a Burmese port under the English flag, shall be subject to no other demands beside the payment of duties and 10 ticals, 25 per cent. (10 sicca rupees), for a passport on leaving. Nor shall pilotage be demanded, unless the captain voluntarily requires a pilot. However, when ships arrive, information shall be given to the officer stationed at the entrance of the sea. In regard to vessels whose breadth of beam exceeds 8 royal cubits, they shall remain, according to the 9th article of the treaty of Yandabo, without unshipping their rudders or landing their guns, and be free from trouble and molestation as Burmese vessels in British ports. Besides the royal duties, no more duties shall be given or taken than such as are customary.

Art. 3. — Merchants belonging to one country, who go to the other country and remain there, shall, when they desire to return, go to whatever country and by whatever vessel they may desire, without hindrance. Property owned by merchants they shall be allowed to sell. And property not sold, and household furniture, they shall be allowed to take away, without hindrance, or incurring any expense.

Art. 4. — English and Burmese vessels meeting with contrary winds, or sustaining damage in masts, rigging, &c., or suffering shipwrecks on the shore, shall, according to the laws of charity, receive assistance from the inhabitants of the towns and villages that may be near, the master of the wrecked ship paying to those that assist suitable salvage, according to the circumstances of the case; and whatever property may remain, in case of shipwreck, shall be restored to the owner.

Commerce. — A considerable intercourse is carried on between the Burmese and Chinese dominions by an annual caravan, of which the merchants are all Chinese. The imports from China consist of manufactured articles, the chief export from Burma being cotton wool. The trade with foreign countries seaward is carried on with the ports of Chittagong, Dacca, and Calcutta, in Bengal; Madras and Masulipatam, on the Coromandel coast; the Nicobar Islands, in the Bay of Bengal; Penang, in the Straits of Malacca; and occasionally with the Persian and Arabian Gulphs. The largest trade is with Calcutta, owing to the great consumption of teak timber in the latter, and the facility with which she supplies the demand of the Burmese for Indian and British cotton goods. The articles exported to foreign countries *from* Rangoon are the following: — Teak wood, terra Japonica, or catechu, stick lac, bees' wax, elephants' teeth, raw cotton, orpiment, commonly called in India hurtal, gold, silver, rubies, sapphires, and horses, or rather the small, hardy pony of the country, which is much esteemed, particularly at Madras. By far the most important of these commodities is teak timber; the quantity of this wood annually exported is said to be equal to 7,500 full-sized trees, which, for the most part, consist of what India ship-builders call *shimbin*, which are planks hewn out of the log with the adze at an immense waste. The teak forests of Pegu are by far the most abundant in India. The teak is nowhere to be found in the low alluvial lands to which the tide reaches, but abounds in the high lands beyond its influence. It seems to be very generally disseminated throughout the Burmese dominions. In the territory ceded to the British in Martaban, there are some fine forests, the timber of which is cut down for exportation, and where it is believed that saw-mills have very recently been established by some European settlers. The most accessible and extensive forests of Teak in the Burmese dominions are in the province of Sarawadi, about 150 miles to the north of Rangoon, with which there is a water communication. The principal imports into Burma are cotton piece goods from India and Britain, British woollens, iron, steel, quicksilver, copper, cordage, borax, sulphur, gunpowder, saltpetre, fire-arms, coarse porcelain, English glass ware, opium, tobacco, cocoa and areca nuts, sugar, and spirits. Of these, by far the most important is cotton piece goods. The Burmese have few cotton manufactures of their own, and appear, from very early times, to have been furnished with the principal part of their supply from the Coromandel coast. To these were afterwards added the cheaper fabrics of Bengal; and both are now, in a great measure, superseded by British manufactures, the use of which has spread very rapidly since the opening of the trade in 1814. In 1826-27, the exports and imports of the port of Rangoon

were estimated each at the rate of 300,000*l.* — (We are indebted for this valuable article to our esteemed friend, John Crawfurd, Esq., who ascertained the particulars on the spot.)

RAPE, a biennial plant of the turnip kind (*Brassica napus* Lin.), but with a woody fusiform root scarcely fit to be eaten. It is indigenous, flowers in May, and ripens its seeds in July. It is cultivated in many parts of England, particularly in Lincoln and Cambridge; partly on account of its seed, which is crushed for oil, and partly for its leaves as food for sheep. The culture of rape for seed has been much objected to by some, on account of its supposed great exhaustion of the land; but Mr. Loudon says that, where the soil and preparation are suitable, the after-culture properly attended to, and the straw and offal, instead of being burnt, as is the common practice, converted to the puposes of feeding and littering cattle, it may, in many instances, be the most proper and advantageous crop that can be employed by the farmer. The produce, when the plant succeeds well, and the season is favourable for securing the seed, amounts to from 40 to 50 bushels an acre. The seed is sold by the last of 10 quarters; and is crushed in mills constructed for that purpose. — (*Loudon's Ency. of Agriculture.*) We subjoin an

Account of the Quantities of Rape Seed imported into the U. Kingdom during each of the 7 Years ending with 1841, specifying the Countries from which they were imported, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Russia - - -	-	-	4,204	13,469	55,871	32,592	127,629
Denmark - - -	442,803	330,763	724,781	501,989	680,840	465,292	343,298
Germany - - -	260,534	163,751	241,536	145,508	190,821	129,733	155,160
All other countries - -	51,497	83,040	51,844	47,105	56,332	26,341	91,446
Total imported - -	754,834	577,554	1,020,165	713,171	983,864	653,958	715,533
Retained for consumption -	690,716	558,712	939,863	700,518	912,107	652,726	631,865

The duty on rapeseed was reduced in 1842 from 1*s.* to 1*d.* per quarter.

Rape-seed, the produce of Europe, may not be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

RAPE CAKE, is the adhering masses of the husks of rape-seed, after the oil has been expressed. They are reduced to powder by a malt-mill or other machine; and are used either as a top-dressing for crops of different kinds, or are drilled along with turnip seed. Rapeseed oil pays a duty of 6*d.* a ton on importation.

RATTANS, OR CANES, the long slender shoots of a prickly bush (*Calamus rotang* Lin.), one of the most useful plants of the Malay peninsula, and the Eastern islands. They are exported to Bengal, to Europe, and above all to China, where they are consumed in immense quantities. For cane work they should be chosen long, of a bright pale yellow colour, well glazed, and of a small size, not brittle, or subject to break. They are purchased by the bundle, which ought to contain 100 rattans, having their ends bent together, and tied in the middle. In China they are sold by the picul, which contains from 9 to 12 bundles. Such as are black or dark coloured, snap short, or from which the glazing flies off on their being bent, should be rejected. When stowed as dunnage, they are generally allowed to pass free of freight. — (*Milburn's Orient. Com. &c.*) The imports into this country are very considerable.

"The rattan," says Mr. Crawfurd, "is the spontaneous product of all the forests of the Archipelago; but exists in great perfection in those of the islands of Borneo, Sumatra, and of the Malayan peninsula. The finest are produced in the country of the *Bataks* of Sumatra. The wood-cutter, who is inclined to deal in this article, proceeds into the forest without any other instrument than his *parang* or cleaver, and cuts as much as he is able to carry away. The mode of performing the operation is this: — he makes a notch in the tree at the root of which the rattan is growing, and cutting the latter, strips off a small portion of the outer bark, and inserts the part that is peeled into the notch. The rattan now being pulled through as long as it continues of an equal size, is by this operation neatly and readily freed from its *epidermis*. When the wood-cutter has obtained by this means from 300 to 400 rattans, — being as many as an individual can conveniently carry in their moist and undried state, — he sits down, and ties them up in bundles of 100, each rattan being doubled before being thus tied up. After drying, they are fit for the market without further preparation. From this account of the small labour expended in bringing them to market, they can be sold at a very cheap rate. The Chinese junks obtain them in Borneo at the low rate of 5 Spanish dollars per 100 bundles, or 5 cents for each 100 rattans, or 27 for 1*d.* The natives always vend them by tale; but the European residents and the Chinese sell them by weight, counting by piculs. According to their quantity, and the relative state of supply and demand, the European merchants dispose of them at from 1¼ to 2½ dollars the picul. In China, the price is usually about 3½ dollars per picul, or 75 per cent. above the average prime cost. In Bengal they are sold by tale, each bundle of about 100 rattans bringing about 20¼*d.*" — (*Indian Archipelago*, vol. iii. p. 423.)

REAL, in the Spanish monetary system, is of two sorts; viz. a *real of plate*, and a *real vellon*. The former is a silver coin, varying in value from about 6½*d.* to 5*d.* — (See COINS.) A real vellon is a money of account, worth about 2½*d.*

REAM, a quantity of paper. The ream of writing paper consists of 20 quires, each of 24 sheets: but the ream of printing paper, or, as it is sometimes called, the *printer's ream*, extends to 21½ quires, or 516 sheets. Two reams of paper make a *bundle*.

RECEIPT, is an acknowledgment in writing of having received a sum of money, or other valuable consideration. It is a voucher either of an obligation or debt discharged, or of one incurred.

The 55 Geo. 3. c. 55. enacts, that every note, memorandum, or writing whatever, given to any person on the payment of money, acknowledging such payment, on whatever account it be, and whether signed or not, shall be considered a receipt, and liable to a stamp duty.

And every person who shall write, or cause to be written, any receipt for money on unstamped paper, (except in certain excepted cases hereafter enumerated,) or on a lower stamp than the proper one, shall forfeit 10*l.* if for a sum under 100*l.*; if above, 20*l.*

Giving receipts for less than actually paid, writing off sums, or other fraudulent contrivances, penalty 50*l.*; but receipts may be stamped if brought *within fourteen days after date*, on payment of a penalty of 5*l.* over and above the duty; and if brought within one *calendar month*, on payment of a penalty of 10*l.* and the duty.

Any person refusing to give a receipt upon demand, or to pay the amount of the stamp, is liable to a penalty of 10*l.*

Scale of Stamp Duties per 55 Geo. 3. c. 184.

Receipt or discharge, given for or upon the payment of			£	s.	d.
money, amounting to 5*l.* and under 10*l.*	-	-	0	0	3
10*l.* and under 20*l.*	-	-	0	0	6
20*l.* — 50*l.*	-	-	0	1	0
50*l.* — 100*l.*	-	-	0	1	6
100*l.* — 200*l.*	-	-	0	2	6
200*l.* — 500*l.*	-	-	0	4	0
500*l.* — 700*l.*	-	-	0	5	0
500*l.* — 1,000*l.*	-	-	0	7	6
1,000*l.* or upwards	-	-	0	10	0
And where any sum shall be therein expressed to be received in full of all demands	-	-	0	10	0

And any note, memorandum, or writing whatsoever, given to any person for or upon the payment of money, whereby any sum of money, debt, or demand, or any part of any debt or demand, therein specified, and amounting to 5*l.* or upwards, shall be expressed to have been paid, settled, balanced, or otherwise discharged or satisfied, or which shall import or signify any such acknowledgment, and whether the same shall or shall not be signed with the name of any person, shall be deemed to be a receipt for a sum of money of equal amount with the sum so expressed to have been paid, settled, balanced, or otherwise discharged or satisfied, and shall be charged with a duty accordingly.

Previously to 1833 all receipts for sums of 2*l.* and under 5*l.* were charged with a stamp duty of 2*d.*; but the act 3 & 4 Will. 4. c. 23. exempts all receipts for sums under 5*l.* from the duty.

Exemptions.—Receipts exempted from stamp duty by any act relating to the assessed tax. Receipts given by the Treasurer of the Navy. Receipts on account of the pay of the army or ordnance. Receipts by any officer, seaman, marine, or soldier, or their representatives. Receipts for the consideration money for the purchase of any parliamentary stocks or funds, and for any dividend paid on any share of the said stocks or funds. Receipts on exchequer bills. Receipts given for money deposited in the Bank of England, or in the hands of any banker, to be accounted for on demand; provided the same be not expressed to be received of, or by the hands of, any other than the person to whom the same is to be accounted for. Receipts written upon promissory notes, bills of exchange, drafts, or orders for the payment of money. Receipts given upon bills or notes of the Bank of England. Letters by the general post acknowledging the safe arrival of any bills of exchange, promissory notes, or other securities. Receipts indorsed upon any bond, mortgage, or other security, or any conveyance whatever. Releases or discharges for money by deeds duly stamped. Receipts or discharges for drawbacks or bounties. Receipts or discharges for the return of duties of customs. Receipts indorsed upon navy bills. Receipts upon victualling and transport bills. Receipts given solely for the duty on insurance against fire.

In 1842, the nett produce of the receipt duty was as follows:—Great Britain, 158,559*l.* 11*s.* 2½*d.*; Ireland, 21,900*l.* 9*s.* 9*d.*

REGISTRY, in commercial navigation, the registration or enrolment of ships at the Custom-house, so as to entitle them to be classed among, and to enjoy the privileges of, British-built ships.

The registry of ships appears to have been first introduced into this country by the Navigation Act (12 Car. 2. c. 18. anno 1660). Several provisions were made with respect to it by the 7 & 8 Will. 3. c. 22.; and the whole was reduced into a system by the 27 Geo. 3. c. 19.

It may be laid down in general, that a vessel, in order to be admitted to registry, and consequently to enjoy the privileges and advantages that exclusively belong to a British ship, must be the property of his Majesty's subjects in the U. Kingdom or some of its dependencies; and that it must have been built in the said U. Kingdom, &c., or been a prize vessel legally condemned, or a vessel legally condemned for a breach of the same laws.

The great, and, perhaps, the only original object of the registration of ships, was to facilitate the exclusion of foreign ships from those departments in which they were prohibited from engaging by the navigation laws, by affording a ready means of distinguishing such as were really British. It has also been considered advantageous to individuals, by preventing the fraudulent assignment of property in ships; but Lord Tenterden has observed, in reference to this supposed advantage, that "the instances in which fair and honest transactions are rendered unavailable through a negligent want of compliance with the forms directed by these and other statutes requiring a public register of conveyances, make the expediency of all such regulations, considered with reference to private benefit only, a matter of question and controversy."—(*Law of Shipping*, part i. c. 2.)

The existing regulations as to the registry of ships are embodied in the act 3 & 4 Will. 4. c. 55., which, on account of its importance, is subjoined nearly entire.

ACT 3 & 4 WILL. 4. c. 55., FOR REGISTERING OF BRITISH VESSELS.

Commencement of Act.—From 1st of September, 1833, except where any other commencement is herein-after particularly directed.

No Vessel to enjoy Privileges until registered.—No vessel shall be entitled to any of the privileges or advantages of a British registered ship unless the person or persons claiming property therein shall have caused the same to have been registered in virtue of the act 6 Geo. 4. c. 110., or of the act 4 Geo. 4. c. 41., or until such person or persons shall have caused the same to be registered in manner herein-after mentioned, and have obtained a certificate of such registry from the person or persons authorised to make such registry and grant such certificate as herein-after directed; the form of which certificate shall be as follows; viz.—

"This is to certify, that in pursuance of an act passed in the 4th year of the reign of King Will. 4, intituled, *An Act [here insert the title of this act, the names, occupation, and residence of the subscribing owners]*, having made and subscribed the declaration required by the said act, and having declared that [he or they] together with [*names, occupations, and residence of non-subscribing owners*] [is or are] sole owner or owners, in the proportions specified on the back hereof, of the ship or vessel called the "*ship's name*] of [*place to which the vessel belongs*], which is of the burden of [*number of tons*], and whereof [*master's name*] is master, and that the said ship or vessel was [*where and when built, or condemned as prize, referring to builder's certificate, judge's certificate, or certificate of last register then delivered up to be cancelled*], and [*name and employment of surveying officer* having certified to us that the said ship or vessel has [*number*] decks and [*number*] masts, that the length from the fore part of the main stem to the after part of the stern post aloft is [*number of feet and inches*], her breadth at the broadest part [*stating whether that be above or below the main wales*] is [*number of feet and inches*], her [*height between decks if more than 1 deck, or depth in the hold if only 1 deck*] is [*number of feet and inches*], and that she is [*how rigged*] rigged with a [*standing or running*] bowsprit, is [*description of stern*] sterned [*carvel or clinched*] built, has [*whether any or no*] gallery and [*kind of head if any*] head; and the said subscribing owners having consented and agreed to the above description, and having caused sufficient security to be given as is required by the said act, the said ship or vessel called the [*name*] has been duly registered at the port of [*name of port*]. Certified under our hands at the Custom-house in the said port of [*name of port*] this [*date*] day of [*name of month*] in the year [*words at length*].

[*Signed*] Collector.
[*Signed*] Comptroller."

And on the back of such certificate of registry there shall be an account of the parts or shares held by each of the owners mentioned and described in such certificate, in the form and manner following. — § 2.

" Names of the several owners within mentioned.	Number of sixty-fourth shares held by each owner.
Name	Thirty-two.
Name	Sixteen.
Name	Eight.
Name	Eight.

[Signed] [Signed] Collector. Comptroller."

Persons authorised to make Registry and grant Certificates. — The persons authorised and required to make such registry and grant such certificates shall be the several persons herein-after mentioned and described; (that is to say,)

The collector and comptroller of customs in any port in the U. Kingdom, and in the Isle of Man respectively, in respect of ships or vessels to be there registered:

The principal officers of customs in the island of Guernsey or Jersey, together with the governor, lieutenant governor, or commander-in-chief of those islands respectively, in respect of ships or vessels to be there registered:

The collector and comptroller of customs of any port in the British possessions in Asia, Africa, and America, or the collector of any such port at which no appointment of a comptroller has been made, in respect of ships or vessels to be there registered:

The collector of duties at any port in the territories under the government of the East India Company, within the limits of the charter of the said company, or any other person of the rank in the said company's service of senior merchant, or of 6 years' standing in the said service, being respectively appointed to act in the execution of this act by any of the governments of the said company, in respect of ships or vessels to be there registered:

The collector of duties at any British possession within the said limits, and not under the government of the said company, and at which a Custom-house is not established, together with the governor, lieutenant-governor, or commander-in-chief of such possession, in respect of ships or vessels to be there registered:

The governor, lieutenant-governor, or commander-in-chief of Malta, Gibraltar, Heligoland, and Cape of Good Hope respectively, in respect of ships or vessels to be there registered.

Provided that no ship or vessel to be registered at Heligoland, except such as is wholly of the built of that place, and that ships or vessels, after having been registered at Malta, Gibraltar, or Heligoland, shall not be registered elsewhere; and that ships or vessels registered at Malta, Gibraltar, or Heligoland shall not be entitled to the privileges and advantages of British ships in any trade between the said United Kingdom and any of the British possessions in America: provided also, that wherever in and by this act it is directed or provided that any act, matter, or thing shall and may be done or performed by, to, or with any collector and comptroller of his Majesty's customs, the same shall or may be done or performed by, to, or with the several persons respectively herein-before authorised and required to make registry, and to grant certificates of registry as aforesaid, and according as the same act, matter, or thing is to be done or performed at the said several and respective places, and within the jurisdiction of the said several persons respectively: provided also, that wherever in and by this act it is directed or provided that any act, matter, or thing shall or may be done or performed by, to, or with the commissioners of his Majesty's customs, the same shall or may be done or performed by, to, or with the governor, lieutenant-governor, or commander-in-chief of any place where any ship or vessel may be registered under the authority of this act, so far as such act, matter, or thing can be applicable to the registering of any ship or vessel at such place. — § 3.

Ships exercising Privileges before Registry to be forfeited. — In case any ship or vessel not being duly registered, and not having obtained such certificate of registry as aforesaid, shall exercise any of the privileges of a British ship, the same shall be subject to forfeiture, and also all the guns, furniture, ammunition, tackle, and apparel to the same ship or vessel belonging, and shall and may be seized by any officer or officers of his Majesty's customs: provided always, that nothing in this act shall extend or be construed to extend to affect the privileges of any ship or vessel which shall, prior to the commencement of this act, have been registered by virtue of an act passed in the 6th year of the reign of his late Majesty George IV., intituled "An Act for the registering of British Vessels." — § 4.

What Ships are entitled to be registered. — No ship or vessel shall be registered, or having been registered shall be deemed to be duly registered, by virtue of this act, except such as are wholly of the built of the said U. Kingdom, or of the Isle of Man, or of the islands of Guernsey or Jersey, or of some of the colonies, plantations, islands, or territories in Asia, Africa, or America, or of Malta, Gibraltar, or Heligoland, which belong to his Majesty, his heirs or successors, at the time of the building of such ships or vessels, or such ships or vessels as shall have been condemned in any court of admiralty as prize of war, or such ships or vessels as shall have been condemned in any competent court as forfeited for the breach of the laws made for the prevention of the slave trade, and which shall wholly belong and continue wholly to belong to his Majesty's subjects duly entitled to be owners of ships or vessels registered by virtue of this act. — § 5.

Mediterranean Pass may be issued at Malta or Gibraltar for certain Ships only. — No Mediterranean pass shall be issued for the use of any ship, as being a ship belonging to Malta or Gibraltar, except such as be duly registered at those places respectively, or such as, not being entitled to be so registered, shall have wholly belonged, before the 10th day of October, 1827, and shall have continued wholly to belong, to persons actually residing at those places respectively, as inhabitants thereof, and entitled to be owners of British ships there registered, or who, not being so entitled, shall have so resided upwards of 15 years prior to the said 10th day of October, 1827. — § 6.

Foreign Repairs not to exceed 20s. per Ton. — No ship or vessel shall continue to enjoy the privileges of a British ship after the same shall have been repaired in a foreign country, if such repairs shall exceed the sum of 20*s.* for every ton of the burden of the said ship or vessel, unless such repairs shall have been necessary by reason of extraordinary damage sustained by such ship or vessel during her absence from his Majesty's dominions, to enable her to perform the voyage in which she shall have been engaged, and to return to some port or place in the said dominions; and whenever any ship or vessel which has been so repaired in a foreign country shall arrive at any port in his Majesty's dominions as a British registered ship or vessel, the master or other person having the command or charge of the same shall, upon the first entry thereof, report to the collector and comptroller of his Majesty's customs at such port that such ship or vessel has been so repaired, under penalty of 20*s.* for every ton of the burden of such ship or vessel, according to the admeasurement thereof; and if it shall be proved to the satisfaction of the commissioners of his Majesty's customs that such ship or vessel was seaworthy at the time when she last departed from any port or place in his Majesty's dominions, and that no greater quantity of such repairs have been done to the said vessel than was necessary as aforesaid, it shall be lawful for the said commissioners, upon a full consideration of all the circumstances, to direct the collector and comptroller of the port where such ship or vessel shall have arrived, or where she shall then be, to certify on the certificate of the registry of such ship or vessel that it has been proved to the satisfaction of the commissioners of his Majesty's customs that the privileges of the said ship or vessel have not been forfeited, notwithstanding the repairs which have been done to the same in a foreign country. — § 7.

Ships declared unseaworthy to be deemed Ships lost or broken up. — If any ship or vessel registered under the authority of this or any other act shall be deemed or declared to be stranded or unseaworthy, and incapable of being recovered or repaired to the advantage of the owners thereof, and shall for such reasons be sold by order or decree of any competent court for the benefit of the owners of such ship or vessel, or other persons interested therein, the same shall be taken and deemed to be a ship or vessel lost, or broken up to all intents and purposes within the meaning of this act, and shall never again be entitled to the privileges of a British-built ship for any purposes of trade or navigation. — § 8.

British Ships captured not to be again entitled to Registry, &c. — No British ship or vessel which has been

or shall hereafter be captured by and become prize to an enemy or sold to foreigners shall again be entitled to the privileges of a British ship: provided that nothing contained in this act shall extend to prevent the registering of any ship or vessel whatever which shall afterwards be condemned in any court of admiralty as prize of war, or in any competent court, for breach of laws made for the prevention of the slave trade. — § 9.

Ships shall be registered at the Port to which they belong. — No such registry shall hereafter be made, or certificate thereof granted, by any person or persons herein-before authorised to make such registry and grant such certificate, in any other port or place than the port or place to which such ship or vessel shall properly belong, except so far as relates to such ships or vessels as shall be condemned as prizes in any of the islands of Guernsey, Jersey, or Man, which ships or vessels shall be registered in manner herein-after directed; but that all and every registry and certificate made and granted in any port or place to which any such ship or vessel does not properly belong shall be utterly null and void to all intents and purposes, unless the officers aforesaid shall be specially authorised and empowered to make such registry and grant such certificate in any other port by an order in writing under the hands of the commissioners of his Majesty's customs, which order the said commissioners are hereby authorised and empowered to issue, if they shall see fit: and at every port where registry shall be made in pursuance of this act, a book shall be kept by the collector and comptroller, in which all the particulars contained in the form of the certificate of the registry herein-before directed to be used shall be duly entered; and every registry shall be numbered in progression, beginning such progressive numeration at the commencement of each and every year; and such collector and comptroller shall forthwith, or within 1 month at the farthest, transmit to the commissioners of his Majesty's customs a true and exact copy, together with the number, of every certificate which shall be by them so granted. — § 10.

Port to which Vessels shall be deemed to belong. — Every ship or vessel shall be deemed to belong to some port at or near to which some or one of the owners, who shall make and subscribe the declaration required by this act before registry be made, shall reside; and whenever such owner or owners shall have transferred all his or their share or shares in such ship or vessel, the same shall be registered *de novo* before such ship or vessel shall sail or depart from the port to which she shall then belong, or from any other port which shall be in the same part of the U. Kingdom, or the same colony, plantation, island, or territory as the said port shall be in: provided always, that if the owner or owners of such ship or vessel cannot in sufficient time comply with the requisites of this act so that registry may be made before it shall be necessary for such ship or vessel to sail or depart upon another voyage, it shall be lawful for the collector and comptroller of the port where such ship or vessel may then be to certify upon the back of the existing certificate of registry of such ship or vessel, that the same is to remain in force for the voyage upon which the said ship or vessel is then about to sail or depart: provided also, that if any ship or vessel shall be built in any of the colonies, plantations, islands, or territories in Asia, Africa, or America, to his Majesty belonging, for owners residing in the U. Kingdom, and the master of such ship or vessel, or the agent for the owner or owners thereof, shall have produced to the collector and comptroller of the port at or near to which such ship or vessel was built, the certificate of the builder required by this act, and shall have made and subscribed a declaration before such collector and comptroller of the names and descriptions of the principal owners of such ship or vessel, and that she is the identical ship or vessel mentioned in such certificate of the builder, and that no foreigner, to the best of his knowledge and belief, has any interest therein; the collector and comptroller of such port shall cause such ship or vessel to be surveyed and measured in like manner as is directed for the purpose of registering any ship or vessel, and shall give the master of such ship or vessel a certificate under their hands and seals, purporting to be under the authority of this act, and stating when and where and by whom such ship or vessel was built, the description, tonnage, and other particulars required on registry of any ship or vessel, and such certificate shall have all the force and virtue of a certificate of registry under this act, during the term of 2 years, unless such ship shall sooner arrive at some place in the U. Kingdom; and such collector and comptroller shall transmit a copy of such certificate to the commissioners of his Majesty's customs. — § 11.

Persons residing in foreign Countries may not be Owners. — No person who has taken the oath of allegiance to any foreign state, except under the terms of some capitulation, unless he shall afterwards become a denizen or naturalised subject of the U. Kingdom by his Majesty's letters patent or by act of parliament, nor any person usually residing in any country not under the dominion of his Majesty, his heirs and successors, unless he be a member of some British factory, or agent for or partner in any house or copartnership actually carrying on trade in Great Britain or Ireland, shall be entitled to be the owner, in whole or in part, directly or indirectly, of any ship or vessel required and authorised to be registered by virtue of this act; save and except that it shall be lawful for any person who was a member of the company of merchants trading to the Levant seas at the time of its dissolution, and who was a resident at any of the factories of the said company, to continue to hold any share or shares in any British registered ship of which at the time of such residence he was an owner or part owner, although such person shall continue to reside at any of the places where such factories had existed prior to the dissolution of the said company. — § 12.

Declaration to be made by subscribing Owners previous to Registry. — No registry shall henceforth be made or certificate granted until the following declaration be made and subscribed, before the person or persons herein-before authorised to make such registry and grant such certificate respectively, by the owner of such ship or vessel if such ship or vessel is owned by or belongs to 1 person only, or in case there shall be 2 joint owners, then by both of such joint owners if both shall be resident within 20 miles of the port or place where such registry is required, or by 1 of such owners if 1 or both of them shall be resident at a greater distance from such port or place; or if the number of such owners or proprietors shall exceed 2, then by the greater part of the number of such owners or proprietors if the greater number of them shall be resident within 20 miles of such port or place as aforesaid, not in any case exceeding 3 of such owners or proprietors, unless a greater number shall be desirous to join in making and subscribing the said declaration, or by 1 of such owners if all, or all except 1, shall be resident at a greater distance: —

"I *A. B.* of [*place of residence and occupation*] do truly declare, that the ship or vessel [*name*] of [*port or place*], whereof [*master's name*] is at present master, being [*kind of built, burden, &c. as described in the certificate of the surveying officer*], was [*when and where built, or, if prize or forfeited, capture and condemnation as such*], and that I the said *A. B.* [*and the other owners' names and occupations, if any, and where they respectively reside, viz. town, place, or parish, and county, or if member of and resident in any factory in foreign parts, or in any foreign town or city, being an agent for or partner in any house or copartnership actually carrying on trade in Great Britain or Ireland, the name of such factory, foreign town, or city, and the names of such house and copartnership*] am [or are] sole owner [or owners] of the said vessel, and that no other person or persons whatever hath or have any right, title, interest, share or property therein or thereto; and that I the said *A. B.* [*and the said other owners, if any*] am [or are] truly and *bond fide* a subject [or subjects] of Great Britain; and that I the said *A. B.* have not [*nor have any of the other owners, to the best of my knowledge and belief*] taken the oath of allegiance to any foreign state whatever [*except under the terms of some capitulation, describing the particulars thereof*], or that since my taking [or his or their taking] the oath of allegiance to [*naming the foreign states respectively to which he or any of the said owners shall have taken the same*] I have [or he or they hath or have] become a denizen [or denizens, or naturalised subject or subjects, *as the case may be*] of the U. Kingdom of Great Britain and Ireland by his Majesty's letters patent or by an act of parliament [*naming the times when such letters of denization have been granted respectively, or the year or years in which such act or acts for naturalisation have passed respectively*]; and that no foreigner, directly or indirectly, hath any share or part interest in the said ship or vessel."

Provided always, that if it shall become necessary to register any ship or vessel belonging to any corporate body in the U. Kingdom, the following declaration, in lieu of the declaration herein-before directed, shall be taken and subscribed by the secretary or other proper officer of such corporate body (that is to say,)

"I A. B., secretary or officer of [*name of company or corporation*] do truly declare, that the ship or vessel [*name*] of [*port*], whereof [*master's name*] is at present master, being [*kind of built, burden, &c. as described in the certificate of the surveying officer*], was [*when and where built, or, if prize or forfeited*] *capture and condemnation as such*], and that the same doth wholly and truly belong to [*name of company or corporation*]." — Sect. 13.

Addition to Declaration in case the required Number of Owners do not attend. — In case the required number of joint owners or proprietors of any ship or vessel shall not personally attend to make and subscribe the declaration herein-before directed to be made and subscribed, then and in such case such owner or owners, proprietor or proprietors, as shall personally attend and make and subscribe the declaration aforesaid, shall further declare that the part owner or part owners of such ship or vessel then absent is or are not resident within 20 miles of such port or place, and hath or have not, to the best of his or their knowledge or belief, wilfully absented himself or themselves in order to avoid the making the declaration herein-before directed to be made and subscribed, or is or are prevented by illness from attending to make and subscribe the said declaration. — § 14.

Vessels to be surveyed previous to Registry. — Previous to the registering or granting of any certificate of registry as aforesaid, some one or more person or persons appointed by the commissioners of customs (taking to his or their assistance, if he or they shall judge it necessary, one or more person or persons skilled in the building and admeasurement of ships) shall go on board of every such ship or vessel as is to be registered, and shall strictly and accurately examine and admeasure every such ship or vessel as to all and every particular contained in the form of the certificate herein-before directed, in the presence of the master, or of any other person who shall be appointed for that purpose on the part of the owner or owners, or in his or their absence by the said master; and shall deliver a true and just account in writing of all such particulars of the built, description, and admeasurement of every such ship or vessel as are specified in the form of the certificate above recited to the collector and comptroller authorised as aforesaid to make such registry and grant such certificate of registry; and the said master or other person attending on the part of the owner or owners is hereby required to sign his name also to the certificate of such surveying or examining officer, in testimony of the truth thereof, provided such master or other person shall consent and agree to the several particulars set forth and described therein. — § 15.

Mode of Admeasurement to ascertain Tonnage. — This and the three following clauses for ascertaining the tonnage of ships were repealed by the act 5 & 6 Will. 4. c. 56., which enacts other and more correct rules for determining the tonnage. An abstract of the last-mentioned act will be found under the art. TONNAGE.

Bond to be given at the Time of Registry. — At the time of the obtaining of the certificate of registry as aforesaid, sufficient security by bond shall be given to his Majesty, his heirs and successors, by the master and such of the owners as shall personally attend, as is herein-before required, such security to be approved of and taken by the person or persons herein-before authorised to make such registry and grant such certificate of registry at the port or place in which such certificate shall be granted, in the penalties following; (that is to say,) if such ship or vessel shall be a decked vessel, or be above the burden of 15 tons, and not exceeding 50 tons, then in the penalty of 100*l.*; if exceeding the burden of 50 tons and not exceeding 100 tons, then in the penalty of 300*l.*; if exceeding the burden of 100 tons, and not exceeding 200 tons, then in the penalty of 500*l.*; if exceeding the burden of 200 tons and not exceeding 300 tons, then in the penalty of 800*l.*; and if exceeding the burden of 300 tons, then in the penalty of 1,000*l.*; and the condition of every such bond shall be, that such certificate shall not be sold, lent, or otherwise disposed of to any person or persons whatever, and that the same shall be solely made use of for the service of the ship or vessel for which it is granted; and that in case such ship or vessel shall be lost, or taken by the enemy, burnt, or broken up, or otherwise prevented from returning to the port to which she belongs, or shall on any account have lost and forfeited the privileges of a British ship, or shall have been seized and legally condemned for illicit trading, or shall have been taken in execution for debt and sold by due process of law, or shall have been sold to the Crown, or shall under any circumstances have been registered *de novo*, the certificate, if preserved, shall be delivered up, within 1 month after the arrival of the master in any port or place in his Majesty's dominions, to the collector and comptroller of some port in Great Britain or of the Isle of Man, or of the British plantations, or to the governor, lieutenant-governor, or commander-in-chief for the time being of the islands of Guernsey or Jersey; and that if any foreigner, or any person or persons for the use and benefit of any foreigner, shall purchase or otherwise become entitled to the whole or to any part or share of or any interest in such ship or vessel, and the same shall be within the limits of any port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of the British colonies, plantations, islands, or territories aforesaid, then and in such case the certificate of registry shall, within 7 days after such purchase or transfer of property in such ship or vessel, be delivered up to the person or persons herein-before authorised to make registry and grant certificate of registry at such port or place respectively as aforesaid; and if such ship or vessel shall be in any foreign port when such purchase or transfer of property shall take place, then that the certificate shall be delivered up to the British consul or other chief British officer resident at or nearest to such foreign port; or if such ship or vessel shall be at sea when such purchase or transfer of property shall take place, then that the certificate shall be delivered up to the British consul or other chief British officer at the foreign port or place in or at which the master or other person having or taking the charge or command of such ship or vessel shall first arrive after such purchase or transfer of property at sea, immediately after his arrival at such foreign port; but if such master or other person who had the command thereof at the time of such purchase or transfer of property at sea shall not arrive at a foreign port, but shall arrive at some port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of his Majesty's said colonies, plantations, islands, or territories, then that the certificate shall be delivered up, in manner aforesaid, within 14 days after the arrival of such ship or vessel, or of the person who had the command thereof, in any port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of any of his Majesty's said colonies, plantations, islands, or territories: provided always, that if it shall happen that at the time of registry of any ship or vessel the same shall be at any other port than the port to which she belongs, so that the master of such ship or vessel cannot attend at the port of registry to join with the owner or owners in such bond as aforesaid, it shall be lawful for him to give a separate bond, to the like effect, at the port where such ship or vessel may then be, and the collector and comptroller of such other port shall transmit such bond to the collector and comptroller of the port where such ship or vessel is to be registered, and such bond, and the bond also given by the owner or owners, shall together be of the same effect against the master and owner or owners, or either of them, as if they had bound themselves jointly and severally in one bond. — § 20.

When Master is changed, new Master to give similar Bond. — When and so often as the master or other person having or taking the charge or command of any ship or vessel registered in manner herein directed shall be changed, the master or owner of such ship or vessel shall deliver to the person or persons herein authorised to make such registry and grant such certificates of registry at the port where such change shall take place the certificate of registry belonging to such ship or vessel, who shall thereupon indorse and subscribe a memorandum of such change, and shall forthwith give notice of the same to the proper officer of the port or place where such ship or vessel was last registered pursuant to this act, who shall likewise make a memorandum of the same in the book of registers, which is hereby directed and required to be kept, and shall forthwith give notice thereof to the commissioners of his Majesty's customs: provided always, that before the name of such new master shall be indorsed on the certificate of registry he shall be required to give and shall give a bond in the like penalties and under the same conditions as are contained in the bond herein-before required to be given at the time of registry of any ship or vessel. — § 21.

Bonds liable to same Duties of Stamps as Bonds for Customs. — All bonds required by this act shall be

liable to the same duties of stamps as bonds given for or in respect of the duties of customs are or shall be liable to under any act for the time being in force for granting duties of stamps. — § 22.

Certificate of Registry to be given up by all Persons, as directed by the Bond. — If any person whatever shall at any time have possession of and wilfully detain any certificate of registry granted under this or any other act, which ought to be delivered up to be cancelled according to any of the conditions of the bond herein-before required to be given upon the registry of any ship or vessel, such person is hereby required and enjoined to deliver up such certificate of registry in manner directed by the conditions of such bond in the respective cases and under the respective penalties therein provided. — § 23.

Name of Vessel which has been registered never afterwards to be changed. — It shall not be lawful for any owner or owners of any ship or vessel to give any name to such ship or vessel other than that by which she was first registered in pursuance of this or any other act; and the owner or owners of all and every ship or vessel which shall be so registered shall, before such ship or vessel, after such registry, shall begin to take in any cargo, paint or cause to be painted, in white or yellow letters, of a length of not less than 4 inches, upon a black ground, on some conspicuous part of the stern, the name by which such ship or vessel shall have been registered pursuant to this act, and the port to which she belongs, in a distinct and legible manner, and shall so keep and preserve the same: and if such owner or owners or master or other person having or taking the charge or command of such ship or vessel shall permit such ship or vessel to begin to take in any cargo before the name of such ship or vessel has been so painted as aforesaid, or shall wilfully alter, erase, obliterate, or in anywise hide or conceal, or cause or procure or permit the same to be done (unless in the case of square-rigged vessels in time of war), or shall in any written or printed paper, or other document, describe such ship or vessel by any name other than that by which she was first registered pursuant to this act, or shall verbally describe, or cause to procure or permit such ship or vessel to be described, by any other name to any officer or officers of his Majesty's revenue in the due execution of his or their duty, then and in every such case such owner or owners or master or other person having or taking the charge or command of such ship or vessel shall forfeit the sum of 100*l.* — § 24.

Builder's Certificate of Particulars of Ship. — All and every person and persons who shall apply for a certificate of the registry of any ship or vessel shall and they are hereby required to produce to the person or persons authorised to grant such certificate a true and full account, under the hand of the builder of such ship or vessel, of the proper denomination, and of the time when and the place where such ship or vessel was built, and also an exact account of the tonnage of such ship or vessel, together with the name of the first purchaser or purchasers thereof (which account such builder is hereby directed and required to give under his hand on the same being demanded by such person or persons so applying for a certificate as aforesaid), and shall also make and subscribe a declaration before the person or persons herein-before authorised to grant such certificate that the ship or vessel for which such certificate is required is the same with that which is so described by the builder as aforesaid. — § 25.

Certificate of Registry lost or mislaid. — If the certificate of registry of any ship or vessel shall be lost or mislaid, so that the same cannot be found or obtained for the use of such ship or vessel when needful, and proof thereof shall be made to the satisfaction of the commissioners of his Majesty's customs, such commissioners shall and may permit such ship or vessel to be registered *de novo*, and a certificate thereof to be granted: provided always, that if such ship or vessel be absent and far distant from the port to which she belongs, or by reason of the absence of the owner or owners, or of any other impediment, registry of the same cannot then be made in sufficient time, such commissioners shall and may grant a licence for the present use of such ship or vessel, which licence shall, for the time and to the extent specified therein, and no longer, be of the same force and virtue as a certificate of registry granted under this act: provided always, that before such registry *de novo* be made, the owner or owners and master shall give bond to the commissioners aforesaid, in such sum as to them shall seem fit, with a condition that if the certificate of registry shall at any time afterwards be found, the same shall be forthwith delivered to the proper officers of his Majesty's customs to be cancelled, and that no illegal use has been or shall be made thereof with his or their privity or knowledge; and further, that before any such licence shall be granted as aforesaid, the master of such ship or vessel shall also make and subscribe a declaration that the same has been registered as a British ship, naming the port where and the time when such registry was made, and all the particulars contained in the certificate thereof, to the best of his knowledge and belief, and shall also give such bond and with the same condition as is before mentioned: provided also, that before any such licence shall be granted, such ship or vessel shall be surveyed in like manner as if a registry *de novo* were about to be made thereof; and the certificate of such survey shall be preserved by the collector and comptroller of the port to which such ship or vessel shall belong; and in virtue thereof it shall be lawful for the said commissioners and they are hereby required to permit such ship or vessel to be registered after her departure, whenever the owner or owners shall personally attend to take and subscribe the declaration required by this act before registry be made, and shall also comply with all other requisites of this act, except so far as relates to the bond to be given by the master of such ship or vessel; which certificate of registry the said commissioners shall and may transmit to the collector and comptroller of any other port, to be by them given to the master of such ship or vessel, upon his giving such bond, and delivering up the licence which had been granted for the then present use of such ship or vessel. — § 26.

Persons detaining Certificate of Registry to forfeit 100l. — In case any person who shall have received or obtained by any means, or for any purpose whatever, the certificate of the registry of any ship or vessel, (whether such person shall claim to be the master or to be the owner or one of the owners of such ship or vessel, or not), shall wilfully detain and refuse to deliver up the same to the proper officers of customs, for the purposes of such ship or vessel, as occasion shall require, or to the person or persons having the actual command, possession, and management of such ship or vessel as the ostensible and reputed master, or as the ostensible and reputed owner or owners thereof, it may and shall be lawful to and for any such last-mentioned person to make complaint on oath of such detainer and refusal to any justice of the peace residing near to the place where such detainer and refusal shall be, in Great Britain or Ireland, or to any member of the supreme court of justice or any justice of the peace in the islands of Jersey, Guernsey, or Man, or in any colony, plantation, island, or territory to his Majesty belonging in Asia, Africa, or America, or in Malta, Gibraltar, or Heligoland, where such detainer and refusal shall be in any of the places last mentioned; and on such complaint the said justice or other magistrate shall and is hereby required, by warrant under his hand and seal, to cause the person so complained against to be brought before him to be examined touching such detainer and refusal; and if it shall appear to the said justice or other magistrate, on examination of such person or otherwise, that the said certificate of registry is not lost or mislaid, but is wilfully detained by the said person, such person shall be thereof convicted, and shall forfeit and pay the sum of 100*l.*, and on failure of payment thereof he shall be committed to the common gaol, there to remain without bail or mainprize for such time as the said justice or other magistrate shall in his discretion deem proper, not being less than 3 months nor more than 12 months: and the said justice or other magistrate shall and he is hereby required to certify the aforesaid detainer, refusal, and conviction to the person or persons who granted such certificate of registry for such ship or vessel, who shall, on the terms and conditions of law being complied with, make registry of such ship or vessel *de novo*, and grant a certificate thereof conformably to law, notifying on the back of such certificate the ground upon which the ship or vessel was so registered *de novo*; and if the person who shall have detained and refused to deliver up such certificate of registry as aforesaid, or shall be verily believed to have detained the same, shall have absconded, so that the said warrant of the justice or other magistrate cannot be executed upon him, and proof thereof shall be made to the satisfaction of the com-

missioners of his Majesty's customs, it shall be lawful for the said commissioners to permit such ship or vessel to be registered *de novo*, or otherwise in their discretion, to grant a licence for the present use of such ship or vessel in like manner as is herein-before provided in the case wherein the certificate of registry is lost or mislaid. — § 27.

Ship altered in certain Manner to be registered de novo. — If any ship or vessel, after she shall have been registered pursuant to the directions of this act, shall in any manner whatever be altered so as not to correspond with all the particulars contained in the certificate of her registry, in such case such ship or vessel shall be registered *de novo*, in manner herein-before required, as soon as she returns to the port to which she belongs, or to any other port which shall be in the same part of the U. Kingdom, or in the same colony, plantation, island, or territory as the said port shall be in, on failure whereof such ship or vessel shall, to all intents and purposes, be considered and deemed and taken to be a ship or vessel not duly registered. — § 28.

Vessels condemned as prize, &c. — The owner or owners of all such ships and vessels as shall be taken by any of his Majesty's ships or vessels of war, or by any private or other ship or vessel, and condemned as lawful prize in any court of admiralty, or of such ships or vessels as shall be condemned in any competent court as forfeited for breach of the laws for the prevention of the slave trade, shall, for the purpose of registering any such ship or vessel, produce to the collector and comptroller of customs a certificate of the condemnation of such ship or vessel, under the hand and seal of the judge of the court in which such ship or vessel shall have been condemned (which certificate such judge is hereby authorised and required to grant), and also a true and exact account in writing of all the particulars contained in the certificate herein-before set forth, to be made and subscribed by one or more skilful person or persons to be appointed by the court then and there to survey such ship or vessel, and shall also make and subscribe a declaration before the collector and comptroller that such ship or vessel is the same vessel which is mentioned in the certificate of the judge aforesaid. — § 29.

Prize Vessels not to be registered at Guernsey, Jersey, or Man. — No ship or vessel which shall be taken and condemned as prize or forfeiture as aforesaid shall be registered in the islands of Guernsey, Jersey, or Man, although belonging to his Majesty's subjects residing in those islands, or in some one or other of them; but the same shall be registered either at Southampton, Weymouth, Exeter, Plymouth, Falmouth, Liverpool, or Whitehaven, by the collector and comptroller at such ports respectively, who are hereby authorised and required to register such ship or vessel, and to grant a certificate thereof in the form and under the regulations and restrictions in this act contained. — § 30.

Transfers of Interest to be made by Bill of Sale. — When and so often as the property in any ship or vessel, or any part thereof, belonging to any of his Majesty's subjects, shall, after registry thereof, be sold to any other or others of his Majesty's subjects, the same shall be transferred by bill of sale or other instrument in writing, containing a recital of the certificate of registry of such ship or vessel, or the principal contents thereof, otherwise such transfer shall not be valid or effectual for any purpose whatever, either in law or in equity: provided always, that no bill of sale shall be deemed void by reason of any error in such recital or by the recital of any former certificate of registry instead of the existing certificate, provided the identity of the ship or vessel intended in the recital be effectually proved thereby. — § 31.

Property in Ships to be divided into Sixty-four Parts or Shares. — The property in every ship or vessel of which there are more than one owner shall be taken and considered to be divided into 64 equal parts or shares, and the proportion held by each owner shall be described in the registry as being a certain number of 64th parts or shares; and no person shall be entitled to be registered as an owner of any ship or vessel in respect of any proportion of such ship or vessel which shall not be an integral 64th part or share of the same: and upon the first registry of any ship or vessel, the owner or owners who shall take and subscribe the declaration required by this act, before registry be made, shall also declare the number of such parts or shares then held by each owner, and the same shall be so registered accordingly: provided always, that if it shall at any time happen that the property of any owner or owners in any ship or vessel cannot be reduced by division into any number of integral 64th parts or shares, it shall and may be lawful for the owner or owners of such fractional parts as shall be over and above such number of integral 64th parts or shares into which such property in any ship or vessel can be reduced by division to transfer the same one to another, or jointly to any new owner, by memorandum upon their respective bills of sale, or by fresh bill of sale, without such transfer being liable to any stamp duty: provided also, that the right of any owner or owners to any such fractional parts shall not be affected by reason of the same not having been registered: provided also, that it shall be lawful for any number of such owners, named and described in such registry, being partners in any house or copartnership actually carrying on trade in any part of his Majesty's dominions, to hold any ship or vessel, or any share or shares of any ship or vessel, in the name of such house or copartnership, as joint owners thereof, without distinguishing the proportionate interest of each of such owners, and that such ship or vessel, or the share or shares thereof so held in copartnership, shall be deemed and taken to be partnership property to all intents and purposes, and shall be governed by the same rules, both in law and equity, as relate to and govern all other partnership property in any other goods, chattels, and effects whatsoever. — § 32.

Only thirty-two Persons to be Owners of any Ship at One Time. — No greater number than 32 persons shall be entitled to be legal owners at one and the same time of any ship or vessel, as tenants in common, or to be registered as such: provided always, that nothing herein contained shall affect the equitable title of minors, heirs, legatees, creditors, or others, exceeding that number, duly represented by or holding from any of the persons within the said number, registered as legal owners of any share or shares of such ship or vessel: provided also, that if it shall be proved to the satisfaction of the commissioners of customs that any number of persons have associated themselves as a joint stock company, for the purpose of owning any ship or vessel, or any number of ships or vessels, as the joint property of such company, and that such company have duly elected or appointed any number, not less than 3, of the members of the same to be trustees of the property in such ship or vessel or ships or vessels so owned by such company, it shall be lawful for such trustees or any 3 of them, with the permission of such commissioners, to make and subscribe the declaration required by this act before registry be made, except that, instead of stating therein the names and descriptions of the other owners, they shall state the name and description of the company to which such ship or vessel or ships or vessels shall in such manner belong. — § 33.

Bills of Sale not effectual until produced to Officers of Customs. — No bill of sale or other instrument in writing shall be valid and effectual to pass the property in any ship or vessel, or in any share thereof, or for any other purpose, until such bill of sale or other instrument in writing shall have been produced to the collector and comptroller of the port at which such ship or vessel is already registered, or to the collector and comptroller of any other port at which she is about to be registered *de novo*, as the case may be, nor until such collector and comptroller respectively shall have entered in the book of such last registry, in the one case, or in the book of such registry *de novo*, after all the requisites of law for such registry *de novo* shall have been duly complied with, in the other case (and which they are respectively hereby required to do upon the production of the bill of sale or other instrument for that purpose), the name, residence, and description of the vendor or mortgagor, or of each vendor or mortgagor, if more than 1, the number of shares transferred, the name, residence, and description of the purchaser or mortgagee, or of each purchaser or mortgagee if more than 1, and the date of the bill of sale or other instrument, and of the production of it; and further, if such ship or vessel is not about to be registered *de novo*, the collector and comptroller of the port where such ship is registered shall and they are hereby required to indorse the aforesaid particulars of such bill of sale or other instrument on the certificate of registry

of the said ship or vessel, when the same shall be produced to them for that purpose, in manner and to the effect following: —

"Custom-house [*port and date; name, residence, and description of vendor or mortgagor*] has transferred by [*bill of sale or other instrument*] dated [*date; number of shares*] to [*name, residence, and description of purchaser or mortgagee.*]

A. B., Collector.
C. D., Comptroller."

And forthwith to give notice thereof to the commissioners of customs; and in case the collector and comptroller shall be desired so to do, and the bill of sale or other instrument shall be produced to them for that purpose, then the said collector and comptroller are hereby required to certify, by indorsement upon the bill of sale or other instrument, that the particulars before mentioned have been so entered in the book of registry, and indorsed upon the certificate of registry as aforesaid. — § 34.

Entry of Bill of Sale to be valid, except in certain Cases. — When and so soon as the particulars of any bill of sale or other instrument by which any ship or vessel, or any share or shares thereof, shall be transferred, shall have been so entered in the book of registry as aforesaid, the said bill of sale or other instrument shall be valid and effectual to pass the property thereby intended to be transferred as against all and every person and persons whatsoever, and to all intents and purposes, except as against such subsequent purchasers and mortgagees who shall first procure the indorsement to be made upon the certificate of registry of such ship or vessel in manner herein-after mentioned. — § 35.

When a Bill of Sale has been entered for any Shares, Thirty Days shall be allowed for indorsing the Certificate of Registry, before any other Bill of Sale for the same shall be entered. — When and after the particulars of any bill of sale or other instrument by which any ship or vessel, or any share or shares thereof, shall be transferred, shall have been so entered in the book of registry as aforesaid, the collector and comptroller shall not enter in the book of registry the particulars of any other bill of sale or instrument purporting to be a transfer by the same vendor or mortgagor or vendors or mortgagors of the same ship or vessel, share or shares thereof, to any other person or persons, unless 30 days shall elapse from the day on which the particulars of the former bill of sale or other instrument were entered in the book of registry; or in case the ship or vessel was absent from the port to which she belonged at the time when the particulars of such former bill of sale or other instrument were entered in the book of registry, then unless 30 days shall have elapsed from the day on which the ship or vessel arrived at the port to which the same belonged; and in case the particulars of 2 or more such bills of sale or other instruments as aforesaid shall at any time have been entered in the book of registry of the said ship or vessel, the collector and comptroller shall not enter in the book of registry the particulars of any other bill of sale or other instrument as aforesaid unless 30 days shall in like manner have elapsed from the day on which the particulars of the last of such bill of sale or other instrument were entered in the books of registry, or from the day on which the ship or vessel arrived at the port to which she belonged, in case of her absence as aforesaid; and in every case where there shall at any time happen to be 2 or more transfers by the same owner or owners of the same property in any ship or vessel entered in the book of registry as aforesaid, the collector and comptroller are hereby required to indorse upon the certificate of registry of such ship or vessel the particulars of that bill of sale or other instrument under which the person or persons claims or claim property, who shall produce the certificate of registry for that purpose within 30 days next after the entry of his said bill of sale or other instrument in the book of registry as aforesaid, or within 30 days next after the return of the said ship or vessel to the port to which she belongs, in case of her absence at the time of such entry as aforesaid; and in case no person or persons shall produce the certificate of registry within either of the said spaces of 30 days, then it shall be lawful for the collector and comptroller and they are hereby required to indorse upon the certificate of registry the particulars of the bill of sale or other instrument to such person or persons as shall first produce the certificate of registry for that purpose, it being the true intent and meaning of this act that the several purchasers and mortgagees of such ship or vessel, share or shares thereof, when more than 1 appear to claim the same property, or to claim security on the same property, in the same rank and degree, shall have priority one over the other, not according to the respective times when the particulars of the bill of sale or other instrument by which such property was transferred to them were entered in the book of registry as aforesaid, but according to the time when the indorsement is made upon the certificate of registry as aforesaid: provided always, that if the certificate of registry shall be lost or mislaid, or shall be detained by any person whatever, so that the indorsement cannot in due time be made thereon, and proof thereof shall be made by the purchaser or mortgagee, or his known agent, to the satisfaction of the commissioners of his Majesty's customs, it shall be lawful for the said commissioners to grant such further time as to them shall appear necessary for the recovery of the certificate of registry, or for the registry *de novo* of the said ship or vessel under the provisions of this act; and thereupon the collector and comptroller shall make a memorandum in the book of registers of the further time so granted, and during such time no other bill of sale shall be entered for the transfer of the same ship or vessel, or the same share or shares thereof, or for giving the same security thereon. — § 36.

Bills of Sale may be produced after Entry at other Ports. — If the certificate of registry of such ship or vessel shall be produced to the collector and comptroller of any port where she may then be, after any such bill of sale shall have been recorded at the port to which she belongs, together with such bill of sale, containing a notification of such record, signed by the collector and comptroller of such port as before directed, it shall be lawful for the collector and comptroller of such other port to indorse on such certificate of registry (being required so to do) the transfer mentioned in such bill of sale, and such collector and comptroller shall give notice thereof to the collector and comptroller of the port to which such ship or vessel belongs, who shall record the same in like manner as if they had made such indorsement themselves, but inserting the name of the port at which such indorsement was made: provided always, that the collector and comptroller of such other port shall first give notice to the collector and comptroller of the port to which such ship or vessel belongs of such requisition made to them to indorse the certificate of registry, and the collector and comptroller of the port to which such ship or vessel belongs shall thereupon send information to the collector and comptroller of such other port, whether any and what other bill or bills of sale have been recorded in the book of the registry of such ship or vessel; and the collector and comptroller of such other port, having such information, shall proceed in manner directed by this act in all respects to the indorsing of the certificate of registry as they would do if such port were the port to which such vessel belonged. — § 37.

If upon Registry de novo any Bill of Sale shall not have been recorded, the same shall then be produced. — If it shall become necessary to register any ship or vessel *de novo*, and any share or shares of such ship or vessel shall have been sold since she was last registered, and the transfer of such share or shares shall not have been recorded and indorsed in manner herein-before directed, the bill of sale thereof shall be produced to the collector and comptroller of his Majesty's customs, who are to make registry of such ship or vessel, otherwise such sale shall not be noticed in such registry *de novo*, except as herein-after excepted: provided always, that upon the future production of such bill of sale, and of the existing certificate of registry, such transfer shall and may be recorded and indorsed as well after such registry *de novo* as before. — § 38.

Upon Change of Property, Registry de novo may be granted. — If upon any change of property in any ship or vessel, the owner or owners shall desire to have the same registered *de novo*, although not required by this act, and the owner or proper number of owners shall attend at the Custom-house at the port to which such ship or vessel belongs for that purpose, it shall be lawful for the collector and comptroller of his Majesty's customs at such port to make registry *de novo* of such ship or vessel at the same port, and to grant a certificate thereof, the several requisites herein-before in this act mentioned and directed being first duly observed and complied with. — § 39.

Copies of Declarations, &c. and of Extracts from Books of Registry admitted in Evidence.—The collector and comptroller of customs at any port or place, and the person or persons acting for them respectively, shall, upon every reasonable request by any person or persons whomsoever, produce and exhibit, for his, her, or their inspection and examination, any oath or declaration sworn or made by any such owner or owners, proprietor or proprietors, and also any register or entry in any book or books of registry required by this act to be made or kept relative to any ship or vessel, and shall, upon every reasonable request by any person or persons whomsoever, permit him, her, or them to take a copy or copies or an extract or extracts thereof respectively; and the copy and copies of any such oath or declaration, register or entry, shall, upon being proved to be a true copy or copies thereof respectively, be allowed and received as evidence upon every trial at law, without the production of the original or originals, and without the

could or might legally be admitted or received in evidence.—§ 40.

Vessels or Shares sold in the Absence of Owners without formal Powers.—If the ship or vessel, or the share or shares of any owner thereof who may be out of the kingdom, shall be sold in his absence by his known agent or correspondent, under his directions either expressed or implied, and acting for his interest in that behalf, and such agent or correspondent who shall have executed a bill of sale to the purchaser of the whole of such ship or vessel, or of any share or shares thereof, shall not have received a legal power to execute the same, it shall be lawful for the commissioners of his Majesty's customs, upon application made to them, and proof to their satisfaction of the fair dealings of the parties, to permit such transfer to be registered, if registry *de novo* be necessary, or to be recorded and indorsed, as the case may be, in manner directed by this act, as if such legal power had been produced; and also if it shall happen that any bill of sale cannot be produced or if, by reason of distance of time, or the absence or death of parties concerned, it cannot be proved that a bill of sale for any share or shares in any ship or vessel had been executed, and registry *de novo* of such ship or vessel shall have become necessary, it shall be lawful for the commissioners of his Majesty's customs, upon proof to their satisfaction of the fair dealings of the parties, to permit such ship or vessel to be registered *de novo* in like manner as if a bill of sale for the transfer of such share or shares had been produced: provided always, that in any of the cases herein mentioned, good and sufficient security shall be given to produce a legal power or bill of sale within a reasonable time, or to abide the future claims of the absent owner, his heirs and successors, as the case may be; and at the future request of the party whose property has been so transferred, without the production of a bill of sale from him or from his lawful attorney, such bond shall be available for the protection of his interest, in addition to any powers or rights which he may have in law or equity against the ship or vessel, or against the parties concerned, until he shall have received full indemnity for any loss or injury sustained by him.—§ 41.

Transfer by way of Mortgage.—When any transfer of any ship or vessel, or of any share or shares thereof, shall be made only as a security for the payment of a debt or debts, either by way of mortgage, or of assignment to a trustee or trustees for the purpose of selling the same for the payment of any debt or debts, then and in every such case the collector and comptroller of the port where the ship or vessel is registered shall, in the entry in the book of registry, and also in the indorsement on the certificate of registry, in manner herein-before directed, state and express that such transfer was made only as a security for the payment of a debt or debts, or by way of mortgage, or to that effect; and the person or persons to whom such transfer shall be made, or any other person or persons claiming under him or them as a mortgagee or mortgagees, or a trustee or trustees only, shall not by reason thereof be deemed to be the owner or owners of such ship or vessel, share or shares thereof, nor shall the person or persons making such transfer be deemed by reason thereof to have ceased to be an owner or owners of such ship or vessel, any more than if no such transfer had been made, except so far as may be necessary for the purpose of rendering the ship or vessel, share or shares, so transferred, available by sale or otherwise for the payment of the debt or debts for securing the payment of which such transfer shall have been made.—§ 42.

Transfer of Ships for Security.—When any transfer of any ship or vessel, or of any share or shares thereof, shall have been made as a security for the payment of any debt or debts, either by way of mortgage or of assignment as aforesaid, and such transfer shall have been duly registered according to the provisions of this act, the right of interest of the mortgagee or other assignee as aforesaid shall not be in any manner affected by any act or acts of bankruptcy committed by such mortgagor or assignor, mortgagors or assignors, after the time when such mortgage or assignment shall have been so registered as aforesaid, notwithstanding such mortgagor or assignor, mortgagors or assignors, at the time he or they shall so become bankrupt as aforesaid, shall have in his or their possession, order, and disposition, and shall be the reputed owner or owners of the said ship or vessel, or the share or shares thereof, so by him or them mortgaged or assigned as aforesaid, but such mortgage or assignment shall take place of and be preferred to any right, claim, or interest which may belong to the assignee or assignees of such bankrupt or bankrupts in such ship or vessel, share or shares thereof, any law or statute to the contrary thereof notwithstanding.—§ 43.

Governors of Colonies, &c. may cause Proceedings in Suits to be stayed.—It shall and may be lawful for any governor, lieutenant-governor, or commander-in-chief of any of his Majesty's colonies, plantations, islands, or territories, and they are hereby respectively authorised and required, if any suit, information, libel, or other prosecution or proceeding of any nature or kind whatever shall have been commenced or shall hereafter be commenced in any court whatever in any of the said colonies, plantations, islands, or territories respectively, touching the force and effect of any register granted to any ship or vessel, upon a representation made to any such governor, lieutenant-governor, or commander-in-chief, to cause all proceedings thereon to be stayed, if he shall see just cause so to do, until his Majesty's pleasure shall be known and certified to him by his Majesty, by and with the advice of his Majesty's privy council; and such governor, lieutenant-governor, or commander-in-chief is hereby required to transmit to one of his Majesty's principal secretaries of state, to be laid before his Majesty in council, an authenticated copy of the proceedings in every such case, together with his reasons for causing the same to be stayed, and such documents (properly verified) as he may judge necessary for the information of his Majesty.—§ 44.

Penalty of 500l. on Persons making false Declaration, or falsifying any Document.—If any person or persons shall falsely make declaration to any of the matters herein-before required to be verified by declaration, or if any person or persons shall counterfeit, erase, alter, or falsify any certificate or other instrument in writing required or directed to be obtained, granted, or produced by this act, or shall knowingly or wilfully make use of any certificate or other instrument so counterfeited, erased, altered, or falsified, or shall wilfully grant such certificate or other instrument in writing, knowing it to be false, such person or persons shall for every such offence forfeit the sum of 500*l*.—§ 45.

How Penalties are to be recovered.—All the penalties and forfeitures inflicted and incurred by this act shall and may be sued for, prosecuted, recovered, and disposed of in such manner, and by such ways, means, and methods, as any penalties or forfeitures inflicted or which may be incurred for any offences committed against any law relating to the customs may now legally be sued for, prosecuted, recovered, and disposed of; and the officer or officers concerned in seizures or prosecutions under this act shall be entitled to and receive the same share of the produce arising from such seizures as in the case of seizures for unlawful importation, and to such share of the produce arising from any pecuniary fine or penalty for any offence against this act, as any officer or officers is or are now by any law or regulation entitled to upon prosecutions for pecuniary penalties.—§ 46.

REPORT. In commercial navigation, a paper delivered by the masters of all ships arriving from parts beyond seas to the Custom-house, and attested upon oath, containing an account of the cargo on board, &c. — (See *antè*, p. 669.)

REPRISALS. Where the people of one nation have unlawfully seized and detained property belonging to another state, the subjects of the latter are authorised, by the law of nations, to indemnify themselves, by seizing the property of the subjects of the state aggressing. This is termed making reprisals; and commissions to this effect are issued from the Admiralty. — (See PRIVATEERS.)

RESPONDENTIA. See BOTTOMRY AND RESPONDENTIA.

REVENUE AND EXPENDITURE. Though not properly belonging to a work of this sort, we believe we shall do an acceptable service to our readers by laying before them the following comprehensive Table of the revenue and expenditure of the United Kingdom in 1840, 1841, and 1842. — (See pp. 1057, 1058.) It contains more information in a brief space than most parliamentary papers. It was originally framed according to the suggestion, and printed upon the motion, of Mr. Pusey; and there are not very many members who can refer to so useful a memorial of their parliamentary career.

RHUBARB (Du. *Rhubarber*; Fr. *Rhubarbe, Rubarbe*; It. *Rabarbaro, Reo-barbaro*; Sp. *Ruibarbo*; Rus. *Rewen*; Arab. *Rawend*; Chin. *Ta-hwang*), the root of a plant, a native of China and Tartary. Three varieties of rhubarb are known in the shops; viz. Russian, Turkey, and East Indian or Chinese rhubarb. The first two resemble each other in every respect. They are, in fact, the same article, being both derived from Tartary. The portion destined for the Petersburg market being selected and sorted at Kiachta, acquires the name of Russian rhubarb; while the portion that is sent from Tartary to Smyrna and other places in Turkey is called Turkey rhubarb. The best pieces only are sent to Petersburg; and according to the contract with the government, on whose account it is bought, all that is rejected must be burnt; and that which is approved undergoes a second cleaning before being finally packed up for Petersburg. The best pieces of Russian and Turkey rhubarb are roundish, and perforated with a large hole, of a reddish or yellow colour on the outside, and when cut or broken exhibit a mottled texture, and alternate streaks of red and gray. Its odour is peculiar, and its taste nauseous, bitter, and astringent. It should not be porous, but rather compact and heavy. East Indian or Chinese rhubarb is in oblong flat pieces, seldom perforated; has a stronger odour, and is more nauseous to the taste, than the other; it is heavier, more compact, breaks smoother, and affords a powder of a redder shade. — (*Thomson's Dispensatory*; *Ainslie's Mat. Indica*, &c.)

Of 95,701 lbs. of rhubarb imported in 1841, 43,640 were brought from China, 8,349 from the Philippines, 7,290 from the East Indies, and 33,710 from the U. States. Only 1,462 lbs. were brought from Russia. The entries for consumption amounted to 42,230 lbs. The duty on rhubarb is 3*d*. per lb.

RICE (Fr. *Riz*; It. *Riso*; Arab. *Aruz*; Hind. *Chaul*), one of the most valuable of the cereal grasses, the *Oryza sativa* of botanists. It is raised in immense quantities in India, China, and most Eastern countries; in the West Indies, Central America, and the U. States; and in some of the southern countries of Europe. It, in fact, occupies the same place in most intertropical regions as wheat in the warmer parts of Europe, and oats and rye in those more to the north. Forming, as it does, the principal part of the food of the most civilised and populous Eastern nations, it is more extensively consumed than any other species of grain. It is light and wholesome, but is said to contain less of the nutritive principle than wheat. When rough, or in its natural state in the husk, it is called *paddy*. There is an immense variety in the qualities of rice. That which is principally exported from Bengal has received the name of *cargo* rice. It is of a coarse reddish cast, but is sweet and large grained, and is preferred by the natives to every other sort. It is not kiln-dried, but is parboiled in earthen pots or caldrons, partly to destroy the vegetative principle, so that it may keep better, and partly to facilitate the process of husking. Patna rice is more esteemed in Europe than any other sort of rice imported from the East. It is small grained, rather long and wiry, and remarkably white. But the rice raised on the low marshy grounds of South Carolina is unquestionably very superior to any brought from any part of India. It may, perhaps, be worth mentioning, that rice, like wheat, oats, and barley, is not indigenous to America. It was first raised in South Carolina from seeds brought from Madagascar, near the end of the 17th century. Its culture increased so rapidly that in 1724 no fewer than 18,000 tierces, or barrels, were exported. — (*Pitkin's American Statistics*, 1835, p. 100.) According to the returns under the census of 1840, the total annual produce of rice in the U. States may be estimated at 80,841,422 lbs., or above 36,000 tons, of which about 3-4ths are raised in South Carolina. The value of the exports of rice from the U. States amounted, in 1839, to 2,460,198 dollars; in 1840, to 1,942,076 dollars; and in 1841, to 2,010,107 dollars.

The produce of lands naturally or artificially irrigated is, as far as rice is concerned, from 5 to 10 times greater than that of dry land having no command of water: and hence the vast importance of irri-

An Account of the Public Revenue and Expenditure of the U. Kingdom in 1840, 1841, and 1842, exhibiting in detail the various Items embraced in the one and the other.—(*Parl. Paper* No. 494. Sess. 1843.)

Heads of Income.	Public Income in the Years					
	1840.		1841.		1842.	
Customs and Excise.	£	£	£	£	£	
Spirits { foreign	1,290,581	- -	1,761,453	- -	1,262,094	
Spirits { rum	1,155,613	- -	1,063,067	- -	978,959	
Spirits { British	5,201,664	- -	5,178,175	- -	5,041,773	
Malt	4,983,602	- -	5,263,363	- -	4,385,221	
Hops	341,410	- -	69,055	- -	260,979	
Wine	1,791,646	- -	1,721,281	- -	1,335,412	
Sugar and molasses	4,650,017	- -	5,307,675	- -	5,130,271	
Tea	3,472,864	- -	3,973,668	- -	4,088,957	
Coffee	921,552	- -	887,723	- -	768,886	
Tobacco and snuff	3,588,192	- -	3,550,825	- -	3,577,224	
		27,397,171		28,376,305		26,829,776
Butter	257,577	- -	264,614	- -	187,921	
Cheese	117,679	- -	134,622	- -	98,112	
Currants and raisins	339,880	- -	410,827	- -	375,464	
Corn	1,156,640	- -	568,341	- -	1,363,977	
Cotton wool and sheep's imported	785,491	- -	664,576	- -	566,700	
Silks	240,628	- -	257,735	- -	246,080	
Hides and skins	50,504	- -	79,119	- -	49,566	
Paper	583,982	- -	586,219	- -	591,263	
Soap	808,201	- -	815,864	- -	849,277	
Candles and tallow	186,283	- -	205,839	- -	170,834	
Coals, sea-borne	6,827	- -	11,925	- -	57,415	
Glass	738,553	- -	682,192	- -	594,815	
Bricks, tiles, and slates	523,380	- -	443,018	- -	393,050	
Timber	1,730,551	- -	1,500,315	- -	948,070	
Auctions	316,246	- -	311,758	- -	294,836	
Excise licences	1,054,115	- -	1,036,582	- -	1,014,899	
Post-horse duties	216,636	- -	199,864	- -	179,457	
Miscellaneous duties of Customs and Excise	1,617,064	- -	1,570,477	- -	1,350,402	
		10,730,237		9,741,917		9,311,138
Total Customs and Excise	- -	38,127,408	- -	38,118,222	- -	36,140,914
Stamps.						
Deeds and other instruments	1,710,533	- -	1,665,297	- -	1,604,672	
Probates and legacies	2,098,078	- -	2,132,473	- -	2,163,564	
Insurance { marine	299,398	- -	284,496	- -	251,490	
Insurance { fire	944,321	- -	964,146	- -	984,726	
Bills of exchange, bankers' notes	773,114	- -	743,312	- -	680,671	
Newspapers and advertisements	376,006	- -	377,471	- -	381,215	
Stage coaches	438,047	- -	460,733	- -	444,215	
Receipts	175,070	- -	174,747	- -	180,059	
Other stamp duties	473,256	- -	478,685	- -	449,171	
		7,287,823		7,276,360		7,139,785
Assessed and Land Taxes.						
Land taxes	1,181,283	- -	1,214,431	- -	1,172,842	
Windows	1,404,642	- -	1,664,055	- -	1,569,344	
Servants	216,823	- -	215,844	- -	205,727	
Horses	416,170	- -	464,592	- -	388,181	
Carri	481,499	- -	414,676	- -	442,880	
Dogs	170,951	- -	172,190	- -	159,326	
Additional 10 per cent.	- -	- -	311,357	- -	296,342	
Other assessed taxes	280,919	- -	258,210	- -	250,768	
		4,152,287		4,715,353		4,485,410
Property and income tax	- -	- -	- -	- -	- -	582,038
Post-office	- -	1,342,604	- -	1,495,540	- -	1,578,145
Crown lands	- -	482,422	- -	438,298	- -	368,161
Other ordinary revenue, and other resources	- -	300,966	- -	271,660	- -	825,589
Total Income	- -	51,693,510	- -	52,515,433	- -	51,120,040
Excess of expenditure over income	- -	1,750,543	- -	2,149,885	- -	4,075,119
		53,444,053	- -	54,665,318	- -	55,195,159

Heads of Expenditure.	Public Expenditure in the Years					
	1840.		1841.		1842.	
	£	£	£	£	£	
Revenue — Charges of Collection.						
Civil Departments { Customs	623,783	- -	623,867	- -	610,754	
Civil Departments { Excise	840,700	- -	798,883	- -	776,734	
		1,464,483		1,422,150		1,387,488
Preventive service, land guard, revenue, police cruizers and harbour vessels	- -	577,088	- -	561,990	- -	566,957
		2,041,521		1,984,140		1,954,445
Stamps	- -	150,133	- -	149,952	- -	147,440
Assessed taxes	- -	168,773	- -	174,714	- -	188,467
Other ordinary revenues	- -	54,678	- -	56,984	- -	57,727
Superannuation and other allowances	- -	357,756	- -	358,278	- -	363,018
Total revenue	- -	2,772,840	- -	2,724,046	- -	2,705,497
Public Debt.						
Interest on permanent debt	24,352,269	- -	24,333,359	- -	24,689,991	
Terminable annuities	4,244,444	- -	4,076,776	- -	4,071,550	
Management	134,241	- -	135,669	- -	134,158	
	28,730,954	- -	28,545,797	- -	28,694,979	
Interest on Exchequer bills	644,997	- -	896,465	- -	725,010	
Total debt		29,375,951		29,442,262		29,419,989
Civil Government. Civil List. Privy Purse.						
Salaries of the household, and tradesmen's bills	371,800	- -	371,800	- -	371,800	
The allowances to the several branches of the Royal Family, and to the Prince of Coburg (King of the Belgians)*	323,928	- -	318,000	- -	318,000	
The Lord Lieutenant of Ireland's establishment	32,359	- -	32,465	- -	30,551	
The salaries and expenses of the Houses of Parliament (including printing)	122,410	- -	122,717	- -	123,847	
Civil departments, including superannuation allowances	518,940	- -	499,551	- -	524,773	
Other annuities, pensions and superannuation allowances on the consolidated fund and on the gross revenue	349,397	- -	319,299	- -	312,647	
Pensions, civil list	2,743	- -	4,022	- -	5,120	
Total civil government		1,721,577		1,666,554		1,686,735
Justice.						
Courts of justice	534,945	- -	533,761	- -	551,340	
Police and criminal prosecutions	577,363	- -	571,805	- -	595,915	
Correction	285,495	- -	497,060	- -	493,117	
Total justice		1,397,603		1,602,626		1,640,602
Diplomatic.						
Foreign ministers' salaries and pensions	184,765	- -	185,770	- -	183,470	
Consuls' salaries and superannuation allowances	121,782	- -	128,890	- -	118,649	
Disbursements, outfit	51,998	- -	36,671	- -	42,156	
Total diplomatic		365,545		351,331		344,275
Forces.						
Army { Effective { number of men	(91,901)	- -	(92,630)	- -	(92,240)	
Army { Effective { charge	4,480,595	- -	3,971,425	- -	3,566,222	
Army { Non-effective { number of men	(88,006)	- -	(86,960)	- -	(84,183)	
Army { Non-effective { charge	2,489,672	- -	2,446,996	- -	2,391,699	
Total army	6,990,267	- -	6,418,421	- -	5,957,921	
Navy { Effective { number of men	(36,501)	- -	(40,273)	- -	(43,619)	
Navy { Effective { charge	4152,666	- -	5,103,358	- -	5,231,164	
Navy { Non-effective { number of men	(22,958)	- -	(22,447)	- -	(22,283)	
Navy { Non-effective { charge	1,444,845	- -	1,385,716	- -	1,408,999	
Total navy	5,597,511	- -	6,489,074	- -	6,640,163	
Ordnance { Effective { number of men	(9,395)	- -	(9,531)	- -	(9,584)	
Ordnance { Effective { charge	1,474,577	- -	1,655,393	- -	2,008,474	
Ordnance { Non-effective { number of men	(614)	- -	(640)	- -	(631)	
Ordnance { Non-effective { charge	157,063	- -	160,739	- -	166,199	
Total ordnance	1,631,640	- -	1,815,132	- -	2,174,673	
Total forces		14,119,418		14,722,627		14,802,757
Army and ordnance, insurrection in Canada	- -	553,249	- -	117,153	- -	253,343
China expedition	- -	150,000	- -	400,000	- -	430,008
China and India,— army, navy, and ordnance services	- -	- -	- -	- -	- -	272,921
Bounties, &c. for promoting fisheries	- -	14,607	- -	18,804	- -	19,410
Public works	- -	351,837	- -	386,424	- -	119,519
Payments out of the revenue of crown lands, for improvements and various public services	- -	244,741	- -	213,315	- -	193,607
Post-office; charges of collection and other payments	- -	848,566	- -	931,372	- -	967,195
Quarantine and warehousing establishments	- -	119,477	- -	131,986	- -	127,941
Miscellaneous services not classed under the foregoing heads	- -	1,410,840	- -	1,502,378	- -	1,511,360
Total expenditure	- -	53,444,053	- -	54,465,318	- -	55,186,139
Memorandum. — The amount of terminable annuities on 5th January was	- -	4,114,021	- -	4,098,956	- -	3,989,783
In corresponding perpetuities, as estimated by Mr. Finlaison	- -	1,710,761	- -	1,664,793	- -	1,597,635
Difference	- -	2,403,260	- -	2,434,257	- -	2,392,148

* No part of this income is at present paid for the use of King Leopold. The trustees, after discharging certain annuities and pensions to the servants and establishment of the late Princess Charlotte, repay the balance (34,000*l.*) to the Exchequer.

† A sum of 29,715*l.* 12*s.* 6*d.*, issued and repaid as an adjustment of account, and explained in the finance accounts for the year 1842, is excluded from both sides of the present account.

gation in all countries where this grain is cultivated. But it is worthy of remark, that, owing to the not unfrequent occurrence of severe droughts, there is a greater variation in the crops of rice than in those of any other species of grain. Those who, like the Hindoos, depend almost entirely on it for subsistence, are, consequently, placed in a very precarious situation. There can be no doubt that famines are at once more frequent and severe in Hindostan than in any other quarter.

A few years ago, England was principally supplied with cleaned rice from Carolina. Latterly, however, the imports of Carolina rice have been much reduced. An improved method of separating the husk, which throws out the grain clean and unbroken, has been successfully introduced into this country; and as the grain, when in the husk, is found to preserve its flavour and sweetness better during a long voyage than when shelled, large quantities are now imported rough from Bengal and the U. States. Unquestionably, however, the late oppressive discriminating duty of 14*s.* a cwt. on American and other foreign cleaned rice did more than any thing else to increase the imports of rough grain; and the fact of the duty on paddy from Bengal being only 1*d.* per quarter, while that on paddy from Carolina was 2*s.* 6*d.* a bushel, sufficiently accounts for the increased imports from the former. But the duty on foreign cleaned rice having been reduced in 1842 to 6*s.* a cwt., and on rice in the husk to 7*s.* a quarter, it is probable that the imports from Carolina will be materially increased. Independently of duties, the consumption is materially dependent on the price of wheat, increasing when its price increases, and falling when it falls. In bad seasons, when wheat is soft and damp, it is usual to mix rice with it in grinding.

Account of the Quantities of Rice imported into the U. Kingdom during each of the 7 Years ending with 1841, specifying the Countries whence it was brought, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
East India Company's territories and Ceylon	233,041	145,180	352,834	203,895	419,319	320,752	797,535
Sumatra and Java	11,510	27,584	30,243	31,931	145,056	113,572	85,584
United States of America	2,297	2,974	1,186	502	676	648	145
All other countries	2,890	11,288	820	2,038	12,003	8,746	3,455
Total imported	249,538	186,826	385,083	238,366	577,054	443,918	486,719
Retained for consumption	98,227	73,708	142,694	119,689	201,226	213,330	243,373

Account of the Quantities of Rice (in the Husk) imported into the U. Kingdom during each of the 7 Years ending with 1841, specifying the Countries whence they were brought, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Western coast of Africa	12,946	13,390	4,975	116	1,576	-	3,385
East India Company's territories and Ceylon	29,426	1,704	17,451	13,050	8,938	4,339	1,336
United States of America	259,326	243,445	317,851	202,681	343,058	332,228	322,506
All other countries	623	188	- -	2,360	182	392	125
Total imported	302,321	258,727	340,277	218,207	353,754	336,959	327,352
Retained for consumption	177,930	205,250	160,281	169,374	190,351	145,676	202,795

Prices of rice, per cwt., in the London market, on the

	31st December, 1843.			31st December, 1842.			Duties for Home Use.
	s.	*d.*		*s.*	*d.*		
Bengal, ordinary	9 0	to	10 6	10 0	to	10 6	6*d.* per cwt.
Do. middling and good	11 0	—	12 6	11 0	—	12 6	—
Carolina, dressed	21 0	—	24 0	26 0	—	30 0	6*s.* per cwt.
Do. in bond	15 0	—	18 0	22 0	—		—

RIGA, a city of European Russia, the capital of Livonia, on the Duna, about 9 miles from the sea, lat. 56° 56′ 5″ N., lon. 24° 0′ 4″ E. Population in 1838, including garrison, 71,228.

Harbour. — A light-house has been erected on Fort Comet, on the western side of the mouth of the river. It has 2 lights: the first, elevated about 104 feet (English) above the level of the sea, may be seen, under favourable circumstances, at the distance of 4 leagues; and the second, elevated about 24½ feet, may be seen at the distance of 2½ leagues. The bar at the mouth of the river has usually from 12 to 13 feet water; and vessels drawing more than this frequently load and unload part of their cargoes by means of lighters at Bolderaa, a small town on the west side of the river, near its mouth. There is a fairway beacon without the bar, in 5 fathoms water; and within, the channel is buoyed with black and white buoys; the black being left on the right or starboard side when entering, and the white on the larboard. Vessels bound for Riga take pilots at Bolderaa, who carry them to their anchorage. No ballast is allowed to be discharged, except at Poderague. Regulations as to clearing, &c. similar to those at Petersburg. — (*Coulier sur les Phares*, 2d. ed.; and *Regulations published by the Russian Authorities.*)

Trade. — Owing to its advantageous situation near the mouth of a great navigable river, the trade of Riga is very extensive; being, of the Russian towns on the Baltic, in this respect second only to Petersburg. The trade is chiefly carried on by foreign merchants, particularly by the English. The principal exports are flax and hemp, linseed and hemp seed, timber, corn, tobacco, hides, wool, tallow, &c.; the imports are salt, sugar, coffee, and groceries of all sorts, herrings, indigo, dye woods, cotton and cotton twist, silks, wines, &c.

The mast trade is extensive. The burghers of Riga send persons who are called mast brokers into the provinces to mark the trees, which are purchased standing. They grow mostly in the districts which border on the Dnieper, are sent up that river to a landing place, transported 30 versts to the Duna, when, being formed into rafts from of 50 to 200 pieces, they descend the stream to Riga. The tree which produces the largest masts is the Scotch fir. Those pieces which are from 18 to 25 inches in diameter are

called masts; under those dimensions, spars, or, in England, Norway masts, because Norway exports no trees more than 18 inches in diameter. Great skill is required in distinguishing those masts that are sound from those which are in the least internally decayed. They are usually from 70 to 80 feet in length.

The best kind of flax shi[illegible] in White Russia, and is called Druana rakitzer; its colour is very white, and the threads long, [illegible], and loose, but it has sometimes black spots; the next quality, coming from the province of Trockic in Lithuania, is called Lithuanian rakitzer, and is very little inferior to Druana, but its colour is a little brown; of this kind the best sort is Thiesenhausen. The best kind of Courland flax shipped from Riga is Marienburg; that grown in Livonia is inferior. There are two kinds of linseed: that of the last crop, which is used for sowing; and that of former years, for crushing. To prevent deception, the year of its growth is stamped on the barrel by sworn inspectors (*brackers*). Hemp-seed is mostly shipped for Holland. Riga wheat is inferior to that of Dantzic. Two descriptions are shipped — one the growth of Russia, the other of Courland; the last is the best, being larger bodied and of a brighter colour than the Russian; still, however, it makes but indifferent flour. Oats are of a good quality, and are largely exported; peas are also occasionally exported.

In shipping masts, the rest of the cargo generally consists of deals and wainscot logs; the latter are much exported to England, and are very superior.

Money. — For the monies of Riga, see PETERSBURG.

Weights and Measures. — The commercial pound is divided into 2 marcs, or 32 loths; and also into halves, quarters, &c. It contains 6,452 English grains. Hence 100 lbs. of Riga = 99·17 lbs. avoirdupois = 41 8 kilog. = 86·32 lbs. of Hamburg = 84·64 lbs. of Amsterdam. The lispound = 20 lbs.; the shippound = 20 lispounds.

The loof is the measure for grain: 48 loofs = 1 last of wheat, barley, or linseed; 45 loofs = 1 last of rye; and 60 loofs = 1 last of oats, malt, and beans. According to Kelly, the loof = 1·9375 Winchester bushels; and, consequently, the last of wheat = 11·625 quarters. Neikenbrecher does not value the loof quite to high as Kelly.

The fuder, the measure for liquids, is divided into 6 ahms, 24 ankers, 120 quarts, or 720 stoofs. The anker = 10¾ English wine gallons.

The foot of Riga = 10·79 English inches. The ell = 2 feet; the clafter = 6 feet.

The following accounts of the trade of Riga have been taken from the official statements given in the excellent articles on Riga, published in the *Supplement au Journal de l'Interieur* for 1843 (pp. 33—48.) a detailed official account of the imports into and exports from Riga in 1841 will be found in the art. PETERSBURG.

Account of the Value of the Imports into and Exports from the Port of Riga during each of the 19 Years ending with 1842, and of the Number and Tonnage of the Ships engaged in its Trade during each of these Years.

Years.	Imports.	Exports.	Value of Paper Rouble in Silver.	Ships.	Tonnage.
	Paper roubles.	*Paper roubles.*	*Cop.*		*Tons.*
1824	25,915,868	41,065,728	27	932	133,696
1825	18,827,620	45,150,657	27 1-7th.	1,002	147,924
1826	14,494,059	34,936,935	27 1-7th.	1,002	140,052
1827	16,410,875	40,668,678	27	1,398	198,068
1828	15,440,299	32,719,004	26½	1,162	167,544
1829	16,014,753	36,688,257	27 3-10th.	1,403	195,218
1830	13,747,189	41,126,200	27½	1,241	172,000
1831	11,464,088	47,346,151	27	1,609	223,728
1832	12,173,690	39,203,813	27 3-10th.	1,522	199,140
1833	11,728,631	35,582,388	27 7-10th.	903	127,118
1834	10,309,035	30,082,796	28	814	111,570
1835	11,657,171	30,622,779	28½	914	127,796
1836	12,228,407	42,033,072	28⅝	1,033	154,492
1837	12,761,562	34,923,874	28½	1,149	152,888
1838	12,127,207	45,711,052	28 4-7th.	1,372	185,758
1839	12,438,141	53,937,120	ditto.	1,665	231,468
1840	13,815,018	39,364,539	ditto.	1,047	152,824
1841	13,973,235	40,022,104	ditto.	1,065	159,110
1842	- -	- -	- -	1,243	

Account of the Exports of Corn from the Port of Riga in the Year 1817, and during each of the 19 Ye ending with 1842.

Years.	Wheat.	Rye.	Barley.	Oats.	Total.
	Chetwerts.	*Chetwerts.*	*Chetwerts.*	*Chetwerts.*	*Chetwerts.*
1817	126,795	997,350	- -	- -	1,024,145
1824	1,718	425	8,066	13,978	24,187
1825	13,257	1,991	23,759	17,980	56,987
1826	16,845	28,999	77,372	98,272	201,488
1827	11,838	97,471	5,905	25,157	140,371
1828	52,555	346,638	79,528	16,592	495,985
1829	234,507	303,719	61,018	92,800	691,844
1830	57,356	319,559	59,983	81,925	498,923
1831	181,842	815,629	95,480	216,034	1,008,985
1832	79,226	540,313	119,056	29,827	768,421
1833	6,521	74,607	10,348	1,973	93,449
1834	156	9,031	12,476	- -	21,663
1835	804	156	2,855	- -	3,815
1836	5,101	4,090	10,560	1,560	21,311
1837	784	98,956	11,336	107,621	218,697
1838	11,054	287,999	33,724	17,282	350,059
1839	56,837	498,244	109,934	264,971	928,986
1840	6,520	17,593	60,663	74,718	159,496
1841	2	19,856	15,857	9,543	45,258
1842	3,994	49,752	29,440	28,971	105,157

Statement showing the Quantities of the principal Articles of Merchandise imported into Riga during each of the 4 Years ending with 1841.

Principal Articles.		1838.	1839.		1841.
Sugar, raw		148,015	137,224	148,644	141,592
Coffee -		14,760	14,543	14,180	15,644
Salt -	- -	1,772,727	1,613,892	1,841,441	2,939,116
Herrings	{ tons,			pouds 61,624	
	{ barrels			2,522	3,702
				75,284	89,727

Statement showing the Value of Timber and the Quantities of Hemp, with the Quantities and Values of the Flax, Linseed, and Hempseed exported from Riga during the following Years.

Years.	Timber. Value.	Hemp. Quantities.	Years.	Flax. Quantities.	Flax. Value.	Linseed and Hempseed. Quantities.	Quantities.	Value. of both.
	Rs. roub.	*Poods.*		*Poods.*	*Paper roub.*	*Chetwerts.*		*Paper roub.*
1816 to 1820 aver.	1,457,605	608,437	1818 to 1827 aver.	996,742		157,567		
1821 — 1825 —	2,065,903	642,162	1828 — 1837 —	1,496,455		206,816		
1826 — 1830 —	2,265,392	626,128	1838	1,832,370	18,323,700	288,930 poods	19,558pds.	7,527,026
1831 — 1835 —	2,302,513	749,261	1839	1,350,784	14,183 252	244,489	92,141	7,274,670
1836 — 1840 —	3,278,885	947,232	1840	1,426,734	14,980,917	197,478	44,509	6,427,807
1841	2,363,074	997,166	1841	1,641,484	17,559,564	348,262	93,165	10,970,253
1842	2,818,655	1,084,600	1842	1,792,959		357,801 chet.	109,554 cht.	

We borrow from a different, but not less authentic source, the following details as to the trade of Riga in 1842.

No fewer than 446 British ships arrived at Riga in 1842.

The value of merchandise exported in 1842 was 2,618,273*l.* 8*s.* 4*d.*, being an increase of 290,677*l.* 8*s.* 4*d.* over the previous year. The value of that shipped for the U. Kingdom was 1,527,710*l.* 5*s.* 4*d.*, being more than a moiety of the total exports.

There have been shipped, in 1842, 29,171 tons of flax, and 824 tons codilla, the exportation to the U. Kingdom being —

	Tons.	*Tons.*
In 1842,	23,566 flax,	706 codilla
In 1841,	22,948 —	826 —

The exports of flax to France were 2,428 tons, to Spain about 500 tons, and to Portugal 767 tons. The flax in hand at the end of the shipping season was of the new growth, the quality of which, especially the Livonian flax, is generally approved. The last prices for fresh flax were —

	£	*s.*	*d.*	
P. T. R.	35	2	6	Per ton free on board without winter charges.
P. T. R.	34	2	4	
D. C.	31	10	0	
R. T.	26	17	6	
Crown M.	36	2	8	
Superior H.	31	11	0	
H.	33	10	5	

There have been exported in —

	Tons.	*Tons.*
1842,	17,644 hemp, and	2,165 codilla
1841,	16,224 —	1,685 —

Of these were shipped to the U. Kingdom —

	Tons.	*Tons.*
In 1842,	9,758 hemp,	1,099 codilla
1841,	10,471 —	353 —

The prices of hemp in January 1842 were —

	£	*s.*	*d.*	
R. H.	27	14	0	Per ton free on board.
O. H.	26	5	0	
P. H.	25	8	0	

It may be well to mention that the hemp shipped for the British navy contract cost in many instances, from its superior quality, 4*ls.* and even 100*s.* per ton more than the common R. H. as above quoted.

There were shipped to all countries 172,291 barrels of linseed, of which 48,629 barrels were for the U. Kingdom. The exports of hempseed were 164,351 barrels, of which only 3,665 barrels went to the U. Kingdom.

The shipments of corn were —

	Quarters.	*Quarters.*	*Quarters.*	*Quarters.*
1842,	2,852 wheat,	36,818 rye,	15,889 barley,	20,886 oats
1841,	15,514 —	7,943 —	15,215 —	

2,777 quarters wheat, the whole of the oats (20,886 quarters) and barley (2,779 quarters) were shipped for the U. Kingdom.

The exportation of all sorts of wood to the U. Kingdom was as follows: —

Years.	Wainscot Logs.	Half Logs.	Pipe Hhd. Staves.	Deals.	Timber. Square.	Timber. Round.	Spars and Bowsprits.
1842	2,343	198	2,516	116,422	17,134	1,705	439
1841	2,112	73	980	171,441	15,888	1,768	392

The total exportation being —

Years.	Wainscot Logs.	Half Logs.	Pipe Hhd. Staves.	Deals.	Timber. Square.	Timber. Round.	Spars and Bowsprits.
1842	2,950	242	373,561	313,834	79,999	4,220	1,619
1841	3,026	121	200,160	318,677	67,388	3,407	1,947

The quality of timber denominated "crown fir timber" has latterly become very scarce, so that the greater part of the Riga exports consist of the second quality, or what is called "Verschiffungs brack timber." There is no essential difference in the quality of crown timber, and timber of the second quality, except that the latter is knottier than the former.

RIO DE JANEIRO, the capital of Brazil, on the Atlantic, in lat. 22° 54′ 15″ S., lon. 43° 15′ 50″ W. Population 200,000. The harbour of Rio is one of the finest in the world, both as respects capaciousness and security for all sorts of vessels. In coming from the N. E. it is usual to make Cape Frio, in lat. 23° 1′ 18″ S., lon. 42° 3′ 19″ W., being about 4 leagues nearly E. of Rio. The entrance to the harbour is marked by a remarkable hill in the form of a sugarloaf, 900 feet high, close to its west side; while on the east, or opposite side of the bay, at the distance of about 1½ mile, is the fort of Santa Cruz. But the wood-cut in the next page, taken from a chart published by order of the Brazilian authorities, gives a much better idea of this noble harbour than could be obtained from any description.

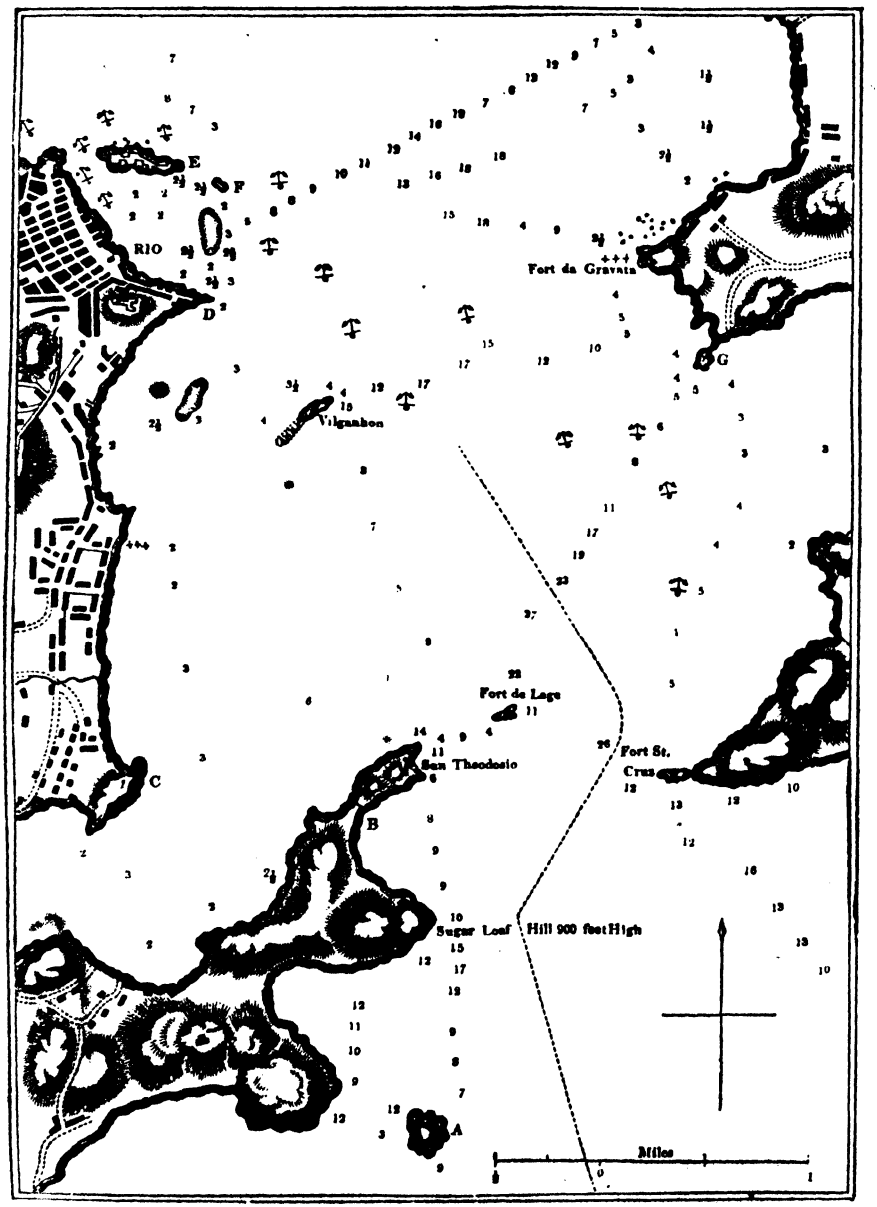
Entrance to the Harbour. — Vessels bound for Rio, coming from the N., should, after rounding Cape Frio, steer due W., keeping about 3 leagues from the coast, until they come within 5 or 6 miles of the *Ilha Raza*, or Flat island lying almost due S. from the mouth of the harbour, at the distance of about 3 leagues. A light-house, the lantern of which is said to be elevated nearly 300 feet above the level of the sea, was erected on this island in 1829. The light is a revolving one, finishing its revolution in 3 minutes, and exhibiting alternately a white and a red light. There is also a light-house in the fort of Santa Cruz, the light of which is fixed, and elevated about 50 feet above the level of the sea. — *Coulier sur les Phares*, 2d ed.) Having got within 5 or 6 miles of the Ilha Rasa, ships may enter by day or by night, the dotted line in the cut marking the fair-way into the harbour. There are no pilots to be met with; and as there are no hidden dangers of any kind, their services are not wanted. On entering, vessels must pass within hail of Fort Santa Cruz, to be ready to answer any questions that may be put to them. They then proceed to Fort Vilganhon, below or opposite to which they must bring to, or come to anchor, allowing no boats to come alongside, but those of the government, until they have received *pratique*, when they will be permitted to proceed to the usual place of anchorage for the merchant shipping.

The sea breeze generally sets in about 11 A.M., and lasts till about sunset. It is strong enough to enable ships to overcome the ebb. High water at full and change at 2 in the afternoon.

Money, Weights, and Measures. — All payments are made in paper money, which has been over-issued, and is excessively depreciated. But in ordinary cases the par of exchange may now be assumed at about 31*d.* sterling per patriotic dollar, of 1620 reis paper. Weights and long measures are the same as those

of Lisbon, the arroba being 32½ lbs. avoirdupois; but measures of capacity are different, a medida being equal to ·5954 Imperial galls., and an alquiére to 1·11 ditto.

Trade. — The trade of Rio is extensive, and has increased rapidly of late years. It is now by far the greatest mart for the export of coffee. The shipments of this important article, which in 1830 amounted to 396,785 bags, have increased with such unexampled rapidity, that in 1842-43 they amounted to 1,176,138 bags, that is (taking the bag at



References to Plan.—A. Ilha do Cáiunduba. B, Fort de St. Joao. C, Morro do Flamengo. D, Ponta do Calhabouco. E, Fort da Ilha das Cobras. F, Ilha dos Rattos. G, Fort da Boa Viagem.

154 lbs.), to 181,125,252 lbs., or 80,859 tons; being nearly equal to all the exports of coffee from all the other ports in the world! Sugar is also an important article of export from Rio, though latterly it has been decreasing, and does not now exceed 10,000 cases (15 cwt. each). The other great articles of export from Rio are hides, rice, tobacco, rum, tapioca, ipecacuanha, manioc flour, and other inferior articles. The export of cotton has almost entirely ceased; and that of gold, diamonds, &c. is mostly clandestine, and too inconsiderable to be worth notice. We subjoin

An Account of the Quantities and Values (in Reis) of the principal Articles of Brazilian Produce exported from Rio in 1840

	Reis.	Reis.		Reis.	Reis.
Coffee, 5,255,950 arrobas, at 3,500 -	18,395,825		Rum, pipes, 3,110, at 65,000 -	202,150	
Expenses, including duty and commission, 17½ per cent. - -	3,219,269		Tapioca, barrels, 250, at 9,000 -	2,250	
		21,615,094	Ipecacuanha, lbs., 20,000, at 500 -	10,000	
Sugar, 575,003 arrobas, at 2,100 -	1,207,500		Jacaranda, manioc flour, and various articles - - -	200,000	
Expenses, as above, 15 per cent. -	905,620				
		2,113,120		2,234,834	
Hides, 184,292, at 6,300 - -	1,161,039		Expenses, as above, 12½ per cent. -	279,350	
Horns, 100,000, at 4,500 per 100 -	4,500				2,514,184
Tanned half-hides, 17,500, at 2,500	43,750				
Rice, bags, 17,805, at 9,000 - -	161,145		Total value of exports during the year 1840 - - -		26,242,398[a]
Tobacco, arrobas, 100,000, at 4,500	450,000				

[a] Being, at the medium exchange of the year, equal to about 3,400,000*l.*

Subjoined is

An Account of the Exports of Coffee from Rio during each of the 4 Years ending with 1842-43, specifying the Countries for which they were exported, and the Quantities shipped for each.

	1842-43.	1841-42.	1840-41.	1839-40.
United States - - - - bags	390,519	370,245	369,285	329,934
England and the English Channel - —	160,345	111,427	80,710	177,674
Hamburg and Altona - - - —	209,478	219,936	200,561	223,980
Sweden and the Baltic - - - —	34,656	44,759	33,263	31,479
Bremen - - - - —	27,208	27,767	17,254	21,909
Antwerp - - - - —	64,045	57,374	45,857	49,969
Holland - - - - —	382	9,141	4,755	
France - - - - —	43,984	67,679	38,330	39,535
Trieste - - - - —	117,140	86,123	142,514	131,156
Different ports in the Mediterranean - —	27,671	48,902	20,311	29,569
Portugal - - - - —	30,499	20,309	18,012	24,463
Cape of Good Hope - - - —	17,945	7,077	13,794	28,547
Various places not in Europe - - —	2,266	3,022	2,914	2,603
Total - - -	1,176,138	1,073,761	993,490	1,090,218

—(*From the Circular of A. F. Biesterfeld & Co.*)

The aggregate value of the exports, in the undermentioned years, has been—

	Reis.		Reis.
1836 - - -	18,711,824	1839 - - -	23,362,298
1837 - - -	15,362,642	1840 - - -	26,242,398
1838 - - -	20,455,865		

The principal article of import consists of cotton goods, the value of which amounts to full one third of the total value of the imports. Next to cottons are woollen, linen, and silk manufactures, wines, jewellery, and ironmongery; flour, meat, fish, butter, and other articles of provision; spirits, salt, earthenware, paper, and a host of other articles. Of the total value of the imports in 1838-9, estimated at 29,450,698 rs., that of the cotton goods, which were almost wholly supplied by Great Britain, amounted to 10,555,704 rs.! We subjoin

An Account of the Value of the Imports into Rio during each of the Three Years ending with 1838-9, specifying the Value of those furnished by each Country.

Countries.	1836-1837.	1837-1838.	1838-1839.	Countries.	1836-1837.	1837-1838.	1838-1839.
	Reis.	Reis.	Reis.		Reis.	Reis.	Reis.
Gt. Britain & her possess. -	13,345,787	12,689,846	13,092,554	Fisheries - - -	130,595	121,751	160
France - - -	3,921,145	2,804,160	4,514,363	Holland and Belgium -	110,267	115,795	109,243
United States N. America -	1,054,474	1,667,863	1,799,687	Austria - - -	55,440	69,451	[illegible]
Hamburg and Bremen -	2,037,938	1,661,475	1,596,317	Cape of Good Hope -	21,011	18,966	
States in the R. Plata -	1,098,264	1,599,680	1,577,217	Sundry places -	12,418	- -	1[illegible]
Portugal and her possess. -	1,671,399	1,556,395	2,652,598	Coastwise, *duties paid* -	483,203	129,600	6[illegible]
Spain - - -	357,649	682,496	765,413	Ditto, *duties unpaid* -	152,565	502,122	
Italy - - -	473,674	265,260	475,015				
Ports of the Pacific -	282,644	216,057	9,994	Totals -	25,380,100	24,316,275	[illegible]
Baltic ports - -	166,699	155,040	350,255				

The customs duties at Rio, in 1840, amounted to 1,929,822 rs. on imports, and to 1,920,406 rs. on exports. During the same year 858 ships arrived at Rio from foreign ports: and 812 sailed, of which 512 were laden with Brazilian produce, and 300 in ballast. On the 1st of June 1841, there were in the port 21 British, 27 Portuguese, 12 American, &c. ships. The arrivals coastwise, in 1840, amounted to 1,849.—(*From Freese's Rio Circular, and Private Returns from Rio.*)

The entire exports of sugar from Brazil may amount to from 75,000 to 80,000 tons a year: viz. from Rio, 8,000 tons; Bahia (the principal port for the export of sugar), 33,000 tons; Pernambuco, 27,000 tons; Santos, 7,000 tons; and other ports, 5,000 tons; making, in all, 80,000 tons. But the exports have not increased within the last few

years: and now that labour is becoming scarcer and dearer, in consequence of the increasing difficulties thrown in the way of the importation of slaves, it is doubtful whether they will be maintained, and whether the exports of coffee will not also decline. The latter, indeed, is now selling at a price hardly sufficient to defray the cost of its production. The exports of cotton are not very extensive, and have for a lengthened period been nearly stationary. Hides are a very important article of export.

Port Regulations. — The captain of every ship entering Rio, or any other port of Brazil, is ordered by a law enacted in 1836 —

1. To go directly with his vessel from the entrance of the harbour to the anchorage ground in *Franquia*; and if, on account of the tide, contrary wind, or any other just cause, he should be compelled to come to anchor, and shall remain anchored for twelve hours after said hindrances are removed (except in case of being quarantined), he shall pay a fine of 100,000 reis, and shall be compelled, by the fort, or by a government vessel of war, (whichever may be nearest,) to proceed immediately to the Franquia anchoring ground.

2. He shall not suffer any kind of vessel to board him, nor any person to come on board or to leave his vessel, before he has been visited from the custom-house, excepting only the pilot, health officer, the boat officer at the entrance, when there is one, and in the case of shipwreck, or for the saving of lives.

3. Even after the custom-house visit on arrival, and until the vessel is discharged, he shall allow no person to come on board without a written permission from the inspector of the customs; and this permission shall be given in the following cases, viz.: —

A. To allow the buyers of goods to go on board to examine the cargo they wish to purchase, when sufficient specimens cannot be seen on shore.

B. To workmen or labourers necessary to put the cargo in order, taking care to have them examined when they go on board and return. In case of the infraction of the above regulations, a fine shall be imposed on him from 100,000 to 200,000 reis for every vessel he allows to board him, and of 500,000 for each person who shall enter or leave his vessel without licence, unless he be a passenger, or belonging to the ever; and every other person who goes on board or leaves the vessel shall pay 100,000 reis fine, and be kept in custody until payment is made. The one third part of these fines shall be divided amongst the watchmen or military who shall have taken up the offender.

4. He shall deliver to the *guarda-mor* (chief customs officer), when he makes his visit on arrival, his passport and cargo book.

5. He shall deliver to the commander of the guard-boat without the port, if he be there, or at the Franquia, if he be there, the manifest as described below.

6. He shall enter at the custom-house, within 24 hours after the *guarda-mor* has been on board, not counting the days on which the custom-house is shut, and present himself to the inspector, and swear, or affirm, that he has not on board of his vessel any merchandise other than what is described in the manifest he has delivered, and that he has no further declaration to make; and if he do not enter within the 24 hours, he shall pay 100,000 reis for each day's delay additional.

7. If he shall detain his vessel at either of the anchorages more than 24 hours, when he shall be directed by the guarda-mor, or his representative, to remove thence, he shall pay 100,000 reis for every day he delays.

8. He shall discharge no part of his cargo but by an order in writing from the inspector; and if he land any without such order, he shall pay 100,000 reis, for each package so landed.

9. He shall give notice to the officer attending the discharge of the vessel, as soon as his cargo is discharged, that he has nothing remaining on board. If he omit to do this on the same day, so that the vessel may be immediately examined, he shall be fined 100,000 reis.

10. The master of every vessel going with a cargo to any part of the empire, must have two manifests of the cargo, exact copies of each other, exhibiting the name, class, and tonnage of the vessel; the name of the captain, whose signature must follow the date; the name of the port where the articles stated in the manifest were taken on board; the name of the port or ports for which the vessel is destined; the marks or counter-marks and numbers of the packages, and their description, as bales, cases, pipes, half-pipes, barrels, &c.; a declaration of the quantity and quality of the merchandise of each package, or several similar ones of the same mark, and also of what is on board in bulk; the names of the consignees, or to order; all to be written at length, except the numbers of the packages.

11. When the vessel has taken in her cargo at more than one port, there must be two manifests from each port.

12. At the end of the manifest, the captain shall declare the number of passengers, whether cabin or steerage, and the baggage for the use of each, and in addition any declaration necessary for his security; and in good faith he shall declare whether he has any package to add to the manifest, or whether it be deficient, with the cause of it, as no after declaration will relieve him from responsibility, for he will not be exempted from vague declarations frequently made, which do not explain deficiences or differences.

13. The captain of any vessel bound to Brazil, when he has discharged his cargo in the port or ports from which he is to make the manifests, as required in the 9th article, shall take documents to the Brazilian consul residing in the port, and examine them, and if agreeable to these regulations certify them.

14. In those ports where there is no Brazilian consul or substitute, the manifest shall be certified by two Brazilian resident merchants; or, if there be none, by two merchants of the place in either case, the signatures to be authenticated by legal authority.

15. Should any greater quantity of goods be found on board than are stated in the manifest or the declaration of the captain, the overplus shall be seized and divided amongst those who seize them, after paying the duties, and the captain shall pay a fine of half the value of the goods.

16. If there are any goods missing of those stated in the manifest or declaration of the captain, they shall be reputed to be concealed or smuggled, and he shall pay the value thereof to those who have discovered the deficiency, and half the value to the national treasury. These condemnations shall take place on the simple fact of there being an overplus or deficiency of goods, without further proof being required.

17. For each difference in the quality or mark of the package, the captain shall pay 2,000 reis, although in every other respect the goods discharged may agree with the manifest.

18. The captain whose manifests are not conformable to these regulations, shall be fined from 100,000 reis to one *conto de reis*, at the will of the collector, according to the degree of culpability that shall appear, and he cannot discharge until the fine is paid.

19. In case the captain brings no manifest, he may still be allowed to discharge, by paying 5 per cent. on the value of the cargo, in addition to the usual duties.

Franquia. — Vessels proceeding to Brazil, and when it is wished to dispose of their cargoes at different ports, must clear out for "Brazil and other ports," or for "Pernambuco, Bahia, Rio de Janeiro, and other ports." They are then entitled to the privilege of Franquia, and may land a part of their cargoes at one port, paying duties only on the goods so landed, and proceed with the remainder to other ports. But if they clear out for one port only, they are compelled to make a complete entry, and discharge the whole of the cargo.

In proceeding from one Brazilian port to another, it is necessary that a bill of health should be taken from the local authorities of each port; and where any part of the cargo is landed, the same must be noted on the original manifest by the customs officer of the port.

Anchorage. — Foreign vessels pay, in all ports of the empire, 10 reis per ton per day, from the 5th day after their entry.

Light-house. — The light-house duty, 100 reis per ton, for all vessels over 40 tons departing from ports where there is a light-house. Vessels under 40 tons are exempted from this duty.

Port-duty. — On all vessels not crossing the bar at the harbour of Rio de Janeiro, the following charges are levied, viz., of three masts, 12,800 reis; of two masts, 9,600 reis; and of one mast, 6,400 reis.

Seal. — The duty is 40 reis for every written half-sheet.

Health. — Visit of the physician is fixed at 8,200 reis; but in case the vessel is made to perform quarantine, then another sum of 8,200 reis is payable on the admission of the vessel to free pratique.

Hospitals. — A vessel of three masts pays 6,000 reis; brigs, corvettes, and yachts, 4,000; pinnaces, 2,560; barks, 1,280.

Each one of the ship's company of vessels sailing for a foreign port pays 400 reis.

Usages of Merchants. — It is customary that the expense of landing and shipping a cargo on freight should be paid by the vessel, unless the contrary be stipulated in the bills of lading.

When hard Spanish dollars are bargained for, in contracts of freight, they should be so expressed in the instrument of contract, to prevent dispute.

Purchases of produce are paid for in cash, and sales are made on stipulated credits, but nominally for cash.

If bills on London are sent out for the purchase of produce in Brazil, the credit must have the confirmation of the London house.

Anchorage Dues in Brazil Ports. — The anchorage dues fixed by law of 22d October, 1836, are now superseded by a tax of 2 1/2-dollars per ton, payable, one half on entering, and one half on sailing, by all merchant vessels on foreign trading, with the following restrictions: —

Ships arriving in ballast, and going away the same, will pay the old anchorage; if taking cargoes, they will pay half the present dues.

Ships *entering* to get fresh provisions, or in "*Franquia*," to try the market, but do not discharge, pay only the old anchorage. If they merely discharge part of cargo, pay only half of present dues.

Ships *entering* under average or in distress, pay nothing if they do not discharge, or only discharge the necessary for repairing.

Ships carrying colonists subject to some modifications.

Ships entering three times in one year, only pay anchorage dues the first two voyages.

The government is authorised to modify the impost, as soon as the treaty with Great Britain expires, as may seem most suitable for the encouragement of the national shipping trade to foreign ports, or to the whale fisheries. The anchorage dues on foreign shipping may not be increased.

Rio, June 26, 1843.

Rates of Commission charged at Rio.

5 per cent. on sales of merchandise.
2½ per cent. on purchase of merchandise, with funds in hand, on amount of cost and charges.
2½ per cent. guaranty on amount of sales on credit.
2½ per cent. for drawing or indorsing, and negotiating bills.
2½ per cent. on purchase or sale of vessels by private contract.
5 per cent. on amount of vessels condemned by surveyors.
2½ per cent. for procuring or collecting freights.
2½ per cent. on disbursements of vessels in common cases, with funds in hand.
5 per cent. on disbursements of vessels when funds are advanced, or in case of condemnation, or in vessels entering for repairs only.
1 per cent. on receiving and forwarding goods; and
2½ per cent. on amount of responsibilities incurred thereon.
1 per cent on receiving and paying money on which no other commission is derived.
½ per cent. on purchase or sale of specie.

per cent. for effecting marine insurance on the amount insured; and when the premium exceeds 10 per cent., 5 per cent. on the amount of premium.
½ per cent. on remittances on bills not indorsed.
On consignments of merchandise withdrawn or reshipped, full commission to be charged to the extent of advances or responsibilities incurred, and half commission on the residue of the value.

1 per cent. per month on all cash advanced.
No interest allowed on money on deposit.
1 per cent. storage on all dry goods.
In the case of discharging and reshipping the cargoes of vessels in distress, on the invoice amount, 2½ per cent.
2½ per cent., or half the commission charged on sales of merchandise, will be returned to supercargoes, but nothing on investments or other business.

Account showing the Quantities of the principal Articles of Brazilian Produce imported into the United Kingdom during each of the 10 Years ending with 1842, and showing, also, the Quantities of the same Articles entered for Consumption during these Years.

Articles.	1833.		1834.		1835.		1836.		1837.	
	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.
Cocoa, lbs.	2,402,803	36,138	1,591,600	4,902	1,678,769	420	183,526	638	256,458	3,855
Coffee, lbs.	3,349,733	493	5,316,865	445	4,117,094	708	3,972,718	1,377	7,607,276	452
Hides, untanned, cwt.	28,508	21,571	49,792	17,551	37,706	18,537	26,835	18,769	16,006	7,288
India rubber, or caoutchouc, cwt.	2,594	2,818	1,530	2,295	992	1,174	160	482	936	604
Sarsaparilla, lbs.	13,077	18,777	28,803	12,461	22,387	15,609	1,718	1,831	12,842	2 496
Sugar, unrefined, cwt.	198,198	42	79,135	31	81,348	9	176,151	9	110,216	15
Tapioca, cwt.	942	1,277	888	905	1,663	1,685	3,735	2,425	2,142	2,489
Brazil wood, tons	586	319	582	340	418	158	283	29	327	8
Rosewood, tons	443	1,029	1,569	1,077	2,458	1,389	1,916	1,775	1,717	1,307
Wool, cotton, lbs.	22,468,821	27,253,980	19,291,396	20,028,856	24,986,409	24,757,678	27,501,272	26,905,704	20,940,145	20,822,509

Articles.	1838.		1839.		1840.		1841.		1842.	
	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.	Quantities Imported.	Quantities entered for Consumption.
Cocoa, lbs.	201,780	444	186,465	2,941	67,382	2	269,794	96	185,756	248
Coffee, lbs.	10,373,713	978	2,268,345	1,190	8,608,616	22,625	2,191,855	1,226	5,833,345	47,015
Hides, untanned, cwt.	28,463	16,627	27,961	18,723	24,190	12,569	13,815	7,480	44,297	21,520
India rubber, or caoutchouc, cwt.	1,714	1,904	4,254	3,573	4,459	4,776	4,926	4,615	1,986	2,781
Sarsaparilla, lbs.	- -	11,078	9,484	4,693	4,141	780	1,399	563	5,572	3,537
Sugar, unrefined, cwt.	86,515	28	197,510	26	216,018	1,545	365,663	27	260,068	9
Tapioca, cwt.	462	1,240	402	558	983	1,099	1,870	1,679	2,325	2,224
Brazil wood, tons	703	21	770	26	900	36	1,693	188	127	604
Rosewood, tons	964	1,790	1,737	1,456	1,491	1,545	2,488	1,682	1,069	1,890
Wool, cotton, lbs.	24,464,505	24,727,312	16,971,979	17,089,859	14,779,171	13,952,644	16,671,348	14,095,988	15,222,828	13,554,546

Account of the Quantities and Values of the principal Articles of British Produce and Manufacture exported from the U. Kingdom to Brazil in each Year, from 1838 to 1842, both included.

Articles.	1838.		1839.		1840.		1841.		1842.
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Declared Value.
Apparel, slops, haberdashery, &c. value	- -	£ 11,576	- -	£ 13,267	- -	£ 15,021	- -	£ 16,129	£ 14,630
Arms and ammunition - —	- -	37,214	- -	17,133	- -	16,096	- -	12,576	15,148
Beer and ale - - tuns	548	7,009	658	11,325	5,217	12,535	5,464	12,381	16,804
Brass and copper manufactures, cwts.	5,111	25,595	7,260	37,255	7,904	40,914	6,297	33,503	33,085
Butter and cheese - - —	26,589	106,221	21,775	78,804	17,650	72,546	17,020	66,525	63,166
Cotton manufactures, entered by the yard - - - yds.	80,454,079	1,599,906	75,965,581	1,516,088	76,848,429	1,451,345	73,875,410	1,408,758	819,530
hosiery, lace, and small wares value	- -	57,796	- -	71,598	- -	73,364	- -	62,470	
Earthenware of all sorts - pieces	4,573,137	35,275	4,028,388	33,010	5,199,780	40,025	5,368,592	38,183	38,976
Glass entered by weight - cwts.	15,782	19,317	16,535	17,908	17,152	17,936	19,031	19,106	21,445
Hardware and cutlery - cwts.	14,361	51,570	17,941	62,987	16,263	58,021	13,297	48,071	50,756
Iron and steel, wrought and unwrought - - - tons	3,568	50,527	3,685	53,371	4,336	59,320	4,421	59,200	55,015
Linen manufactures, entered by the yard - - - yds.	6,526,555	165,424	7,594,836	211,853	8,425,771	231,551	8,075,584	243,997	184,484
Machinery and mill-work - value	- -	13,837	- -	15,701	- -	17,497	- -	17,698	24,941
Silk manufactures - - —	- -	18,969	- -	23,117	- -	25,515	- -	29,217	21,996
Soap and candles - - lbs.	4,024,075	58,769	4,456,855	67,918	4,812,403	67,001	3,753,581	51,016	45,384
Woollen manufactures entered by the piece - - - pieces.	76,058	204,571	76,697	211,165	99,430	272,892	106,914	298,825	
Do. do. by the yard - yds.	858,423	19,618	193,111	14,548	282,410	19,238	320,752	23,037	
hosiery and small wares - value	- -	1,745	- -	22,156	- -	15,500	- -	8,12	
All other articles - - —	- -	124,747	- -	169,515	- -	118,836	- -	107,2	
Total - -	- -	2,606,604	- -	2,650,713	- -	2,625,853	-	2,566,	

Remarks on the Trade of Brazil. — The imports into Brazil, which are chi... Great Britain, consist principally of our cottons, woollens, linen, hardware, ... manufactures, amounting in all, in ordinary years, as seen above, to about 2,60... It is frequently, no doubt, said that our exports to Brazil amount to double that ... or to more than 5,000,000*l.* But there is no room or ground for any such statement. The return is not derived from Brazil, but from our own Custom-house; and there is no reason why the merchants should undervalue the exports to Brazil more than to any other country.

The duties on all imports have for several years past been 15 per cent. on the tariff value, which averages fully 20 per cent. or more on the real value of British goods.

There are, also, duties on exports, which vary on different articles, and at different ports. On coffee they amount to about 10, and on sugar to about 12 per cent. But it is unnecessary to enter into any lengthened statements with respect to these duties, as it is all but certain that they will speedily undergo very material changes. Indeed a commission was appointed on the 17th May, 1843, for the avowed purpose of framing a new tariff, in which the duties on most articles were to be fixed at from 24 to 60 per cent. *ad valorem!* Our readers are aware that the mission recently sent by the British government to Rio to negotiate a new commercial treaty in the place of that which expires in November next (1844), failed of its object. This failure was occasioned, as is alleged, by our declining to make any sufficient reduction in the present exorbitant duty on Brazil sugar. It is certain, however, that such reduction would be even more advantageous to us than to the Brazilians. It would not only give a great stimulus to our trade with Brazil, by allowing it to flow in a direct instead of forcing it into an indirect channel, but it would also be of signal advantage to all classes of people in this country.

A reduction of the duty on Brazil and other foreign sugar to 30*s.* or 32*s.* a cwt. would go far to enable us to get 2 lbs. of sugar for the same price we now pay for 1 lb. And we have elsewhere shown that it is mere drivelling to suppose we should give, by so doing, any greater encouragement to slavery in Brazil than we give to it by our present system.—(See art. SUGAR.) The existing exorbitant duty on Brazil sugar is good for nothing, unless it be to deprive our people of an adequate supply of a most important necessary, to narrow our exports to Brazil, to force us to carry our returns in the first place to Hamburg and other continental emporiums, instead of bringing them direct to England, and, consequently, by laying our merchants under difficulties, to give a bonus to the Americans, Hanseatics, Austrians, and other foreigners now engaged in the trade. The truth is, that in insisting upon an effectual reduction of the duty laid in this country on foreign sugar, the Brazilians insisted on that which was most for our advantage. If we but reduce the duty in question, we need give ourselves, in so far at least as this matter is concerned, no further trouble about any thing else. Should the Brazilian government enact an oppressive tariff, it will redound only to their own disadvantage, and will have little or no influence over our interests. It will not be more effectual than the edicts of the Chinese against the importation of opium. If we open our ports under reasonable duties to the peculiar produce of Brazil, we may be quite sure that our products will, despite every obstacle, find their way to the Brazilian markets.

The commerce of Brazil has sustained great injury from the wretched state of the currency and of the finances; the value of the former, which consists almost wholly of paper, being excessively depreciated and liable to extreme fluctuations, and the revenue being inadequate to meet the expenditure. Latterly, however, vigorous efforts have been made to increase the revenue; and it is hoped that, in the event of the finances being placed on a better footing, measures may also be taken to improve the currency.

Trade between Brazil and the Hanse Towns in 1842.

The following statement of the trade between Brazil and the Hanse Towns, Hamburg, and Bremen, for the year 1842, is derived from Brazilian official documents:—

Arrived from Hamburg, in the different ports of the empire, 66 vessels, measuring 19,192 tons, with 791 men as crews, and 124 passengers, of which 31 Hamburgers, 22 Danes, 5 Swedes, 7 Bremen, Lubec, and Prussia, 1 English, with cargoes of an official value of $1,618,217. The exports to Hamburg were effected in 119 vessels, measuring 38,808 tons, and 1,480 men, of which 65 loaded at Rio Janeiro, 35 at Bahia, 10 at Pernambuco, 9 at Maranham and Rio Grande. Of these, 33 were Hamburgers, 24 English, 23 Danes, 17 Swedes, 10 Bremen, Dutch, and Prussian, 3 French, 3 Portuguese, 2 Russian, 2 American, 2 Austrian, 119; with cargoes of an official value of $7,734,201, showing an export in favour of Brazil of no less than $6,615,938. This export consists of 244,349 bags, 155 bbls., coffee; 22,209 chests, 3,843 bbls., bags, boxes sugar; 56,934 pieces hides; 1,171 bales cotton; 1,146 bags cocoa; 1,746 cocoa nuts; besides Jachranda wood, caoutchouc, roll tobacco, balsam copavai, sarsaparilla, &c. Arrived from Bremen, 13 ships, 2,677 tons, 125 men, of which 3 American vessels and 13 ships sailed to Bremen, 2,966 tons, 139 men, of which 1 American, value of export $846,700; import $80,868.

"The quantity of precious stones shipped is now very considerable. In most cases they are sent to a losing market; being, in fact, more valuable in Brazil than in London or Paris. Aquamarines—(see BERYL.)—of a very large size has been found. In January, 1811, one was found in the Riberao das Americanas, near the diamond district, which weighed 15 lbs.; and in the same place, in the October following, one was discovered weighing 4 lbs. Topazes of fine quality, but seldom large, amethysts, and chrysolites, are also articles of exportation; and, at times, some fine specimens of these gems are to be met with in the jewellers' shops.

"Correctly speaking, there are no trading companies in Rio de Janeiro: there is a society for effecting maritime assurances, but no other.

"The Bank of Brazil has had very extensive concessions made in its favour, and ought to be in a flourishing state. It has the power of issuing notes; and all disputed monies and property of the deceased and absentees (*monies e ausentes*) must be placed in its hands, and 2 per cent. per annum charged for the care and trouble. This, in addition to the interest which might be obtained for the deposit, would alone, in an active mercantile country, form no inconsiderable revenue. Specie is prohibited from being carried coastwise; merchants who wish to deposit cash in one of the northern ports, where the largest purchases are made, are therefore forced to take hand bills, and pay a premium for them, varying from 3 to 5 per cent.

"Some enormous capitals have been amassed; but generally the speculations of the native merchants are conducted on a very limited scale.

"The legal rate of interest is 6 per cent.; but money can seldom be obtained under 12." — (*Caldcleugh's Travels in South America*, vol. i. pp. 53—59.)

ROADS, pathways formed through the country with more or less art and care, for facilitating the transit of individuals, carriages, &c. between different places. They are

of every variety of form — from rude, narrow, rugged, and unformed paths, carried over mountains, interrupted by every petty rivulet, and almost impracticable to any but foot passengers, to smooth, broad, and level ways, formed of solid materials, winding round or cut through mountains, and carried over swamps and rivers at an immense expense, and admitting of the easy passage of carriages and of all sorts of goods.

The laying out of improved roads, and their construction, forms an important part of what is denominated the science of civil engineering. But as it would be quite foreign to our purpose to enter into any details as to the formation of roads, we shall satisfy ourselves with laying before the reader the following statements as to their importance in a commercial point of view.

Importance and Utility of improved Roads. — Next to the introduction of money, and weights and measures, the formation of good roads and bridges gives the greatest facility to commerce, and contributes more powerfully, perhaps, than any thing else to the progress of improvement. They have been denominated national veins and arteries; and the latter are not more indispensable to the existence of individuals, than improved communications are to a healthy state of the public economy. It were vain to attempt to point out in detail the various advantages derived from the easy means of communication that exist in Great Britain. There is not a single district that is not indebted to others for a large part of its supplies, even of some of the bulkiest commodities. Besides the coals, metals, minerals, timber, corn, &c. conveyed from one part of the empire to another by sea, immense quantities are conveyed from place to place in the interior, by roads and canals; and every improvement effected in the means of conveyance has obviously the same effect upon the cost of commodities that have to be conveyed, as an improvement in the methods by which they are raised or manufactured.

Wherever the means of internal communication are deficient in a country, the inhabitants must unavoidably disperse themselves over the surface. Cities were originally founded by individuals congregating more, perhaps, for the sake of mutual defence and protection, than for any other cause. But in countries where good government is established, and property is secure, men resort to cities only from a sense of the advantages they afford. The scale on which business is conducted in them presents facilities that cannot be elsewhere afforded for making a fortune; and the extent to which the subdivision of employments is carried opens a field for the exercise of all sorts of talent: at the same time that it improves and perfects all sorts of arts, whether subservient to industrious or scientific pursuits, or to those of pleasure and dissipation. It is this that attracts the aspiring, the industrious, the gay, and the profligate, to cities, — that fills them with the best and the worst part of the species. The competition that takes place in a great town, the excitement that is constantly kept up, the collision of so many minds brought into immediate contact, and all endeavouring to outstrip each other in their respective departments, developes all the resources of the human mind, and renders a great city a perpetually radiating focus of intelligence and invention. There are, however, considerable clogs upon the continued increase of cities. The food and fuel made use of by the inhabitants, and the raw products on which their industry is to be exerted, must all come from the country; and according as the size of a city increases, the distances from which its supplies have to be brought become so much the greater, that ultimately the cost of their conveyance may be so great as to balance or exceed the peculiar advantages resulting from a residence in town. Hence the impossibility of a large or even a considerable city existing any where without possessing extensive means of communication either with the surrounding country, or with other countries; and hence, too, the explanation of the apparently singular fact, of almost all large cities having been founded on or near the sea, or a navigable river. Had London been an inland town, 50 miles from the shore, it is abundantly certain that she could not have attained to one third part her present size; but the facilities afforded, by her admirable situation on the Thames, for the importation of all sorts of produce from abroad, as well as from other parts of England, will enable her, should her commerce continue to prosper, to add to her colossal magnitude for centuries to come.

But all towns cannot be founded on the sea coast, or the banks of navigable rivers: and the growth of those in inland situations must, in all cases, depend on their means of communicating with the surrounding country. Without our improved roads, the great inland manufacturing towns with which England is studded, such as Manchester, Leeds, Birmingham, Sheffield, Bolton, Preston, &c., could not exist. They enable the inhabitants to obtain the rude products of the soil and the mines almost as cheap as if they lived in country villages. There is thus nothing, or next to nothing, to detract from the advantages which the inventive and enterprising artisan may expect to realise from resorting to those great hives of industry. And, owing to the gigantic scale on which all sorts of industry are conducted in them, the scope afforded for the employment of the most powerful machines, and the appropriation of particular sets of workmen to

every separate process, however minute, manufacturing industry is carried to a degree of perfection that almost exceeds belief.

The influence that the growth of a large town has upon agriculture is great and striking. "In the neighbourhood," says Paley, "of trading towns, and in those districts which carry on a communication with the markets of trading towns, the husbandmen are busy and skilful, the peasantry laborious; the land is managed to the best advantage, and double the quantity of corn or herbage (articles which are ultimately converted into human provision) raised from it, of what the same soil yields in remoter and more neglected parts of the country. Wherever a thriving manufactory finds means to establish itself, a new vegetation springs up around it. I believe it is true, that agriculture never arrives at any considerable, much less at its highest, degree of perfection, when it is not connected with trade; that is, when the demand for the produce is not increased by the consumption of trading cities."—(*Moral Philosophy*, book vi. c. 11.)

But the fact of their being mainly conducive to the growth of cities, is not the only advantage which improved roads confer upon agriculture. Without their aid it would be impossible to carry to distant places sufficient supplies of such bulky and heavy articles as lime, marl, shells, and other manures necessary to give luxuriance to the crops of rich soils, and to render those that are poor productive. Not only, too, would inferior roads lessen the market for farm produce, and consequently the quantity raised, but a larger proportional number of horses or other cattle would be required to convey the diminished produce to market. It is plain, therefore, that good roads are both directly and indirectly a prime source of agricultural improvement; directly, by increasing the quantity and reducing the cost of manure, and by increasing the quantity and reducing the cost of conveying farm produce to market; and indirectly, by providing for the growth and indefinite extension of cities and towns, that is, of the markets for agricultural produce.

Increased speed of conveyance is one of the principal advantages that have resulted from the formation of good roads, the invention of steam packets, &c. Suppose that it takes 2 days to travel by an uneven, ill-made road between any 2 places; and that, by improving the road, the journey may be accomplished in 1 day; the effect is the same as if the distance were reduced $\frac{1}{2}$; and there is not only a great saving of time to travellers, but also a great saving of cost from the more speedy conveyance of commodities. This latter is a point of much more importance than is commonly supposed. It is not possible to form any correct estimate of the value of the products that are constantly in the act of being carried from place to place in Great Britain and Ireland. It is certain, however, that it is very great; and every additional facility of conveyance, by bringing such products more rapidly to their destination, and enabling them to be sooner applied to the purposes for which they are intended, renders large quantities of capital available for industrious purposes, that would otherwise be locked up.

Mode of defraying Costs of Roads. — Roads of one sort or other must, of course, exist in every country emerged from barbarism, — but in England, the statute of the 28th of Philip and Mary, which is still in force, is the first legislative enactment in which a regular provision was made for the repair of the roads. The preamble to this statute declares, that the roads were tedious and noisome to travel on, and dangerous to passengers and carriages: and therefore it enacts, that in every parish 2 surveyors of the high ways shall be annually chosen, and the inhabitants of all parishes obliged, according to their respective ability, to provide labourers, carriages, tools, &c. for *four* days each year, to work upon the roads, under the direction of the surveyors. This system, though in many respects exceedingly defective, was at the time justly considered a great improvement, and answered pretty well till the reign of Charles II., when, owing to the increase of carriages, particularly about London, it became necessary to adopt more efficient measures for the formation and repair of roads; and the plan of imposing tolls upon those who made use of them began then to be adopted. But this system was not carried into full effect, and placed upon a solid footing, till about 1767, when it was extended to the great roads to all parts of the country; the contributions of labour under the act of Philip and Mary being then appropriated entirely to the cross or country roads. A money payment is now, however, very frequently made, in the case of the latter, instead of a contribution in labour.

When the plan for extending turnpike roads from the metropolis to distant parts of the country was in agitation, the counties in the neighbourhood of London petitioned parliament against it, alleging that the remoter counties would be able, from the comparative cheapness of labour in them, to sell their produce in London at a lower rate than they could do; and that their rents would be reduced, and cultivation ruined, by the measure! Luckily this interested opposition proved ineffectual; and instead of being injurious to the counties adjoining the metropolis, the improvement of the roads has been quite as beneficial to them as to those at a distance, inasmuch as, by providing for the indefinite extension of the city, it has rendered it a far better market for their pecu-

liaf productions, than it would have been had its growth been checked; which must have been the case long ago, had the improvements in question not been made.

The plan of making and repairing roads by contributions of labour is not peculiar to England, but was at one period general all over Europe. By an act of the Scotch parliament, passed in 1669, all persons engaged in husbandry were obliged to labour 6 days each year, before or after harvest, upon the public roads: the farmers and landlords being, at the same time, obliged to furnish horses, carts, &c. according to the extent of land occupied by them. The inconveniences of such a system are many and obvious. Those who get no pay for their work, and who perform it against their will, waste their time and industry; and there is, besides, a great loss incurred by the interruption of the regular pursuits of the labourer. A sense of these disadvantages led, in the early part of the reign of George III., to a commutation of the labour contribution for a money tax on land, rated according to its valuation in the cess books. This measure has been productive of the best effects. Previously to its taking place, the roads, even in the best cultivated districts of Scotland, were in the worst possible state, whereas they are now about the very best in Europe.

A similar system has been followed on the Continent. When Turgot entered on his administration, he sent a circular letter to the road surveyors and engineers of the different provinces of France, desiring them to transmit estimates, framed on the most liberal scale, of the sums of money for which the usual repairs might be made on the old roads, and the ordinary extent of new ones constructed. The average of the estimates showed that a money contribution of about 10,000,000 livres a year would suffice for these objects; whereas Turgot showed, that the execution of these repairs and constructions, by contributions of forced labour, or *corvées*, cost not less than 40,000,000 livres!—(Art. *Taxation*, *Ency. Brit.*)

There is still, however, a great deal of labour performed on the cross and country roads of England under the system established by the act of Philip and Mary. Its continuance is most probably to be ascribed to the want of any ready means for its commutation.

It is the duty of government to furnish assistance towards the formation of roads and bridges in parts of the country where they are necessary, and where the funds required for their formation cannot otherwise be obtained. But it is in such cases extremely desirable, in order to prevent government from being deceived by interested representations, that those more immediately concerned in the undertaking should be bound to contribute a considerable portion of its expense. This has been done in the case of the Highland roads. Down to a very recent period, large tracts in the Highlands were quite inaccessible, and were, consequently, in a great measure shut out from all improvement; while the rugged nature of the country and the poverty of the inhabitants rendered any attempt to construct improved roads an undertaking beyond their means. Under these circumstances, government came forward and engaged to advance ½ the expense of making roads and bridges in certain districts, on condition that the landlords and others interested should advance the other ½, and that the work should be executed under the direction of parliamentary commissioners and engineers. This arrangement has been highly beneficial. Through its means above 600 miles of excellent roads have been constructed; and, in consequence of the easy means of communication they afford, a spirit of improvement has been excited even in the wildest and least frequented districts.

Dr. Smith seems to have inclined to the opinion, that the roads of a country would be better attended to, and more economically managed, were they placed under the control of government, than when they are left to be planned and superintended by private individuals. But this opinion does not seem to rest on any good foundation. It is, perhaps, true that a few of the great roads between the principal towns of a country might be better laid out by government surveyors, than by surveyors appointed by the gentlemen of the different counties through which they pass. But these great roads bear but a very small proportion to the total extent of cross and other roads with which every country either is, or should be, intersected; and, besides, it is abundantly certain, that when the formation of the great roads is left, as in Great Britain, to the care of those who, either by themselves or their tenants, have to defray the greater part of the expense of their construction and repair, they will be managed, if not with greater skill, at least with far more economy, than if they were intrusted to the agents of government. M. Dupin has set this matter in the clearest point of view, in his remarks on the administration of the roads in France and England. In the former they are entirely under the control of government; and the consequence is, that while there is a useless expenditure upon a few great roads, the cross roads are almost entirely neglected, and the facilities of internal intercourse are incomparably inferior to ours.

Sir Henry Parnell, who published the best treatise on road-making in the English language, while he approves of the system of local trusts, proposes that measures should

be taken for increasing the responsibility of the trustees, and that every trust should be obliged to submit its accounts to the inspection of some public board. We have no doubt that this plan would be in several respects advantageous. Perhaps, however, the object in view, in making accounts be submitted to a public board, might be attained by the erection of local tribunals for their inspection. We should be extremely jealous of any plan, how advantageous soever in other respects, that might lead to the employment of government surveyors generally in the laying out of roads, or to any material abridgment of the powers of the private trusts.

Length of Roads, Cost, &c. — The total length of the different paved streets and turnpike roads in England and Wales amounts to about 20,000 miles. The expenditure by the trustees, on account of these roads, in 1841, amounted to 1,551,336*l.*; the revenue for the same year being 1,574,5[illegible]*l.*: of the total expenditure, 302,182*l.* went to defray interest of debt. — (*Parl. Paper* No. 580. Sess. 1843.) The length of the various cross roads and other highways, exclusive of turnpikes, is estimated at about 95,000 miles.

Tolls. — In fixing the rate of tolls, great care should be taken to keep them as low as possible. When they are either too much multiplied, or too high, they have a very pernicious influence. They then operate as a most oppressive and unequal tax on commerce; and obstruct that intercourse they are intended to promote. The same remark is applicable to all sorts of dock and harbour dues, light-house dues, &c. When confined within due bounds, they cannot justly be objected to; for nothing can be fairer than that those who benefit by such increased facilities and security in the prosecution of their business should pay for them. But whenever they exceed the proper limits, they tempt the navigator to resort to ports where the charges are lower, and to direct his course through more insecure but less costly channels.

Improvement of Roads. — It is not easy for those accustomed to travel along the smooth and level roads by which every part of this country is now intersected, to form any accurate idea of the difficulties the traveller had to encounter a century ago. Roads were then hardly formed; and, in summer, not unfrequently consisted of the bottoms of rivulets. Down to the middle of last century, most part of the goods conveyed from place to place in Scotland, at least where the distances were not very great, were carried, not by carts or wagons, but on horseback. Oatmeal, coals, turf, and even straw and hay, were conveyed in this way! At that period, and for long previously, single-horse traffickers (cadgers) regularly plied between different places, supplying the inhabitants with such articles as were then most in demand, as salt, fish, poultry, eggs, earthenware, &c.: these were usually conveyed in sacks or baskets, suspended one on each side the horse. But in carrying goods between distant places, it was necessary to employ a cart, as all that a horse could carry on his back was not sufficient to defray the cost of a long journey. The time that the *carriers* (for such was the name given to those that used carts) usually required to perform their journeys seems now almost incredible. The common carrier from Selkirk to Edinburgh, *thirty-eight* miles distant, required a *fortnight* for his journey between the two places, going and returning! The road originally was among the most perilous in the whole country; a considerable extent of it lay in the bottom of that district called Gala-water, from the name of the principal stream, the channel of the water being, when not flooded, the track chosen as the most level, and easiest to travel in!

Even between the largest cities, the means of travelling were but little superior. In 1678, an agreement was made to run a coach between Edinburgh and Glasgow, a distance of 44 miles, which was to be drawn by *six* horses, and to perform the journey from Glasgow to Edinburgh and back again in *six* days. Even so late as the middle of last century, it took a day for the stage coach to travel from Edinburgh to Glasgow, — a journey which is now accomplished in 4½ or 5 hours.

So late as 1763, there was but one stage coach from Edinburgh to London, and it set out only once a month, taking from 12 to 14 days to perform the journey. Previously to the late opening of the railway, by which they have been in a great measure superseded, there were, exclusive of steam packets, smacks, &c., 3 or 4 coaches which set out each day from Edinburgh for London, and conversely, performing the journey in from 45 to 48 hours. — (*Robertson's Rural Recol.* pp. 39—44.)

The effects of this extraordinary improvement in the means of travelling, especially since the introduction of railways, have been as striking on the manners as on the industry of all classes. The remark of Smith, that "man is the least transportable species of luggage," is no longer true as applied to Great Britain. During spring, the metropolis is crowded with visiters of all ranks and orders from the remotest provinces; and during summer and autumn vast numbers of the citizens are spread over the country. Hence it is, that manners, as well as prices, are reduced nearly to the same standard. A respectable family in Penzance or Inverness live very much in the same way as a respectable family in London. Peculiarities of all sorts have disappeared; every thing

is, as it were, brought to a level; the fashions and opinions of the metropolis are immediately diffused over every part of the country, while those that originate in the latter powerfully influence the former.

ROPE consists of hemp, hair, &c. spun into thick yarn, of which several strings are twisted together by means of a wheel. When made very small, it is called a cord; and when very thick, a cable. All the different kinds of this manufacture, from a fishing-line, or whip-cord, to the cable of a first-rate ship of war, go by the general name of cordage. — (See CABLE.)

ROSEWOOD (Ger. *Rosenholz*; Fr. *Bois du rose, de Rhode*; It. *Legno rodie*; Sp. *Leno de rosu*; Port. *Páo [illegible]rosado*) is produced in Brazil, the Canary Islands; in Siam, whence it is pretty largely exported by the Chinese; and in other places. It is in the highest esteem as a fancy wood. The width of the log imported into this country averages about 22 inches, so that it must be the produce of a large tree. Rosewood has a slightly bitterish, somewhat pungent, balsamic taste, and fragrant smell, whence its name. It should be chosen sound, heavy, of the deepest colour, in the largest pieces that can be procured, and of the most irregular knotty grain. The small, light-coloured and large shivered pieces should be rejected. The more distinct the darker parts are from the purple red, which forms the ground, the more is the wood esteemed. It is usually cut into veneers of nine to an inch. — (*Milburn's Orient. Com., &c.*)

Rosewood, which is one of the dearest as well as most beautiful of the fancy woods, is principally used in veneering. Its consumption has more than quintupled since 1820. At an average of the 3 years ending with 1822, the entries for home consumption were 277 tons a year, whereas they amounted, during the 3 years ending with 1841, to 1,607 tons a year! This increase is principally to be ascribed to the reduction of the duty, in 1826, from 20*l.* to 10*l.* a ton, and in 1836, to 6*l.* But we are glad to have to state that the duty was further reduced, in 1842, to 1*l.* per ton when imported from a foreign country, and to 5*s.* per ton when imported from a British possession.

ROSIN. "This substance is obtained from different species of fir; as the *Pinus abies, sylvestris, larix, balsamea.* It is well known that a resinous juice exudes from the *pinus sylvestris*, or common Scotch fir, which hardens into tears. The same exudation appears in the *pinus abies*, or spruce fir. These tears constitute the substance called *thus*, or frankincense. When a portion of the bark is stripped off these trees, a liquid juice flows out, which gradually hardens. The juice has obtained different names, according to the plant from which it comes. The *pinus sylvestris* yields common turpentine; the *larix*, Venice turpentine — (see TURPENTINE); the *balsamea*, balsam of Canada — (see BALSAM), &c. All these juices, which are commonly distinguished by the name of turpentine, are considered as composed of two ingredients; namely, oil of turpentine, and rosin. When the turpentine is distilled, the oil comes over, and the rosin remains behind. When the distillation is continued to dryness, the residuum is known by the name of common rosin, or *colophonium*; but when water is mixed with it while yet fluid, and incorporated by violent agitation, the mass is called *yellow rosin*. During winter, the wounds made in the fir trees become incrusted with a white brittle substance, called *barras* or *galipot*, consisting of rosin united to a small portion of oil. The yellow rosin, made by melting and agitating this substance in water, is preferred for most purposes, because it is more ductile, owing, probably, to its still containing some oil. The uses of rosin are numerous and well known." — (*Thomson's Chemistry.*)

ROSTOCK, the principal city of the Grand Duchy of Mecklenburg Schwerin, on the Warnow, about 9 miles above where it falls into the Baltic, lat. 54° N., lon. 12° 12′ E. Population, in 1837, 18,067. A large fair for merchandise is annually held at Whitsuntide; and there are wool fairs at other seasons of the year.

The outport of Rostock is at Warnemunde, at the mouth of the Warnow. The depth of water at the latter varies from 10½ to 12 feet; but when the west pier, now in the course of being constructed, has been completed, it is expected that the depth of water will be from 12 to 14 feet. The depth of water in the river from Warnemunde up to Rostock is usually from 8 to 9 feet; so that vessels drawing more than this must be lightened to get up to the latter. Rostock has a good harbour and commodious quays.

Money. — Rostock and all Mecklenburg reckon by rix-dollars new, two thirds of 48 schillings. The rix-dollar contains 199·1 grains pure silver, and is worth nearly 2*s.* 4*d.* (2*s.* 3·8*d.*) sterling.

Weights. — The commercial weights are the same as those of Hamburg, which see. There are, however, other weights, introduced in 1757, which are 5 per cent. heavier than the above. They are principally used in the trade with Russia.

Measures. — The Rostock foot = 11·38 Eng. inches. The ell = 2 feet. The last contains 96 scheffels: the last used in the measuring of oats = 14½ imp. quarters = 42 hectolitres: the last used in the measuring of other grain = 14 imp. quarters or 37·3 hectolitres. — (*Kelly's Cambist.*)

Imports. — The principal articles of import are sugar, coffee, and other colonial products; cottons, woollens, and hardware, with coal, earthenware, salt, iron, horses, &c., from England; hemp, flax, tallow, oil, sail-cloth, &c., from Russia; alum, deals, timber, lime, tar, &c., from Sweden; herrings and fish oil from Norway; wine, brandy, molasses, drugs, &c., from France; with rice, rum, groceries, &c., from Copenhagen and Hamburg. The total value of the imports may be estimated at about 250,000*l.*

Exports. — These consist chiefly of very good red wheat, barley, peas, rapeseed, and a few oats; with wool, rags of a very superior quality, oil cake, rape oil, bones, &c. The exports of wheat amounted in 1840 to 97,565 quarters, and in 1841 to 124,267. In 1840, the exports of peas from Rostock only were 9,503 quarters; but from the duchy they amounted to 43,013 quarters; but at an average their export does not exceed from 20,000 to 25,000 quarters. The export of bones amounted during the same year to 1,550,000 lbs. At an average the value of the exports may be estimated at 300,000*l.*

Shipping. — The port of Rostock had, in 1840, 230 ships of the burden of 35,332 tons, which trade with most European nations, the U. States, and Brazil. In 1835, there entered the port 540 ships (burden not stated), of which 215 belonged to Mecklenburg, 152 (mostly small craft) to Denmark, 83 to Sweden, 27

to Hanover, 18 to Prussia, 12 to Russia, 19 to Holland, 10 to Lubeck, 2 to Hamburg, and 1 each to France and England. It is only, in fact, when our ports are open to the importation of foreign corn that British ships are met with, in considerable numbers, in the ports of Mecklenburg.

Port Charges. — These are the same on native and privileged ships, among which are included those of England, France, America, Prussia, Norway, &c. The port charges on a vessel of 100 tons burden are as follow, viz. :—

	Privileged.		Not privileged.	
	Rix-d.	Sch.	Rix-d.	Sch.
Inward with cargo	16	2	10	2
Outward ditto	25	44	32	6
Inward in ballast	12	6	13	6
Outward ditto	19	36	31	10
Ditto without either	17	52	25	42

Duties. — These are extremely moderate. On most imported articles they amount to only 3 per cent. *ad valorem*. An export duty of about 5*d*. per quarter is charged on corn, and of about 4*s*. 8*d*. per hhd. on wine. Wool is not subject to any duty on export. Goods imported in vessels not privileged pay 50 per cent. additional on the above duties; that is, they pay 4½ instead of 3 per cent. *ad valorem*.

Wismar, the second sea-port town of Mecklenburg, at the confluence of the river 6tor with the sea, in lat. 53° 49′ 25″ N., long. 11° 36′ 15′ E. Population 11,000. The harbour of Wismar is commodious and safe, being nearly land-locked by the islands of Poel and Walfisch. Close to the town there is from 8 to 8½ feet water; in the inner roads there is from 12 to 13 feet; and in the outer from 16 to 20 feet water. The port charges on a native or privileged vessel of 100 tons amount to about 30 rix-dollars. The articles of import and export are the same at Wismar as at Rostock; but owing to the proximity of Lubeck, from which Wismar is not more than 27 miles distant, her foreign trade is comparatively limited. About 35 ships, of the burden of 4,800 tons, belong to this port. There cleared from it, in 1835, 227 ships, of which 11 were English. The duties at Wismar are somewhat higher than at Rostock, being 4½ per cent. *ad valorem* on colonial products, and from 4*d*. to 8*d*. per quarter on corn exported. It is believed, however, that they will shortly be reduced to the Rostock level.

General Remarks on the Trade of the Duchies. — Mecklenburg is essentially an agricultural, wool-growing, grazing, and breeding country. In some places it is sandy and barren; but it is for the most part very fertile, and the crops and pastures are both luxuriant. Having few manufactures, her imports necessarily consist principally, as already stated, of manufactured goods, and her exports of raw produce. Owing, however, to the circumstance of the south-western part of the province being bounded by the Elbe, and approaching to within about 30 miles of Hamburg, almost all the manufactured goods, as well as a very large proportion of the colonial products used by the population (550,000), are imported by way of Hamburg. Hence, in Mecklenburg, as in Prussia, the direct foreign trade carried on by the sea frontier forms but a very small part of the entire trade of the country. It is impossible, however, to form any precise estimate of what the latter may amount to. Probably there is no European country so little fettered by customs regulations as Mecklenburg. The duties on articles imported by sea amount only, as already stated, to about 3 per cent. *ad valorem*; and those entering by the land frontier are subject merely to a trifling charge, on account of toll, of which we have never seen any account. It is impossible, indeed, that any commercial system can be bottomed on more liberal principles; and this enlightened policy, and her situation near the mouth of the Elbe, and on the western frontier of the Prussian league, give to Mecklenburg far greater importance, as a commercial state, than is indicated by the amount of her population, or her internal consumption.

ROTTERDAM, on the north bank of the Maese, in lat. 51° 55′ 19″ N., lon. 4° 29′ 14″ E. Population, in 1840, 78,098. Rotterdam is the second commercial city of Holland. It is more advantageously situated than Amsterdam; being nearer the sea, and the canals which intersect it are so deep as to admit of the largest vessels coming up to the quays and warehouses of the merchants. Its commerce, during the last 15 years, has increased more rapidly than that of any town in Holland. The exports and imports are similar to those of Amsterdam. The white Zealand wheat shipped here is of a peculiarly fine quality; and it is the best market for madder and geneva. Our imports of madder from Holland in 1841 amounted to 35,334 cwt., most of which came from Rotterdam. — (See MADDER.) Geneva is sold by the aam; but, for the convenience of smuggling to England, it is divided into ankers and ½ ankers. The legitimate import of geneva from Holland in 1841 amounted to 464,537 gallons.

N.B. — The channel from the sea to Rotterdam is exhibited in the chart of the Dutch coast in the map of Europe in this work.

Monies, Weights, and Measures. — See the article AMSTERDAM, for an account of the current monies, weights, and measures of Holland.

Two different commercial lbs. were formerly used at Rotterdam: one was the Amsterdam weight, 109 lbs. of which = 108·93 lbs. avoirdupois; the other, used by retailers, was 5 per cent. lighter, 100 lbs. of it being = 105·48 lbs. avoirdupois.

The Rotterdam last of corn = 10·64 Winchester bushels.

The aam = 40 English wine gallons very nearly.

A hogshead of flax-seed contains from 7½ to 8 Winchester bushels. Rock salt is sold per great hundred of 404 masters, containing from 21 to 22 tons. Coals per hoed = ⅓ a chaldron of Newcastle.

The liquid measures were divided in the same manner as at Amsterdam, but were larger; thus, 100 stoops of Rotterdam were = 67⅞ English wine gallons. Brandies were sold per 30 viertels; whale oil, per 30 stoops; vegetable oils per 300 stoops.

The ell is the same as at Amsterdam. 100 feet of Rotterdam = 109½ feet of Amsterdam, or 102 English feet.

Tares and Allowances.

	Tares.	Drafts.	Allowances.
Coffee, Surinam	6 per cent.	1 per cent.	3 per ct.
St. Domingo			
Bourbon	10 lbs. per bale	1 —	—
Mocha	24 lbs. —	1 —	—
Java	14 lbs. per bale of 270 lbs.	1 —	3 —
Sugar, Jamaica	18 per cent.	1 —	1 —
Demerara	20 —		
East India, in bags	10 —		
Havre chests below 364 lbs.	20 lbs. per chest	1 —	1 —
364 lbs. above	18 per cent.	1 —	1 —

	Tares.	Drafts.	Allowances.
Sugar — *continued.*			
Martinique	18 per cent.	1 per ct.	1 per ct.
St. Domingo			
Cotton	6 —	1 —	1 —
Hides, Buenos Ayres	2 lbs. per hide	2 —	1 —
Tobacco, Virginia	3 per cent.	2 —	3 —
Logwood	3 —	1 —	1 —
Pimento	real tare	1 —	1 —
Indigo	3 per cent.	—	2 —
Pepper	5 lbs. per bale	1 —	—
Whale oil	1 per cent.	—	1 —
Madders	real tare	—	1 —

Account of the Values of the different Articles imported into and exported from Rotterdam in 1841 distinguishing between those imported from and exported to the United Kingdom and all the other Countries.

Imports.				Exports.			
Articles.	United Kingdom.	All other Countries.	Total.	Articles.	United Kingdom.	All other Countries.	Total.
	£	£	£		£	£	£
Barley, oats, and other corn	120	92,080	92,200	Cheese and butter, indigenous	237,000	69,640	306,640
Coals	47,640	22,000	69,640	Coffee	1,520	607,240	608,760
Coffee	32,3[illegible]	23,120	1,155,440	Cotton	-	150,200	150,200
Cotton	76,880	59,880	136,760	Cutlery and hardware	280	19,400	19,680
Drugs used in medicine and the arts	67,040	87,520	154,560	Drugs used in medicine	8,200	[illegible]2,600	190,800
Dye stuffs and colours	175,200	389,760	564,960	Dyestuffs and colours	112,000	1,080	693,080
Fish and salted provisions	600	9,440	10,040	Earths, or ochres, and bricks	3,[illegible]	8,760	12,400
Fruits, dry and fresh	20,840	51,960	72,800	Fish and salted provisions	240	11,640	11,880
Glass and glass wares	1,640	20,720	22,360	Fruits, dry and fresh	6,520	25,600	32,120
Gums	12,640	12,000	24,640	Geneva and other indigenous spirits	26,080	38,160	64,240
Haberdashery and hardware	29,080	76,360	105,440	Glass and glasswares	880	3,280	4,160
Hair, horse, and other kinds, and feathers	25,360	18,400	43,760	Grain, or corn and flour for food	130,480	76,800	207,280
Hemp and flax	1,800	7,520	9,320	Gums	-	29,280	29,280
Hides and skins	31,360	164,600	195,960	Hair, horse and other, and feathers	5,520	34,840	40,360
Iron wire and ironmongery	24,760	55,800	80,560	Hemp and flax	227,040	16,000	243,040
Manufactures of various kinds	27,200	112,120	139,320	Hides and skins	105,720	243,920	349,640
Metals, wrought and unwrought	335,160	113,360	448,520	Iron nails and ironmongery	6,040	45,000	51,040
Oils for the arts	31,480	29,560	61,040	Manufactures of various kinds	26,480	45,440	71,920
Pitch, tar, and other resins	800	10,080	10,880	Metals, wrought and unwrought	10,120	202,160	212,280
Porcelain, earthenware, pottery	54,960	30,840	85,800	Oils for the arts	-	47,840	47,840
Potash, and other ashes	4,480	26,040	30,520	Pitch, tar, and other resins	2,320	3,800	6,120
Rice	60,480	61,600	125,080	Porcelain, earthenware, and pottery	5,160	16,960	22,120
Rum and arrack	6,480	19,120	25,600	Salt and chemical products	3,080	70,320	73,400
Salt, and chemical products	38,280	10,640	48,920	Seeds, oleaginous	28,400	31,840	60,240
Seeds, oleaginous, for extracting oil	10,360	39,240	49,600	Spices	11,960	61,320	73,280
Spices	32,880	103,920	136,800	Sugar, raw	-	138,760	138,760
Sugar	9,000	476,080	485,080	refined	6,960	114,000	120,960
Tallow, and other fat	22,760	99,680	122,440	Tallow and other fat	1,000	46,040	47,040
Tea	50,560	17,040	67,600	Thread, yarn, twist, and other manufactures, viz.—			
Thread, yarn, twist, and manufactures, viz. —				cotton	79,840	1,378,960	1,458,800
cotton	1,589,360	208,240	1,797,600	hemp and flax	2,600	44,760	47,360
hemp and flax	71,920	40,080	112,000	silk	173,080	394,720	569,800
silk	184,600	695,320	879,920	wool, or worsted	16,760	319,920	336,680
wool, or worsted	731,520	102,480	834,000	not enumerated	2,920	103,280	106,200
not enumerated	18,680	31,080	49,760	Tobacco, indigenous unmanufactured	2,240	12,120	14,360
Tobacco	22,600	226,480	249,080	leaf and roll	160	169,240	[illegible]400
Wheat, rye, and the flour thereof	-	269,800	269,800	manufactured	80	44,880	[illegible]60
Wine, brandy, and spirits	16,240	196,240	212,480	Toys, German	12,280	6,400	18,680
Wood, cabinet makers'	1,200	19,840	21,040	Wines and foreign spirits	13,440	56,720	72,160
dyewood	19,640	42,680	62,320	Wood, cabinet makers'	200	5,040	5,240
for ship and house building	-	16,320	16,320	dyewood	160	37,280	37,440
Wool	360	8,200	8,560	Wool	5,920	27,320	33,240
Sundry articles	17,680	60,200	77,880	Sundry articles	45,440	49,080	94,520
Total	3,905,960	5,260,440	9,166,400	Total	1,325,760	5,531,640	6,857,400

Statement of Imports, Sales, and Stocks of the principal Articles of Colonial and Foreign raw Produce at Rotterdam and Amsterdam, in the Five Years ending with 1843.

	1839.			1840.			1841.			1842.			1843.		
	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.
Coffee (tons) —															
E. I. Rotterdam	18,460	17,036	6,250	19,920	19,137	7,050	20,015	21,377	5,688	19,544	18,210	6,822	23,696	20,165	10,353
W. India, do.	1,487	1,886	-	1,596	1,596	-	988	920	68	1,695	1,259	504	1,066	[illegible]	226
E. I. Amsterdam	21,137	18,812	7,325	25,530	24,435	8,420	32,000	31,405	9,015	28,540	29,599	7,956	[illegible]40	[illegible]	15,059
W. India, do.	936	1,436	125	2,059	2,184	-	3,000	2,390	610	228	796	42	[illegible]27	[illegible]	36
E. I. Middleberg	1,265	1,267	509	1,220	1,489	249	924	1,028	145	3,057	2,204	998	1,985	1,803	1,180
	43,285	40,427	14,209	50,325	48,841	15,709	56,927	57,120	15,526	52,864	52,068	16,[illegible]	[illegible]7,314	46,782	26,854
Cotton (bales) —															
Rotterdam	38,095	30,312	4,172	30,146	25,164	9,154	23,566	25,899	6,821	36,600	37,101	6,320	31,970	32,290	6,000
Amsterdam	9,862	13,002	4,955	28,490	17,133	16,512	15,698	18,952	11,078	10,650	8,018	13,690	15,824	17,892	11,622
	47,957	43,314	9,127	58,636	42,297	25,466	37,264	44,851	17,899	[illegible]7,250	45,119	20,010	47,794	50,182	17,622
Hides —															
E. I. Rotterdam	26,056	24,856	1,200	12,520	12,400	1,320	46,367	43,806	3,881	43,402	36,962	9,321	40,908	39,614	10,615
W. India, do.	15,198	15,198	-	28,000	28,000	-	232,281	-	-	99,358	99,358	-	18,764	15,859	2,905
E. I. Amsterdam	24,152	24,152	1,000	31,950	32,950	-	32,144	29,144	3,000	89,195	78,905	13,900	59,968	65,068	8,800
W. India, do.	5,869	29,069	-	100,046	56,196	43,850	86,134	93,285	36,699	27,617	47,558	16,758	79,486	73,744	19,500
	72,275	93,275	2,200	172,516	129,546	45,170	396,926	166,235	43,580	251,572	255,173	39,979	196,126	194,285	41,820
Pepper (bags) —															
Rotterdam	15,500	14,050	2,250	5,700	7,150	800	16,350	[illegible]350	[illegible]800	7,600	7,600	800	9,021	9,021	800
Amsterdam	8,100	7,600	500	7,245	7,145	600	13,571	13,771	[illegible]400	4,240	3,240	1,400	11,547	11,547	1,400
	23,600	21,650	2,750	12,945	14,295	1,400	29,921	30,121	[illegible]200	11,840	10,840	2,200	20,568	20,568	2,200
Rice (tons) —															
E. I. Rotterdam	10,080	10,367	116	6,349	5,355	1,110	6,744	7,488	426	8,160	8,514	72[illegible]	8,682	8,136	618
Carolina, do.	1,140	1,045	119	613	681	51	258	309	-	450	450	-	885	843	45
E. I. Amsterdam	7,640	5,015	2,586	2,772	4,222	1,136	1,633	2,169	600	1,851	2,451	-	6,012	5,535	377
Carolina, do.	289	410	539	529	618	450	813	683	580	646	792	452	690	1,[illegible]2	
	19,149	16,837	3,360	10,263	10,876	2,747	9,448	10,588	1,606	11 107	12,207	504	16,272	15,756	1,040

Statement of Imports, Sales, &c. — *continued.*

	1839.			1840.			1841.			1842.			1843.		
	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.	Impts.	Sales.	Stcks.
Sugar (tons) —															
E. I. Rotterdam	20,208	24,313	5,225	18,000	23,011	214	22,716	19,594	3,366	18,736	19,073	2,029	20,550	18,516	4,063
W. India, do.	2,734	3,007	76	2,057	2,133	-	2,990	2,854	136	2,697	2,325	508	2,295	2,718	85
E. I. Amsterdam	23,368	18,056	8,462	20,319	25,942	2,860	27,483	61,538	8,700	23,560	28,036	4,524	26,599	28,708	2,415
W. India, do.	26,102	26,243	2,376	32,015	32,213	2,178	37,717			22,940	20,930	2,010	23,504	23,514	2,000
E. I. Middelburg	2,111	2,623	-	1,600	1,600	-	1,146	1,146	-	3,894	3,660	234	3,139	3,373	
W. India, do.	166	449													
	77,687	75,626	16,139	74,012	84,899	5,252	92,082	85,132	12,202	72,127	74,024	9,305	76,087	76,829	8,563
Tea (qr. chests) —															
Rotterdam	8,050	9,660	7,700	1,791	5,617	3,871	2,703	4,183	2,394	7,900	10,024	270	7,724	7,482	512
Amsterdam	12,270	11,940	3,200	15,553	12,663	6,090	3,470	9,220	340	10,940	6,850	4,430	21,380	19,150	6,380
	20,320	21,600	10,900	17,344	18,280	9,964	6,173	13,103	2,734	18,840	16,874	4,700	29,104	26,912	6,892
Tin (slabs) —															
Banca, Rotter.	50,799	44,241	11,908	21,618	27,857	5,669	32,980	25,972	12,677	48,106	34,919	25,834	41,014	53,016	12,902
Do. Amster.	41,669	32,069	11,000	25,252	29,326	6,926	43,311	38,973	11,264	46,676	17,320	41,620	45,262	79,722	7,160
	92,468	76,310	22,908	46,870	57,183	12,595	76,291	64,945	23,941	98,782	52,269	67,454	86,276	133,668	20,062
Tobacco (hhds.) —															
Rotterdam	7,388	6,023	4,033	17,442	16,424	5,060	20,162	18,701	6,491	22,940	21,643	7,788	17,738	16,846	8,680
Amsterdam	5,385	5,330	2,628	12,422	10,676	4,373	8,698	8,685	4,886	14,993	12,653	6,726	12,278	11,137	7,867
	12,773	11,353	6,661	29,864	27,100	9,433	28,860	27,416	10,877	37,933	34,296	14,514	30,016	27,983	16,547

RUBY, a precious stone, very highly esteemed: but under this name a variety of minerals have not unfrequently been sold, which differ essentially in their characters.

The *Oriental Ruby* is, in fact, a red variety of the sapphire. When perfect, its colour is a cochineal red, presenting a richness of hue the most exquisite and unrivalled: it is, however, in general, more or less pale, and often mixed with blue; hence it occurs rose red, peach blossom red, and lilac blue, passing into the amethyst. It is harder than any other mineral, except the diamond. Easily frangible. Specific gravity from 3·916 to 4·283. Infusible before the blowpipe. Oriental rubies of 10 carats are extremely rare and valuable. One of 22 grains was sold for 160*l.* Rubies in lots, Indian cut, or small sizes, and of different qualities, are at all times to be had, and sell at from 15*s.* to 65*s.* a carat: but a perfect stone of a carat, or 6 grains, may be deemed rare, and falls little short of the value of the diamond: nay, in some cases, rubies of 2, 3, or 4 carats, if *very fine*, are much scarcer, and even more valuable, than diamonds of equal weight. The finest ruby in England, or perhaps, in Europe, is in the collection of the late Mr. Hope, author of "Anastasius."

There are two other species of ruby, the *Spinelle* and *Balais*. When perfect, the Spinelle is a gem of great value and scarcity. Its colour is a fine full carmine or rose red, but it never presents that rich yellow tinge that attends the Oriental ruby. It is also inferior to the latter in hardness and specific gravity. Stones of 3 carats and upwards are very rare and valuable.

The *Balais Ruby* is a pale variety of the spinelle. It varies in colour from light red to yellowish red. Though not so rare as the spinelle, it is by no means common. It is much admired for its agreeable tinge of colour; and, when pure and perfect, fetches a very high price; though considerably less than the other varieties.

Rubies are not found in any considerable quantity except in Ava. — (See SAPPHIRE.) — (*Mawe on Diamonds*, 2d ed. pp. 90. 101.; *Thomson's Chemistry.*)

RUM, a well known and highly esteemed spirituous liquor imported from the West Indies, of which it forms one of the staple products. It is obtained, by means of fermentation and distillation, from molasses, the refuse of the cane juice, and portions of the cane, after the sugar has been extracted. The flavour and taste peculiar to rum are derived from the essential oils carried over in distillation. When the distillation has been carelessly performed, the spirit contains so large a quantity of the grosser and less volatile part of the oil as to be unfit for use till it has attained a considerable age. When it is well rectified, it mellows much sooner. Rum of a brownish transparent colour, smooth oily taste, strong body and consistence, good age, and well kept, is the best. That of a clear, limpid colour, and hot pungent taste, is either too new, or mixed with other spirits. Jamaica rum is the first in point of quality; the Leeward Island rum, as it is called, being always inferior to it, both in flavour, strength, and value. The price of the latter is usually 10 per cent. below that of the former. We import all our rum in puncheons, containing from 84 to 90 gallons each. It is customary, in some of the West India islands, to put sliced pine-apples in puncheons of rum: this gives the spirit the flavour of the fruit; and hence the designation, *pine-apple rum.*

Rum is said to be much adulterated by the retail dealers in England, sometimes with corn spirit; but if done with molasses spirit, the tastes of both are so nearly allied, that the cheat is not easily discovered.

Consumption of, and Duties upon, Rum, &c. — The following Table shows the

quantity of rum consumed in Great Britain and Ireland since 1800, the rates of duty charged upon it, and the produce of the duties: the price of Jamaica rum in bond since 1814 is also given.

Account, stated in *Imperial Proof Gallons*, of the Rum annually entered for Home Consumption in the U. Kingdom, from 1800 to 1842, both inclusive, distinguishing England, Ireland, and Scotland, the Rates of Duty payable respectively thereon; the Produce of the Duties; and the Price of Rum in Bond since 1814. (This account has been prepared partly from published and partly from unpublished *official* documents. The column of prices has been supplied by Mr. Cook.)

Years.	Quantities entered for Home Consumption.				Rate of Duty payable (Customs and Excise).		Nett Produce of the Duties in Great Britain.	Nett Produce of the Duties in Ireland.	Price of Jamaica Rum in Bond.
	England.	Scotland.	Ireland.	United Kingdom.	In England and Scotland.	In Ireland.			
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Per Gal.* s. d.	*Per Gal.* s. d.	£ s. d.	£ s. d.	*Per Gallon.* s. d. — s. d.
1800	1,945,266	239,913	964,411	3,049,590	9 0½	6 8½	920,827 6 4	263,355 0 5	
1801	1,687,839	349,237	1,057,316	3,094,392	8 10½	- -	955,177 1 5	347,455 7 9	
1802	2,204,807	468,163	657,095	3,330,065	9 0½	6 11½	1,222,989 11 2	206,861 2 10	
1803	2,573,602	379,043	259,966	3,212,611	13 4½	8 6½	1,368,870 13 4	88,140 7 8	
1804	1,508,899	124,548	180,289	1,813,736	13 5½	9 2½	1,054,625 1 6	69,292 8 3	
1805	1,696,384	153,635	123,049	1,973,068	13 5½	- -	1,223,770 0 9	56,401 2 4	
1806	1,857,391	188,811	160,148	2,206,280	13 6½	- -	1,373,986 5 0	72,615 16 0	
1807	1,999,783	226,296	210,822	2,436,901	- -	- -	1,496,814 1 8	69,776 13 3	
1808	2,174,751	239,263	343,333	2,757,347	- -	10 3½	1,637,475 16 2	161,789 3 9	
1809	2,260,625	289,325	1,063,661	3,613,611	13 7½	- -	1,753,074 5 8	546,747 1 7	
1810	2,703,718	350,560	336,658	3,370,936	- -	- -	2,059,170 0 7	172,424 11 8	
1811	2,711,945	300,306	150,290	3,162,541	- -	- -	2,055,161 4 0	77,378 3 11	
1812	3,205,165	286,569	283,135	3,775,169	- -	- -	2,366,338 12 10	149,817 9 1	
1813	3,014,680	211,686	463,008	3,749,374	13 10½	12 10½	2,278,636 10 0	251,639 9 2	
1814	3,332,188	280,493	91,154	3,703,835	- -	12 8½	2,513,578 2 7	58,060 6 6	4 6 — 6 6
1815	3,019,201	281,748	64,853	3,365,802	- -	- -	2,230,472 17 10	41,295 5 10	3 2 — 4 6
1816	2,221,535	185,874	21,513	2,428,950	- -	- -	1,630,076 13 10	13,177 5 0	3 7 — 4 8
1817	2,179,213	198,412	30,686	2,408,311	- -	- -	1,619,425 16 5	19,423 6 2	3 9 — 5 0
1818	2,106,266	203,951	21,366	2,631,583	- -	- -	1,775,714 12 2	13,587 15 4	3 5 — 4 6
1819	2,390,193	148,955	25,735	2,564,883	13 11½	- -	1,750,446 14 9	16,289 14 6	2 6 — 3 9
1820	2,325,733	142,997	20,390	2,489,120	- -	- -	1,684,425 7 8	12,981 5 2	2 8 — 4 0
1821	2,166,441	138,189	19,685	2,324,315	- -	- -	1,576,377 1 4	12,538 6 0	1 6 — 2 9
1822	2,100,925	130,879	15,039	2,246,839	- -	- -	1,516,645 11 6	9,557 6 8	1 8 — 2 8
1823	2,229,923	108,562	18,175	2,349,660	- -	13 11½	1,590,666 18 6	11,534 6 5	1 8 — 2 4
1824	2,407,207	134,986	9,453	2,551,646	12 7½	12 7½	1,600,827 6 6	6,097 7 1	1 7 — 2 6
1825	1,980,807	104,752	16,128	2,099,687	- -	- -	1,278,513 19 1	6,313 19 4	2 6 — 3 4
1826	3,982,053	295,505	27,758	4,305,316	8 6	8 6	1,817,108 2 3	11,770 6 6	3 0 — 4 0
1827	3,080,152	185,214	23,240	3,288,606	- -	- -	1,586,726 1 1	9,850 7 10	3 4 — 4 4
1828	3,064,856	188,089	24,708	3,277,653	- -	- -	1,582,624 19 5	10,528 17 9	3 3 — 4 3
1829	3,202,143	152,461	21,202	3,375,806	- -	- -	1,425,746 18 8	9,035 14 5	2 3 — 3 3
1830	3,503,144	136,520	19,294	3,658,958	9 0	9 0	1,591,836 11 5	8,492 18 6	2 3 — 3 8
1831	3,479,911	125,702	18,981	3,624,597	- -	- -	1,621,541 0 5	8,540 9 0	2 6 — 3 2
1832	3,377,607	112,026	24,432	3,513,965	- -	- -	1,569,402 10 3	10,977 13 6	2 0 — 3 2
1833	3,344,548	124,357	22,888	3,492,193	9 0	9 0	1,560,498 0 0	10,299 0 0	2 2 — 3 6
1834	3,206,650	111,169	27,358	3,345,177	9 0	9 0	1,492,842 10 10	12,297 5 9	2 6 — 3 6
1835	3,285,473	105,198	26,295	3,416,966	9 0	9 0	1,525,860 14 1	11,833 4 8	2 10 — 4 0
1836	3,194,892	104,882	24,975	3,324,749	9 0	9 0	1,484,916 17 4	11,238 16 9	3 0 — 4 6
1837	3,079,778	83,801	20,673	3,184,255	9 0	9 0	1,423,650 0 0	9,299 0 0	2 4 — 3 4
1838	3,029,490	86,160	19,701	3,135,651	9 0	9 0	1,402,201 0 0	8,865 0 0	4 0 — 5 3
1839	2,739,263	75,337	15,663	2,830,263	9 0	9 0	1,266,579 0 0	7,048 0 0	5 0 — 5 10
1840	2,445,221	55,408	12,331	2,512,960	To 5 May 9 0 From do. 9 4	9 0 9 4	1,149,934 0 0	5,679 0 0	4 11 — 6 3
1841	2,217,073	48,523	12,374	2,277,970	9 4	9 4	1,057,315 0 0	5,772 0 0	6 0 — 7 3
1842	2,050,331	35,951	11,465	2,097,747	9 4	9 4	973,608 0 0	5,551 0 0	4 8 — 5 9

For an account of the number of gallons of rum imported into the U. Kingdom from the West India colonies, during each of the 11 years ending with 1841, see *ante*, p. 331. Exclusive of the supplies from the West Indies, there were imported, in 1841, 95,510 gallons from the Mauritius, and 1,006,549 gallons from the E. India Company's territories. The latter, however, is more nearly allied to arrack than to rum.

Though rum has not been so much over-taxed as brandy, geneva, and wine, still it is obvious that even, in its case, taxation has been carried far beyond its proper limits. During the 3 years ending with 1802, when the duty in Great Britain was about 9*s.* a gallon, and in Ireland 6*s.* 8¾*d.*, the consumption of the U. Kingdom amounted to 3,150,000 gallons a year; while, notwithstanding the great increase of population, during the 3 years ending with 1823, when the duty in Great Britain was 13*s.* 11½*d.* a gallon, and in Ireland 12*s.* 8¾*d.*, the annual consumption amounted to only 2,307,000 gallons! The reduction of the duty in 1826 to 8*s.* 6*d.* increased the consumption from about 2,500,000 to above 3,600,000 gallons in 1830. But 6*d.* having been added to the duty in 1830, the consumption, influenced, no doubt, partly by this, but probably also by other circumstances, has since greatly declined. The extraordinary demand for rum from 1811 to 1815, was occasioned chiefly by the high price and inferior quality of the British spirits that were then manufactured.

The decrease in the consumption of rum in Ireland is most striking. Unfortunately, however, this is not the only instance the sister kingdom affords of the destructive effects of oppressive taxes. The excessive additions made to the duties on brandy, wine, sugar, &c. since 1805, have had similar effects; the quantity of these articles consumed in Ireland being *decidedly less now than it was* 30 *years ago!*—(See BRANDY, SUGAR, &c.) Exorbitant taxes have gone far to deprive the Irish of a great variety of comforts; and, consequently, have taken from them some of the most powerful incentives to industry and good conduct. The poverty of the people has set at nought

the calculation of our finance ministers; every increase of taxation in Ireland having produced a diminution of revenue and an increase of crime! Surely it is high time to abandon so odious a system; particularly after the experience of the beneficial effects that have resulted from the diminution of the spirit duties.

Rum the produce of the British possessions in America is not liable to the duty charged on sweetened spirits, unless the actual strength exceed the strength denoted by Sykes's hydrometer by more than 10 degrees per cent.; and in lieu of such duty there shall be charged upon every degree per cent. more than 3 degrees, and not more than 10 degrees, by which the actual strength shall exceed the strength denoted by Sykes's hydrometer, a duty of 9*s.* 6*d.*: provided, that if the importer cannot make a perfect entry thereof for payment of duty on the actual strength, he may demand in writing, upon the entry, that trial be made of the actual strength (he paying the expenses of such trial), instead of entering such rum for the payment of duty upon any stated number of such excessive degrees of strength: provided also, that all trials of actual strength of such rum shall be made by some skilful person appointed by the commissioners of customs for such purpose. — (7 *Geo.* 4. c. 48. § 31.)

Rum the produce of the British plantations must be imported in casks containing not less than 20 gallons. — (3 & 4 *Will.* 4. c. 52.) But rum in casks capable of containing 20 gallons may be imported on the officer being satisfied that the deficiency has been *wholly occasioned by absorption or leakage*, and not by abstraction. — (*Customs Min.* 24th of March, 1831.)

Rum in bonded warehouses may be drawn off into casks containing not less than 20 gallons each, as stores for ships, and may be delivered into the charge of the searcher, to be shipped as stores for any ship, without entry or payment of duty, the same being duly borne upon the victualling bill of such ships respectively. — (3 & 4 *Will.* 4. c. 57.)

Rum of the British plantations in bonded warehouses may also be drawn off into reputed quart or reputed pint bottles, for the purpose of being exported from the warehouse. — (3 & 4 *Will.* 4. c. 57.)

On applications referring to a former order allowing the admixture of rums of different strengths for exportation, and praying that the rum remaining in the vats after the operation of racking might be admitted for home consumption, the Board were of opinion that the request might be complied with, to the extent of an ullage of 20 gallons, the legal quantity allowed to be exported, and that the duty should be paid, according to the strength, at the time of delivery of the said rum. — (*Min. Com. Cus.* 27th of Sept. 1827.)

Before any rum shall be entered as being the produce of any British possession in America, or of the Mauritius, the master of the ship importing the same must deliver a certificate of origin to the collector or comptroller, and subscribe a declaration that the goods are the produce of such place. — (3 & 4 *Will.* 4. c. 52. § 37.; see *antè*, 663.)

RUSSIA COMPANY, a regulated company for conducting the trade with Russia. It was first incorporated by charter of Philip and Mary, sanctioned by act of parliament in 1566. The statute 10 & 11 Will. 3. c. 6. enacts, that every British subject desiring admission into the Russia Company shall be admitted on paying *5l.*; and every individual admitted into the Company conducts his business entirely as a private adventurer, or as he would do were the Company abolished.

Table of Duties payable to the Russia Company.

		s.	*d.*
Aniseed	the cwt.	0	3
Ashes, pearl and pot	the ton	0	9
Books, bound	the cwt.	0	3
unbound	the cwt.	0	2
Bristles	the dozen lbs.	0	0½
Castoreum	the lb.	0	1
Caviare	the cwt.	0	2
Cordage	the cwt.	0	2
Down	the 100 lbs.	0	4
Feathers, bed	the cwt.	0	4
Flax	the ton	0	9
Hair, cow or ox	the cwt.	0	2
Hemp	the ton	0	7
Hides of cows or horses, undressed	each	0	0½
red or Muscovy	each	0	1
Iron	the ton	0	5
Isinglass	the cwt.	0	4
Linen drillings	the 120 ells	0	1½
narrow or diaper	the 120 ells	0	2
22½ to 31½	the 120 ells	0	3
31½ to 45	the 120 ells	0	4
45 and upwards	the 120 ells	0	6
sail cloth	the 120 ells	3	3
Linseed	the quarter	0	2
Mats	the hundred	0	2
Oats	the quarter	0	1
Pitch	the last	0	2
Rhubarb	the lb.	0	1½
Rosin	the cwt.	0	1½
Saltpetre	the cwt.	0	1½
Seeds, garden	the 100 lbs.	0	3
Skins and furs, viz. —			
Armins or ermins	the zimmer of 40 skins	0	2
Bear	each	0	2
Calabar	the zimmer	0	2
Calf	the hundred	0	3
Fox	the hundred	0	1½
Hare	the 100 dozen	0	2
Sables	the zimmer	1	6
Swan	each	0	1
Wolf	each	0	1½
Tallow	the ton	0	9
Tongues	the hundred	0	2
Tow	the ton	0	6
Wax, bees'	the cwt.	0	2
Wheat	the quarter	0	1
Wood, viz. —			
Balks above 5 inches sq.	the 120	0	4
under do.	the 120	0	3
Barrel boards	the 120	0	1
Battens	the 120	0	1½
Capravens	the 120	0	3
Clap boards	the 120	0	1
Deals under 20 feet long	the 120	0	4
above do.	the 120	0	2
Fire wood	the fathom	0	1
Fir timber	the load	0	1
Handspikes	the 120	0	1½
Lathwood	the fathom	0	1½
Masts, great	each	0	2
all others	each	0	1
Oak boards	the 120	0	5
plank	the load	0	3
Timber	the load	0	2
Oars	the 120	0	4½
Paling boards	the 120	0	1
Spars	the 120	0	2
Staves	the 120	0	1
Tar	the last	0	2
Wainscot logs	the load	0	2

All goods not enumerated pay 1-8th per cent. *ad valorem* on the declaration of the importer.

RUSSIA LEATHER (Fr. *Cuir de Russie*; Ger. *Juften*; It. *Cuojo di Russia*; Pol. *Jachta*; Rus. *Juft, Youft*; Sp. *Moscovia*) the tanned hides of oxen and other kine, denominated by the Russians *youfts*, or *juffs*, — a designation said to be derived from their being generally manufactured in pairs. The business of tanning is carried on in most towns of the empire, but principally at Moscow and Petersburg. Russia leather is soft, has a strongly prominent grain, a great deal of lustre, and a powerful and peculiar odour. It is principally either red or black: the former is the best, and is largely used in this and other countries in bookbinding; for which purpose it is superior to every other material. The black is, however, in very extensive demand in Russia; large quantities being made up into boots and shoes. The process followed by the Russians in the preparation of this valuable commodity has been frequently

described; but notwithstanding this circumstance, and the fact that foreigners have repeatedly engaged in the business in Russia, with the intention of making themselves masters of its details, and undertaking it at home, the efforts made to introduce the manufacture into other countries have hitherto entirely failed. One of the best tests of genuine Russia leather is its throwing out a strong odour of burnt hide upon being rubbed a little. — (*Ricard, Traité Général du Commerce*, tome i. p. 275. ed. 1781.)

We borrow from Mr. Borrisow's work on the *Commerce of Petersburg* the following details with respect to this article: — Russia leather forms one of the principal export commodities of Petersburg. But since the ports of the Black Sea have been opened, the exports of leather from this port have considerably decreased; Italy, the principal consumer, supplying its wants from Odessa and Taganrog, more easily, cheaply, and expeditiously than from Petersburg. The chief exportation from the latter is to Prussia, Germany, and England. Frankfort on the Maine and Leipzic are of great importance as respects the trade in Russia leather, on account of the fairs held in them.

Juffs are never bought on contract, but always on the spot at cash prices. It nevertheless often happens that agents, in order to secure a lot of juffs, pay a certain sum in advance, and settle for the amount at the first market prices; no prices being fixed in the months of January, February, March, and sometimes even April.

Juffs are assorted or *bracked* when received, according to their different qualities, into *Gave*, *Rosval*, *Malja*, and *Domashna*. The three first sorts are again divided into *heavy* and *light Gave*, *heavy* and *light Rosval*, &c. Domashna is the worst, and consequently the cheapest sort. It often happens that juffs are bought unassorted, and then the prices are regulated according as the quantity of Domashna contained in the lot is greater or less. Persons well acquainted with the nature of Russia leather prefer purchasing it in this state.

Juffs are sold by the pood, which consists, as it is commonly expressed, of 4, 4½, 4¾, 5, 5¼, and 5½ hides. By this is understood, that so many hides make a pood, calculated upon the whole lot; and it is to be observed that the lightest juffs are esteemed the best in quality. Heavy juffs, or those of 4 and 4½ hides, are shipped for Italy: the Germans, on the contrary, prefer the lighter sort.

Juffs are packed in rolls, each containing 10 hides; and from 10 to 15 of these rolls are packed together in a bundle, which is well secured by thick matting. There are red, white, and black juffs; but the red are most in demand. Their goodness is determined by their being of a high red colour, of equal size, and unmixed with small hides: they must also be free from holes, well stretched, and equally thin. In a well finished lot, no thick head or feet parts should be found. If spots resembling flowers are seen on the red hides, it is an additional sign of their good quality; and they are then called *bloomed juffs*. The inside should be clean, soft, and white, and, when taken in the hand, should feel elastic. The best connoisseurs of Russia leather can nearly determine the quality by the smell alone.

Great attention must be paid, in shipping juffs, to secure them from being wetted, as damp air alone is sufficient to injure them.

Sixty rolls of juffs make a last; 88 poods nett weight, when shipped for Italy, make a last; and 44 poods a ton in England.

The exports of juffs from Russia, in 1841, amounted to 177,838 poods, and 150,951 pieces, worth together 1,538,191 silver roubles. — (*Official Returns*, p. 13.)

RYE (Ger. *Rogken, Rocken;* Du. *Rog, Rogge;* Fr. *Seigle;* It. *Segale, Segala;* Sp. *Centeno;* Rus. *Rosch, Sel, Jar;* Lat. *Secale*), according to some, is a native of Crete; but it is very doubtful if it be found wild in any country. It has been cultivated from time immemorial, and is considered as coming nearer in its properties to wheat than any other grain. It is more common than wheat in many parts of the Continent; being a more certain crop, and requiring less culture and manure. It is the bread corn of Germany and Russia. In Britain it is now very little grown; being no longer a bread corn; and, therefore, of less value to the farmer than barley, oats, or peas. — (*Loudon's Ency. of Agriculture.*)

For the regulations as to the importation and exportation of rye, see CORN LAWS AND CORN TRADE.

S.

SABLE (Ger. *Zobel;* Fr. *Zibelline;* It. *Zibellino;* Rus. *Sohol*), an animal of the weasel tribe, found in the northern parts of Asiatic Russia and America, hunted for the sake of its fur. Its colour is generally of a deep glossy brown, and sometimes of a fine glossy black, which is most esteemed. Sable skins have sometimes, though very rarely, been found yellow, and white. The finer sorts of the fur of sables are very scarce and dear. — (See FUR TRADE.)

SADDLES (Fr. *Selles;* Ger. *Sattel;* It. *Selle;* Rus. *Sädla;* Sp. *Selles*), seats adapted to the horse's back, for the convenience of the rider. Those made in England are reckoned the best. Sherborne and Lynn are particularly remarkable for this manufacture. The hogskins, which, when tanned, are used for the seat of the saddle, are mostly imported from Russia.

SAFFLOWER, OR BASTARD SAFFRON (Ger. *Safflor;* Du. *Saffloer, Basterd Saffran;* Fr. *Cartame, Saffran batard;* It. *Zaffrone;* Sp. *Alazor, Azafran bastardo;* Rus. *Polerroi, Prostoi schafran*), the flower of an annual plant (*Carthamus tinctorius* Lin.) growing in India, Egypt, America, and some of the warmer parts of Europe. It is not easily distinguished from saffron by the eye, but it has nothing of its smell or taste.

The flowers, which are sometimes sold under the name of *saffranon*, are the only parts employed in dyeing. They yield two sorts of colouring matter: one soluble in water, and producing a yellow of but little beauty; the other is *resinous*, and best dissolved by the fixed alkalies: it is this last which alone renders safflower valuable in dyeing; as it affords a red colour exceeding in delicacy and beauty, as it does in costliness, any which can be obtained even from cochineal, though much inferior to the latter in durability. The colour of safflower will not bear the action of soap, nor even that of the sun and air for a long time; and being very costly, it is principally employed for imitating upon silk the fine scarlet (*ponceau* of the French) and rose colours dyed with cochineal upon woollen cloth.

The fine rose colour of safflower, extracted by crystallised soda, precipitated by citric acid, then slowly dried, and ground with the purest talc, produces the beautiful *rouge* known by the name of *rouge végétale*.

Safflower should be chosen in flakes of a bright pink colour, and of a smell somewhat resembling tobacco. That which is in powder, dark coloured, or oily, ought to be rejected.—(*Hasselquist's Voyages*, Eng. ed. p. 252.; *Bancroft's Permanent Colours*, vol. i. pp. 286—289.; *Milburn's Orient. Com.*)

Of 5,352 cwt. of safflower imported in 1840, 5,110 came from the East Indies. The price of safflower in bond varies from 1*l.* to 7*l.* a cwt. The entries of safflower for home consumption amounted, at an average of the years 1840 and 1841, to 1,331 cwt. a year. The duty is 1*s.* a cwt.

SAFFRON (Ger. *Saffran*; Du. *Safran*; It. *Zafferano*; Sp. *Saffron*; Fr. *Azafran*; Rus. *Schafran*), a sort of cake prepared from the stigmas, with a proportion of the style, of a perennial bulbous plant (*Crocus sativus* Lin.) cultivated to a small extent in Cambridgeshire. It is also imported from Sicily, France, and Spain; but the English, as being fresher, more genuine, and better cured, is always preferred. When good, saffron has a sweetish, penetrating, diffusive odour; a warm, pungent, bitterish taste; and a rich, deep orange red colour. It should be chosen fresh, in close, tough, compact, cakes, moderately moist, and possessing in an obvious degree all the above mentioned qualities. The not staining the fingers, the making them oily, and its being of a whitish yellow or blackish colour, indicate that it is bad, or too old. Saffron is used in medicine, and in the arts; but in this country the consumption seems to be diminishing. It is employed to colour butter and cheese, and also by painters and dyers. —(*Thomson's Dispensatory*; *Loudon's Ency. of Agriculture.*)

SAGAPENUM (Arab. *Sugbenuj*), a concrete gum-resin, the produce of an unknown Persian plant. It is imported from Alexandria, Smyrna, &c. It has an odour of garlic; and a hot, acrid, bitterish taste. It is in agglutinated drops or masses, of an olive or brownish yellow colour, slightly translucent, and breaking with a horny fracture. It softens and is tenacious between the fingers, melts at a low heat, and burns with a crackling noise and white flame, giving out abundance of smoke, and leaving behind a light spongy charcoal. It is used only in medicine. —(*Thomson's Dispensatory.*)

SAGO (Malay, *Sagu*; Jav. *Sagu*), a species of meal, the produce of a palm (*Metroxylon Sagu*) indigenous to and abundant in such of the Eastern islands as produce spices, where it supplies a principal part of the farinaceous food of the inhabitants.

The tree, when at maturity, is about 30 feet high, and from 18 to 22 inches in diameter. Before the formation of the fruit, the stem consists of an external wall about 2 inches thick, the whole interior being filled up with a sort of spongy medullary matter. When the tree attains to maturity, and the fruit is formed, the stem is quite hollow. Being cut down at a proper period, the medullary part is extracted from the trunk, and reduced to a powder like sawdust. The filaments are next separated by washing. The meal is then laid to dry; and being made into cakes and baked, is eaten by the islanders. For exportation, the finest sago meal is mixed with water, and the paste rubbed into small grains of the size and form of coriander seeds. This is the species principally brought to England, for which market it should be chosen of a reddish hue and readily dissolving in hot water into a fine jelly. Within these few years, however, a process has been invented by the Chinese for refining sago, so as to give it a fine pearly lustre; and the sago so cured is in the highest estimation in all the European markets. It is a light, wholesome, nutritious food. It is sent from the islands where it is grown to Singapore, where it is granulated and bleached by the Chinese. The export trade to Europe and India is now principally confined to that settlement. —(*Ainslie's Mat. Medica*; *Crawfurd's East. Archip.* vol. i. pp. 383—393., vol. iii. p. 348.; *Bell's Review of the Commerce of Bengal, &c.*)

The consumption of sago has increased very rapidly since 1820, having then amounted to only about 1,300 cwts. a year; whereas, during the years 1840 and 1841, no fewer than 43,664 cwts. were annually retained for consumption. This large increase is partly ascribable to the reduction in the interval of the oppressive duties by which the article was formerly loaded, and partly, and perhaps principally, to the fact of its being extensively used, along with potato flour, in the adulteration of sugar. —(See SUGAR.) The price of common sago in bond varies from 10*s.* to 1*l.*, while pearl sago fetches from 15*s.* to 1*l.* 10*s.* a cwt.; but the price is liable to great fluctuation.

SAIL, a coarse linen or canvass sheet attached to the masts and yards of ships, the blades of windmills, &c., to intercept the wind and occasion their movement.

Foreign sails, when imported by, and fit and necessary for, and *in the actual use* of any British ship, are exempted from duty; but when otherwise disposed of, they pay a duty of 20 per cent. *ad valorem*. —(9 *Geo.* 4. c. 76. § 12.)

Sails and cordage of British manufacture, exported from Great Britain to the colonies, and afterwards imported into the U. Kingdom, are in all cases, other than those in which they are imported by *bill of store*, to be deemed foreign; and such sails and cordage, although not liable to duty so long as the vessel continues to belong to the colony, become subject to the duties in question as soon as the vessel becomes the property of persons residing in this country. —(*Treasury Order*, 29th of Jan. 1828.)

SALEP, a species of powder prepared from the dried roots of a plant of the orchis kind (*Orchis mascula* Lin.). That which is imported from India is in white oval pieces, hard, clear, and pellucid, without smell, and tasting like tragacanth. As an article of diet, it is said to be light, bland, and nutritious. The plant thrives in England,

but it is not cultivated to any extent; and very little is imported. — (*Ainslie's Mat. Indica; Milburn's Orient. Com.*)

SALMON (Ger. *Lachs, Salm;* Fr. *Saumon;* It. *Sermone, Salamone;* Sp. *Salmon;* Rus. *Lemga*). This excellent fish is too well known to require any description. It is found only in northern seas, being unknown in the Mediterranean and other warm regions. In this country it is an article of much value and importance. It is said to be exceedingly abundant in Japan and Kamtschatka.

"Salmon fisheries," Marshall observes, "are copious and constant sources of human food; they rank next to agriculture. They have, indeed, one advantage over every other internal produce, — their increase does not lessen other articles of human subsistence. The salmon does not prey on the produce of the soil, nor does it owe its size and nutritive qualities to the destruction of its compatriot tribes. It leaves its native river at an early state of growth; and going, even naturalists know not where, returns of ample size, and rich in human nourishment; exposing itself in the narrowest streams, as if nature intended it as a special boon to man. In every stage of savageness and civilisation, the salmon must have been considered as a valuable benefaction to this country."

Such salmon as are taken in æstuaries or rivers are, of course, the property of those to whom the æstuaries or rivers belong, the fisheries in them frequently letting for very large sums; but of late very considerable quantities of salmon have been taken in bays and in the open sea, where the fishing is free to any one who chooses to engage in it. The London market, where the consumption is immense, has been, since 1790, principally supplied from the Scotch rivers. The Tweed fishery is the first in point of magnitude of any in the kingdom; the take is sometimes quite astonishing, several hundreds having been frequently taken by a single sweep of the net! Salmon are despatched in fast sailing vessels from the Spey, the Tay, the Tweed, and other Scotch rivers, for London, packed in ice, by which means they are preserved quite fresh. When the season is at its height, and the catch greater than can be taken off fresh, it is salted, pickled, or dried for winter consumption at home, and for foreign markets. Formerly, such part of the Scotch salmon as was not consumed at home, was pickled and kitted after being boiled, and was in this state sent up to London under the name of Newcastle salmon; but the present method of disposing of the fish has so raised its value, as to have nearly deprived all but the richer inhabitants in the environs of the fishery of the use of salmon. Within the memory of many, now living, salted salmon formed a material article of household economy in all the farm-houses in the vale of the Tweed; insomuch, that in-door servants used to stipulate that they should not be obliged to take more than two weekly meals of salmon. Its ordinary price was then 2*s.* a stone of 19 lbs.: but it is now never below 12*s.*, often 36*s.*, and sometimes 42*s.* a stone. This rise in the price of the fish has produced a corresponding rise in the value of the salmon fisheries, some of which are very valuable. There are considerable fisheries in some of the Irish and English rivers; but inferior to those of Scotland. — (*General Report of Scotland*, vol. iii. p. 327.) The Scotch salmon fisheries seem to have attained their maximum value towards the end of the last war, when the fisheries in the Tweed were let for from 15,000*l.* to 18,000*l.* a year! and those of the Tay, Dee, Spey, &c. were proportionally valuable. But the value of the Scotch salmon fisheries has, speaking generally, declined greatly of late years; in consequence, partly and principally, of a diminished supply of fish in the rivers, but in some degree, also, from the greater facility of the communication between London and Liverpool, and the consequent importation of Irish salmon into the London markets. We have been fortunate enough to obtain from a source on which every reliance may be placed, the following

Account of the Quantity of Salmon packed in Ice imported into London, from Scotland, during each of the 8 Years ending with the 14th of October, 1841, and of the Wholesale Price of the same.

	Weight of Fish.	Average Price, about		Years ending Oct. 14.	Weight of Fish.	Average Price, about	
	Lbs.	*d.*			*Lbs.*	*d.*	
1834	3,432,800	9½ per lb.	135,900	1838	2,396,800	10½ per lb.	101,160
1835	4,740,960		177,800	1839	1,830,080	11	85,880
1836	2,751,840		120,400	1840	1,697,920		77,850
1837	3,617,600		150,750	1841	3,192,672		116,400

This, it will be observed, is independent of the pickled salmon brought from Scotland, the quantity and value of which varies as much as that of the fresh salmon. But we are well assured that, at an average of the last eight years, its value has not exceeded 12,000*l.* a year. At an average, the retail price of salmon in London may be taken at from 50 to 75 per cent. above the wholesale price.

We may remark, by the way, that as by far the largest portion of the salmon made use of in London comes from Scotland, the above statement shows that its consumption in the metropolis is not nearly so great as is generally supposed. In fact, it is little used, except by the more opulent classes; and nothing that is not generally used by the middle classes, or by them and the lower, is ever of much importance. The little influence over prices caused by a large increase of supply is also a striking feature in this return.

Decrease of the Supply of Salmon, Poaching, &c. — The decrease of salmon in the English and Scotch rivers, particularly of late years, is a fact as to which there can be no manner of doubt. — (*Report of Committee of House of Commons on Scotch Salmon Fishery, in* 1843.) Much unsatisfactory discussion has taken place as to its causes, which are, probably, of a very diversified character. A good deal has been ascribed to the increase of water machinery on the banks of the different rivers; but we hardly think that this could have much influence, except, perhaps, in the case of the smaller class of rivers. *Weirs*, or salmon traps, have also been much objected to; though, as we have been assured, with still less reason. On the whole, we are inclined to think that the falling off in the supply of this valuable fish is principally to be ascribed to the temptation to over-fish the rivers, caused by the high price of salmon; to the prevalence of poaching; and, more than all, to the too limited duration of the *close time*. In 1828, after a great deal of discussion and inquiry, an act was passed (9 Geo. 4. c. 39.), which has done a good deal to remedy these defects — in so far, at least, as respects the Scotch fisheries. The rivers are shut from the 14th of September to the 1st of February; and every person catching or attempting to catch fish during that period forfeits not less than 1*l.* and not more than 10*l.* for every offence, besides the fish, if he have caught any, and such boats, nets, or other implements, as he may have made use of. Pecuniary penalties are also inflicted upon poachers and trespassers; and provision is made for the watching of the rivers. We understand that this act has had a very good effect; though it is believed that it would be better were the *close time* extended from the 1st of September to the middle of February.

Previously to 1842 the importation of foreign salmon was prohibited; but among the important and beneficial changes effected by the tariff act of that year, the repeal of this prohibition, and the admission of foreign salmon to our markets on payment of a duty of 10*s.* 6*d.* (inc. the 5 per cent.) a cwt., is one of the foremost. The importation has not, however, been nearly so great as was anticipated. It appears from the customs returns that during the 11 months ending the 5th of December, 1843, the total imports of foreign salmon amounted to 910 cwt. 2 qrs. and 7 lb., of which 824 cwt. 3 qrs. and 22 lbs. (92,394 lbs.)

were entered for consumption. This salmon was almost wholly brought from Holland; the anticipated imports from Norway and Sweden having turned out quite trifling. The official returns do not afford the means of discriminating between fresh and pickled salmon; but we believe the larger portion by far of the imports made during last year (1843) was fresh.

Return showing the Export of Salmon from the Port of Bergen, in Norway, with the average Prices of the same free on board, in 1839, 1840, and 1841.

Articles.	Quantity exported.	English Weights and Measures.	Prices in Sterling at the Average Rate of Exchange.
1839. — Smoked, first quality	1,374 lbs.	per lb.	10*d.* to 8*d.*
Ditto inferior	Home consumption	per lb.	8*d.* — 6*d.*
Salted	59½ barrels	per barrel nett 320 lb.	4*l.*
Fresh, first in season	- -	- -	10*d.* to 8*d.*
Ditto later in ditto	- -	- -	5*d.* — 4*d.*
1840. — Smoked, first quality	1,370 lbs.	per lb.	11*d.* to 9*d.*
Ditto inferior	- -	- -	8*d.* — 7*d.*
Salted	42 barrels	per barrel	4*l.*
Fresh, first in season	- -	- -	11*d.* to 9*d.*
Ditto later in ditto	- -	- -	6*d.* — 5*d.*
1841. — Smoked, first quality	1,170 lbs.	per lb.	12*d.* to 10*d.*
Ditto inferior	- -	- -	9*d.* — 8*d.*
Salted	26 barrels	per barrel	4*l.* 10*s.*
Fresh, first in season	- -	- -	12*d.* to 10*d.*
Ditto later in ditto	- -	- -	6*d.* — 5*d.*

Return of the Quantities of Salmon exported from Norway in each of the undermentioned Years.

	Salted Salmon.	Smoked Salmon.	Year.	Salted Salmon.	Smoked Salmon.
1835	barrels 142	lbs. 6,508	1839	cls. 17½	lbs. 3,832
1836	144½	6,357	1840	368 4-15ths.	4,441
1837		4,758	1841	169½	7,472
1838		4,353			

It is enacted by stat. 1 Geo. 1. st. 2. c. 18., that no salmon shall be sent to any fishmonger or fish-seller in England, of less than 6 lbs. weight, under a penalty of 5*l.* The 58 Geo. 3. c. 43. authorises the justices at quarter sessions to appoint conservators of rivers, and to fix the beginning and termination of the *close time*. The penalty upon poaching and taking fish in *close time* is by the same act fixed at not more than 10*l.* and not less than 5*l.*, with forfeiture of fish, boats, nets, &c.

SALONICA, a large city and sea-port of European Turkey, at the north-east extremity of the gulph of the same name, in lat. 40° 38′ 47″ N., lon. 22° 57′ 13″ E. Population estimated at 70,000. There is no port at Salonica, but there is excellent anchorage in the roads opposite to the town. The access to them is by no means difficult. Pilots, however, are, for the most part, employed; and of these, some are always on the look-out. During that period of the late war when the anti-commercial system of Napoleon was at its height, Salonica became a great *depôt* for British goods; whence they were conveyed to Germany, Russia, and other parts of Europe. At all times, however, Salonica has a considerable trade. The exports principally consist of wheat, barley, and Indian corn, timber, raw cotton, wool, raw silk, wax, tobacco, and sesamum. The imports are sugar, coffee, dyewoods, indigo, muslins, calicoes, cotton twists, iron, lead, tin, watches, &c. It is stated in a communication from Salonica, dated the 31st December, 1842, on which every dependence may be placed, that the demand for British cotton goods is rapidly increasing, and that they have "entirely superseded" all others. The value of the direct and indirect imports from England in 1842 was estimated at 73,165*l.*

Arrivals. — In 1842 the burden of the vessels that arrived at Salonica amounted to 41,596 tons.

Money, Weights, and Measures. — Accounts are kept in piastres of 40 paras, or 120 aspers. The coins are those of Constantinople; which see.

The weights and measures are the same as those of Smyrna, except that the kisloz, killow, or corn measure of Salonica = 378 kisloz of Smyrna.

SALT (Ger. *Salz*; Du. *Zout*; Fr. *Sel*; It. *Sale*; Sp. *Sal*, Rus. *Sol*; Lat. *Sal*; Arab. *Melh*; Chin. *Yen*; Hind. *Nimmuck*; Per. *Nun*), the *chloride of sodium* of modern chemists, has been known and in common use as a seasoner and preserver of food from the earliest ages. Immense masses of it are found in this and many other countries, which require only to be dug out and reduced to powder. In that state it is called rock salt. The water of the ocean also contains a great deal of salt; to which, indeed, it owes its taste, and the power which it possesses of resisting freezing till cooled down to 28·5°. When this water is sufficiently evaporated, the salt precipitates in crystals. This is the common process by which it is obtained in many countries. There are various processes by which it may be obtained quite pure. Common salt usually crystallises in cubes. Its taste is universally known, and is what is strictly denominated *salt*. Its specific gravity is 2·125. It is soluble in 8·82 times its weight of cold water, and in 2·76 times its weight of boiling water. — (*Thomson's Chemistry.*)

Besides its vast utility in seasoning food, and preserving meat both for domestic consumption and during the longest voyages, and in furnishing muriatic acid and soda, salt forms a glaze for coarse pottery, by being thrown into the oven where it is baked; it improves the whiteness and clearness of glass; it gives hardness to soap; in melting metals, it preserves their surface from calcination, by defending them from the air, and is employed with advantage in some assays; it is used as a mordant, and for improving certain colours; and enters more or less into many other processes of the arts. Many

contradictory statements have been made as to the use of salt as a manure. Probably it may be advantageous in some situations, and not in others.

Salt Mines, Springs, &c. — The principal salt mines are at Wielitska in Poland, Catalonia in Spain, Altemonte in Calabria, Loowur in Hungary, in many places in Asia and Africa, and in Cheshire in this country. The mines at Wielitska are upon a very large scale; but the statements that have frequently been published, of their containing villages inhabited by colonies of miners who never saw the light, are altogether without foundation. These mines have been wrought for more than 600 years. — (*Coxe's Travels in the North of Europe*, vol. i. 149. 8vo. ed.)

The salt mines in the neighbourhood of Northwich in Cheshire are very extensive. They have been wrought since 1670; and the quantity of salt obtained from them is greater, probably, than is obtained from any other salt mines in the world. In its solid form, when dug from the mine, Cheshire salt is not sufficiently pure for use. To purify it, it is dissolved in sea water, from which it is afterwards separated by evaporation and crystallisation. The greater part of this salt is exported.

Salt springs are met with in several countries. Those in Cheshire and Worcestershire furnish a large proportion of the salt made use of in Great Britain. The brine, being pumped up from very deep wells, is evaporated in wrought iron pans from 20 to 30 feet square and 10 or 12 inches deep, placed over a furnace.

Most of the salt used in Scotland, previously to the repeal of the duty, was obtained by the evaporation of sea water nearly in the way now mentioned; but most part of the Scotch salt works have since been relinquished.

In warm countries, salt is obtained by the evaporation of sea water by the heat of the sun; and the crystals of salt made in this way are more perfect, and purer, from the greater slowness of the process. French salt is manufactured in this mode, and it has always been in considerable demand in this and other countries; but the principal imports of foreign salt into Great Britain at present are from Portugal. They amount, at an average, to from 300,000 to 350,000 bushels a year.

Consumption of Salt. — The consumption of salt in this country is immense. Necker estimated the consumption in those provinces of France which had purchased an exemption from the *gabelle* (*Pays francs rédimées*) at about 19½ lbs. (Eng.) for each individual. — (*Administration des Finances*, tome ii. p. 12.) From all that we have been able to learn on the subject, we believe that the consumption of the people of this country may be estimated a little higher, or at 22 lbs.; the difference in our food and habits, as compared with the French, fully accounting for this increased allowance. On this supposition, and taking the population at 18,500,000, the entire consumption will amount to 407,000,000 lbs., or 181,696,000 tons.

Exclusive of this immense home consumption, we annually export very large quantities.

Account of the Quantities and Value of the Salt exported from the U. Kingdom, during each of the 4 Years ending with 1841, specifying the Countries to which it was exported and the Quantity and Value of that sent to each.

Countries.	1838.		1839.		1840.		1841.	
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
	Bushels.	£	*Bushels.*	£	*Bushels.*	£	*Bushels.*	£
Russia	1,358,547	28,053	1,513,792	28,329	1,581,900	23,132	1,495,560	26,107
Norway	142,460	2,343	143,070	2,586	128,972	2,038	75,590	853
Denmark	605,060	11,985	693,960	12,425	584,460	9,355	467,730	7,784
Prussia	845,141	17,108	1,143,520	22,258	946,900	15,013	1,309,710	22,883
Germany	317,673	6,299	283,242	5,125	358,345	6,102	294,798	5,136
Holland	486,192	6,885	799,166	11,555	1,102,940	14,823	1,111,091	12,537
Belgium	1,108,330	16,059	1,154,145	17,984	900,700	12,845	945,377	10,438
Western coast of Africa	275,040	7,217	389,574	9,518	344,740	6,620	387,150	7,951
British settlements in Australia	93,421	3,320	137,254	4,302	170,641	4,376	135,955	4,166
North American colonies	1,191,612	21,149	1,668,839	29,006	1,564,653	22,062	1,089,609	16,922
United States of America	4,612,020	94,219	3,519,990	67,512	4,864,158	89,828	3,012,724	54,201
Brazil	5,176	148	7,235	165	20,496	441	7,053	264
All other countries	357,690	8,741	383,807	8,544	278,778	6,864	305,603	6,675
Total	11,398,662	223,456	11,837,594	218,907	12,847,663	213,479	10,637,953	175,615

The cheapness of this important necessary of life is not less remarkable than its diffusion. Its present cost may be estimated, at a medium, at from 14*s.* to 16*s.* a ton.

Duties on Salt.—In ancient Rome, salt was subjected to a duty (*vectigal salinarum*; see *Burman, Dissertatio de Vectigalibus Pop. Rom.* c. 6.); and it has been heavily taxed in most modern states. The *gabelle*, or code of salt laws, formerly established in France, was most oppressive. From 4,000 to 5,000 persons are calculated to have been sent annually to prison and the galleys for offences connected with these laws, the severity of which had no inconsiderable share in bringing about the Revolution. — (*Young's Travels in France*, vol. i. p. 598.) In this country, duties upon salt were imposed in the reign of William III. In 1798 they amounted to 5*s.* a bushel; but were subsequently increased to 15*s.* a bushel, or about *thirty times* the cost of the salt! So exorbitant a duty was productive of the worst effects; and occasioned, by its magnitude, and the regulations for allowing salt, duty free, to the fisheries, a vast deal of smuggling. The opinion of the public and of the House of Commons having been strongly pronounced against the tax, it was finally repealed in 1823.

That the repeal of so exorbitant a duty has been productive of great advantage, no one can doubt; but seeing that a large revenue must be raised, we question whether government acted wisely in totally relinquishing the tax. Had the duty been reduced to 2*s.* or 2*s.* 6*d.* a bushel, and no duty-free salt allowed for the fisheries, but a drawback given on the fish exported, a revenue of 1,000,000*l.* a year might have been derived from this source with but little injury. It was not the nature of the salt tax, but the absurd extent to which it had been carried, that rendered it justly odious. When at the highest, it produced about 1,500,000*l.* a year.

SALTPETRE, OR NITRATE OF POTASH (Ger. *Salpeter*; Fr. *Nitre, Salpetre*; It. *Nitro, Salnitro*; Sp. *Nitro, Salitre*; Rus. *Senitra*; Lat. *Nitrum*; Arab. *Ubkir*; Hind. *Shorah*), a salt well known in commerce, and of very great importance. It may be regarded both as a natural and an artificial production; being found on the surface of the soil in many parts of India, Egypt, Italy, &c.; but in these and other places all that is known in commerce is obtained by an artificial process, or by lixiviating earth that has been formed into *nitre* beds. The saltpetre consumed in England is brought from Bengal in an impure state, but crystallised, in bags, each containing 164 lbs. Saltpetre forms the principal ingredient in the manufacture of gunpowder; and is used in various arts. It is also of great utility in the commerce of India, from its fur-

nishing a large amount of dead weight for the shipping engaged in it. Saltpetre possesses considerable antiseptic power. That which is of the best quality and well refined, is in long transparent crystals; its taste is sharp, bitterish, and cooling; it flames much when thrown upon burning coals; is very brittle; specific gravity 1·933. It is not altered by exposure to the air.

Beckmann contends, in a long and elaborate dissertation (*Hist. of Invent.* vol. iv. pp. 525—586. Eng. ed.), that the ancients were unacquainted with saltpetre, and that their *nitrum* was really an alkaline salt. But, as saltpetre is produced naturally in considerable quantities in Egypt, it is difficult to suppose that they could be entirely ignorant of it; though it would appear that they had confounded it with other things. It has been known in the East from a very early period. Beckmann concurs in opinion with those who believe that gunpowder was invented in India, and brought by the Saracens from Africa to the Europeans; who improved its manufacture, and made it available for warlike purposes. — (Vol. iv. p. 571.)

The consumption of saltpetre during periods of war is very great. Its price is consequently liable to extreme fluctuation. In remarking on the varieties in the price of saltpetre, Mr. Tooke observes, "It reached its greatest height in 1795, viz. 170*s.* a cwt.; in 1796, it fell at one time to 45*s.*, and rose again to 96*s.* It seems to have been affected considerably by the scale of hostilities on the Continent. But in consequence of the discoveries in chemistry, by which the French were enabled to dispense with a foreign supply, and by the increased importation from India to this country, by which we were enabled to supply the rest of the Continent at a reduced cost, the price declined permanently after 1798-9, when it had reached 145*s.*; and never after was so high as 100*s.*, except during the short interval of speculation in export, during the peace of 1814, and again upon the breaking out of the war terminated by the battle of Waterloo." The price of saltpetre in the London market varies at this moment (January, 1844) from 24*s.* to 28*s.* a cwt. duty (6*d.*) included.

Account of the Quantities of Saltpetre imported into the U. Kingdom during each of the Seven Years ending with 1841, specifying the Countries whence they were imported, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
East India Company's territories and Ceylon	191,119	177,038	222,606	234,017	272,429	183,603	261,552
Chili	26,527	43,656	27,109	41,814	39,751	53,010	85,761
Peru	41,355	52,305	26,896	41,985	42,612	93,918	70,951
All other countries	2,387	6,902	73,391	80,708	9,521	7,286	686
Total	261,388	279,901	349,993	398,554	364,343	337,817	416,930
Retained for home consumption	204,580	231,134	210,222	280,890	311,543	309,201	349,773

But it is of importance to observe that the saltpetre said in this account to be imported from China and Peru is, in fact, nitrate of soda, consisting of nitric acid and soda, whereas saltpetre consists of nitric acid and potash. Like saltpetre, it is found native in various countries, but especially in the deserts of Tarapaca and Atacama, along the coast of Southern Peru. The deserts in question consist of a vast sandy plain extending between the shore and the foot of the Andes for between 400 and 500 miles. This plain is more than 3,000 feet above the level of the sea; no rain ever falls upon it; and except along the banks of a few streams by which it is intersected, it is quite sterile. In most parts, however, it abounds with nitrate of soda, which sometimes appears on the surface, but is more commonly covered with a stratum of clay and sand, with which the salt is frequently mixed. The principal mines are within about 24 miles of the Peruvian port of Iquique, in 21° 50′ S. lat. and 71° 42′ W. long. After being dug up, the salt is pulverised, dissolved in boiling water, and allowed to crystallise in shallow wooden troughs. Its price, free on board, including an export duty of about 4 per cent., varies from 2 to 2½ or 3 doll. the quintal of 100 lbs. Having a tendency to attract moisture, it is not so suitable as saltpetre for the manufacture of gunpowder; but it is extremely serviceable in various departments of the arts, and is particularly valuable in a commercial point of view, from its affording a return cargo for ships which might otherwise have had to come home in ballast. We subjoin

A Return of the Destination, Quantity, and Price free on board, of the Nitrate of Soda exported from Iquique in each Year, from the Date of the first Shipment of the Article for Europe to the 31st of December, 1841. Exchange, 48*d.* per dollar.

Years.	England.	France and Italy.	Hamburg.	United States.	Valparaiso.	Other Countries.	Grand Total in Quintals.	Average Price free on board.	Value in £ sterling.		
								Per Quintal	$	£	*s. d.*
1830	- -	15,000	-	-	-	- -	15,000	$4 0	60,000 0	12,000	0 0
1831	4,000	35,885	-	-	-	4,800	44,685	4 0	178,740 0	35,748	0 0
1832	30,000	21,000	-	-	-	1,800	52,800	3 6	198,000 0	39,600	0 0
1833	60,100	32,500	-	-	-	6,800	99,380	3 6	373,125 0	74,625	0 0
1834	116,700	25,100	-	-	-	7,600	149,400	3 3	504,225 0	100,845	0 0
1835	66,700	57,950	11,260	11,900	5,780	2,260	175,850	3 3	525,993 6	105,198	15 0
1836	93,088	41,923	4,600	12,013	10,392	Lima 898	164,914	3 0	488,832 0	97,766	8 0
1837	111,369	42,300	8,700	1,000	-	Prussia 2,000	46,369	2 0	330,738 0	66,147	12 0
1838	73,510	33,870	13,130	5,600	-	3,500	129,610	2 0	259,220 0	51,844	0 0
1839	113,780	27,500	-	1,525	5,250	Denmark 3,811	151,576	2 0	299,152 0	59,830	8 0
1840	176,476	54,420	6,600	6,660	-	2,800	247,356	2 0	451,712 0	90,342	8 0
1841	173,884	69,840	6,800	500	-	- -	255,524	2 6	702,691 0	140,538	4 0
Totals	1,020,307	436,968	51,090	39,028		36,299	1,607,614	- -	$4,375,428 6	875,085	15

The price of nitrate of soda in the London market, in January 1841, was, duty (6*d.*) included, about 14*s.* 6*d.* a cwt.; but it was then understood to be very much depressed.

SALVAGE, as the term is now understood, is an allowance or compensation made to those by whose exertions ships or goods have been saved from the dangers of the seas, fire, pirates, or enemies.

The propriety and justice of making such an allowance must be obvious to every one. It was allowed by the laws of Rhodes, Oleron, and Wisby; and in this respect they have been followed by all modern maritime states. At common law, the party who has saved the goods of another from loss or any imminent peril has a *lien* upon them, and may retain them in his possession till payment of a reasonable salvage.

1. *Salvage upon Losses by Perils of the Sea.*—If the salvage be performed at sea, or within high or low water mark, the Court of Admiralty has jurisdiction over the subject, and will fix the sum to be paid, and adjust the proportions, and take care of the property pending the suit: or, if a sale be necessary, direct it to be made; and divide the proceeds between the salvors and the proprietors according to equity and reason. And in fixing the rate of salvage, the court usually has regard not only to the labour and peril incurred by the salvors, but also to the situation in which they may happen to stand in respect of the property saved, to the promptitude and alacrity manifested by them, and to the value of the ship and cargo, as well as the degree of danger from which they were rescued. Sometimes the court has allowed as large a proportion as *a half* of the property saved as salvage; and in others, not more than *a tenth*.

The crew of a ship are not entitled to salvage, or any unusual remuneration for the extraordinary efforts they may have made in saving her; it being their duty as well as interest to contribute their utmost upon such occasions, the whole of their possible service being pledged to the master and owners. Neither are passengers entitled to claim any thing for the *ordinary assistance* they may have been able to afford to a vessel in distress. But a passenger is not bound to remain on board a ship in the hour of danger, provided he can leave her; and if he perform any *extraordinary services*, he is entitled to a proportional recompence.

In the case of valuable property, and of numerous proprietors and salvors, the jurisdiction and proceedings of the Court of Admiralty are well adapted to further the purposes of justice. But, as the delay and expense necessarily incident to the proceedings of a court sitting at a distance from the subject will often be very burdensome upon the parties, in cases where the property saved is not, perhaps, very considerable, the legislature has endeavoured to introduce a more expeditious and less expensive method of proceeding.

The first act for this purpose is the 12 Ann. stat. 2. c. 18. It appears from the preamble, that the infamous practices, once so common, of plundering ships driven on shore, and seizing whatever could be laid hold of as lawful property — (see WRECK), — had not been wholly abandoned; or that, if the property was restored to the owner, the demand for salvage was so exorbitant, that the inevitable ruin of the trader was the immediate consequence. To remedy those mischiefs in future, it was enacted, "that if a ship was in danger of being stranded, or being run ashore, the sheriffs, justices, mayors, constables, or officers of the customs, nearest the place of danger, should, upon application made to them, summon and call together as many men as should be thought necessary to the assistance, and for the preservation, of such ship in distress, and her cargo; and that if any ship, man-of-war, or merchantman, should be riding at anchor near the place of danger, the constables and officers of the customs might demand of the superior officers of such ship the assistance of her boats, and such hands as could be spared; and that, if the superior officer should refuse to grant such assistance, he should forfeit 100*l*."

Then follows the section respecting salvage. It enacts, "that all persons employed in preserving ships or vessels in distress, or their cargoes, shall, within 30 days after the service is performed, be paid a *reasonable reward* for the same, by the commander, master, or other superior officer, mariners, or owners, of the ship or vessel so in distress, or by any merchant whose vessel or goods shall be so saved; and, in default thereof, the said ship or vessel so saved shall remain in the custody of the officers of customs until all charges are paid, and until the officers of the customs, and the master or other officers of the ship or vessel, and all others employed in the preservation of the ship, shall be *reasonably gratified* for their assistance and trouble, or good security given for that purpose: and if any disagreement shall take place between the persons whose ships or goods have been saved, and the officers of the customs, touching the monies deserved by any of the persons so employed, it shall be lawful for the commander of the ship or vessel so saved, or the owner of the goods, or the merchant interested therein, and also for the officer of the customs, or his deputy, to nominate 3 of the neighbouring justices of the peace, who shall thereupon adjust the *quantum* of the monies or gratuity to be paid to the several persons acting or being employed in the salvage of the said ship, vessel, or goods; and such adjustment shall be binding upon all parties, and shall be recoverable in an action at law; and in case it shall so happen that no person shall appear to make his claim to all or any of the goods that may be saved, that then the chief officer of the customs of the nearest port to the place where the said ship or vessel was so in distress shall apply to 3 of the nearest justices of the peace, who shall put him or some other responsible person in possession of the said goods, such justices taking an account in writing of the said goods, to be signed by the said officer of the customs; and if the said goods shall not be legally claimed, within the space of 12 months next ensuing, by the rightful owner thereof, then public sale shall be made thereof; and, if perishable goods, forthwith to be sold, and, after all charges deducted, the residue of the monies arising from such sale, with a fair and just account of the whole, shall be transmitted to her Majesty's exchequer, there to remain for the benefit of the rightful owner, when appearing; who, upon affidavit, or other proof made of his or their right or property thereto, to the satisfaction of one of the barons of the coif of the exchequer, shall, upon his order, receive the same out of the exchequer."

By a subsequent statute (26 Geo. 2. c. 10.) it is enacted, "that in case any person or persons, not employed by the master, mariners, or owners, or other person lawfully authorised, in the salvage of any vessel, or the cargo or provision thereof, shall, in the absence of the person so employed and authorised, save any such vessel, goods, or effects, and cause the same to be carried, for the benefit of the owners or proprietors, into port, or to any near adjoining custom-house, or other place of safe custody, immediately giving notice thereof to some justice of the peace, magistrate, or custom-house or excise officer, or shall discover to such magistrate or officer where any such goods or effects are wrongfully bought, sold, or concealed, then such person or persons shall be entitled to a *reasonable reward* for such services, to be paid by the masters or owners of such vessels or goods, and to be adjusted, in case of disagreement about the *quantum*, in like manner as the salvage is to be adjusted and paid by 12th Anne, or else as follows:—

"And be it further enacted, that, for the better ascertaining the salvage to be paid in pursuance of the present act and the act before mentioned, and for the more effectually putting the said acts into execution, the justice of the peace, mayor, bailiff, collector of the customs, or chief constable, who shall be nearest to the place where any ship, goods, or effects shall be stranded or cast away, shall forthwith give public notice for a meeting to be held as soon as possible, of the sheriff or his deputy, the justices of the peace, mayors, or other chief magistrates of towns corporate, coroners, or commissioners of the land tax, or any 5 or more of them, who are hereby empowered and required to give aid in the execution of this and the said former act, and to employ proper persons for the saving ships in distress, and such ships,

vessels, and effects, as shall be stranded or cast away; and also to examine persons upon oath, touching the same, or the salvage thereof, and to adjust the *quantum* of such salvage, and distribute the same among the persons concerned in such salvage, in case of disagreement among the parties or the said persons; and that every such magistrate, &c. attending and acting at such meeting, shall be paid 4*s*. a day for his expenses in such attendance, out of the goods and effects saved by their care or direction.

"Provided always, that if the charges and rewards for salvage directed to be paid by the former statute and by this act, shall not be fully paid, or sufficient security given for the same, within 40 days next after the said services performed, then it shall be lawful for the officer of the customs concerned in such salvage to borrow or raise so much money as shall be sufficient to satisfy and pay such charges and rewards, or any part thereof then remaining, unpaid or not secured as aforesaid, by or upon one or more bill or bills of sale, under his hand and seal, of the ship or vessel, or cargo saved, or such part thereof as shall be sufficient, redeemable upon payment of the principal sum borrowed, and interest upon the same at the rate of 4*l*. *per cent. per annum*."

An act of the 53 Geo. 3. c. 87., continued and extended by the 1 & 2 Geo. 4. c. 76., contains some regulations supplying defects in former statutes. They enact, that goods of a perishable nature, or so much damaged that they cannot be kept, may, at the request of any person interested or concerned in the same, or in saving thereof, be sold, with the consent of a justice, the money being deposited in the hands of the lord of the manor, and an account of the sale transmitted to the deputy vice-admiral. They also authorise the passage of horses, carts, carriages, &c. to the part of the sea coast where a vessel may be wrecked, over the adjoining lands, if there be no road leading as conveniently thereto, under penalty of 100*l*., the damages to be settled by 2 justices in the event of the parties not agreeing. — (1 & 2 *Geo.* 4. § § 27. 29, 30.)

It is ordered by the same statute, that no lord of the manor, or other person claiming to be entitled to wreck or goods, shall appropriate or dispose of the same until he shall have caused to be given in writing to the deputy vice-admiral of that part of the coast, or to his agents if they reside within 50 miles, if not, then to the corporation of the Trinity House, a report containing an accurate and particular description of the wreck or goods found, and of the place where and time when found, and of any marks thereon, and of such other particulars as may better enable the owner to recover them, and also of the place where they are deposited, and may be found and examined by any person claiming any right to them, nor until the expiration of 1 whole year and a day after the expiration of such notice; the deputy vice-admiral, or his agent, is, within 48 hours of receiving such report, to transmit a copy thereof to the secretary of the corporation of the Trinity House, upon pain of forfeiting, for every neglect to transmit such account, 50*l*. to any person who shall sue for the same; and the secretary is to cause such account to be placed in some conspicuous situation for the inspection of all persons claiming to inspect and examine it. — (1 & 2 *Geo.* 4. c. 75. § 26.)

It is further ordered by the same statute, that pilots and others taking possession of anchors, cables, or other wrecked or left materials upon the coast, or within any harbour, river, or bay, shall send notice thereof, within *twenty-four* hours, to the nearest deputy vice-admiral, or his agent, delivering the articles at such place as may be appointed, under pain of being deemed receivers of stolen goods. The deputy vice-admiral, or his agent, may also seize *such articles as have not been reported to him*, and is required to keep and report them to the Trinity House as aforesaid; and if he seize them without previous information, he is to have 1-3d of the value; if he seize in pursuance of information, the third is to be divided between him and the informer. If the articles are not claimed within a year and a day, they are to be sold, and the money applied as directed by the act of Queen Anne (12 Ann. stat. 2. c. 18., previously quoted), the deputy vice-admiral, or his agent, and the person who may have given information, being in such cases entitled to the salvage allowed upon unclaimed property. And it is further enacted, that if any dispute shall arise between the salvors of any goods found, lodged, and reported as aforesaid, and the owners thereof, as to the salvage to be paid in respect of the same, it is to be determined by the decision of 3 justices; or if they differ, by their nominee, who is to be a person conversant with maritime affairs. Masters and others bound to foreign parts, finding or taking on board anchors, goods, &c., knowing them to be found, are to enter the same in the log book, with the place and time of finding, and to transmit a copy of such entry, by the first possible opportunity, to the Trinity House, and to deliver up the articles on their return home, which, if not claimed, are to be sold within a year and a day, according to the aforementioned statute of Anne. Masters selling such articles incur a penalty of not less than 30*l*. and not more than 100*l*.

Pilots, boatmen, or other persons, conveying anchors and cables to foreign countries, and disposing of them there, are to be adjudged guilty of felony, and may be transported for 7 years.

The same statute authorises 3 justices, or their nominee, to decide upon all claims made by boatmen, pilots, and other persons, for services of any description (except pilotage) rendered by them to any ship or vessel, whether in distress or not.

Parties dissatisfied with the award of the justices or their nominee may appeal to the Court of Admiralty; but the justices are in such cases to deliver the goods to the proprietors, or their agent, on their giving good security for double the value. This does not extend to Scotland.

None of the previously mentioned acts have any force within the *Cinque Ports*; but the Lord Warden is directed by stat. 1 & 2 Geo. 4. c. 76. to appoint 3 or more substantial persons in each of these towns, who are authorised to decide upon all claims for services of any sort or description rendered to any vessel, or for saving or preserving, within the jurisdiction, any goods or merchandise wrecked, stranded, or cast away, or for bringing anchors or cables ashore, &c. No commissioner can act for any other place than that in which, or within a mile of which, he is resident. Either party may, within 8 days of the award, declare his intention of bringing the matter before some competent Court of Admiralty; selecting, as he may judge best, the Admiralty of England, or that of the Cinque Ports. The provisions in this statute have been justly eulogised by Lord Tenterden, for the cheap and easy means they afford for settling such questions.

It is impossible, as Mr. Justice Park has observed (*Law of Insurance*, c. 8.), to suppose 2 instances of loss by shipwreck, or other peril of the sea, so similar to each other, that the trouble, danger, and expense of the salvors should be exactly equal; and it would, consequently, be contrary to the first principles of justice to award the same sum for all possible cases of salvage. There was, therefore, no other resource but to appoint competent persons to decide as to the allowance due in any case of salvage that might arise, after taking the various circumstances with respect to it into account.

2. *Salvage upon Recapture.* — It was the practice of our courts, previously to any regulations on the subject, to order restitution of ships or goods, if retaken before condemnation, to be made to the original owners, on payment of a *reasonable salvage* to the recaptors; but by stat. 43 Geo. 3. c. 160. it has been adjudged, that "if any ship or vessel taken as prize, or any goods therein, shall appear, in the Court of Admiralty, to have belonged to any of his Majesty's subjects, which were before taken by any of his Majesty's enemies, and at any time afterwards retaken by any of his Majesty's ships, or any privateer, or other ship or vessel under his Majesty's protection, such ships, vessels, and goods shall, in all cases (save as hereafter excepted), be adjudged to be restored, and shall be accordingly restored, to such former owner or owners, he or they paying for salvage, if retaken by any of *his Majesty's ships*, *one eighth* part of the true value thereof, to the flag officers, captains, &c., to be divided as the same act directs; and if retaken by any *privateer*, or other ship or vessel, *one sixth* part of the true value of such ships and goods, to be paid to the owners, officers, and seamen of such privateer or other vessel, without any deduction; and if retaken by the joint operation of one or more of his Majesty's ships, and one or more private ships of war, the judge of the Court of Admiralty, or other court having cognisance thereof, shall order such salvage,

and in such proportions, to be paid to the captors by the owners, as he shall, under the circumstances of the case, deem fit and reasonable; but if such recaptured ship or vessel shall appear to have been set forth by the enemy as a ship or vessel of war, the said ship or vessel shall not be restored to the former owners, but shall in all cases, whether retaken by any of his Majesty's ships or any privateer, be adjudged lawful prize for the benefit of the captors."

This act is decidedly more favourable to the merchants than the old law, which adjudged that all ships recaptured after sentence of condemnation should be the property of the captors.

In the case of neutral ships captured by an enemy, and retaken by British men-of-war or privateers, the Courts of Admiralty have a discretionary power of allowing such salvage, and in such proportions, as, under the circumstances of each particular case, may appear just; but there is no positive law or binding regulation to which parties may appeal, for ascertaining the rate of such salvage. "The maritime law of England," says Lord Stowell, "having adopted a most liberal rule of restitution on salvage, with respect to the recaptured property of its own subjects, gives the benefit of that rule to its allies, till it appears that they act towards British property on a less liberal principle; *in such a case it adopts their rule*, and treats them according to their own measure of justice." —(1 *Rob. Adm. Rep.* 54.)

Salvage is one of those charges which are usually provided against by insurance. When, however, the salvage is very high, and the object of the voyage in so far defeated, the insured is, by the laws of this and all other maritime nations, allowed to abandon, and to call upon the insurer as for a total loss.—(See ABANDONMENT.)

For further information with respect to salvage, see *Abbott on the Law of Shipping*, part. iii. c. 10.; *Park on Insurance*, c. 8.; and *Marshall on Insurance*, book i. c. 12. § 8.

SAMPLE, a small quantity of a commodity exhibited at public or private sales, as a specimen. Sugars, wool, spirits, wine, coffee, and, indeed, most species of merchandise, are sold by sample. If an article be not, at an average, equal to the sample by which it is sold, the buyer may cancel the contract, and return the article to the seller.

Subjoined is a list of most articles that may be warehoused, and of the quantities that may be taken out as samples. —(*Customs Min.* Oct. 11. 1825.)

Alkali or barilla,	5 lbs. per pile 5 tons.
Aloes	2 oz. per package.
Argol	½ lb. do
Arrow root	2 lb. do.
Balsam capivi	2 oz. do.
Bark, Jesuits'	¼ lb. do.
in general, except Jesuits'	½ lb. do.
Brimstone, rough,	2 lbs. per pile.
in rolls,	1 lb. per package.
Cassia	½ lb. do.
Cantharides	2 oz. do.
Capers	½ lb. do.
Cochineal	2 oz. do.
dust	2 oz. do.
Cocoa nut oil	½ pint each cask.
Coffee	2 oz. per bag.
Coloquintida	2 oz. per package.
Coccilus Indicus,	1 oz. do.
Cotton	4 oz. do.
Cream of tartar,	1 lb. do.
Currants	½ lb. do.
Essence of bergamot or lemon	1 oz. do.
Euphorbium	1 oz. do.
Feathers, bed	½ lb. per lot 6 bags.
Galls	1 lb. do.
Gentian	½ lb. do.
Ginger	8 oz. do.
Gramilla, *see* Cochineal.	
Gum Arabic	1 lb. per package.
Senegal	½ lb. do.
tragacanth	2 oz. do.
other gum	4 oz. do.
Honey	2 oz. do.
Jalap	2 oz. do.
Indigo	½ lb. do.
Any further quantity (not exceeding 1½ lb.) to be charged with duty on delivery of the packages.	
Isinglass	½ lb. per package.
Juice of lemons,	½ pint do.
Lac dye	1 oz. do.
Lead, black	1 lb. do.
Lemon peel	½ lb. each entry.
Liquorice juice	½ lb. per package.
root	1 lb. do.
Madder, manufactured	½ lb. do.
root	½ lb. do.
Oil of almonds	1 oz. do.
aniseed	1 oz. do.
bay	1 oz. do.
juniper	1 oz. do.
olive	½ pint per cask.
palm	½ pint do.
rosemary	1 oz. per package.
spike	1 oz. do.
thyme	1 oz. do.
Orange peel	½ lb. do.
Orchella	2 oz do.
Orrice root	½ lb. do.
Pepper	1 oz. per bag.
Pimento	2 oz. do.
Radix contrayervæ	1 oz. per package.
galanga	2 lb. per pile.
ipecacuanhæ	1 oz. per package.
senekæ	1 oz. do.
Raisins	½ lb. each mark.
Rhubarb	1 oz. per package.
Rice	½ lb. do.
Saffron	½ oz. do.
Sago	2 lbs. per pile.
Salep	1 oz. per package.
Sarsaparilla	1 oz. do.
Saltpetre	½ lb. do.
Seed, aniseed	1 oz. per package.
clover	2 oz. do.
caraway	2 oz. do.
lac	1 oz. do.
mustard	1 oz. do.
Senna	1 oz. do.
Shumac	1 lb. per lot 10 bags.
Silk raw	2 oz. per package.
thrown	1 oz. do.
waste	2 oz. do.
Smalts	1 oz. do.
Spirits	½ pint per cask.
Sugar, foreign	2 oz. per bag.
	4 oz. per box not exceeding 5 cwt.
	8 oz. per box or chest exceeding 5 cwt.
Sugar, British plantation	1½ lb. per hogshead.
	1½ lb. per tierce.
	½ lb. per chest.
	12 oz. per barrel.
	½ lb. molasses per hhd. or cask.
Tallow	4 lbs. per lot 10 pcks.
Tapioca	1 oz. per package.
Tea	3 oz. of each description and quality.
Turmeric	2 lbs. per pile.
Valonia	3 lbs. per lot.
Wax, bees'	½ lb. per package.
Wine	½ pint.
Wool, cotton	½ oz. per package.
sheep or lambs'	1 lb. do.
Spanish	1 lb. do.
Yarn, mohair	½ lb. do.
cotton	½ lb. do.
Mother of pearl shells	½ lbs. per lot of 10 packages.
Vermicelli	1 oz. per package.

SANDAL WOOD, the wood of a tree (*Santalum album* Lin.) having somewhat of the appearance of a large myrtle. It is of a deep yellow colour, and yields an agreeable perfume. The tree, when cut down, is usually about 9 inches in diameter at the root, but sometimes considerably more. After being felled, it is barked, cut into billets, and buried in a dry place for about a couple of months, during which time the white ants eat off the outer wood, without touching the heart, which is the sandal. It is then taken up and sorted, according to the size of the billets. The deeper the colour, and the nearer the root, the higher is the perfume. Reject such pieces as are of a pale colour, small, decayed, or have white wood about them; and take especial care that it be not mixed with wood resembling sandal, but without its perfume. —(*Milburn's Orient. Com.*)

Sandal wood is extensively employed by the Hindoos as a perfume, in their funeral ceremonies. But the Chinese are its principal consumers. They manufacture it into fans, and small articles of furniture, and use it, when ground into powder, as a cosmetic. During the year ended the 30th of June, 1838, there were imported by British vessels into Canton, 6,166 piculs of sandal wood, valued at 147,984 dollars (see *antè*, p. 235.); and the imports in some years are more than twice this amount. The average importation into Calcutta is about 200 tons a year. It grows principally in Malabar, in the mountainous country at a little distance from the low sea coast; in Timor; and in the Fejee Islands in the South Sea. Calcutta is principally supplied from Malabar, while China derives the larger portion of her supplies from Timor and the other islands. It is seldom brought to Europe, except by individuals for their own use, or as presents for their friends. —(*Bell's External Com. of Bengal*, pp. 49. and 85.; *Crawfurd's Indian Archipelago*, vol. i. p. 519., vol. iii. p. 421. &c.)

SANDARACH, a resinous substance, commonly met with in loose granules a little larger than a pea, of a whitish yellow colour, brittle, inflammable, of a resinous smell,

and acrid aromatic taste. It exudes, it is said, in warm climates, from cracks and incisions in the common juniper bush. It is used as a varnish, dissolved in spirits of wine. —(*Ainslie's Mat. Indica.*)

SANDWICH ISLANDS. This secluded, but interesting group, is situated in the midst of the Pacific Ocean, in about the 21st degree of N. lat., and the 157th of W. long. It comprises 8 inhabited and 2 uninhabited islands, of which Owhyhee, where Captain Cook was killed, is the most considerable. They are of volcanic formation, and mountainous, some of the peaks rising, in Owhyhee, to between 13,000 and 14,000 feet in height! The population in 1836 is said to have amounted to above 108,000, of which nearly 40,000 belonged to Owhyhee. The islanders are honourably distinguished among the Polynesian nations, by the advances they have made in civilisation; and particularly by their progress in manufactures, navigation, and commerce. Christianity was introduced by the American missionaries in 1820, and is now the religion of the state; schools have been established, churches have been built, and the forms of religion are at least pretty well observed. European usages have become fashionable; and the costume of the better classes, women as well as men, closely resembles that of the Americans.

The principal port is Honolulu or Honororu, on the S. side of the island of Woahoo, in lat. 21° 18′ 3″ N., long. 157° 53′ W. Population about 8,500, of whom about 450 are Englishmen, Americans, and other foreigners. The harbour, to which the place owes all its importance, has a narrow entrance, but it is easy of access at all times of the tide to vessels not drawing more than 18 ft. water. The bar at its mouth being narrow and composed of soft coral, it might easily be made accessible even for line-of-battle ships. We subjoin a

List of Merchant Vessels arrived at Honolulu during the Year 1842.

	Ships.	Tons.
From Chili and Peru	3	1,115
Mexico	22	4,277
Guatemala	2	288
China	1	212
New Zealand and Tahite	4	450
England	2	636
U. States	5	1,085
Columbia River	6	1,372
	45	9,435

List of Whaling Vessels arrived at the same Port during the Year 1842 (second Visits of the same Vessels not included).

	Tonnage.	Cargoes.	
		Sperm Oil, Tons.	Black Oil, Tons.
American	16,780	4,044	2,865
English	5,976	1,269	170
French	2,470	-	655
Danish	236	10	175
	25,462	5,323	3,865

About 14 or 15 vessels belong to the port, of which 3 are the property of the government, 3 of native chiefs, and the remainder of the resident foreigners.

A newspaper in the English language is published in the town, in which we have noticed advertisements of ladies' shoes from Paris, *Eau-de-Cologne*, ices, &c.! The sovereignty of these islands was ceded, in February 1843, to the British; but the cession was declined by the admiral commanding in chief in the Pacific. —(*Geog. Dict.* art. *Polynesia; Simpson's Sandwich Islands.*)

SAPAN WOOD is obtained from a species of the same tree that yields the Brazil wood (*Cæsalpinia Sapan* Lin.). It is a middle sized forest tree, indigenous to Siam, Pegu, the Philippine Islands, &c. It has been employed for dyeing in the greater part of Asia for many centuries. It found its way into Europe some time before the discovery of America; but very little is now imported. Its colouring matter differs but little from that of Brazil wood, but the best sapan wood does not yield more than half the quantity that may be obtained from an equal weight of Brazil wood, and the colour is not quite so bright. —(*Bancroft on Colours*, vol. ii. p. 329.) Its price in the London market varies from 7*l.* to 12*l.* a ton.

SAPPHIRE (Ger. *Sapphir*; Du. *Saffiersteen*; Fr. *Saphir*; It. *Zaffiro*: Sp. *Safiro*, *Safir*; Rus. *Jachant*; Lat. *Sapphirus*), a precious stone in very high estimation. Colours blue and red; also gray, white, green, and yellow. It occurs in blunt-edged pieces, in roundish pebbles, and crystallised. Varies from transparent to translucent. Refracts double. After diamond, it is the hardest substance in nture. The blue variety, or sapphire, is harder than the ruby, or red variety. Brittle. Specific gravity 4 to 4·2.

It is found in Bohemia, Saxony, France, &c.; but the red sapphire, or Oriental ruby, is not found in any considerable quantity anywhere except in Ava. Next to diamond, sapphire is the most valuable of the gems. The white and pale blue varieties, by exposure to heat, become snow white, and, when cut, exhibit so high a degree of lustre, that they are used in place of diamond. The most highly prized varieties are the crimson and carmine red; these are the Oriental *ruby* of the jeweller; the next is *sapphire*; and last, the yellow or Oriental *topaz*. The *asterias*, or star-stone, is a very beautiful variety, in which the colour is generally of a reddish violet, and the form a rhomboid, with truncated apices, which exhibit an opalescent lustre.* —(See RUBY.)

Mr. Crawfurd gives the following details with respect to the sapphire and ruby mines of Ava: —"The precious stones ascertained to exist in the Burmese territory are chiefly those of the sapphire family,

* Professor Jameson says, in his *Mineralogy*, that some peculiarly beautiful sapphires are found in the Capelan mountains, in Pegu. But we are not aware that there are any such mountains in any part of the world; and, in point of fact, there are no mountains in Pegu, nor have any precious stones been ever found in it.

and the spinelle ruby. They are found at 2 places, not very distant from each other, called Mogaut and Kyatpëan, about 5 days' journey from the capital, in an E. S. E. direction. From what I could learn, the gems are not obtained by any regular mining operations, but by digging and washing the gravel in the beds of rivulets or small brooks. All the varieties of the sapphire, as well as the spinelle, are found together, and along with them large quantities of corundum. The varieties ascertained to exist, are the Oriental sapphire; the Oriental ruby, or red stone; the opalescent ruby, or cat's eye ruby; the star ruby; the green; the yellow and the white sapphires; and the Oriental amethyst. The common sapphire is by far the most frequent, but, in comparison with the ruby, is very little prized by the Burmese, in which they agree with other nations. I brought home with me several of great size, the largest weighing no less than 3,630 grains, or above 907 carats. The spinelle ruby (zebu-gaong) is not unfrequent in Ava, but is not much valued by the natives. I brought with me to England a perfect specimen, both as to colour and freedom from flaws, weighing 22 carats. The sapphire and ruby mines are considered the property of the king; at least he lays claim to all stones that exceed in value a viss of silver, or 100 ticals. The miners, it appears, endeavour to evade this law by breaking the large stones into fragments. In the royal treasury there are, notwithstanding, many fine stones of both descriptions. The year before our visit, the king received from the mines a ruby weighing 124 grains; and the year preceding that, 8 good ones, but of smaller size. No stranger is permitted to visit the mines; even the Chinese and Mohammedans residing at Ava are carefully excluded."—(*Journal of an Embassy to the Court of Ava*, p. 442.)

SARCOCOLLA, a subviscid, sweetish, and somewhat nauseous gum resin. It is brought from Arabia and Persia in small grains of a pale yellow colour; the whitest, as being the freshest, is preferred. It is but seldom imported. — (*Milburn's Orient. Com.*)

SARDINES, or SARDINIAS (Ger. *Sardellen*; Fr. *Sardines*; It. *Sardine*; Sp. *Sardinas*), a species of fish of the herring tribe, but smaller. They are taken in considerable quantities on our coasts, and are exceedingly plentiful on the coasts of Algarve in Portugal, Andalusia and Granada in Spain, and along the shores of Italy. The small sardines, caught on the coast of Provence, in France, are esteemed the best. From 1,000 to 1,200 fishing smacks are engaged in catching these fish on the coast of Britany, from June to the middle of October. The French frequently cure them in red brine; and when thus prepared, designate them *anchoisées*, or *anchovied sardines*. These are packed in vessels previously employed for holding wine, and exported to the Levant. When perfectly fresh, sardines are accounted excellent fish; but if kept for any time, they entirely lose their flavour, and become quite insipid.

SARDONYX, a precious stone, a variety of chalcedony.

The ancients selected this substance to engrave upon, no doubt, from its possessing two peculiar and necessary qualities, viz. hardness and tenacity, by which it is capable of receiving the finest touch or stroke of the tool without chipping, and showing the art of the engraver to the highest perfection. — (*Mawe on Diamonds*, 2d ed. p. 121.)

SARSAPARILLA (Ger. *Sarsaparille*; Fr. *Salsepareille*; It. *Salsapariglia*; Sp. *Zarzaparilla*), the root of the *Smilax Sarsaparilla*, a plant growing in South America and the West Indies. It is imported in bales. It is known in the London market by the names of Lisbon, Honduras, and Vera Cruz, but it is also brought from Jamaica. The Lisbon root, which is the produce of Brazil, has a reddish or dark brown cuticle, is internally farinaceous, and more free from fibre than the other kinds: the Honduras has a dirty brown, and sometimes whitish, cuticle; it is more fibrous, and has more ligneous matter, than the Lisbon and Vera Cruz. It is in long slender twigs, covered with a wrinkled brown cuticle, and has a small woody heart. The Jamaica differs from the others, in having a deep red cuticle of a close texture; and the red colour partially diffused through the ligneous part. The root is inodorous, and has a mucilaginous, very slightly bitter taste: the bark is the only useful part of the plant; the ligneous part being tasteless, inert, woody fibre. — (*Thomson's Dispensatory.*) The duty of 6*d.* per lb., with which it was then charged, produced, in 1840, 3,573*l.*, showing that 142,920 lbs. had been entered for consumption. In 1842 the duty was reduced to 1*d.* per lb.

SASSAFRAS (Ger. and Fr. *Sassafras*; It. *Sassafrasso*; Sp. *Sassafras*,) a species of laurel (*Laurus Sassafras* Lin.), a native of the southern parts of North America, Cochin-China, and several of the Indian islands. Sassafras wood, root, and bark have a fragrant odour, and a sweetish aromatic taste. The wood is of a brownish white colour; and the bark ferruginous within, spongy, and divisible into layers. Their sensible qualities and virtues depend on an essential oil, which may be obtained separate by distilling the chips or the bark with water. It is very fragrant, hot, and penetrating to the taste, of a pale yellow colour, and heavier than water. It is used only in the materia medica. Very little is imported. — (*Thomson's Dispensatory.*)

SAUNDERS (RED) (Arab. *Sundal-ahmar*; Hind. *Ruckut-chundum*), the wood of a lofty tree (*Pterocarpus santalinus*) indigenous to various parts of India, Ceylon, Timor, &c. The wood is brought to Europe in billets, which are very heavy and sink in water. It is extremely hard, of a fine grain, and a bright garnet red colour, which brightens on exposure to the air. It is employed to dye lasting reddish brown colours on wool. It yields its colouring matter to ether and alcohol, but not to water. The quantity imported is but inconsiderable. The price in bond varies at this moment (November, 1843) from 6*l.* to 7*l.* a ton. — (*Thomson's Dispensatory*; *Bancroft on Colours*, vol. ii. p. 236.)

SCAMMONY (Ger. *Skammonien*; Fr. *Scammonée*; It. *Scammonea*; Sp. *Escamonea*),

a gum-resin, the produce of a species of convolvulus, or creeper plant, which grows abundantly in Syria. When an incision is made into the roots, they yield a milky juice, which being kept, grows hard, and is the scammony of the shops. It is imported from Aleppo in what are called drums, weighing from 75 to 125 lbs. each; and from Smyrna in cakes like wax, packed in chests. The former is light and friable, and is considered the best; that from Smyrna is more compact and ponderous, less friable, and fuller of impurities. It has a peculiar heavy odour, not unlike that of old cheese; and a bitterish, slightly acrid taste. The colour is blackish or bluish grey, changing to dirty white, or lathering when the surface is rubbed with a wet finger. Its specific gravity is 1·235. It is very liable to be adulterated; and when of a dark colour, heavy, and splintery, it ought to be rejected. It is used only in medicine. — (*Thomson's Dispensatory.*) The duty on scammony, which was formerly as high as 6*s.* 4*d.* per lb., was reduced in 1832 to 2*s.* 6*d.*, and in 1842 to 6*d.*

SCULPTURES, figures cut in stone, metal, or other solid substance, representing or describing some real or imaginary object. The art of the sculptor, or statuary, was carried to the highest pitch of excellence in ancient Greece. Fortunately, several of the works of the Grecian sculptors have been preserved; and serve at once to stimulate and direct the genius of modern artists.

Models, are casts or representations of sculptures.

The act 54 Geo. 3. c. 56. vests the property of sculptures, models, copies, and casts in the proprietor for 14 years; provided he cause his name, with the date, to be put on them before they are published; with the same term in addition, if he should be living at the end of the first period. In actions for piracy, double costs to be given. The act 6 Geo. 4. c. 107. prohibits the importation, on pain of forfeiture, of any sculptures, models, casts, &c. first made in the U. Kingdom.

SEAL (Lat. *Sigillum*), a stone, piece of metal, or other solid substance, generally round or elliptical, on which is engraved the arms, crest, name, device, &c. of some state, prince, public body, or private individual. It is employed as a stamp to make an impression on sealing wax, thereby authenticating public acts, deeds, &c., or to close letters or packets. Seals were very early invented, and much learning has been employed in tracing their history, and explaining the figures upon them. — See particularly the work of *Hopkinck, De Sigillorum Prisco et Novo Jure*, 4to, 1702.) They are now very generally used.

The best are usually formed of precious stones, on which the crest or the initials of the person's name are engraved, set in gold. But immense numbers are formed of stained glass, and set in gilt copper. They are manufactured at London, Birmingham, &c., and are extensively exported.

SEAL FISHERY. The seal, an amphibious animal, of which there are many varieties, is found in vast numbers in the seas round Spitzbergen, and on the coasts of Labrador and Newfoundland. As it frequents the British shores, it is well known, and has been repeatedly described. Seals are principally hunted for their oil and skins. When taken in the spring of the year, when they are fattest, a full grown seal will yield from 8 to 12 gallons of oil, and a small one from 4 to 5 gallons. The oil, when extracted before putrefaction has commenced, is beautifully transparent, free from smell, and not unpleasant in its taste. The skin, when tanned, is extensively employed in the making of shoes; and when dressed with the hair on, serves for the covering of trunks, &c. For an account of the imports of seal-skins, see art. SKINS.

"To the Esquimaux the seal is of as much importance as bread to a European. Its flesh forms their most usual food; the fat is partly dressed for eating, and partly consumed in their lamps; the liver, when fried, is esteemed, even among sailors, as an agreeable dish. The skin, which the Esquimaux dress by processes peculiar to themselves, is made waterproof. With the hair off, it is used as coverings, instead of planks, for their boats, and as outer garments for themselves; shielded with which, they can invert themselves and canoes in the water, without getting their bodies wet. It serves also for coverings for their tents, and for various other purposes. The jackets and trowsers made of seal-skin by the Esquimaux are in great request among the whale fishers for preserving them from oil and wet."—(*Scoresby's Arctic Regions*, vol. i. p. 510.)

Seals in fine weather prefer the ice to the water, and vast herds of them are frequently found lying on the field ice; the places where they are met with being thence called "seal meadows." The seal hunters endeavour to surprise them while sleeping, and to intercept their retreat to the water. They attack them with muskets and bludgeons, but principally the latter, they being easily despatched by a blow on the nose.

The seal fishery has long been prosecuted to a considerable extent in the northern seas by ships from the Elbe and the Weser; but very few ships have been sent out for *sealing* only from England, though occasionally some of the whale ships have taken considerable quantities of seals. Latterly, however, the seal fishery has been prosecuted on a large scale, and with extraordinary success, by vessels of from 60 to 120 tons each, having crews of from 16 to 30 men, fitted out from the ports of Newfoundland, Nova Scotia, &c. The business is attended with a good deal of risk, and instances frequently occur of the vessels being crushed to pieces by the collision of the fields of ice. We borrow the following details from Mr. Bliss's tract on the *Trade, Statistics, &c. of Canada and our North American Possessions.*

"There is another department of the colonial fishery which has originated within no distant period, and is now of great extent and importance. The large fields of ice which, in the months of March and April, drift southward from the Polar seas, are accompanied by many herds of seals; these are found sleeping in what are called the seal meadows of the ice, and are there attacked and slaughtered in vast numbers. For this purpose the fishers of Newfoundland, from which island these voyages are principally made, without waiting till the return of spring shall have opened their harbours, saw channels through the ice for their vessels, and set sail in quest of those drifting fields, through the openings of which they work a passage, attended with great difficulties and dangers, till they encounter their prey on the seal

meadows. This bold and hazardous enterprise seems well compensated by its success. The number of seals thus taken is almost incredible, and is greatly on the increase."—(p. 70.) There were captured by the Newfoundland fishermen, in 1838, 375,361 seals; in 1839, 437,501. Large quantities are also taken by the Nova Scotia and Labrador fishermen.

See also *M'Gregor's British America*, 2d. edit. vol. i. p. 197. &c. There is a good account of the seal in *Laing's Voyage to Spitzbergen*. For the price of seal oil, see OIL.

SEALING WAX (Ger. *Siegellack*; Fr. *Cire d'Espagne, Cire à cacheter*; It. *Cera Lacca, Cera di Spagna*; Sp. *Lacre*; Rus. *Surgutsch*), the wax used for sealing letters, legal instruments, &c. It is a composition of gum lac, melted and incorporated with resin, and afterwards coloured with some pigment, as vermilion, verditer, ivory black, &c.

SEAMEN, the individuals engaged in navigating ships, barges, &c. upon the high seas. Those employed for this purpose upon rivers, lakes, or canals, are denominated watermen.

A *British Seaman* must be a natural-born subject of her Majesty; or be naturalised by act of parliament; or made a denizen by letters of denization; or have become a British subject by the conquest or cession of some newly acquired territory; or (being a foreigner) have served on board her Majesty's ships of war, in time of war, for the space of 3 years.—(3 & 4 *Will.* 4. c. 54. § 16.) But her Majesty may, by proclamation during war, declare that foreigners who have served *two* years in the royal navy, during such war, shall be deemed British seamen. — (§ 17.)

Various regulations have been enacted with respect to the hiring of seamen, their conduct while on board, and the payment of their wages. These regulations differ in different countries; but, in all, they have been intended to obviate the disputes that might otherwise arise between the master and seamen as to the terms of the contract between them, to secure due obedience to the master's orders, and to interest the seamen in the completion of the voyage, by making their earnings depend on its successful termination.

During the session of 1835 an act was passed (5 & 6 W. 4. c. 19.) of great importance to seamen, and to persons connected with navigation. It is intituled "An Act for amending and consolidating the laws relating to Merchant Seamen, and for forming and maintaining a Register of all the Men engaged in that Service." It lays down the various forms and regulations to be observed in hiring, paying, and discharging seamen; establishes an office for their registry; and prescribes the mode in which lists of crews are to be transmitted to the registrar. It also regulates the number of apprentices to be taken on board ship; the conditions under which seamen may, in certain cases, be left in foreign parts; with a variety of other interesting particulars. As any infraction of the provisions of the act incurs, in most cases, the forfeiture of heavy penalties, it should be carefully attended to, both by masters and men. After declaring that the prosperity, strength, and safety of the kingdom principally depend on a large, constant, and ready supply of seamen, as well for carrying on the commerce as for the defence thereof, and that it is necessary, by all practicable means, to increase the number of such seamen, and to give them all due encouragement and protection; and that, in furtherance of this end, it is expedient to amend and consolidate the laws relating to their registration and government, the statute proceeds to declare that the act 2 & 3 Ann. c. 6. for the increase of seamen, &c.; the act 2 Geo. 2. c. 36. for the better regulation, &c. of seamen in the merchant service; the act 2 G. 3. c. 31. for perpetuating the last-mentioned act, &c.; the act 31 G. 3. c. 39. for the better regulation, &c. of seamen in the coasting trade of the kingdom; the act 45 G. 3. c. 81. for amending the last-mentioned act; the act 37 G. 3. c. 73. for preventing the desertion of seamen from British merchant ships in the West Indies; the act 58 G. 3. c. 38. to extend and render more effectual the regulations for the relief of seafaring men and boys, &c., subjects of the U. K., in foreign parts; the act 4 G. 4. c. 25. for regulating the number of apprentices to be taken on board British merchant vessels, &c.; and the act 3 and 4 W. 4. c. 88. for continuing the 59 G. 3. c. 58. for facilitating the recovery of the wages of seamen in the merchant service, are hereby repealed: but with the proviso, that all offences committed and penalties and forfeitures incurred previously to the commencement of this act, against the provisions of the said acts, shall be punishable and recoverable under the said acts as if they had not been repealed. — § 1.

1. *Hiring of Seamen. No Seaman to be taken to Sea without a written Agreement.* — It shall not be lawful for any master of any ship or vessel belonging to any subject of the U. Kingdom, trading to parts beyond seas, or of any British registered ship of the burden of 80 tons or upwards employed in the fisheries of the U. Kingdom, or in trading coastwise or otherwise, to carry to sea, from this kingdom or any other place, any seaman or other person as one of his crew or complement (apprentices excepted), without first entering into an agreement in writing with every such seaman, specifying what monthly or other wages such seaman is to be paid, the capacity in which he is to act, and the nature of the voyage in which the ship is intended to be employed, so that the seaman may have some means of judging of the probable period for which he is likely to be engaged; and the said agreement shall contain the day of the month and year in which the same shall be made, and shall be signed by the master in the first instance, and by the seamen respectively at the port or place where such seamen shall be respectively shipped; and the master shall cause the same to be, by or in presence of the party who is to attest their

respective signatures thereto, truly and distinctly read over to every such seaman before he shall be required to sign the same, in order that he may be enabled to understand the purport and meaning of the engagement he enters into and the terms to which he is bound. — § 2.

Regulations respecting Forms of Agreements.—In the case of ships bound to parts beyond seas, except as herein-after provided, every agreement shall be in the form and shall contain true entries under their respective heads of the several particulars set forth in the subjoined schedule marked (A) so far as the same can be ascertained; and the owners and the master of every such ship, or one of them, shall, on reporting his ship's arrival at her port of destination in the U. Kingdom, deposit with the collector or comptroller of customs at such port a true copy of such agreement, attested by the signature of the master, that every person interested in such agreement may at all times know the terms and conditions thereof; and in the cases of ships employed in fishing on the coasts of the U. Kingdom, and of ships regularly trading from one part of the U. Kingdom to another, and of ships regularly trading or making regular voyages to any of the islands of Jersey, Guernsey, Alderney, Sark, and Man, or to any port on the continent of Europe between the river Elbe inclusive and Brest, the agreement to be entered into as aforesaid shall be in the form and shall contain due entries under their respective heads of the particulars set forth in the subjoined schedule B., so far as the same can be ascertained; and the owner or one of the owners of every such ship employed in fishing or in trading in any of the cases last mentioned shall, within 10 days next after the expiration of every 6 months ending the 30th of June and the 31st of December each year, deposit with the collector or comptroller of the customs of the port to which the ship belongs a true copy of every agreement entered into with any person composing part of the crew within the preceding 6 months, attested by the signature of such owner; and all copies of agreements required to be deposited as aforesaid shall, when the same have been deposited, and be required to be produced in evidence on the part of any seaman, be received and taken as legal proof of the contents of the agreement. — § 3.

Schedules referred to in the preceding Clause.

SCHEDULE (A).

An Agreement made, pursuant to the Directions of an Act of Parliament passed in the Sixth Year of the Reign of His Majesty King William the Fourth, between , the Master of the Ship , of the Port of , and of the burden of Tons, and the several Persons whose names are subscribed thereto.

It is agreed, by and on the part of the said persons, and they severally hereby engage to serve on board the said ship in the several capacities against their respective names expressed on a voyage from the port to [*here the intended voyage is to be described as nearly as can be done, and the places at which it is intended the ship shall touch, or if that cannot be done, the nature of the voyage in which she is to be employed*], and back to the port ; and the said crew further engage to conduct themselves in an orderly, faithful, honest, careful, and sober manner, and to be at all times diligent in their respective duties and stations, and to be obedient to the lawful commands of the master in every thing relating to the said ship, and the materials, stores, and cargo thereof, whether on board such ship, in boats, or on shore [*here may be inserted any other clauses which the parties may think proper to be introduced into the agreement, provided that the same be not contrary to or inconsistent with the provisions and spirit of this act.*] In consideration of which services, to be duly, honestly, carefully, and faithfully performed, the said master doth hereby promise and agree to pay to the said crew, by way of compensation or wages, the amount against their names respectively expressed. In witness whereof the said parties have hereto subscribed their names on the days against their respective signatures mentioned.

Place and Time of Entry.				Men's Names.	Age.	Place of Birth.	Quality.	Amount of Wages per Calendar Month, Share, or Voyage.	Witness to Signature.	Name of Ship in which the Seamen last served.
	Day.	Month.	Year.							

Note. — Any embezzlement or wilful or negligent loss or destruction of any [redacted] of the ship's cargo or stores may be made good to the owner out of the wages (so far as they will extend) of the seaman guilty of the same; and if any seaman shall enter himself as qualified for a duty to which he shall prove to be not competent, he will be subject to a reduction of the rate of wages hereby agreed for in proportion to his incompetency.

SCHEDULE (B).

An Agreement made, pursuant to the Directions of an Act of parliament passed in the Sixth Year of the Reign of His Majesty King William the Fourth, between , the Master of the Ship , of the Port of and of the Burden of Tons, and the several Persons whose Names are subscribed hereto.

It is agreed, by and on the part of the said persons, and they severally hereby engage, to serve on board the said ship in the said several capacities against their respective names expressed, which ship is to be employed in [*here the nature of the ship's employment is to be described, whether in the fisheries, on the coast, or in trading from one port of the United Kingdom to another, or to any of the islands of Jersey, Guernsey, Alderney, Sark, and Man, or to any part on the continent of Europe between the River Elbe inclusive and Brest*]; and the said crew further engage to conduct themselves in an orderly, faithful, honest, careful, and sober manner, and to be at all times diligent in their respective duties and stations, and to be obedient to the lawful commands of the master in every thing relating to the said ship, and the materials, stores, and cargo thereof, whether on board such ship, in boats, or on shore, [*here may be inserted any other clauses which the parties may think proper to be introduced into the agreement, provided the same be not contrary to or inconsistent with the provisions and spirit of this act.*]. In consideration of which services, to be duly, honestly, carefully, and faithfully performed, the said master doth hereby promise to pay to the said crew, by way of compensation or wages, the amount against their names respectively expressed: provided always, and it is hereby declared, that no seaman shall be entitled to his discharge from the ship during any voyage in which she may be engaged, nor at any other than a port in the United Kingdom. In witness whereof the said parties have hereto subscribed their names on the days against their respective signatures mentioned.

Place and Time of Entry.				Men's Names.	Age.	Place of Birth.	Quality.	Amount of Wages per Calendar Month, Share, or Voyage.	Witness to Signature.	Name of Ship in which the Seamen last served.
	Day.	Month.	Year.							

Note. — Any embezzlement or wilful or negligent loss or destruction of any part of the ship's cargo or stores may be made good to the owner out of the wages (so far as they will extend) of the seaman guilty of the same; and if any seaman shall enter himself as qualified for a duty to which he shall prove to be not competent, he will be subject to a reduction of the rate of wages hereby agreed for in proportion to his incompetency.

Penalty for Default. — If any master of any ship as aforesaid carry out to sea any seaman (apprentices excepted) without having first entered into the agreement hereby required, he shall for every such offence forfeit and pay the sum of 10*l.* in respect of each and every seaman carried out contrary to this act; and if any master neglect to cause the agreement to be distinctly read over to each seaman, as enjoined above, he shall for every such neglect forfeit and pay the sum of 5*l.*; and if any master neglect to deposit a copy of the agreement with the collector or comptroller of the customs as is hereby required, or shall wilfully deposit a false copy of such agreement, he shall for every such neglect or offence forfeit and pay the sum of 50*l.* — § 4.

Seamen not to be deprived of legal Remedies, &c. — No seaman, by entering into or signing such agreement as aforesaid, shall forfeit his lien upon the ship, nor be deprived of any remedy for the recovery of his wages which seamen are now lawfully entitled to against either the ship, the master, or the owners thereof; nor shall any agreement made contrary to or inconsistent with the provisions of this act, or any clause whereby a seaman shall consent to forego the right which the maritime law gives him to wages in the case of freight earned by ships subsequently lost, or containing any words to that effect, be valid or binding on any seaman signing the same; and in cases in which it may be necessary that the agreement should be produced to sustain a claim on the part of a seaman, no obligation shall lie upon the seaman to produce the same, nor shall any seaman fail in any suit or proceeding for the recovery of his wages for want of the production of such agreement, or of any deposited copy thereof as aforesaid, or for the want of any notice to produce the same; any law or usage to the contrary notwithstanding. — § 5.

Seamen refusing to join or to proceed in the Ship, &c. may be committed to Gaol. — In case a seaman shall, after having signed an agreement as before mentioned, neglect or refuse to join the ship on board of which he had engaged to serve, or refuse to proceed to sea in her, or absent himself therefrom without leave, it shall be lawful for any justice of the peace, at home or abroad, near the place, upon complaint of the fact made upon oath by the master, mate, or owner thereof, and such justice is required, by his warrant, to cause such seaman to be apprehended and brought before him; and in case such seaman shall not give a reason to the satisfaction of such justice for his neglect, refusal, or absence, upon due proof thereof it shall be lawful for such justice to commit such seaman to the house of correction, to be kept to hard labour for a period not exceeding 30 days: provided that in case such seaman, on being brought before said justice, shall consent to join the ship and proceed on the voyage for which he has agreed, it shall be lawful for said justice, at the request of the master, instead of committing such seaman, to cause him to be conveyed on board the said ship, or be delivered to the master, for the purpose of proceeding on the voyage, and also to award to the master such costs as shall seem reasonable, not exceeding in any case the sum of 40*s.*, which shall be chargeable against and may be abated from the wages to grow due to such seaman. — § 6.

The statutes do not render a verbal agreement for wages absolutely void; but impose a penalty on the master if a written agreement be not made. When a written agreement is made, it becomes the only evidence of the contract between the parties; and a seaman cannot recover any thing agreed to be given in reward for his services, which is not specified in the articles.

A seaman who has engaged to serve on board a ship, is bound to exert himself to the utmost in the service of the ship; and, therefore, a promise made by the master of *a ship in distress*, to pay an extra sum to a seaman, as an inducement to extraordinary exertion on his part, is held to be essentially void.

2. *Conduct of Seamen.* — It is essential to the business of navigation that the most prompt and ready obedience should be paid to the lawful commands of the master. To this effect it is covenanted in the articles of agreement previously quoted, that "the crew engage to conduct themselves in an orderly, faithful, honest, careful, and sober manner; and to be at all times diligent in their respective duties and stations, and to be obedient to the lawful commands of the master in every thing relating to the said ship, and the materials, stores, and cargo thereof, whether on board such ship, in boats, or on shore."

In case of disobedience or disorderly conduct on the part of the seamen, the master may correct them in a reasonable manner. Such an authority is absolutely necessary for the safety of the ship and of those on board; but it behoves the master to act in such cases with great deliberation, and not to pervert the powers with which he is intrusted for the good of the whole, to cruel or vindictive purposes. Masters abusing their authority must answer at law for the consequences. In case of actual or open mutiny by the crew, or any part of them, the resistance of the master becomes an act of self defence, and is to be considered in all its consequences in that point of view. The Ordinances of Oleron and Wisby declare that a mariner who strikes the master shall either pay a fine or lose his right hand; a singular as well as barbarous alternative, unknown in modern jurisprudence.

But although the master may by force restrain the commission of great crimes, he has no judicial authority over the criminal, but is bound to secure his person and bring him before a proper tribunal. And all justices of the peace are empowered to receive informations touching any murder, piracy, felony, or robbery upon the sea, and to commit the offenders for trial. — (43 *Geo.* 3. c. 160.)

The *desertion* or absence without leave of seamen from a ship, while on a voyage to foreign parts, being attended with many bad consequences, has been provided against in all maritime laws. It is enacted in this country by the 5 & 6 Will. 4. c. 19. —

Forfeiture for temporary Absence from Duty. — If any seaman, after having signed the aforesaid agreement, or after the ship on board which he has agreed to serve has left her first port of clearance and before the period for which he has agreed to serve be completed, shall wilfully and without leave absent himself from the ship, or from his duty, he shall (in all cases not of absolute desertion, or not treated as such by the master) forfeit out of his wages to the master or owner of such ship the amount of 2 days' pay for every 24 hours of such absence, and in a like proportion for any less period of time, or, at the option of the said master, the amount of such expenses as have been necessarily incurred in hiring a substitute to perform his work; and in case any seaman while he belongs to the ship shall without sum-

cient cause neglect to perform such reasonable duty as is required of him by the master or other person in command, he shall be subject to a like forfeiture in respect of every such offence, and of every 24 hours' continuance thereof; and in case a seaman, after signing such agreement, or after the ship's arrival at her port of delivery, and before her cargo be discharged, shall quit the ship without a previous discharge or leave from the master, he shall forfeit 1 month's pay out of his wages. But no such forfeitures shall be incurred unless the fact of the seaman's temporary absence, neglect of duty, or quitting the ship be duly entered in the ship's log-book, which entry shall specify truly the hour of the day at which the same shall have occurred, and the period during which the seaman was absent or neglected his duty, the truth of which entry the owner or master must, in all cases of dispute, substantiate by the evidence of the mate or some other credible witness. — § 7.

How Amount of Forfeiture is ascertained when Seamen contract for the Voyage. — In all cases where the seaman has contracted for wages by the voyage or by the run, and not by the month or other stated period of time, the amount of forfeitures incurred under this act shall be ascertained as follows; viz., if the whole time spent in the voyage agreed upon shall exceed 1 calendar month, the forfeiture of 1 month's pay, expressed in this act, shall be taken to be a forfeiture of a sum of money bearing the same proportion to the whole wages as a calendar month shall bear to the whole time spent in the voyage, and in like manner a forfeiture of 2 days' pay or less shall be accounted and taken to be a forfeiture of a sum bearing the same proportion to the whole wages as the same period of time shall bear to the whole time spent in the voyage; and if the whole time spent in the voyage shall not exceed 1 calendar month, the forfeiture of 1 month's pay shall be taken to be a forfeiture of the whole wages contracted for: and if such time shall not exceed 2 days, the forfeiture of 2 days' pay shall be accounted and taken to be a forfeiture of the whole wages contracted for; and the master is authorised to abate the amount of all such forfeitures enacted out of the wages of any seaman incurring the same. — § 8.

Forfeiture for Desertion. — Every seaman who absolutely deserts the ship to which he belongs shall forfeit to the owner or master all his clothes and effects left on board, and all wages and emoluments to which he might otherwise be entitled, provided the circumstances attending such desertion be entered in the log-book at the time and certified by the signature of the master and mate or other credible witness; and an absence of a seaman from the ship for any time within the space of 24 hours immediately preceding the sailing of the ship without permission from the master, or for any period however short under circumstances plainly showing that it was his intention not to return, shall be deemed an absolute desertion; and in case any such desertion take place in parts beyond seas, and the master be under the necessity of engaging a substitute for the deserter at a higher rate of wages than that stipulated in the agreement to be paid to the seaman deserting, the owner or master shall be entitled to recover from the deserter by summary proceeding, in the same manner as wages are hereby made recoverable, any excess of wages which he shall pay to such substitute beyond the amount payable to the deserter had he duly performed his service pursuant to agreement. — § 9.

Penalty for harbouring Deserters. — If any person shall, on shipboard or on shore, harbour or secrete a seaman who has signed an agreement to proceed on a voyage to parts beyond seas, and has deserted or absented himself without leave from his ship, knowing or having reason to believe him to be a deserter or to be absent without leave, he shall for every seaman so harboured or secreted forfeit 10*l.*; and no debt exceeding 5*s.*, incurred by any seaman after he has signed any agreement as aforesaid, shall be recoverable until the voyage agreed for has been concluded; nor shall it be lawful for any keeper of a public-house, or of a lodging-house for seamen, to withhold or detain any chest, bed or bedding, clothes, tools, or other effects of any seaman, for any debt alleged to have been contracted by such seaman; and in case any chest, bed, &c., or other effects as aforesaid, be withheld contrary to this act, it shall be lawful for any justice of the peace in any part of H. M.'s dominions, upon complaint upon oath made by such seaman or on his behalf, to inquire into the matter, and, if he see right, to cause such property or effects so withheld or detained to be seized and delivered over to the seaman. — § 10.

For an account of the penalties imposed on the master for leaving seamen in foreign countries, or refusing to bring them back, see MASTER.

Neglect of duty, disobedience of orders, habitual drunkenness, or any cause which will justify the master in discharging a seaman during the voyage, will also deprive the seaman of his wages.

If the cargo be embezzled or injured by the fraud or negligence of the seamen, so that the merchant has a right to claim satisfaction from the master and owners, they may, by the custom of merchants, deduct the value thereof from the wages of the seamen by whose misconduct the injury has taken place. And the last proviso introduced into the usual agreement signed by the seaman, is calculated to enforce this rule in the case of embezzlement either of the cargo or of the ship's stores. This proviso, however, is to be construed individually, as affecting only the particular persons guilty of the embezzlement, and not the whole crew. Nor is any innocent person liable to contribute a portion of his wages to make good the loss occasioned by the misconduct of others.

The offences of running away with the ship, or voluntarily yielding her up to an enemy, or making a revolt, are punishable by death. The statute 11 & 12 Will. 3. c. 7. enacts —

"That if any commander or master of any ship, or any seaman or mariner, shall in any place, where the admiral hath jurisdiction, betray his trust and turn pirate, enemy, or rebel, and piratically and feloniously run away with his or their ship or ships, or any barge, boat, ordinance, ammunition, goods, or merchandises, or yield them up voluntarily to any pirate, or shall bring any seducing messages from any pirate, enemy, or rebel, or consult, combine, or confederate with, or attempt or endeavour to corrupt any commander, master, officer, or mariner, to yield up or run away with any ship, goods, or merchandises, or turn pirate, or go over to pirates; or if any person shall lay violent hands on his commander, whereby to hinder him from fighting in defence of his ship and goods committed to his trust, or that shall confine his master, or make or endeavour to make a revolt in the ship; shall be adjudged, deemed, and taken to be a *pirate*, *felon*, and *robber*, and being convicted thereof according to the directions of this act, shall have and suffer pain of *death*, loss of lands, goods, and chattels, as *pirates*, *felons*, and *robbers* upon the seas ought to have and suffer."

The wilful destruction or loss of the ship is, in all countries, punishable by death. But doubts having been entertained whether the destruction of a ship that had been insured came within the scope of the previously existing statutes, they were repealed by the 43 Geo. 3. c. 113., and the following provision substituted in their stead: —

"That if any person or persons shall, from and after the *sixteenth* day of *July*, 1803, wilfully cast away, burn, or otherwise destroy any ship or vessel, or in anywise counsel, direct, or procure the same to be

done, and the same be accordingly done, with intent or design thereby wilfully and maliciously to prejudice any owner or owners of such ship or vessel, or any owner or owners of any goods laden on board the same, or any person or persons, body politic or corporate, that hath or have underwritten or shall underwrite any policy or policies of insurance upon such ship or vessel, or on the freight thereof, or upon any goods laden on board the same, the person or persons offending therein, being thereof lawfully convicted, shall be deemed and adjudged a principal felon or felons, and shall suffer death, as in cases of felony, without benefit of clergy.

3. *Payment of Seaman's Wages, &c.* — In order to stimulate the zeal and attention of seamen, it has been the policy of all maritime states to make the payment of their wages depend on the successful termination of the voyage. "*Freight is the mother of wages; the safety of the ship the mother of freight.*" When, therefore, by any disaster happening in the course of the voyage, such as the loss or capture of the ship, the owners lose their freight, the seamen also lose their wages.

If a ship on a voyage out and home has delivered her outward-bound cargo, but perishes in the homeward voyage, the freight for the outward voyage is due; so, in the same case, the seamen are entitled to receive their wages for the time employed in the outward voyage and the unloading of the cargo, unless by the terms of their contract the outward and homeward voyages be consolidated into one. If a ship sail to several places, wages are payable to the time of the delivery of the last cargo. Upon the same principle where money has been advanced to the owners in part of the freight outwards and the ship perished before her arrival at the port of delivery, it was held that the seamen were entitled to wages in proportion to the money advanced.

If, after seamen have been hired, the owners of a ship do not think proper to send her on the intended voyage, the seamen are to be paid for the time during which they may have been employed on board the ship; and in the event of their sustaining any special damage by breaking off the contract, it is but reasonable that they should be indemnified.

In the case of shipwreck, it is the duty of the seamen to exert themselves to the utmost to save as much as possible of the vessel and cargo. If the cargo be saved, and a proportion of the freight paid by the merchant in respect thereof, it seems, upon principle, that the seamen are also entitled to a proportion of their wages. And for their labour in saving the cargo, or the remains of the ship, they, as well as other persons, may be entitled to a recompence by way of *salvage*. The laws of Oleron rule, that if, in case of shipwreck, "the seamen preserve a part of the ship and lading, the master shall allow them a reasonable consideration to carry them home to their own country; and in case they save enough to enable the master to do this, he may lawfully pledge to some honest persons such part thereof as may be sufficient for the occasion."

By the laws of Wisby, "the mariners are bound to save and preserve the merchandise to the utmost of their power, and, whilst they do so (*ce-faisant*, according to the *French* translation), ought to be paid their wages, otherwise not." By the Hanseatic Ordinance, if a ship happen to be cast away, the mariners are obliged to save as much as in them lies, and the master ought to requite them for their pains to their content, and convey them at his own charge to their dwelling places; but if the mariners refuse to assist their master, in such case they shall have neither reward nor wages paid them." It is not quite clear, from the language of these ancient ordinances, whether the payment directed to be made to seamen on those melancholy occasions is to be regarded as a reward for their labour in the salvage, or a recompence for their former services in the ship, for which, according to general principles, they are not entitled to payment, if no freight be earned. Cleirac, in his *Commentary on the Laws of Oleron*, says, that by an ordinance of Philip II. of Spain, made in 1563, it is ordained, that seamen shall save as much as they can from shipwreck; and, in that case, the master is bound to pay them their wages, and to give them a further reward for their labour out of the goods. And the Hanseatic Ordinance of 1614 expressly directs, that if so much of the ship be saved as equals the value of the wages of the seamen, they shall be paid their whole wages. In like manner, the Ordinance of Rotterdam and the *French* Ordinance also expressly direct the payment of wages out of the relics and materials of the ship. — (*Abbott on the Law of Shipping*, part iv. c. 2.)

"I have not been able," says Lord Tenterden, "to find any decision of an English court on the point, and the legislature has made no provision relating to it. As an inducement to the mariners to exert themselves in the hour of danger, it may not be unfit to hold out to them the prospect of obtaining their wages, if they save so much of the ship as shall be sufficient to pay them; but their claim upon the ship seems not to extend to a case wherein, according to the principles of the law upon which their claim is founded, no wages are payable to them." — (Part iv. c. 2.)

The laws of Oleron, Wisby, and the Hanse Towns direct, that if a seaman die during the voyage, wages shall be paid to his heirs: but it is not clear whether the sum thus directed to be paid is to be understood as meaning a payment proportioned to the time of his service, or the whole sum that he would have earned had he lived till the con-

clusion of the voyage. This question has not been judicially decided in England; but by the act 4 & 5 Will. 4. c. 52. it is ordered that the wages due to any seaman who has died on board any merchant ship shall be paid, within 3 months of the arrival of such ship in Great Britain, to the receiver of the corporation for the support of maimed and decayed seamen for the use of the seaman's executor or administrator. All masters neglecting or refusing to pay the same forfeit double the sum due as wages for each offence.

A seaman impressed from a merchant ship into the royal service, is entitled to receive the proportion of his wages due to him at the time of impressment, provided the merchant ship *arrive in safety* at the port of her discharge.

Policy requires that the wages of seamen should not be paid to them in foreign countries, as well to prevent desertion, as to preserve for the benefit of their families, what might otherwise be spent in riot and debauchery. Conformably to this principle it has been enacted —

"That no master or owner of any merchant ship or vessel shall pay or advance, or cause to be paid or advanced, to any seaman or mariner, during the time he shall be in parts beyond the seas, any money or effects upon account of wages, exceeding *one moiety* of the wages which shall be due at the time of such payment, until such ship or vessel shall return to *Great Britain* or *Ireland*, or the plantations, or to some other of his Majesty's dominions, whereto they belong, and from whence they were first fitted out; and if any such master or owner of such merchant ship or vessel shall pay or advance, or cause to be paid or advanced, any wages to any seaman or mariner above the said moiety, such master or owner shall forfeit and pay *double* the money he shall so pay or advance, to be recovered in the High Court of Admiralty by any person who shall first discover and inform of the same." — (8 *Geo.* 1. c. 24.)

The following clauses in the act 5 & 6 Will. 4. c. 19. refer to the payment of wages.

The Period within which Wages are to be paid. — The master or owner of every ship is hereby required to pay to every seaman entered as aforesaid his wages, if the same be demanded, within the periods following; viz., if the ship be employed in trading coastwise, the wages shall be paid within 2 days after the termination of the agreement, or at the time when such seaman is discharged, whichever shall first happen; if the ship be employed in trading otherwise than coastwise, then the wages shall be paid at the latest within 3 days after the cargo is delivered, or within 10 days after the seaman's discharge, whichever shall first happen; in either of which last-mentioned cases of payment being delayed, the seaman at the time of his discharge is entitled to be paid on account a sum equal to one fourth part of the estimated balance due to him; and in case any master or owner neglect or refuse to make such payment, he shall for every such neglect or refusal forfeit and pay to the seaman the amount of 2 days' pay for each day, not exceeding 10 days, during which payment shall without sufficient cause be delayed beyond the period at which such wages or part wages are hereby required to be paid; for recovery of which forfeiture the seaman has the same remedies as he is entitled to for recovery of his wages: provided that nothing in this clause contained shall extend to the cases of ships employed in the southern whale fishery, or on voyages for which seamen by the terms of their agreement are compensated by shares in the profits of the adventure. — § 11.

Payment of Wages to be valid notwithstanding Bill of Sale, &c. — Every such payment of wages to a seaman shall be valid and effectual in law, notwithstanding any bill of sale or assignment made by any seaman of such wages, or of any attachment or incumbrance thereon; and no assignment or sale of wages made prior to the earning thereof, nor any power of attorney expressed to be irrevocable for the receipt of such wages, shall be valid or binding upon the party making the same. — § 12.

Masters to give Seamen Certificates on Discharge. — Upon the discharge of a seaman from a ship, he shall be entitled to receive from the master a certificate, signed by him, of his service and discharge, specifying the period of service and the time and place of his discharge; and any master refusing to give such certificate, without reasonable cause, shall for every such offence forfeit and pay to such seaman the sum of 5*l.* — § 13.

For obtaining immediate Payment of Wages of Seamen in certain Cases. — If after a seaman has been discharged from any ship or vessel 3 days he shall be desirous of proceeding to sea on another voyage, and in order thereto requires immediate payment of the wages due to him, any justice of the peace in any part of H. M.'s dominions may, on application from such seaman, and on satisfactory proof that he would be prevented from employment by delay, summon the master or owner of such ship or vessel before him, and require cause to be shown why immediate payment of such wages should not be made; and if it appear to the satisfaction of such justice that there is no reasonable cause for delay, he shall order payment to be made forthwith, and in default of compliance with such order such master or owner shall forfeit and pay the sum of 5*l.* — § 14.

Summary Mode of recovering Wages not exceeding 20l. — And whereas seamen, in cases of dispute, may be exposed to great inconvenience, expense, and delay in obtaining payment of their wages; for remedy thereof it is enacted, in all cases of wages not exceeding 20*l.* which are due and payable to a seaman for service in any ship, it shall be lawful for any justice of peace in any part of H. M.'s dominions, residing near the place where the ship has ended her voyage, cleared or discharged her cargo, or near the place where the master or owner upon whom the claim is made shall be or reside, upon complaint on oath made to such justice by any seaman, or on his behalf, to summon such master or owner to appear before him to answer such complaint, and upon his appearance, or in default thereof, on proof of his having been summoned, such justice is empowered to examine upon the oath of the parties, and their witnesses (if there be any), touching the complaint and the amount of wages due, and to make such order for payment as shall appear reasonable and just; and in case such order be not obeyed within 2 days after making thereof, it shall be lawful for such justice to issue his warrant to levy the amount of the wages awarded as due, by distress and sale of the goods and chattels of the party on whom such order for payment shall be made, rendering to such party the overplus (if any shall remain of the produce of the sale) after deducting thereout all charges and expenses incurred by the seaman in making and hearing the complaint, as well as those incurred by the distress and levy and in the enforcement of the justice's order; and in case sufficient distress cannot be found, it shall be lawful for the said justice to cause the amount of the said wages and expenses to be levied on the ship in respect of the service on board which the wages are claimed, or the tackle and apparel thereof; and if such ship be not within the jurisdiction of such justice, then he is empowered to apprehend and commit the party upon whom the order for payment shall be made to the common gaol of the county, there to remain without bail until payment of the amount of wages awarded, and of all costs and expenses attending their recovery; and the award and decision of such justice shall be final and conclusive as well on every seaman as on the owner and master of the ship. — § 15.

In what Case Costs of Suit for Recovery of Wages not to be allowed. — If any suit for the recovery of a seaman's wages be instituted against the ship, or the master or owner thereof, in the Court of Admiralty or in any vice-admiralty court, or in any court of record in H. M.'s dominions, and it shall appear to the judge that the plaintiff might have had as effectual a remedy for the recovery of his wages by complaint

to a justice of the peace as herein-before provided, then and in every such case such judge is hereby required to certify to the effect, and thereupon no costs of suit shall be awarded to the plaintiff. — § 16.

If Ship is sold at a Foreign Port, Crew to be sent home at the Expense of the Master or Owners. — When any ship whatever belonging to any subject of the U. K., except in cases of wreck or condemnation, is sold at any port of H. M.'s dominions, the master in all such cases (unless the crew in the presence of the British consul or vice-consul, or if there be none such, then in the presence of 1 or more British resident merchants at such port, shall signify their consent in writing to be there discharged,) is hereby required, besides paying them the wages to which they shall be entitled under the agreement, either to provide them with adequate employment on board some other British vessel homeward bound, or to furnish the means of sending them back to the ports in H. M.'s dominions at which they were originally shipped, or to some port in the U. K., as shall be agreed upon, by providing them with a passage home, or depositing with the consul or vice-consul such money as he shall deem reasonably sufficient to defray the expenses of their subsistence and passage; and if the master refuse or neglect to do so, such expenses shall be a charge upon the owner whose ship is so sold, except in cases of barratry, wreck, or condemnation, and may be recovered as so much money paid and expended on his account, together with full costs, at the suit of the consul or other person defraying such expenses, or of the attorney-general, in case the same has been allowed to the consul out of the public monies. — § 17.

4. *Establishment of an Office in London for the Registry of Seamen.* — This is provided by clauses 19 & 20 of the act 5 & 6 Will. 4. c. 19., which establishes an office at the Custom-house for the registry of merchant seamen, consisting of a registrar &c., under the direction of the Lords of the Admiralty. It then goes on to enact, as follows: —

Masters of Ships to deliver Lists of their Crew on their Return. — Whereas by the act 4 & 5 W. [illegible]. 52. (see *post*, p. 28.), a certain book by way of muster-roll is required to be kept on board merchant ships; and whereas it is expedient for the better effecting the objects of this act that a return should be made to the registrar of merchant seamen of many of the said particulars, it is enacted, that the masters of every British ship bound to parts beyond seas, except in the cases herein-after provided, shall not only keep the book required by the said recited act, but shall, on reporting his ship on her arrival at her port of destination in the U. K., deliver to the collector or comptroller of customs at such port an account, signed by himself, of all the seamen and others (including apprentices) who have belonged to the ship at any time during the absence from the U. K., containing a true and correct return under their respective heads of the several particulars expressed in the form set forth in the subjoined schedule marked (C). — § 21.

SCHEDULE (C).

Ship , of the Port of , whereof was Master.
A List of the Crew (including the Master and Apprentices) at the Period of her sailing from the Port or , in the United Kingdom, from which she took her first Departure on her Voyage of , and of the Men who joined the Ship subsequent to such Departure and until the Return to the Port of , being her Port of Destination in the United Kingdom.

Name.	Age.	Place of Birth	Quality.	Ship in which he last served.	Date of joining the Ship.	Place where.	Time of Death or leaving the Ship.	Place where.	How disposed of.

Note. — If any one of the crew has entered His Majesty's service, the name of the king's ship in which he entered must be stated in the account, under the head of "How disposed of."

Note. — This list is to be filled up, and, being signed by the master, is to be delivered by him to the collector or comptroller of the customs, on reporting his ship inwards, on her arrival at her port of destination in the United Kingdom.

Masters of Ships in the Home Trade to return like Lists. — Within 21 days after the 30th of June and the 31st of December in each year, the owner or one of the owners of every ship employed in fishing on the coasts of the U. K., or in regularly trading from one part of the U. K. to another, and of every ship regularly trading to any of the islands of Jersey, Guernsey, Alderney, Sark, and Man, or to any port on the continent of Europe between the river Elbe inclusive and Brest, shall deposit with the collector or comptroller of the customs of the port to which the ship belongs, or with the registrar in London, an account signed by the owner, or master, of the voyages in which such ship has been engaged during the half year ending on the days above mentioned, and setting forth the christian and surnames of the several persons (including the master and apprentices) who belonged to the ship at any time during such periods, which account shall be in the form, and shall contain a true and correct return, under their respective heads, of the several particulars expressed in the subjoined schedule (D). — § 22.

SCHEDULE (D).

An Account of the Voyages in which the Ship , of , has been engaged in the Half Year commencing on the Day of , One thousand eight hundred and , and ending on the Day of , One thousand eight hundred and , and of all the Persons (Masters and Apprentices included) who have belonged to such Ship during that Period.

ACCOUNT OF THE VOYAGES.

Here the several Voyages, and the Period of the Voyages, are described.

ACCOUNT OF THE CREW.

Name.	Age.	Place of Birth.	Quality.	Ship in which he last served.	Date of joining the Ship.	Place where.	Time of Death or leaving the Ship.	Place where.	How disposed of.

Note. — If any one of the crew shall have entered his Majesty's service, the name of the king's ship in which he entered must be stated in his account under the head of "How disposed of."

Note. — This account, when filled up is to be signed by the owner, and deposited with the collector or comptroller of the customs of the port to which the ship shall belong, or with the registrar of merchant seamen in London.

Return to be made in case of Ship lost or sold Abroad. — In case any ship be lost or sold while absent from the U. K., then an account containing a similar return as in the cases before mentioned, made out up to the period of such loss or sale, by the persons who were at that time owner and master thereof, or by one of them, shall be transmitted to the registrar in the port of London so soon as he shall be able to make such return after the loss, and within 12 calendar months at farthest after the sale of the ship. — § 23.

Lists to be certified, &c. — The said accounts and returns required by this act to be delivered to the collector or comptroller of customs, shall be transmitted by them to the registrar; and every owner or master of a ship who shall refuse or wilfully neglect to deliver such list or account as is hereby required, shall for every such refusal or neglect forfeit and pay the sum of 25*l.* — § 24.

Disposal of the Effects of Seamen dying Abroad. — Whenever a British seaman abroad dies elsewhere than on board a British ship, leaving any money or effects within the limits of any British consulate, H. M.'s consul there is hereby required to claim and take charge of such money and effects, and to dispose of the effects for the benefit of the next of kin of the deceased or other person who may be entitled to the same; and in case no claim be made to the same within 3 calendar months after the death of such seaman, the consul shall, after abating the amount of any expenses incurred in getting in the assets of the deceased, remit the balance of such monies as either have arisen or shall hereafter arise to the president and governors of the corporation "for the relief and support of sick, maimed, and disabled seamen, and of the widows and children of such as shall be killed, slain, or drowned in the merchant service," to be by them paid over and disposed of in the manner and under the regulations provided by the act 4 & 5 W. 4. c. 52.; and in case any seaman dying as last mentioned leave on board the ship to which he belonged any monies, clothes, or other effects, and the same be not claimed within 1 month after the ship's return to the U. K. by the executor or administrator of the deceased, then the master of the ship is hereby required to deposit the same or the proceeds arising therefrom with the president and governors aforesaid, to be disposed of in the manner provided by the said act with respect to the wages of deceased seamen. — § 25.

5. Regulations as to taking Apprentices on board Ship. — We have already noticed these under the art. APPRENTICE; but as the subject is of great interest, we subjoin a full abstract of the clauses in the act *5 & 6* Will. 4. c. 19. having reference to apprentices.

Parish Boys may be put out Apprentices in the Sea Service.—Overseers of the poor or other competent persons are hereby empowered to bind by indenture and put out any boy having attained the age of 13 years, and of sufficient health and strength, who or whose parent or parents is or are maintained by any parish or township, or who shall beg for alms therein, with his consent, but not otherwise, an apprentice in the sea service to any of H. M.'s subjects being master or owner of any ship registered in any port of the U. K., for so long time and until such boys shall respectively attain the age of 21 years, which binding shall be as effectual as if such boy had been bound by virtue of any statute now in force respecting the binding of parish apprentices, or as if such boy were of full age and had bound himself an apprentice, and notwithstanding the residence of the master or owner to whom he may be bound be more than 40 miles distant from such parish or place: provided that every such binding shall be made in the presence of 2 justices acting for the county, riding, borough, or place within which such parish or township is situate, which justices shall execute the indenture in testimony of their being satisfied that such boy hath attained the age and is of sufficient health and strength as required by this act; and that the period when the service under such indenture shall expire may the more certainly appear, the age of every such boy shall be inserted in his indenture, the same being truly taken from the entry of his baptism in the register book of the parish in which he was born (where the same can be obtained), a copy of which shall be given and attested by the officiating minister of such parish without fee or reward; and where no such entry of baptism can be found, the justices shall inform themselves as fully as they can of the boy's age, and from such information shall insert the same in his indenture, and the age of every such boy so inserted therein shall (in relation to the continuance of his service) be taken to be his true age without any further proof thereof. — § 26.

Parish Apprentices may be turned over to the Sea Service. — It shall be lawful for any person to whom any parish apprentice is bound to a service on shore according to the statutes already in force relating to such apprentices, or for the executors or administrators, or, there being none such, for the widow of any such deceased person, with the concurrence of two or more justices residing in or near to the place where such poor boy should be bound apprentice, to assign and turn over such boy, with his consent, but not otherwise, apprentice to any master or owner of any ship not having her complement of apprentices as herein required, to be employed by such master or owner in the sea service during the unexpired period of his apprenticeship. — § 27.

Indentures may be assigned on the Death of the Master. — In the event of the death of the master of any parish apprentice to the sea service, it shall be lawful for the widow, executor, or administrator of such deceased master to assign his indenture for the residue of the unexpired term to any master or owner of any ship not having the complement of apprentices herein required; all which assignments, if executed within the ports of London, shall be attested by the registrar or one of his assistants or clerks, and if at any other port, by the collector or comptroller of the customs thereof. — § 28.

Parish Officers to prepare Indentures.—Such overseers, &c. shall cause the indentures of apprenticeship to be prepared and transmitted in duplicate, if the master or owner of the ship to whom such apprentice is bound be or reside within the limits of the port of London, to the registrar, and if at any other port, to the collector or comptroller of customs at such port; and the said overseers or other persons shall cause each poor boy to be conducted and conveyed to such port or place by the constable and at the expense of the parish or township sending him thither, and shall also, upon the execution by the master of the counterpart of the indentures, cause to be paid down to the master the sum of 5*l.*, to be expended in providing such boy with necessary sea clothing and bedding; which sum, with the other expenses, are to be allowed in their accounts in relation to the poor. — § 29.

How Counterparts of Indentures to be attested.—The counterparts of all indentures shall, if the master be or reside within the limits of the port of London, be executed in the presence of and attested by the registrar or one of his assistants or clerks, and if at any other port by the collector or comptroller of the customs at such port, and also in both cases by the constable or other officer who shall convey such apprentices thither, and such indentures shall bear date respectively on the days on which they are executed; and the constable on his return shall deliver such counterpart to the overseers or other competent persons to be registered and preserved. — § 30.

Every Ship to have Apprentices according to her Tonnage.—The master of every ship belonging to any subject of the U. K., and of the burden of 80 tons and upwards, shall have on board, at the time of clearing out from any port of the U. K., 1 apprentice or more, in the following proportions to the ship's admeasurement, according to the certificate of registry; viz. every ship of 80 tons and under 200 tons shall have 1 apprentice at the least, every ship of 200 tons and under 400 tons shall have 2 apprentices at the least, every ship of 400 tons and under 500 tons shall have 3 apprentices at the least, every ship of 500 tons and under 700 tons shall have 4 apprentices at the least, and every ship of 700 tons and upwards shall have 5 apprentices at the least, all of whom at the period of their being bound shall have been under 17 years of age, and shall have been duly bound for the term of 4 years at the least; and if any master neglect to have on board his ship the number of apprentices hereby required, he shall for every such offence forfeit and pay the sum of 10*l.* in respect of each apprentice so deficient. — § 31

Apprentices exempt from Contributions. — No apprentice bound or assigned pursuant to this act, nor any master or owner in respect of any such apprentice, shall be liable for the payment of any contribution for the support of any hospital or institution. — § 32.

Indentures and Assignments to be registered. — The registrar in London, and the collector and comptroller of customs at each other port, shall, in a book to be kept for that purpose, enter all indentures

and assignments of parish apprentices, specifying the dates thereof, the names and ages of the apprentices, the parishes or places from whence sent, the names and residences of the masters to whom bound or assigned, and the names, ports, and burden of the respective ships to which such masters belong, and shall make and subscribe on each indenture or assignment an indorsement purporting that the same hath been duly registered pursuant to this act; and every collector or comptroller shall also at the end of each quarter of the year transmit a list of the indentures and assignments registered by him within the preceding quarter, containing all the particulars aforesaid, to the registrar in London. — § 33.

Indentures of Apprentices to be registered. — In every case of a person voluntarily binding himself apprentice to the sea service, the indentures to be executed on such occasions shall be registered in a book to be kept for that purpose by the registrar in London, and by the collector and comptroller of customs at each other port at which the indenture shall be executed, in which book shall be expressed the dates of the several indentures, the names and ages of the apprentices, the names and residence of their masters, and (if known) the names, port, and burden of the several ships on board which they are to serve; and such registrar or collector and comptroller shall indorse and subscribe upon each indenture a certificate purporting that the same hath been duly registered pursuant to this act; and the said collector and comptroller shall also at the end of each quarter of the year transmit a list of the indentures so registered by them within the preceding quarter, containing all the particulars aforesaid, to the said registrar, for the purposes of this act; and it shall be lawful for the master, or his executor or administrator, with the consent of the apprentice if of the age of 17 years or upwards, and if under that age with the consent of his parent or guardian, to assign or transfer his indenture to any other master or owner of any registered ship; and all such voluntary apprentices may, during the term for which they are bound, be employed in any ship of which the master of any apprentice is master or owner: provided that every such assignment be registered and indorsed by the said registrar, or by the collector or comptroller of customs at the port where the master is resident, or to which his ship belongs; in which latter case the said collector or comptroller shall notify the same to the registrar, as is provided with regard to the indenture of such apprentice. — § 34.

No Stamp Duty on Agreements. — Agreements with the crew of a ship made in conformity with this act, and all indentures of parish and voluntary apprentices to the sea service, and all counterparts and assignments of such indentures executed after the passing of this act, shall be wholly exempt from stamp duty. — § 35.

Penalty on Masters neglecting to register Indentures, &c. — If any master to whom any apprentice mentioned in this act shall be bound or assigned neglect to cause the indenture or the assignment thereof (as the case may be) to be registered as required by this act, or shall, after the ship has cleared outwards on the voyage upon which such ship may be bound, suffer his apprentice to quit his service (not entering into that of H. M.) except in case of death, desertion, sickness, or other unavoidable cause, to be certified in the log-book of the ship, every such master shall for every such offence forfeit and pay the sum of 10*l.* — § 36.

Justices to determine Complaints. — Two or more justices, residing at or near to any port at which any ship having on board any sea apprentice shall at any time arrive, shall have full power and authority to inquire into and examine, hear, and determine all claims of apprentices upon their masters under their indentures, and all complaints of hard or ill usage exercised by their masters towards their apprentices, or of misbehaviour on the part of any apprentice, and to make such orders therein as they are empowered to do in other cases between masters and apprentices. — § 37.

Masters entitled to receive the Wages of Apprentices entering into the Navy. — No parish or voluntary apprentice to the sea service shall be at liberty to enter into H. M.'s naval service during his apprenticeship without the consent of his master; but if nevertheless he voluntarily enter on board any of H. M.'s ships of war, and be allowed by his master to continue therein, such master, in case he give notice to the secretary of the admiralty of his consent to his apprentice remaining in H. M.'s service during the residue of his apprenticeship, shall, upon the production of his indenture, be entitled, at the time of paying off the ship, to receive to his own use any balance of wages that may be then due and payable to such apprentice up to the period of expiration of his indenture. — § 39.

6. *General Regulations.* — The following clauses of the act 5 & 6 Will. 4. c. 19. refer to various matters of importance to the master and the crew.

Common Assaults may be summarily punished by 2 Justices. — In case of any assault or battery which shall, after the commencement of this act, be committed on board any British merchant ship in any place at sea, or out of H. M.'s dominions, it shall be lawful for any 2 justices in any part of H. M.'s dominions, upon complaint of the party aggrieved, to hear and determine any such complaint, and to proceed and make such adjudication thereon as any 2 justices are empowered to do by the act 9 Geo. 4. c. 31., subject however to such provisoes and limitations as are contained in the said act with respect to the cases of assault and battery therein mentioned; and the fine or forfeiture to be imposed in such case shall be payable to the merchant seamen's hospital or institution at or nearest to the port or place where such adjudication is made. — § 38.

Forcing on Shore, &c. any Person belonging to the Crew, a Misdemeanor. — If any master of a British ship force on shore and leave behind, or shall otherwise wilfully and wrongfully leave behind on shore or at sea, in any place in or out of H. M.'s dominions, any person belonging to his crew, before the arrival of such ship in the U. K., or before the completion of the voyage or voyages for which such person was engaged, whether such person have formed part of the original crew or not, every person so offending shall be deemed guilty of a misdemeanor, and shall suffer such punishment by fine and imprisonment, or both, as to the court before which he is convicted shall seem meet; and the said offence may be prosecuted by information at the suit of the attorney-general, or by indictment, or other proceeding, in any court of criminal jurisdiction in H. M.'s dominions, at home or abroad, where such master or other person shall happen to be, although the place where the offence may have been committed be out of the ordinary local jurisdiction of such court; and such court is hereby authorised to issue a commission for the examination of any witnesses absent or out of its jurisdiction; and at the trial the depositions so taken, if such witnesses be then absent, shall be received in evidence. — § 40.

Seamen not to be discharged Abroad without Sanction. — No master shall discharge any individual person of his crew, whether British subject or foreigner, at any of H. M.'s colonies or plantations, without the previous sanction in writing of the governor, lieutenant-governor, secretary, or other officer appointed in that behalf by the government there, or in the absence of all such authorities at or near the port or place at which the ship is then lying, then of the chief officer of customs resident at or near to such port or place: nor shall he discharge any person at any other place abroad without the like previous sanction in writing of H. M.'s minister, consul, or vice-consul there, or in the absence of any such functionary, then of two respectable merchants resident there; all which functionaries are hereby required, and all which merchants are hereby authorised, in a summary way to inquire into the grounds of such proposed discharge by examination on oath, and to grant or refuse such sanction according to their discretion, having regard to the objects of this act. — § 41.

Not to be left Abroad on the Plea of Incapacity to proceed. — No master shall be at liberty to leave behind abroad, either on shore or at sea, any person of his crew, on the plea of such person not being in a condition to proceed on the voyage, or having deserted from the ship, or otherwise disappeared, unless upon a previous certificate in writing of one of such functionaries or merchants as aforesaid, if there be any such at or within a reasonable distance from the place where the ship shall then be, if there be time

to procure the same, certifying that such person is not in such condition, or has deserted or disappeared, and cannot be brought back; and all such functionaries are hereby required, on the application of any such master, to inquire by examination on oath into the circumstances, and to give or refuse such certificate according to the result of such examination. — § 42.

If any of the Crew are left behind, the Proof of Sanction shall be on the Master. — If any master shall leave behind any one of his crew contrary to this act, in any indictment or proceeding the proof of his having obtained the sanction or certificate aforesaid shall be upon him, it being the intention hereof that, except in the case of entering into H. M.'s naval service, no person of the crew shall be discharged, either with or without his consent, in any place abroad where such functionary can be found, unless he have given his sanction thereto. — § 43.

Seamen when allowed to be left behind to be paid their Wages. — Every master who shall leave any person of his crew on shore at any place abroad, under certificate of his not being in a condition to proceed on the voyage, shall deliver to one of the said functionaries, or if there be none such to any two respectable merchants there, or if there be but one then to such one merchant, a just and true account of the wages due to such person, and pay the same to the seaman, either in money or by a bill drawn upon the owner of his ship; and if by bill, then such functionary or merchant is hereby required by certificate indorsed on such bill to testify that the same is drawn according to this act for money due on account of wages of a seaman, or to that effect; and any master who shall deliver a false account or refuse or neglect to deliver a just and true account of the wages due to such person, and to pay the amount in money or by bill as aforesaid, shall for every such offence forfeit and pay, in addition to the wages due, the penal sum of 25*l.* — § 44.

Act not to prevent Seamen from entering into the Navy. — Nothing in this act or in any agreement shall prevent any seaman or person belonging to any merchant ship whatever from entering or being received into H. M.'s naval service, nor shall any such entry be deemed a desertion from the merchant ship, nor incur any penalty or forfeiture whatever, either of wages, clothes, or effects, or other matter or thing, notwithstanding any agreement made to the contrary; and all masters and owners of ships are strictly prohibited from introducing into any ship's articles or agreement with the crew any clause or matter by which any penalty or forfeiture of any kind is agreed to be incurred by a seaman upon his entry into H. M.'s service. — § 45.

Seamen entering into the Navy from Merchant Ships entitled to the immediate Delivery of Clothes, &c. — When any seaman quits a merchant ship in order to enter into H.M.'s naval service, and is actually received into such service, not having previously committed any act amounting to and treated by the master as a total desertion, he shall be entitled immediately upon entry to the delivery up of all his clothes and effects on board such merchant ship, and (in case the ship shall have earned freight) to receive from the master the payment of the proportionate amount of his wages up to the period of such entry, in money or by a bill on the owner; all which clothes, effects, money, and bill such master is required to deliver up to him accordingly, under a penalty of 25*l.* for any refusal or neglect, to be recovered with full costs of suit by such seaman: provided, that if no freight have been earned at the time of such entry, then the master shall be required to give the seaman so entering a bill upon the owner for his wages to the period of such entry, payable on the ship's safe arrival at her destined port; but in case the master shall have no means of ascertaining the balance justly due, he shall make out and deliver to such seaman a certificate of the period of his services and the rate of wages he is entitled to, producing at the same time to the commanding officer of H. M.'s ship the agreement entered into with the seaman for the voyage; and every master, upon the delivery up of such clothes and effects, and the settlement, as now directed, of such wages, shall be entitled to receive from the officer in command of H. M.'s ship into which such seaman has entered, a certificate signed by the officer, which he is hereby required to give upon the request of the master, testifying that such seaman has entered into H. M.'s ship to serve, as proof that the master had not parted with the seaman contrary to the provisions of this act. — § 46.

Power to H. M. to sue for the Amount advanced for Seamen left Abroad. — In all cases where any master has forced on shore or left behind any person against the provisions of this act, and any such person shall become distressed and be relieved under the provisions of the act 11 Geo. 4. c. 20, or under any act hereafter to be passed, then, in addition to the wages due from and the penalties imposed on such master, H. M. shall be entitled to sue him or the owner of the ship, at the option of the lords of the admiralty, for all charges and expenses incurred on the subsistence, necessary clothing, and conveyance home of such person, as so much money paid and expended to the use of the defendant, which, together with full costs of suit, may be recovered in the same manner as other debts due to H. M. are recoverable; and in any proceeding for that purpose proof of the account furnished to the said commissioners by any one of such functionaries, or by such two merchants or one merchant, according to the case, as provided by the said act of the 11 Geo. 4. c. 20., shall, together with proof of payment by the said lords or by the treasurer of the navy, of the charges incurred on account of such person, be sufficient evidence that he was relieved and conveyed home at H. M.'s expense; and the court in which any proceeding for the recovery of the said money is instituted is authorised to issue a commission for the examination of witnesses abroad, and the depositions so taken shall be received as evidence. — § 47.

Ship's Agreement on Arrival at a Foreign Port to be deposited with the Consul. — Every master of a British ship, on his arrival at any foreign port where there is a British consul or vice-consul, shall deliver to such functionary the agreement with his ship's crew, to be preserved by him during the ship's stay there, and to be returned to the master before his leaving the port, without any fee or charge for the same; and if any master refuse or neglect to deliver such agreement to the consul or vice-consul, as is hereby required, he shall for every such offence forfeit and pay the sum of 25*l.* — § 48.

No Seaman to be shipped at a Foreign Port without the Privity of the Consul. — During the ship's stay at any foreign port no seaman shall be shipped by any master except with the privity of the consul or vice-consul, indorsed or certified on the agreement, under a penalty of 25*l.* for every seaman shipped in breach of this act. — § 49.

Masters to produce Agreements to Officers of King's Ships. — The master of every British ship is hereby required to produce and show the muster-roll of the ship, and the agreement with his crew, to the captain, commander, or other commissioned officer of any of H. M.'s ships, requiring a production and sight thereof; and it shall be lawful for any such officer in H. M.'s naval service, if he think it necessary, to muster the crew and passengers (if any) of any British ship, in order to be satisfied that the provisions of this act, and the laws relating to navigation with respect to the crews of merchant ships, have been duly complied with; and if any master shall, upon being required by any such officer, neglect or refuse to produce the muster-roll or agreement, or obstruct any officer in mustering the said crew or passengers, or produce any false muster-roll, he shall for every such offence forfeit and pay the sum of 25*l.* — § 50.

Registrar and Officers of Customs empowered to require Production of the Agreement, &c. — For the better carrying into effect the purposes of this act it shall be lawful for the registrar and his assistants, and also for the collectors or other chief officers of customs, at the several ports of the U. K. and of the British possessions abroad, to demand from the master of every ship required to enter into an agreement with his crew, the production of the muster-roll of the ship, and also of such agreement, with liberty to take a copy of either or both, and to muster the crew and apprentices of such ship for the purpose of ascertaining whether the provisions of this act, and of the laws relating to navigation, have been complied with; and if any master, on such demand being made, refuse or neglect to produce such muster-roll or agreement, or refuse to allow a copy of either document to be taken, or refuse to permit, or prevent his crew

and apprentices from being mustered, he shall for every such neglect, refusal, or offence, forfeit and pay the sum of 50*l*. — § 51.

Definition of the Terms Master, Seaman, Ship, and Owner. — Every person having the charge or command of any British ship shall, within the meaning and for the purposes of this act, be deemed and taken to be the master of such ship; and every person (apprentices excepted) employed or engaged to serve in any capacity on board the same, shall be deemed and taken to be a seaman within the meaning and for the purposes of this act; and the term "ship," as used in this act, shall be taken and understood to comprehend every description of vessel navigating on the sea; and the term "owner," as applied to a ship, shall be understood to comprehend all persons, if more than one, to whom the ship belongs; and all steam and other vessels employed in carrying passengers or goods shall be deemed trading ships within the meaning and for the purposes of this act. — § 52.

Recovery of Penalties. — All penalties and forfeitures imposed by this act, for the recovery whereof no specific mode is herein provided, shall be recovered, with costs of suit, in manner following: (that is to say,) all penalties and forfeitures not exceeding 20*l*. shall be recoverable at the suit of any person by information and summary proceeding before any one or more justice or justices in any part of H. M.'s dominions, residing near to the place where the offence shall be committed, or where the offender shall be, which justice or justices shall have full power to levy the amount of any such penalty or forfeiture and costs by distress and sale of the offender's goods, or by commitment of the offender for non-payment of the amount; and all penalties and forfeitures exceeding 20*l*. shall and may be recovered, with costs of suit, in any of H. M.'s courts of record at Westminster, Edinburgh, or Dublin, or in the colonies, at the suit of H. M.'s attorney-general or other chief law officer of the crown in any part of H. M.'s dominions other than in Scotland, and if there at the suit of the lord advocate; and that all penalties and forfeitures mentioned in this act for which no specific application is before provided shall, when recovered, be paid and applied as follows; viz. one moiety of every such penalty shall be paid to the informer or person on whose discovery or information the same has been recovered, and the residue shall be divided between Greenwich Hospital and the merchant seamen's hospital or institution at the port to which the ship shall belong, and if there be none such at said port, then the whole of the said residue shall be paid to Greenwich Hospital: provided that it shall be lawful for the court before which or the justice or justices before whom any proceedings are instituted for the recovery of any pecuniary penalty imposed by this act, to mitigate or reduce such penalty as to them shall appear just and reasonable, in such manner, however, that no penalty shall be reduced below half its original amount: and provided also, that all proceedings so to be instituted be commenced within 2 years after the commission of the offence, if the same have been committed at or beyond the Cape of Good Hope or Cape Horn, or within 1 year if committed on the European side of those limits, or within 6 calendar months after the return of the offender or complaining party to the U. K. — § 53.

As to Ships belonging to any British Colony having a Legislature. — This act shall not extend or apply to any ship registered in or belonging to any British colony having a legislative assembly, or to the crew of any such ship, while such ship is within the precincts of such colony; any thing herein contained to the contrary in anywise notwithstanding. — § 54.

SEAMEN (CORPORATION FOR RELIEF OF). During the reign of George II. an establishment attached to Greenwich Hospital was erected by the 20 Geo. 2. c. 38. "*for the relief and support of disabled seamen, and the widows and children of such as shall be killed, slain, or drowned in the merchant service.*" To provide a fund for this charitable institution, every person serving in any merchant ship, or other private ship or vessel, belonging to any of his Majesty's subjects in England, (except apprentices under the age of 18, persons employed in boats upon the coasts in taking fish which are brought fresh on shore, or in boats within rivers, or upon boats on the coasts, and pilots (except persons employed in the service of the East India Company, and who were not entitled to the benefit of this institution, being provided for by a fund established by the Company),) paid sixpence per month, which was deducted out of his wages by the master, and paid over to the persons appointed under the authority of the act at the port to which the ship belonged, before she was allowed to clear inwards. For the management and distribution of this fund, a corporation was created, composed chiefly of eminent merchants, with power to purchase lands and erect an hospital, and to provide for seamen rendered incapable of service by sickness, wounds, or other accidental misfortunes, and decrepit and worn out by age, either by receiving them into the hospital, or by pensions: and also to relieve the widows and children of seamen killed or drowned in the merchant service, provided the children are not of the age of 14 years; or if of that age and upwards are incapable of getting a livelihood by reason of lameness, blindness, or other infirmity, and are proper objects of charity; and to make reasonable allowances to those who shall lose an eye or a limb, or be otherwise hurt or maimed, in fighting, defending or working their ships, or doing any other duty in their service, in proportion to their hurt; so far forth as the income and revenues of the charity will extend for these purposes. But no person is to be provided for as a worn-out seaman, who has not been employed in the merchant service five years and paid the contribution. And in providing for this class, a preference is given to such as have served longest and contributed most.

In order to ascertain the times of service and payment of the contribution, the master was obliged to keep a muster-roll of the persons employed in the ship, and had before her departure to deliver a duplicate to the collector or receiver of duties for the seamen's hospital at the port; and, during the voyage, to enter the time and place of discharge, quitting, and desertion, and of receiving other persons on board, and of any hurt, damage, death, or drowning, of which he had also to deliver a duplicate at his return, under the penalty of 20*l*., to the truth whereof he might be examined upon oath by the collector. And in case any person employed on board any ship or vessel should, in doing his duty on shore or on board, break an arm or a leg, or be otherwise hurt or maimed, he was to be properly relieved until sufficiently recovered to be sent to the place to which the ship belonged.

But, notwithstanding the praiseworthy principle on which this establishment was founded, it was not found to be productive of the benefits, in a practical point of view, that had been anticipated. Perhaps this is to be in part explained by the circumstance of its being attached to Greenwich Hospital, which is peculiarly intended as a retreat for the worn-out and disabled seamen belonging to the Royal Navy. But, however this may be, it appears from accounts laid before parliament, that in 1829, when the merchant seamen paid an annual contribution of 26,137*l.* to the hospital, there was not one of them within its walls, except such as had also served on board line-of-battle ships! The system was, in consequence, much complained of by the seamen and others interested in the merchant service; and it is obvious that these complaints were not unfounded, and that the seamen reaped no advantage from the institution at all equivalent to the sacrifice they made for its support.

To obviate this state of things, a new system was introduced in 1835, when it was ordered, by the act 4 & 5 Will. 4. c. 34., that the contribution of 6*d.* per month by seamen in the merchant service to Greenwich Hospital should cease from the 1st of January, 1835; and that 20,000*l.* a year should be advanced from the consolidated fund to the Hospital to make good the deficiency caused by the cessation of such contribution.

New Establishment for Support of Merchant Seamen, &c. — And to provide still more effectually for the relief and support of maimed and disabled merchant seamen, and of the widows, &c. of those killed or drowned in the merchant service, the act 4 & 5 Will. 4. c. 52. was passed. This act repeals the 20 Geo. 2. c. 38., except in so far as it relates to the establishment of the corporation of the president and governors for the relief of maimed, &c. merchant seamen, and of the widows and children of seamen killed or drowned in the merchant service; and it also repeals as much of the act 37 Geo. 3. c. 73. as relates to the wages of seamen dying while employed in ships trading to the West Indies. Having thus cleared the way for a new system, it goes on to enact as follows: —

President and Governors empowered to relieve disabled Seamen, &c. — The said president and governors and their successors are authorised to provide, in their hospital, for such seamen as are rendered incapable of service by sickness, wounds, or other accidental misfortunes, and those who shall become decrepit or worn out by age, or to allow them certain pensions, or otherwise, as the president and governors deem meet and most for the advantage of the said charity; and also to relieve the widows and children of such seamen as shall be killed, slain, or drowned in the said service; and also to relieve the widows and children of seamen dying after having contributed during a term of 21 years to the funds of this corporation, provided such children are not of the age of 14 years, or if of that age or upwards, not capable of getting a livelihood by reason of lameness, blindness, or other infirmities, and are proper objects of charity; and also to relieve the widows and children (such children being proper objects of charity) of such seamen as at the time of their death shall have been receiving or been entitled to pensions, under and by virtue of this act, from the fund hereby to be created, as decrepit or worn-out seamen: provided that no widow shall be entitled to any benefit under this act, who shall not have been the wife of such seaman or pensioner before he became entitled to relief under its provisions: provided nevertheless, that no seaman shall be entitled to any provision or benefit of this act, on account of any hurt or damage received on board any ship or vessel, unless he produce, or cause to be produced, a certificate of the said hurt or damage from the master, mate, boatswain, and surgeon, or so many of them as were in the vessel to which he belonged at the time of his receiving such hurt or damage, or of the master and 2 of the seamen, if there be no other officer, or in case the master shall die, or be killed or drowned, then of the person who shall take upon him the care of the ship or vessel, and 2 of the seamen on board the same, under their hands and seals, thereby signifying how and in what manner such seaman received such hurt or damage, whether in fighting, defending, working, loading, or unloading the said ship or vessel, where and when he entered, and how long he had served on board the same; and the parties so signing and sealing such certificate are hereby required to make oath to the truth thereof before some justice of the peace, if given in Great Britain or Ireland, or the chief officer of the customs of the port or place where there is no justice of the peace, or before the British consul or resident in any foreign country where such certificate is executed (who are respectively authorised and required to administer the same without fee or reward); and in case of sickness, whereby such seaman shall be rendered incapable of service, a certificate, signed, sealed, and authenticated in like manner, signifying that he was healthy when he entered on board such ship or vessel, and that such sickness was contracted on board the same, or on shore in doing his duty in the service of the ship, and not otherwise, and expressing the time and place he entered on board such ship or vessel, and how long he had served therein; and that no widow, child, or children of any seaman killed, slain, or drowned in the said service, shall be relieved or entitled to any allowance by virtue of this act unless she or they, or some person on her or their behalf, shall produce a certificate, signed, sealed, and authenticated in like manner, signifying how and in what manner such seaman lost his life in the service of the said ship or vessel, the time and place he entered on board, and how long he had served therein; and that no widow, child, or children of any seaman in the said service shall be entitled to any relief by virtue of this act, unless she or they shall produce, or cause to be produced, a certificate under the hands and seals of the minister and churchwardens and overseers of the poor of the parish, township, or place, or any 2 of them, or under the hands and seals of the minister and overseers of the poor of the parish, township, or place, or any 2 of them, where there are no churchwardens, or if in Scotland, by the minister and elders, or if in Ireland, by a justice of the peace for the parish, township, or place where such widow, &c. shall at the time reside; and if such widow, &c. are some of the people called Quakers, then by any 2 reputable persons of that persuasion of the parish, township, or place where such widow, &c. have a legal settlement, or do inhabit and reside, to be attested by 2 or more credible witnesses, that such widow was the lawful wife and real widow, and that such child or children was or were the lawful child or children of such deceased seaman as aforesaid, and that such child or children is or are under the age of 14 years, or if of that age or upwards, not capable of getting a livelihood by reason of lameness, blindness, or other infirmities, and is or are proper objects of charity; and that no seaman shall be provided for by a pension or otherwise, as decrepit or worn out, unless he have served in the merchant service for the space of 5 years, and have during that time paid the monthly duty out of his wages, imposed by the act 20 Geo. 2. c. 38., or by this act required to be henceforward paid and deducted, as the case may happen, for the uses and purposes herein provided. —

Forgery of Certificate. — Forged certificates to be null and void; and those knowingly using them to be liable to the punishment of an incorrigible rogue. — § 3.

Courts. — The president and 5 assistants to make a court, who are to meet weekly. The court may apply the monies of the corporation, and appoint the officers and their salaries, and do all other matters and things necessary. — § 4.

All Masters and Owners of Merchant Ships or Vessels, &c. to pay 2s. per Month. — For effecting the ends and purposes aforesaid, every master of any merchant ship or vessel belonging to any British subject, and every owner, being a British subject, navigating or working his own ship or vessel, whether the said ship or vessel be employed on the high sea, or coasts of Great Britain or Ireland, or in any port, bay, or creek of the same, shall, from and after the 31st of December, 1834, pay 2*s.* per month, and proportionably for a lesser time, during the time he or they shall be employed in such merchant ship or vessel, for the uses and purposes aforesaid: provided always, that such masters or owners, or their widows, and children under 14 years of age, or being objects of charity as aforesaid, shall be entitled to a proportionate increase of the pension or allowance by this act provided, according to the difference between the amount of the monthly duty paid by other seamen, mariners, and pilots, in case such master or owner shall have paid the 2*s.* per month for a period of 5 years or 60 months before any application to the said president and governors for relief under this act; but in case any such master or owner be killed or drowned, or become decrepit, maimed, or disabled, before he or they shall have paid such increased rate of 2*s.* per month for the full period of 5 years or 60 months as aforesaid, then such masters or owners, or their widows and children, shall be entitled to such smaller pension or allowance as the said president and governors, or the trustees to be appointed, shall think fit. — § 5.

All Seamen, or other Persons serving on board such Ship or Vessel, &c., to pay 1s. per Month. — Every seaman or other person whatsoever who shall serve or be employed in any merchant ship, or other private ship or vessel, belonging to any British subject, whether employed on the high sea, or coasts of Great Britain or Ireland, or in any port, bay, or creek of the same, and every pilot employed on board any such ship or vessel, shall, from and after the 31st day of December, 1834, pay 1*s.* per month, and proportionably for a lesser time, during the time he or they shall be employed in or belong to the said ship or vessel, for the uses and purposes aforesaid: provided that this act shall not be construed to extend to any person employed in taking fish in any boat upon any of the coasts of Great Britain or Ireland, or the islands of Guernsey, Jersey, Alderney, Sark, and Man, nor to any person employed in boats or vessels that trade only from place to place within any river of Great Britain or Ireland. — § 5.

Masters of Ships to keep in their Hands 1s. per Month out of Seamen's Pay. — The master, owner, or commander of every such merchant or private ship or vessel is hereby required to deduct out of the wages, shares, or other profits payable to seamen or other persons employed on board such ship or vessel (other than those hereby excepted), the said monthly duty, and shall pay the same, together with the amount of the duty owing from himself, to such officer or officers as shall be lawfully appointed at any of the out-ports for collecting the said duty of 1*s.* per month, if such seamen or other persons be entitled to any such wages, shares, or profits. — § 7.

Appointments of Receivers. — President and governors, with the concurrence of commissioners of customs, to appoint such persons to receive the monthly duties at the out-ports as they may think fit, making them a reasonable allowance for their trouble, which is not, however, in any case, to exceed 5 per cent. on the gross sum collected. — § 8.

Muster Roll. — Every master is to keep a true and faithful muster roll of the crew of his ship, specifying in writing the name of every one of the crew, including apprentices, with the various particulars as to the place of each person's birth, the place and time of his entry to the ship, the place and time of his discharge from or leaving the same, and if he be discharged or left, with the other particulars specified in the subjoined formula, in the event of his being hurt, killed, &c.: —

A List and Account of the Crew (including the Master and Apprentices) of the Ship of the Port of , whereof is the Master, at the Period of her Departure from the Port of in the United Kingdom, and on her Return to the Port of in the United Kingdom, and also of those who have joined the Ship at any Time during the Voyage.

Men's Names.	Place of Birth.	Place and Time of Entry.				Place and Time of Discharge, or leaving the Ship.				When and where received, hurt or damaged.	When or where killed or drowned or died a natural Death.	Wages due at Time of Death.	What Clothes or other Effects any deceased Man has left.	Amount of Monthly Duty.
			Day.	Month.	Year.		Day.	Month.	Year.			£ s. d.		

Duplicates of this account are to be delivered to the collectors of the duties at the port where the vessel discharges; and any master or commander neglecting to keep such muster roll, and neglecting or refusing to deliver it to the collectors of the duties, shall forfeit for every such offence the sum of 5*l.* The collectors are to transmit to the president and governors the duplicates received from such vessels as do not belong to the port of discharge; and the latter are to transmit them to the same. Collectors neglecting to transmit such duplicates incur a penalty of 5*l.* — § 9.

Masters to deduct Penalties from Wages. — The master of every ship coming within the provisions of this act shall deduct out of the wages of the seamen thereof the amount of all forfeitures incurred by any such seamen, and every master is hereby required truly to enter the same in a book to be kept by him for that purpose, which shall be signed by the master and the person next in command, both of them certifying that it contains all the forfeitures which have been incurred by the seamen of the ship during the voyage, to the truth whereof the master shall make oath when required before the officer of the president and governors in London, or before their collectors at the out-ports; and the said book, or a true copy thereof, signed and certified as aforesaid, shall, within 1 calendar month after the ship's return from her voyage, be delivered to the said officer by the master, together with extracts from the log-book of the entries therein of the causes of the several forfeitures; and every master who shall refuse or neglect to deliver such account shall forfeit and pay the sum of 20*l.* — § 10.

Examination of Masters, &c. — Collectors may summon masters of vessels, and examine them upon oath as to the truth of the muster rolls; masters refusing to appear or to answer, to forfeit 10*l.* — § 11.

Regulations as to Government Ships. — Secretaries, &c. of public government officers to give in a list of ships and vessels employed in their service, and of the seamen or other persons employed in such ships or vessels; and the treasurer, &c. of such offices are to pay no wages or freight to any master, &c. until he produce an acquittance signed by receiver of duties. — § 12.

Payment of Duties. — The said monthly duties are to be paid at the port where the ship or vessel unloads her cargo, *before she be cleared inwards*; and all officers are interdicted from granting any cockets, transire, &c., or permitting any vessel to go out of any port, unless it appear by the acquittances of the collectors of the said duties that they are not more than 3 months in arrear of the same: every officer acting contrary to this regulation to forfeit 10*l.* But masters or owners may agree with the trustees and collectors for half-yearly payments. — § 13.

Prevention of Delay. — To prevent unnecessary delay, it is enacted, that if masters fail to produce proper acquittance or certificate of agreement, tidewaiters to be continued on board at their expense. — § 14.

Penalties by this act recoverable before a magistrate. — § 15.

Appointment of Trustees, &c. — From and after the 1st day of October, 1834, it shall be lawful for the owners, masters, and commanders employed on board ships and vessels belonging to any of the out-ports to assemble and meet at any time and place within the same that shall be appointed by any 6 or more of them, by giving 10 days' previous notice, to be fixed at the custom-house, wharf, quay, or other public place: and such persons, or the greater part of them, being so assembled, are authorised from time to time to nominate and appoint, by an instrument in writing under their hands and seals, 15 persons to be trustees for such out-port, for receiving, collecting, and applying the said duties, which trustees shall continue to act until the 26th day of December, 1835, and until new trustees are nominated and confirmed; and that within 10 days after the 26th day of December in each succeeding year, the owners, masters, &c. at such out-ports shall have power to meet and choose 15 persons to be trustees for the year ensuing, by an instrument in writing under their hands and seals, or the majority of them so assembled, having given previous notice in the manner before directed; which said respective trustees shall continue from time to time until new trustees are nominated, &c. as aforesaid; and the said instrument shall be sent, free of expense, to the president and assistants or committees of the said corporation, who are required to confirm the same under the common seal of the corporation, without fee or reward, within 15 days after the receipt thereof; which trustees when so confirmed (and whereof *five* shall be a quorum) shall have the same powers and authorities to make by-laws, and to revoke or alter the same, and to receive and apply any sums of money which shall be contributed, devised, or bequeathed by any well-disposed persons for the purpose aforesaid, and to appoint receivers and other officers, and to collect, receive, pay, and apply the said duties of 2*s.* per month and 1*s.* per month so to be allowed and paid by the seamen or other persons serving on board any ship or vessel belonging to such persons, at such out-ports, according to such rules, orders, and regulations as are or shall be established by virtue and in pursuance of this act, or have been established and continued under the provisions of the act 26 Geo. 2. c. 38., so far as the same are not inconsistent with or repealed or varied by the provisions of this act; and the said receivers and other officers shall have the same powers and authorities as the other receivers and officers appointed in pursuance of this act, and shall be liable to the same penalties and forfeitures: provided always, that if the instrument of trust be not sent to the president and assistant or committees within 60 days after every appointment of trustees, the trust thereby created shall be considered void, and the trustees appointed under it as discharged from the same; and that the president and governors shall have power to appoint a receiver or receivers for the port or place from which such instrument of trust has not been sent, for collecting the forementioned duties and allowances payable at such port or place aforesaid; and the said president and governors shall have power to demand from the outgoing trustees of such port or place an account in writing of the former management of such void trust, and also to demand payment from such trustees of any balance which may at the time of such default be in their hands, who are hereby required to pay the same to such receiver appointed as aforesaid, together with the books of account and other books belonging to such trustees relative to such trust. — § 16.

Appointments on Default. — These are not to be revocable within 5 years. — § 17.

Former Trustees. — Trustees previously appointed at the several out-ports to be subject to the provisions of this act. — § 18.

Trustees in Bristol. — The corporation of the Merchants Venturers of Bristol are appointed trustees for the duties, &c. received there; and empowered to hold lands, &c. for the purpose of this act. — § 19.

Hull Trustees. — The guild of the Trinity-house of Kingston-upon-Hull are appointed trustees for the duties, &c. received there. — § 20.

Greenock and Glasgow, &c. — The ports of Glasgow, Greenock, and Port Glasgow, &c. to be deemed one united port, and masters of ships belonging thereto to elect trustees for collecting duties, &c. — § 21.

Transmission of Accounts. — Trustees of out-ports to transmit accounts of the yearly receipts and expenditure to president and governors. — § 22.

Transmission of Muster Rolls. — Collectors appointed by trustees or corporations aforesaid are exempted from sending duplicate of muster rolls to the president and assistants. — § 23.

Sections 24. and 25. enact that no seaman shall be entitled to the benefit of this act unless he pays the duty; and that those seamen who have served longest shall be first provided for.

Maimed Seamen to be provided for at the port where the accident happens. — § 26.

Disabled Seamen having served and paid 5 years, to be provided for where they have contributed most. — § 27.

Seamen shipwrecked, or made Prisoners by the Enemy, may be relieved. — § 28.

Where regular Certificates cannot be obtained, others may be admitted. — In all cases where the certificates directed to be produced by this act for the purpose of entitling parties to relief and support cannot be obtained, such other certificates as shall be satisfactory to the president and governors or trustees respectively shall be received and allowed, so as to entitle the party producing the same to the pensions or other relief provided by this act. — § 29.

Wages of deceased Seamen to be paid to the Trustees. — All sums of money due for wages to any seaman, mariner, or other person engaged on board any British merchant ship in any port or ports in Great Britain and Ireland, who shall have died on board during the voyage, shall, within 3 months after the arrival of such ship in any port of Great Britain and Ireland, be paid to the trustees of the said port appointed in pursuance of this act, or to the receiver or collector or other authorised agent of the said president and governors, where there are no such trustees, to and for the use of the executors or administrators of the seaman or other person so dying; and in case no claim shall be made on the said trustees by such executors or administrators on account of such wages, within 1 year after the same have been paid over, then the said trustees shall remit the same to the collector or receiver or other their authorised agent of the president and governors at the port of London, in such manner and times as the said president, &c. shall direct, to and for the use of the executors or administrators of the seaman or other person so dying; and in case no claim shall be made on the said president, &c. by the executors, &c. of such seaman on account of such wages within 1 year after the same shall have been first paid over to their collector, then it shall be lawful for them to direct such wages to be paid over (but without interest for the same) to the widow, or if there be no widow claiming, then to the lawful issue respectively, or such persons as by virtue of the statutes of distribution of intestates' effects shall be entitled to the same; and if any master or commander of any merchant ship neglect or refuse to pay over to the said trustees, or the receiver or collector at the port aforesaid, all such sums of money within the time before limited, he shall forfeit for every such offence double the amount of the sums of money due to any seaman or other person for wages. — § 30.

Wages, if not demanded in 3 Years by representatives, to go to the use of the president and governors, or the trustees of the respective ports. — § 31.

Payment to Seamen's Hospital in London. — President and governors to pay 5 per cent. out of duties received by them from seamen in the port of London to the Seamen's Hospital Society in that port. — § 32.

Deductions from Gross Amount. — It shall be lawful for the receiver or collector or other authorised agent of the president and governors at the port of London, and he is hereby authorised, to deduct and receive from the gross amount of such sums of money as shall be derived from the unclaimed wages of deceased seamen, received by him in respect of such wages, 5 per cent. in satisfaction of all expenses and trouble he may be put to in the receipt, collection, or transmission thereof.

The contributions collected under this act amounted, in 1842, in London and the ports immediately under the management of the president and governors of the society, to 16,936*l.* (of which, however, 2,013*l.* were interest of capital); and a large additional sum was also collected at the out-ports, under the management of the trustees appointed by the above act. It may, therefore, be concluded, that, provided these sums be economically and discreetly managed, they will afford the means of suitably providing for the wants of a large number of disabled merchant seamen, as well as for the wives and children of those who have lost their lives in the service, and will consequently render it less hazardous and more respectable. But in this country, and, we presume, in most others, charitable institutions are usually quite as advantageous to others, as to those for whose behoof they are said to be established; and the institution for the relief of merchant seamen does not certainly appear to form an exception to the ordinary rule. Speaking generally, the seamen are very much dissatisfied with the conduct of this establishment; and really this is not much to be wondered at. The expenses of collection seem to be quite enormous, amounting to from 8 to 10, and sometimes even 15 per cent. and upwards, of the sums received! Probably, however, the reader may be disposed to think that there is no very good reason why this heavy expense, amounting to several thousand pounds a year, should be incurred; and why the collectors and other customs officers should not be made to collect and remit the seamen's contributions in the same way that they collect and remit any portion of the public revenue. But if it be necessary to make an allowance to the officers in question for such duty, it would surely be better that it should be made by adding to the salaries paid them by government, than that they should be allowed to eke them out by encroaching deeply on a pittance saved from the hard-earned wages of sailors as a resource against old age and infirmity. —(For details as to the revenue and expenditure of the corporation for the relief of seamen &c., see the *Parl. Paper* No. 241. Sess. 1843.)

SEAWORTHY, a term applied to a ship, indicating that she is in every respect fit for her voyage.

It is provided in all charterparties, that the vessel chartered shall be "tight, staunch, and strong, well apparelled, furnished with an adequate number of men and mariners, tackle, provisions, &c." If the ship be insufficient in any of these particulars, the owners, though ignorant of the circumstance, will be liable for whatever damage may, in consequence, be done to the goods of the merchant; and if an insurance have been effected upon her, it will be void.

But whether the condition of seaworthiness be expressed in the charterparty or not, it is always implied. "In every contract," said Lord Ellenborough, "between a person holding himself forth as the owner of a lighter or vessel ready to carry goods for hire, and the person putting goods on board, or employing his vessel or lighter for that purpose, it is a term of the contract on the part of the lighterman or carrier *implied by law*, that his vessel is tight, and fit for the purpose for which he offers and holds it forth to the public; it is the immediate foundation and substratum of the contract that it is so: *the law presumes a promise to that effect on the part of the carrier, without any actual proof;* and every reason of sound policy and public convenience requires that it should be so."

Not only must the ship and furniture be sufficient for the voyage, but she must also be furnished with a sufficient number of persons of competent skill and ability to navigate her. And for sailing down rivers, out of harbours, or through roads, &c., where either by usage or the laws of the country a pilot is required, a pilot must be taken on board. But no owner or master of a ship shall be answerable for any loss or damage by reason of no pilot being on board, unless it shall be proved that the want of a pilot shall have arisen from any refusal to take a pilot on board; or from the negligence of the master in not heaving to, for the purpose of taking on board any pilot who shall be ready and offer to take charge of the ship. —(48 *Geo.* 3. c. 164.)

A ship is not seaworthy unless she be provided with all the documents or papers necessary for the manifestation of the ship and cargo. Neither is she seaworthy, if, during war, she be not supplied with the sails required to facilitate her escape from an enemy.

"It is not sufficient to defeat the liability of the owner, that he did not know that the ship was *not* seaworthy, for he ought to have known that she was so at the time he chartered her. The sufficiency of the ship is the foundation of the contract between the parties, and a ship not capable of conveying the goods in a proper state is a failure of the condition precedent to the whole contract. The seaworthiness of the ship is not a question of fraud or good intention, but it is a positive stipulation that the ship shall be so; and therefore, although the owner may himself have been deceived by the shipbuilder, repairer, &c., if the vessel be, in fact, un-seaworthy, have an insufficient bottom or unsound timbers, it is a breach of a preliminary condition, and is fatal, as such, to the contract."—(*Holt's Law of Shipping*, 2nd ed. p. 383.)

It is only necessary, to guarantee the owners from loss, that the ship should be sea-

worthy at the time of her departure. She may cease to be so in a few hours, and yet they may not be liable. The question to be decided in such cases always is, whether the ship's disability arose from any defect existing in her *before* her departure, or from a cause which occasioned it *afterwards*. But if a ship, within a day or two of her departure, become leaky or founder at sea, or be obliged to put back, without any visible or adequate cause to produce such an effect — such as the starting of a plank or other accident to which the best ships are liable, and which no human prudence can prevent,— the fair presumption is that she was not seaworthy when she sailed; and it will be incumbent on the owners to show that she was seaworthy at that time. They are liable for damage occasioned by every injury arising from any *original defect* in the ship, or from bad stowage; but they are not liable for any injury arising from the act of God, the king's enemies, or the perils of the sea.

It is further to be observed, that how perfect soever a ship may be, yet if, from the nature of her construction, or any other cause, she be incapable of performing the proposed voyage, with the proposed cargo on board, she is not seaworthy. *She must be, in all respects, fit for the trade in which she is meant to be employed.* And it is a wholesome rule, that the owners should be held to a pretty strict proof of this.

It has been already observed, that any defect in point of seaworthiness invalidates an insurance upon a ship. There is not only an express but an implied warranty in every policy, that the ship shall be "tight, staunch, and strong, &c.;" and the reason of this is plain. The insurer undertakes to indemnify the insured against the *extraordinary and unforeseen perils of the sea*; and it would be absurd to suppose that any man would insure against those perils, but in confidence that the ship is in a condition to encounter the *ordinary perils* to which every ship must be exposed in the usual course of the proposed voyage.

By the old law of France it was directed that every merchant ship, before her departure from the place of her outfit, should be surveyed by certain sea officers appointed for that purpose, and reported to be seaworthy, "*en bon état de navigation*;" and that previous to her return, before she took her homeward cargo on board, she should be again surveyed. Valin has shown — (Tit. *Fret.* art. 12.), that very little confidence could be placed in these surveys, which, he tells us, were only made upon the external parts, for the ship was not unsheathed; and, therefore, her internal and hidden defects could not be disclosed. This practice seems now to be abandoned by the French; at least, there is no allusion to it in the *Code de Commerce*. It is, one should think, much better to leave the question as to the seaworthiness of the ship to be ascertained, as in England, after a loss has happened, by an investigation of the true cause of such loss, than to permit so important a question to be decided upon the report of officers without any motive to inquire carefully into her actual condition. A ship may, to all appearance, be perfectly capable of performing a voyage; and it is only after a loss has happened, that her latent defects can be discovered, and her true state at the time of her departure rendered manifest. Indeed, the survey made by the French was not deemed a conclusive proof that the ship was, at her departure, really seaworthy: it merely raised a *presumption* that such was the case; but it was still open to the freighter or the insurer to show the contrary.

For further information upon this point, the reader is referred to the able and excellent works of Chief Justice Abbot (Lord Tenterden) on the *Law of Shipping*, part iii. c. 3.; *Holt on Shipping*, part iii. c. 3.; and of Mr. Serjeant Marshall on *Insurance*, book i. c. 5. § 1.

SEEDS, in commerce, the grains of several species of gramina. Those of most importance are clover seed, flax or linseed, hemp seed, mustard seed, rape seed, tares, &c.; for which, see the respective articles.

SEGARS, OR CIGARS. See TOBACCO.

SENNA (Fr. *Séné*: Ger. *Sennablüter*; It. *Senna*; Sp. *Sen*; Lat. *Cassia Senna*; Arab. *Suna*). The plant (*Cassia Senna*) which yields the leaves known in commerce and the *materia medica* by the name of senna, is an annual, a native of Upper Egypt, and Bernou in Central Africa. The senna, after being collected in Upper Egypt, is packed up in bales, and sent to Boullac, where it is mixed with other leaves, some of which are nearly equally good, while others are very inferior. After being mixed, it is repacked in bales at Alexandria, and sent to Europe. A great deal of senna is imported from Calcutta and Bombay, under the name of East India senna; but it is originally brought to them from Arabia. — (*Thomson's Dispensatory.*) Senna is very extensively used in medicine. The duty of 6*d.* per lb., with which it was then charged, produced, in 1840, 5,385*l.*, showing that 211,400 lbs. had been entered for consumption. Of the imports in the same year, amounting to 225,779 lbs., none was brought direct from Egypt, but 152,894 lbs., were brought indirectly from her through the Italian ports, and 63,608 lbs. from the East Indies. The duty was reduced, in 1832, from 1*s.* 3*d.* to 6*d.* per lb., and in 1842 to 1*d.* per lb.

SHAGREEN (Ger. *Schagrin*; It. *Chagrin*; Rus. *Schagrim Schagren*), a kind of grained leather, used for various purposes in the arts. It is extensively manufactured at Astrakhan in Russia. — (See *Tooke's Russia*, vol. iii. p. 403.)

SHAMMY or CHAMOIS LEATHER (Ger. *Shmischleder*; Fr. *Chamois*; It. *Camoscio*; Rus. *Schshanii, Koshi*), a kind of leather dressed in oil, or tanned, and much esteemed for its softness, pliancy, and capability of bearing soap without hurt. The real shammy is prepared of the skin of the chamois goat. But leather prepared from the skin of the common goat, kid, and sheep is frequently substituted in its stead.

SHARKS' FINS, form a regular article of trade to China; and are collected for this purpose in every country from the eastern shore of Africa to New Guinea. In the Canton Price Currents they are as regularly quoted as tea or opium; and the price of late years has been, according to quality, from 15 to 18 dollars per picul, equal to from 50*s.* to 60*s.* per cwt.

SHAWLS (Ger. *Schalen*; Fr. *Chals, Chales*; It. *Shavali*; Sp. *Schavalo*), articles of fine wool, silk, or wool and silk, manufactured after the fashion of a large handkerchief, used in female dress. The finest shawls are imported from India, where they are highly esteemed, and cost from 50 to 300 guineas. But the British shawls manufactured at Norwich, Paisley, and particularly Edinburgh, have recently been very much improved; and though still inferior in point of quality to the finest specimens brought from the East, they look well, and are much cheaper. The native shawl manufacture is of very considerable value and importance

Cashmere Shawls. — The shawl manufacture is believed to have originated in the valley of Cashmere, the ancient Caspira, in the north-west of India, between the 34th and 35th degrees of N. latitude, and the 73d and 75th degrees of E. longitude. Though not so flourishing as it once was, the manufacture is still prosecuted in this province to a very considerable extent. The shawls are the very best that are made, possessing unequalled fineness, delicacy, and warmth. They are formed of the inner hair of a variety of the common goat (*capra hircus*), reared on the cold dry table land of Thibet, elevated from 14,000 to 16,000 feet above the level of the sea. The goat thrives sufficiently well in many other countries; but in the sultry plains of Hindostan it has hardly more hair than a greyhound; and though in higher latitudes the hair is more abundant, it is for the most part shaggy and coarse. It is only in the intensely cold and dry climate of Thibet that it yields the peculiarly soft woolly hair that constitutes the material of the Indian shawl. We do not, therefore, suppose that the efforts to naturalise the shawl goat in France will turn out well. On the contrary, we believe the chances of success would be about equal were an attempt made to breed beavers in a hot country, without water, or camels in a moist country, free from heat and drought.

The inner or fine wool is covered over and protected by a quantity of long shaggy hair, which is, of course, carefully separated from it before it is manufactured.

The genuine shawl wool has been imported into this country, and the finest Edinburgh and Paisley shawls have been produced from it. But it must be admitted that shawls have nowhere been made that can come, as respects quality, into successful competition with those of Cashmere. The manufacture has been established at Delhi and Lahore for some years, but notwithstanding it is carried on by native Cashmerians, and though the material employed be quite the same, the fabrics are said to want the fineness of those made in Cashmere, and to have a degenerated, coarse appearance. It is difficult to account for this superiority. It has been ascribed to some peculiar quality of the water in the valley of Cashmere, but it is most probably owing to a variety of circumstances, which, though each may appear of little importance, collectively give a character to the manufacture.

The following details as to the manufacture of Cashmere shawls have been extracted from an English paper published at Delhi: —

"The great mart for the wool of which shawls are made, is at Kilghet, which is said to be a dependency of Ladak, and situated 20 days' journey from the northern boundaries of Cashmere. There are 2 kinds of it: that which can be readily dyed is white; the other sort is of an ashy colour, which being with difficulty changed, or, at least, improved by art, is generally woven of its natural hue. About 2 lbs of either are obtained from a single goat once a year. After the down has been carefully separated from the hairs, it is repeatedly washed with rice starch. This process is reckoned important, and it is to the quality of the water of their valley that the Cashmerians attribute the peculiar and inimitable fineness of the fabrics produced there. At Kilghet the best raw wool is sold for about 1 rupee a pound. By the preparation and washing referred to, it loses ¼, and the remainder being spun, 3 rupees weight of the thread is considered worth 1 rupee.

"Shawls are made of various forms, size, and borders, which are wrought separately, with the view of adapting them to the different markets. Those sent to Turkey used to be of the softest and most delicate texture. Carpets and counterpanes are fabricated of the hair or coarser part of the wool. From a variety of causes, among others the destruction of the Janissaries, who dressed much in shawls, the loss of royalty in Cabul, and the ruined finances of Lucknow, it is certain that the demand for this elegant commodity has greatly declined of late years. Under the Mogul emperors, Cashmere found work for 30,000 shawl looms. In the time of the Afghan kings, the number decreased to 18 000. There are now not more than 5,000 employed. I should attribute little of this diminution to the sale of English imitations among the native nations. When these counterfeits first appeared, the pretty patterns and brilliancy of the colours took the fancy of some, but their great inferiority in the softness and warmth which marks the genuine shawl, soon caused the new article to be neglected.

"The average value of shawls exported from Cashmere amounts annually to 1,800,000 rupees. Runjeet Singh took ¼ in kind as part of the gross revenue of the province, which was about 25 lacs a year. He is said to have sold ⅔ of what he thus received, and to have kept the remainder for his own court. Of those disposed of by him and left for sale in the valley, 7 lacs' worth went to Bombay and Western India; 3 to Hindostan, chiefly Oude; ½ a lac each to Calcutta, Cabul, Herat, and Balk, whence some were carried to neighbouring countries.

"A curious calculation of the excessive exactions, from Cashmere to Bombay inclusive, which magnify the price of shawls, is herewith subjoined.

"Actual cost for materials and labour in making a pair of reel shawls: —

	Rs.	As.
Four Furrukabad seers of wool	12	8
Cleaning, washing, and spinning	50	0
Dyeing	11	0
Wages to weavers	264	6
Total	337	14

Duties on the same. — On sale and importation to Cashmere

	Rs.	As.
On the thread	3	14
While the fabric is in the loom	8	4
Fees to chowdries, brokers, assessors, &c.	125	0
Total amount of duties in Cashmere	35	0
	171	18

	Rs.	as.
Duties from Cashmere to Amritsir	13	0
From Amritsir to Bombay	5	6¼
At Bombay	70	0
Total from Amritsir to Bombay	85	12¼
Total from Kilghet to Bombay, 171 18 and 85 12¼ =	252	30¼
Prime cost	337	14
Proportion of carriage	0	12
Insurance	21	0
Total cost	610	56½

"A pair of such shawls might sell for 500 rupees at Amritsir and in Bombay five 900. The amount of the imposts, and the sums levied by each government, will appear more in relief if stated as they affect a camel-load in its progress. 24 camels of 14½ cutcha maunds, and containing, at an average, 3,000 shawls of different kinds, valued, on reaching Bombay at 29,500 Furrukabad rupees.

"The government of Lahore extorts Rs. 1,440 0; Patialah, 61 0; Bikaneer, 43 0; Goudpore, [illegible] Jeswantnuggur, 20 0; — total levied by native princes, 1,200 0; Bombay, 10 per cent. *ad valorem*, 2,950 0."

SHEEP (Ger. *Schafe*; Fr. *Brebis, Bêtes à laine, Moutons*; It. *Pecore*; Sp. *Pecora, Ovejas*; Rus. *Owzii*; Lat. *Oves*). Of the domestic animals belonging to Great Britain, sheep, with the exception of horses, and, perhaps, cattle, are by far the most important. They can be reared in situations and upon soils where other animals would not live. They afford a large supply of food, and one of the principal materials of clothing. Wool has long been a staple commodity of this country, and its manufacture employs an immense number of people. "The dressed skin," says Mr. Pennant, "forms different parts of our apparel; and is used for covers of books. The entrails, properly prepared and twisted, serve for strings for various musical instruments. The bones, calcined (like other bones in general), form materials for tests for the refiner. The milk is thicker than that of cows, and consequently yields a greater quantity of butter and cheese; and in some places is so rich, that it will not produce the cheese without a mixture of water to make it part from the whey. The dung is a remarkably rich manure; insomuch that the folding of sheep is become too useful a branch of husbandry for the farmer to neglect. To conclude; whether we consider the advantages that result from this animal to individuals in particular, or to these kingdoms in general, we may, with Columella, consider this, in one sense, as the first of the domestic quadrupeds." * — (*Pennant's British Zoology.*) The importation of sheep from a foreign country was prohibited until 1842, but they may now be imported on paying a duty on sheep of 3*s.*, and on lambs of 2*s.* a head. — (See CATTLE and WOOL.)

The following Table exhibits a compendious view of the more prominent characteristics of the principal breeds of sheep in Great Britain.

Names of Breeds.	Head.	Colour of Face and Legs.	Wool.	Wgt. of Fleece.	Weths. per Qr.	Age killed.
				Lbs.	*Lbs.*	*Years.*
1. Teeswater	No horns	White face and legs	Long wool	9	28	2
2. Lincoln	No horns	White face and legs	Long wool	10	25	2
3. Dishley, or New Leicester	No horns	White face and legs	Long wool (fine)	8	21	2
4. Cotswold	No horns	White face and legs	Long wool (fine)	9	24	2
5. Romney Marsh	No horns	White face and legs	Long wool (fine)	8	24	2
6. Dartmoor, or Brampton	No horns	White face and legs	Long wool (fine)	9	25	2
7. Exmoor	Horned	White face and legs	Long wool (coarse)	6	16	2½
8. Black faced, or Heath	Horned	Black face and legs	Long wool (coarse)	3	15	3½
9. Hereford, Ryeland	No horns	White face and legs	Short wool (fine)	2½	14	2½
10. Morf, Shropshire	Horned	Black and speckled	Short wool (fine)	3½	18	2½
11. Dorset	Horned	White and speckled	Short wool (fine)	3½	18	2
12. Wilts	Horned	White and speckled	Short wool (mid.)	5	20	2
13. Berks	No horns	Black and white	Long wool	7	18	2½
14. South Down	No horns	Speckled and white	Short wool	2½	16	2
15. Norfolk	Horned	Black and white	Short wool	2	18	3½
16. Herdwick	Horned	Speckled and white	Short wool	3	10	4½
17. Cheviot	No horns	White face and legs	Short wool	3	16	4½
18. Dun-faced	No horns	Dun face and legs	Short wool	1½	7	4½
19. Shetland	No horns	Various coloured ditto	Fine cottony	1½	8	4½
20. Spanish	Rams horn'd	White	Short wool (super.)	3½	14	3½
21. Ditto, cross	—	—	Short wool (fine)	2½	16	2

For details as to the number of sheep, the quantity and quality of wool, &c., see WOOL.

SHERRY. See WINE.

SHIPS. Nautical men apply the term ship to distinguish a vessel having 3 masts, each consisting of a lower mast, a topmast, and top-gallant mast, with their appropriate rigging. In familiar language, it is usually employed to distinguish any large vessel, however rigged: but it is also frequently used as a general designation for all vessels navigated with sails; and it is in this sense that we now employ it.

Merchant Ships. — It is hardly possible to divide merchant ships into classes, at least with any degree of precision. Their size, shape, the mode of their rigging, &c. depend not merely on the particular trade for which they are destined, but on the varying tastes and fancies of their owners. The ships employed in the China and India trade are the largest and finest merchantmen belonging to this country; those in the West India trade rank next; then follow the whale ships, those engaged in the trade to the Baltic and Canada, the Mediterranean, the coasting trade, &c.

The reader will find, in the articles NAVIGATION LAWS, and REGISTRY, an account of the peculiar privileges enjoyed by British ships, the conditions and formalities

* Post majores quadrupedes ovilli pecoris secunda ratio est; quæ prima sit si ad magnitudinem utilitatis referas. Nam id præcipue contra frigoris violentiam protegit, corporibusque nostris liberalibus præbet velamina; et etiam elegantiam mensas jucundis et numerosis dapibus exornat. — (*De Re Rustica*, lib. vii. cap. 2.)

necessary to be observed in order to acquire and preserve those privileges, the mode of transferring property in ships, &c. And in the articles CHARTERPARTY, FREIGHT, MASTER, OWNERS, SEAMEN, SEAWORTHY, &c. the law with respect to ships and ship owners, in their capacity of carriers or public servants, and the reciprocal duties and obligations of the masters and crews, is pretty fully expounded. In this place, therefore, we shall content ourselves with laying before the reader some official statements exhibiting the progress and present magnitude of the mercantile navy of Great Britain.

Increase of Shipping in England. — It would be to no purpose, even if our limits permitted to enter into any details with respect to the shipping of England, previously to the Revolution. Those who wish to examine the subject, will find most of the scattered notices of contemporary writers collected by Anderson, in his "Chronological History of Commerce." The mercantile navy of England first became considerable in the reign of Elizabeth; and gradually increased under her successors, James I. and Charles I. At the Restoration, the British shipping cleared outwards amounted to 95,266 tons; but such was the increase of navigation during the reigns of Charles II. and James II., that, at the Revolution, the British ships cleared outwards amounted to 190,533 tons. The war terminated by the treaty of Ryswick, in 1697, checked this progress. But commerce and navigation have steadily advanced, with the exception of 2 short periods during the war of 1739, and the American war, from the beginning of last century down to the present day.

The first really authentic account of the magnitude of the commercial navy of England was obtained in 1701-2, from returns to circular letters of the commissioners of customs, issued in January of that year. From these it appears that there belonged, at the period in question, to *all* the ports of England and Wales, 3,281 vessels, measuring (or rather estimated to measure) 261,222 tons, and carrying 27,196 men and 5,660 guns. Of these there belonged to

	Vessels.	Tons.	Men.		Vessels.	Tons.	Men.
London - -	560	84,882	10,065	Hull - -	115	7,564	187
Bristol - -	165	17,338	2,339	Whitby - -	110	8,292	571
Yarmouth - -	143	9,914	668	Liverpool - -	102	8,619	1,101
Exeter - -	121	7,107	978	Scarborough - -	100	6,860	606

None of the other ports had 100 vessels; and there is some mistake in the returns as to the tonnage assigned to Newcastle and Ipswich. Of the Hull vessels, 80 were at the time laid up, which accounts for the small number of men in that port. — (*Macpherson's Annals of Commerce*, anno 1701.)

The Table No. V. (see p. 1110.) of the British and foreign shipping cleared outwards from 1663 to 1811, both inclusive, is taken from the last edition of *Chalmers's Comparative Estimate*. It gives a very complete view of the progress of the navigation of the country; and from the attention paid by the author to such subjects, and the facilities which his situation in the Board of Trade gave for acquiring authentic information, its accuracy may be depended on.

I. COLONIAL SHIPPING. — A Return of the Number and Tonnage of Sailing and Steam Vessels registered on the 31st of December, 1842, at each of the Ports of the Colonies of the U. Kingdom; distinguishing between those under and those above Fifty Tons Register, and between Sailing and Steam Vessels.

Countries.	Sailing Vessels.				Steam Vessels.			
	Under 50 Tons.		Above 50 Tons.		Under 50 Tons.		Above 50 Tons.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
AFRICA.								
Sierra Leone - - -	7	245	8	566				
Cape of Good Hope - - -	4	115	22	3,019				
Mauritius - - - -	60	1,976	60	9,575	- -	- -	2	283
ASIA.								
New Holland, Sydney - - -	87	1,903	119	20,519	3	126	11	1,330
Hobart Town - - -	57	1,356	36	5,882	3	91		
Launceston - - -	18	448	32	4,237	1	44		
AMERICA.								
British Northern Colonies: —								
Newfoundland - - -	337	11,045	414	35,807				
Canada, Montreal - -	2	91	24	4,765	- -	- -	15	3,873
— Quebec - - -	243	8,531	277	31,778	1	47	8	983
New Brunswick, St. Andrew's -	151	2,599	66	16,005				
— St. John and Creeks -	218	6,543	243	70,146	1	21	12	1,580
Nova Scotia and Creeks - -	1,197	34,743	623	72,529	1	35	2	117
Cape Breton - - -	271	8,845	116	8,720				
Prince Edward's Island - -	172	3,645	79	12,206				
British West Indies: —								
Antigua - - - -	54	806	3	256				
Barbadoes - - - -	28	823	13	974				
Dominica - - - -	12	276	2	303				
Grenada - - - -	40	667	3	383				
Jamaica - - - -	100	2,795	21	1,995				
Montserrat - - - -	5	135	1	71				
Nevis - - - -	10	148						
St. Christopher - - -	22	380						
St. Lucia - - - -	15	175	7	565				
St. Vincent's - - - -	28	657	4	702				
Tobago - - - -	9	287						
Tortola - - - -	45	276						
Trinidad - - - -	54	1,845	9	796				
Bahamas - - - -	154	3,089	12	1,055				
Bermuda - - - -	11	252	46	3,839				
Demerara - - - -	36	1,241	15	1,130	- -	- -	3	383
Berbice - - - -	8	219	8	525	1	29		

II. Statement of the Shipping employed in the Trade of the U. Kingdom, exhibiting the Number and Tonnage of Vessels that entered inwards and cleared outwards (including their repeated Voyages), with the Number of their Crews; separating British from Foreign Vessels, and distinguishing the Trade with each Country, in the Year 1842.—(*Board of Trade Papers for* 1842.)

Countries.	Inwards.						Outwards.					
	British.			Foreign.			British.			Foreign.		
	Ships.	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*
Europe, viz.:—												
Russia	1,309	369,279	11,662	215	57,431	2,585	894	181,737	8,238	198	49,510	1,996
Sweden	88	15,296	680	218	37,218	1,806	115	21,335	960	230	31,165	1,709
Norway	17	1,385	106	654	98,979	5,195	25	2,995	174	596	91,776	4,761
Denmark	42	5,199	263	821	69,837	4,167	460	79,739	3,709	1,378	131,714	7,959
Prussia	637	87,902	4,248	886	145,499	6,775	511	65,643	3,500	717	133,865	6,197
Germany	875	181,975	9,705	1,053	101,562	6,093	991	202,442	9,882	1,132	93,967	5,814
Holland	1,445	221,201	11,319	709	72,803	4,719	1,466	228,329	11,301	637	54,904	3,824
Belgium	710	88,033	7,198	465	64,648	4,305	704	81,621	7,050	377	55,686	3,716
France	4,239	496,818	33,883	2,105	159,589	14,512	4,296	506,533	35,080	1,916	134,436	14,112
Portugal, Proper	400	42,602	2,536	27	3,057	245	380	44,238	2,747	74	14,446	761
Azores	227	17,221	1,281	3	421	30	191	16,144	1,178	2	297	22
Madeira	10	2,084	128	-	-	-	26	5,057	305			
Spain and the Balearic Islands	537	51,550	3,226	72	9,340	704	557	70,070	4,292	98	16,625	970
Canaries	9	1,134	63	4	411	37	15	1,550	99	6	849	53
Gibraltar	81	20,602	2,150	-	-	-	252	43,508	3,609	6	1,182	72
Italy and the Italian Islands	737	122,439	6,111	176	42,049	2,264	544	84,152	4,511	144	33,171	1,771
Malta	122	21,583	1,048	-	-	-	209	40,141	2,043	6	1,125	68
Ionian Islands	80	10,150	614	-	-	-	44	7,035	398			
Turkey and Continental Greece	164	26,247	1,418	21	4,831	228	249	48,042	2,381	27	8,106	353
Morea and Greek Islands	46	6,492	328	2	720	35	21	3,948	195	6	1,101	60
Africa, viz.:—												
Egypt	103	29,084	1,627	-	-	-	75	21,658	1,230	2	677	53
Tripoli, Barbary, and Morocco	30	3,506	191	-	-	-	78	13,885	672	19	4,702	213
Senegal and coast from Morocco to River Gambia	-	-	-	6	581	52	1	276	12	5	448	41
Sierra Leone and coast from River Gambia to River Mesurada	69	18,464	869	-	-	-	58	13,519	697			
Windward coast	-	-	-	-	-	-	2	299	23			
Cape Coast Castle	33	4,414	279	-	-	-	25	13,783	256			
Coast from Rio Volta to Cape of Good Hope	59	19,475	1,198	1	120	10	56	17,594	1,054			
Cape of Good Hope	26	4,980	269	-	-	-	73	16,408	847			
Eastern coast	1	152	9	-	-	-	1	240	25			
Ports in the Red Sea	-	-	-	-	-	-	1	409	17			
Cape Verd Islands	6	1,118	69	-	-	-	13	2,883	157	3	787	35
St. Helena and Ascension	1	330	13	-	-	-	16	3,977	218			
Mauritius	108	28,650	1,409	-	-	-	54	16,397	808			
Asia, viz.:—												
Arabia	-	-	-	-	-	-	5	2,345	99			
East India Company's territories, Singapore and Ceylon	430	191,378	9,094	-	-	-	397	202,101	10,070			
Java	8	2,346	112	1	387	24	26	8,672	407	1	387	25
Philippine Islands	10	3,411	154	-	-	-	1	301	15	2	722	44
Other islands of the Indian Seas	4	1,141	55	-	-	-	2	686	32			
China	73	32,814	1,692	-	-	-	63	28,297	1,403	2	1,067	37
New Holland	79	22,865	1,156	-	-	-	139	51,234	2,878			
New Zealand	4	1,341	63	-	-	-	28	9,651	508			
South Sea Islands	1	388	31	-	-	-	4	1,018	96			
America, viz.:—												
British Northern Colonies	1,555	541,451	21,428	-	-	-	1,333	446,842	19,490			
British West Indies	714	191,688	10,552	-	-	-	895	261,344	14,539			
Hayti	27	4,747	256	2	172	17	23	3,747	224	1	102	9
Cuba, and other Foreign West Indies	154	49,660	2,791	36	7,990	400	248	65,506	3,057	87	23,147	1,116
United States	281	152,833	6,145	554	319,524	10,909	335	195,745	7,528	616	340,832	11,781
Mexico	59	11,841	646	-	-	-	37	6,645	364	2	370	20
Guatemala	1	300	14									
Columbia	56	10,958	597	1	300	19	22	3,984	220	3	855	33
Brazil	124	30,875	1,430	16	3,467	171	209	53,128	2,610	80	20,529	967
Rio de la Plata	128	27,966	1,398	3	1,112	45	78	17,840	939	9	2,057	99
Chili	54	14,138	740	32	9,389	447	50	12,395	625	7	2,187	103
Peru	42	11,389	601	-	760	42	27	6,637	366			
Falkland Isles	1	92	13	-	-	-	2	716	51			
The Whale Fisheries	31	9,163	1,126	-	-	-	24	6,953	999			
Isles of Guernsey, Jersey, and Man	2,944	179,356	14,845	30	3,106	186	2,417	144,336	12,625			
Total	18,987	3,994,725	178,584	8,054	1,203,303	65,952	16,785	3,375,270	186,116	8,578	1,992,176	68,493

III. An Account of the Number of Vessels, with the Amount of their Tonnage, distinguishing between Steam Vessels and Sailing Vessels, that were built and registered in the several Ports of the British Empire, in the Years ending 5th of January, 1841, 1842, and 1843.

	1840.				1841.				1842.			
	Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
U. Kingdom	74	10,178	1,296	201,111	48	11,363	1,063	146,215	56	13,716	856	116,213
Isles of Guernsey, Jersey, & Man	-	-	78	8,778	-	-	81	8,731	1	198	56	5,148
Plantations	3	461	768	142,827	6	1,028	662	131,829	8	1,017	502	73,330
Total British Empire	77	10,639	2,142	352,716	54	12,391	1,806	286,775	67	14,931	1,414	194,691

IV. A Return of the Number and Tonnage of Sailing and Steam Vessels registered on the 31st of December 1842, at each of the Ports of Great Britain and Ireland, including the Isle of Man and Channel Islands; distinguishing between those under and above Fifty Tons Register, and between Sailing Vessels and Steam Vessels.—(*Parl. Paper* No. 207. Sess. 1843.)

Ports.	Sailing Vessels.				Steam Vessels.			
	Under 50 Tons.		Above 50 Tons.		Under 50 Tons.		Above 50 Tons.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
England.								
London	629	20,607	2,254	577,493	75	2,255	166	45,010
Aberystwith	97	3,073	60	4,566				
Aldborough	25	794	16	1,197				
Arundel	19	645	25	2,927				
Barnstaple	50	1,793	41	3,226				
Beaumaris	296	9,514	231	19,571				
Berwick	24	848	45	4,748	- -	- -	3	528
Bideford	61	1,986	77	9,211				
Boston	135	4,574	47	3,202	2	99		
Bridgwater	91	2,050	46	3,779	2	32		
Bridlington	23	698	15	2,226				
Bristol	94	2,887	185	37,438	10	265	17	2,909
Bridport			17	1,875				
Cardiff	2	62	47	5,766	2	62		
Cardigan	22	596	97	8,643				
Carlisle	170	5,033	23	1,630	- -	- -	3	607
Chepstow	17	572	19	1,578	2	48	1	53
Chester	38	1,057	52	3,723	4	161	4	342
Chichester	53	1,988	10	943				
Clay	44	1,064	41	4,956	1	12		
Colchester	68	1,078	51	4,739	2	79	1	103
Cowes	200	4,415	43	4,348	- -	- -	1	53
Dartmouth	112	2,935	254	24,375	1	17		
Deal	169	4,801	3	283				
Dover	10	200	27	2,624	- -	- -	5	350
Exeter	85	2,432	135	16,697	1	17		
Falmouth	49	1,564	75	7,944				
Faversham	48	1,383	44	4,004				
Fleetwood	215	4,505	23	2,621	3	85	2	167
Fowey	58	1,347	75	6,429				
Gainsborough	56	1,242	6	517				
Gloucester	3	119	74	5,879				
Goole	220	6,359	178	15,810	1	16	3	193
Grimsby	203	5,471	6	842				
Gweek	34	830	1	89				
Harwich	8	254	65	5,568				
Hull	65	1,899	305	65,691	4	149	18	2,765
Ipswich	155	5,946	117	12,518	1	43	3	337
Lancaster	53	1,667	55	5,099	1	42	1	134
Liverpool	53	1,909	1,131	334,416	11	453	35	4,552
Llanelly	125	4,042	31	3,509	1	26		
Lyme	57	1,851	11	818				
Lynn	3	91	131	17,005	1	13		
Maldon	15	396	53	4,304				
Margate	100	2,704	64	9,561				
Milford	17	607	67	7,076				
Newcastle	76	2,185	1,165	268,100	121	2,222	2	335
Newhaven	77	2,334	11	1,225				
Newport	6	157	43	6,311	1	31	1	58
Padstow	26	916	33	3,608				
Penzance	66	2,256	34	3,277				
Plymouth	43	1,076	188	24,837	1	16	2	272
Poole	192	5,058	83	12,271				
Portsmouth	56	1,114	67	9,783	3	113	1	54
Ramsgate	137	3,368	30	2,912	- -	- -	4	516
Rochester	93	2,558	86	8,227	1	46		
Rye	237	6,872	26	2,440	- -	- -	1	104
St. Ives	57	1,315	93	8,067	- -	- -	3	409
Scarborough	31	972	160	31,928				
Scilly	48	1,335	38	5,995				
Shoreham	18	462	55	4,387	1	89		
Southampton	39	768	65	7,990	9	306	7	834
Southwold	126	3,020	25	1,794				
Stockton	11	426	246	50,238	21	450		
Sunderland	15	505	757	171,282	25	467		
Swansea	59	1,691	90	10,736	6	153	3	359
Truro	76	2,407	26	2,017				
Wells	11	423	27	2,046	1	18		
Weymouth	58	789	53	6,055	- -	- -	1	57
Whitby	90	633	124	46,525	2	67		
Whitehaven	99	1,832	373	60,749	1	57	2	300
Wisbeach	27	850	58	5,536	2	37		
Woodbridge	30	1,119	23	2,047				
Yarmouth	21	700						
Total England	532	10,195	328	36,567	4	74	3	356
	5,995	179,476	10,850	2,054,634	322	7,680	293	61,819
Scotland.								
Aberdeen	36	1,902	322	50,086	2	51	11	3,137
Ayr	14	485	85	9,841				
Alloa	33	1,107	89	17,601	- -	- -	4	294
Banff	25	827	77	6,441				
Barrowstouness	55	1,696	56	5,622				
Campbeltown	27	649	2	578	- -	- -	4	415
Dumfries	103	5,958	66	6,365	- -	- -	2	306
Dundee	61	2,274	279	48,174	- -	- -	9	1,750
Glasgow	58	2,030	324	88,475	17	756	50	10,188
Grangemouth	9	388	37	5,640	2	35		
Greenock	185	5,067	264	84,551	- -	- -	4	825
Inverness	135	3,474	79	5,991	1	18		
Irvine	38	821	86	14,297	- -	- -	1	86
Kirkcaldy	105	3,335	86	9,363	- -	- -	4	264
Kirkwall	33	876	34	3,637				
Leith	105	3,125	140	21,839	7	148	6	1,461
Lerwick	60	1,691	11	995				
Montrose	42	1,836	177	23,775	- -	- -	1	101
Perth	11	372	84	9,568	1	19		
Port Glasgow	30	1,063	45	12,651	- -	- -	5	347
Stornoway	42	1,575	13	1,508				
Stranraer	23	654	8	1,073	- -	- -	2	254
Wick	18	537	18	1,739				
Total Scotland	1,299	41,570	2,290	423,801	30	1,027	103	18,893

TABLE IV. — *continued*.

Ports.	Sailing Vessels.				Steam Vessels.			
	Under 50 Tons.		Above 50 Tons.		Under 50 Tons.		Above 50 Tons.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
IRELAND.								
Baltimore	103	2,688	5	611				
Belfast	109	4,217	255	45,280	-	- -	6	1,017
Coleraine	11	238	2	328	-	- -	1	185
Cork	145	3,471	219	30,853	1	47	2	170
Drogheda	6	133	34	3,573	-	- -	5	1,124
Dublin	246	7,149	93	15,075	2	80	45	10,960
Dundalk	6	195	9	751	-	- -	2	439
Galway	9	178	14	2,716				
Limerick	48	1,170	68	13,572				
Londonderry	8	160	20	5,963	-	- -	8	2,663
Newry	163	5,148	45	5,474	-	- -	1	203
Ross	3	91	11	1,980				
Sligo	10	247	27	4,116				
Waterford	53	1,328	114	17,900	-	- -	4	999
Westport	4	60						
Wexford	42	1,518	66	6,794	-	- -	2	416
Total Ireland	961	28,105	982	155,316	3	127	76	18,176
Isle of Man	252	6,081	23	1,587	-	- -	3	470
Isle of Guernsey	22	675	109	14,454				
Isle of Jersey	129	2,873	178	24,314	-	- -	1	117

V. Table of Ships cleared outwards from 1663 to 1811.

Years.	British.	Foreign.	Total.	Years.	British.	Foreign.	Total.	Years.	British.	Foreign.	Total.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1663	95,966	47,634	142,900	1760	540,241	107,237	647,478	1786	1,115,424	121,197	1,236,621
1669				1761	582,980	122,755	705,735	1787	1,279,033	138,288	1,417,253
1686	190,533	95,267	285,800	1762	543,444	124,926	668,370	1788	1,411,649	128,997	1,540,646
1697	144,264	100,524	244,788	1763	631,720	91,593	723,313	1789	1,515,091	103,722	1,618,743
1700				1764	662,454	79,880	742,334	1790	1,424,912	148,919	1,573,831
1701	273,693	43,635	317,328	1765	726,402	72,215	798,617	1791	1,511,246	184,729	1,695,975
1702				1766	758,081	66,153	824,234	1792	1,561,158	175,805	1,736,963
1709	243,693	45,625	289,318	1767	725,835	68,006	793,841	1793	1,340,202	187,032	1,527,234
1712	326,680	29,115	355,795	1768	761,786	77,984	839,770	1794	1,382,166	218,077	1,600,243
1713				1769	805,305	68,420	873,725	1795	1,145,450	382,567	1,528,017
1714	421,431	26,573	448,004	1770	866,469	63,176	929,645	1796	1,254,674	478,358	1,732,980
1715				1771	877,484	66,898	943,902	1797	1,103,781	396,271	1,500,052
1726				1772	923,456	72,931	996,387	1798	1,319,151	365,719	1,684,870
1727	432,832	23,651	456,483	1773	874,421	57,994	932,415	1799	1,302,551	414,774	1,717,325
1728				1774	901,016	68,402	969,418	1800	1,445,271	685,051	2,130,322
1736				1775	882,579	68,034	950,613	1801	1,345,921	804,880	2,150,801
1737	476,941	26,627	503,568	1776	872,109	74,323	946,431	1802	1,626,966	461,723	2,088,689
1738				1777	847,067	102,638	949,705	1803	1,453,066	574,542	2,027,608
1739				1778	739,558	93,778	833,336	1804	1,463,986	587,949	2,051,135
1740	384,191	87,260	471,451	1779	644,981	149,040	794,021	1805	1,495,309	605,821	2,101,030
1741				1780	731,286	154,111	885,397	1806	1,486,302	564,170	2,054,472
1749				1781	608,219	170,775	778,994	1807	1,424,103	631,910	2,056,013
1750	609,798	51,386	661,184	1782	615,150	225,456	840,606	1808	1,379,810	282,145	1,661,955
1751				1783	865,967	170,938	1,037,905	1809	1,531,152	699,750	2,230,902
1755	British.			1784	932,219	118,268	1,050,487	1810	1,624,274	1,138,527	2,762,801
1756	496,254	76,456	572,710	1785	1,074,862	107,484	1,182,346	1811	1,507,333	896,232	2,403,565
1757											

VI. Account of the Total Number of Vessels engaged in the Foreign and Colonial Trade of the United Kingdom, with the Amount of their Tonnage, and the Number of Men and Boys employed in navigating the same, that entered inwards from all Parts of the World, in the several Years from 1814 to 1842, both inclusive; distinguishing British from Foreign,

	British and Irish Ves			Foreign Vessels.		
			Men.	Vessels.	Tons.	Men.
1814	8,975	1,209,248	83,793	5,286	699,287	37,375
1815	8,880	1,379,108	86,390	5,411	764,562	44,010
1816	9,744	1,415,723	90,119	5,116	679,465	38,345
1817	11,255	1,625,111	97,275	5,396	745,011	37,047
1818	13,006	1,836,394	111,580	6,230	768,457	43,936
1819	11,974	1,809,128	107,556	4,215	542,684	32,632
1820	11,285	1,864,080	109,325	3,472	447,611	27,633
1821	10,806	1,699,423	97,485	3,261	396,107	26,043
1822	11,087	1,663,620	98,980	3,389	469,151	28,421
1823	11,271	1,740,859	112,944	4,099	582,996	33,988
1824	11,731	1,797,089	108,588	5,808	739,427	42,198
1825	13,303	2,143,317	124,998	6,281	909,218	52,732
1826	12,472	1,930,830	113,993	5,789	694,116	39,858
1827		2,086,898	118,886	6,046	751,864	43,556
1828		2,094,337	119,111	6,955	874,020	50,733
1829		2,184,535	122,185	6,218	710,303	39,344
1830		2,180,042	122,103	5,350	758,891	41,670
1831		2,367,322	131,987	6,088	874,803	47,156
1832		2,185,980	122,594	4,546	659,279	36,109
1833		2,183,814	120,505	5,505	709,085	41,996
1834		2,498,268	136,727	5,894	833,905	45,897
1835		2,442,734	138,688	6,005	866,990	47,134
1836		2,505,473	137,589	7,131	988,899	55,991
1837		2,617,166	146,319	7,313	1,005,940	56,728
1838		2,785,387	154,199	8,079	1,211,866	68,891
1839		3,101,656	170,389	10,248	1,521,365	79,550
1840		3,197,501	172,404	10,198	1,466,194	81,985
1841			176,696	9,977	1,291,165	78,884
1842			178,884	8,064	1,100,808	65,952

VII. An Account of the Number of Vessels, with the Amount of their Tonnage, and the Number of Men and Apprentices, separately* stated, usually employed in navigating the same, on the 5th of January, 1841, 1842, and 1843.

	Vessels belonging to the several Ports of the British Empire.								
	1840.			1841.			1842.		
	Vessels.	Tonnage.	Men and Apprentices.	Vessels.	Tonnage.	Men and Apprentices.	Vessels.	Tonnage.	Men and Apprentices.
U. Kingdom - -	21,883	2,724,107	160,509	22,747	2,886,626	167,117	23,207	2,990,849	170,628
Isles of Guernsey, Jersey, and Man - -	671	44,155	5,018	714	48,775	5,224	747	50,571	5,396
British Plantations - -	6,308	543,276	35,813	6,791	577,081	37,857	6,861	578,430	38,585
Total - -	28,962	3,311,538	201,340	30,252	3,512,480	210,198	30,815	3,619,850	214,609

VIII. Account of the Number of Vessels and of their Tonnage, built and registered in, and of those belonging to, the different Ports of the British Empire, from 1820 to 1835, both inclusive; specifying the Number of their Crews, and distinguishing between those of the British Islands and Possessions in Europe and those of the Colonies.

Years.	Vessels built and registered.						Vessels and their Crews belonging to the British Empire.						Crews.
	United Kingdom and Possessions in Europe.		Colonies.		Total.		United Kingdom and Possessions in Europe.		Colonies.		Total.		
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	
1820	635	68,148	248	16,440	883	84,588	21,369	2,439,029	3,405	209,564	25,374	2,648,593	174,514
1821	597	59,182	275	15,565	872	74,647	21,652	2,455,853	3,384	204,550	25,036	2,660,403	169,179
1822	571	51,533	209	15,611	780	64,144	21,238	2,315,403	3,404	203,641	24,642	2,519,044	166,333
1823	604	65,788	243	22,240	847	86,028	21,042	2,302,867	3,500	203,893	24,542	2,506,760	165,474
1824	857	93,219	342	50,522	1,179	143,741	21,280	2,348,314	3,496	211,273	24,776	2,559,587	168,637
1825	1,003	124,029	536	80,895	1,539	204,924	20,701	2,328,807	3,579	214,875	24,280	2,543,682	166,183
1826	1,151	119,086	588	86,534	1,719		20,968	2,411,461	3,657	224,183	24,625	2,635,644	167,636
1827	911	93,038	529	68,906	1,440		19,594	2,181,138	3,675	279,562	23,199	2,460,540	151,115
1828	857	90,060	464	50,844	1,321	140,915	19,646	2,195,500	4,449	324,891	24,095	2,518,191	155,576
1829	734	77,635	416	39,237	1,150	116,872	19,110	2,199,559	4,343	317,041	23,453	2,517,008	151,808
1830	750	77,411	367	32,719	1,117	110,130	19,174	2,201,592	4,547	330,227	23,721	2,531,819	154,812
1831	760	85,707	376	34,290	1,136	119,997	19,450	2,221,356	4,792	357,608	24,242	2,581,964	158,422
1832	759	92,915	386	43,597	1,145	136,512	19,664	2,261,860	4,771	356,208	24,435	2,618,061	161,734
1833	798	98,171	598	39,878	1,096	145,049	19,689	2,271,301	4,606	363,276	24,295	2,634,577	164,000
1834	876	107,710	554	40,411	1,160	148,121	19,975	2,312,555	5,080	403,745	25,055	2,716,100	168,061
1835	916	121,782	455	63,230	1,371	184,952	20,300	2,360,203	5,211	423,458	25,511	2,783,761	171,020
1836	709	89,636	441	66,604	1,150	156,240	20,388	2,349,749	5,432	442,897	25,820	2,792,646	170,637
1837	1,005	135,992	510	71,506	1,515	207,498	20,536	2,333,521	5,501	457,497	26,037	2,791,018	173,506
1838	1,147	161,459	606	79,947	1,753	241,406	20,912	2,420,759	5,697	469,812	26,609	2,890,601	178,583
1839	1,278	186,905	568	47,898	1,846	234,801	21,670	2,520,635	6,075	497,798	27,745	3,018,433	191,283
1840	1,448	220,064	771	43,988	2,219	263,552	22,654	2,768,269	6,308	543,276	28,962	3,311,538	201,340
1841	1,792	164,309	668	32,857	1,460	201,166	23,461	2,935,399	6,791	577,081	30,252	3,512,480	210,198
1842	971	133,975	402	55,148	1,373	188,423	23,954	3,041,420	6,861	578,430	30,815	3,619,850	181,047

N.B. — The falling off in the number of ships in 1827 is apparent only. The numbers returned in the previous years were less than appeared on the registers. But a ship, when once placed on them, remained till evidence was produced of her having been sold to foreigners, lost, or otherwise destroyed: so that a good many ships were at all times on the register, which, in fact, did not exist. The Registry Act passed in 1825 obliged all owners of ships to register them of new; when, of course, the names of those that had ceased to exist disappeared from the books. We have already noticed the enormous extent to which this sort of blunder was permitted to grow up in the United States. — (See *anti*, p. 879.)

Ship-building. — The cost, including the outfit, of the ships built in the U. Kingdom in 1842, may, we believe, be taken, at a rough average, at from 10*l.* per ton, or 11*l.* at a medium, making their total value 1,038,100*l.* London, Sunderland, Newcastle, Liverpool, Hull, Yarmouth, &c. are the principal building ports. The business has increased with extraordinary rapidity at Sunderland: so much so that while only 60 ships, of the burden of 7,560 tons, were built in that port in 1820, no fewer than 302 ships, of the burden of 87,023 tons, were built in it in 1840. Ships built at London, Liverpool, Bristol, and other western ports, are, however, in higher estimation than those built in the Tyne and the Wear, at least for those branches of trade where the best ships are required. Within the last few years, a great many steam boats have been built in the Clyde.

State of the Shipping Interest. — The complaints that were so frequent about 10 years since respecting the distressed state of the shipping interest have recently all but ceased; indeed, we incline to think they never had any very good foundation. No doubt their profits are a good deal lower now than they were during the war; but this, if it be really an evil, is one that is not peculiar to them, but equally affects agriculturists, manufacturers, and merchants; and is not even confined to this country, but extends to others. We have already shown the groundlessness of the clamour raised against the reciprocity treaties (*anti*, p. 853.); which, far from being injurious, have been signally beneficial to our commercial and shipping interests. It is believed that, owing to the peculiar facilities afforded by means of docks and other devices for the loading and unloading of ships, the employment of steam tugs to bring them quickly to their moorings and to take them to sea, and the greater economy and despatch that now pervade every department of the business, 3 ships are able to perform, and do, in fact, perform, as much work as was done by 4 at the end of the war! There has, in this way, been a virtual addition of 400,000 or 500,000 tons to our mercantile navy. And this surely is enough, without looking at any thing else, to account for the decline in the rate of freight since 1815. The great number of new ships that have been built every year shows that the shipping business is quite as profitable as other departments.

[illegible] ater fall in the value of the timber, [illegible] us to those who happened to have [illegible] ordinary degree advantageous to the public, and [illegible] The discriminating duti[illegible]

[illegible] ought to be allowed to be built in bond, or, if that would be inconvenient, that a drawback should be allowed of the duty on every article used in their construction. A measure of this sort would give to

* There are no documents in the Custom-house [illegible] which the distinction of men and apprentices can be shown; but by a return produc[illegible] gistrar of Merchant Seamen, the number of registered apprentices in the U. Kingdom, in the year 1[illegible], was 26,750; in 1841, 26,809; and in 1842, 28,883.

the shipping of England the same superiority, in point of cheapness, that is now enjoyed by our cottons; and would do more than any thing else to consolidate and strengthen the foundations of our maritime ascendancy. It is entirely owing to the operation of the duties that so many ships are now built in the colonies. They are very inferior to those built in England; and were the latter built in bond, or were the duties on the articles used in their construction drawn back, they would also be the cheapest of the two.

It may be worth mentioning, as illustrative of the singular anomalies that have been allowed to insinuate themselves into our commercial system, that timber may be imported into the Isle of Man, or into any other British possession, without regard to its origin, on payment of an *ad valorem* duty of 10 per cent.! It is remarkable that advantage was not earlier taken of this anomaly, to build ships in the Isle of Man. Latterly, however, several vessels have been built in it; and, were it in other respects as well situated for ship-building as the other ports of the empire, it would become a principal seat of the business. There can, however, be no good reason why one part of the empire should be permitted to enjoy a peculiar privilege of this sort. An equalisation of the duties should take place, either by extending the British duties to the Isle of Man, or the Manx duties to Britain; — the latter would be the most beneficial way of obviating the anomaly.

Ships (Classification of, for the Purpose of Insurance). — To insure a ship on right principles, or in such a way that the premium shall be the fair equivalent of the risk, is no easy matter. The risk depends partly on the condition of the ship and the capacity of the master and crew; partly on the nature of the cargo she is to take on board; and partly on the voyage she has to perform. The last two circumstances disclose themselves, and their influence may be appreciated, at least with sufficient accuracy for practical purposes, without any difficulty; but it is far otherwise with the condition of the ship, and the capacity of the master and crew. It is essential to the adjusting of an insurance on fair terms, that these should be known; and it is, at the same time, exceedingly difficult to acquire any accurate information with respect to them.

It is plain that there is but one mode in which any thing satisfactory can be learned with respect to the condition of ships, and that is, by their inspection and examination by persons of competent information as to such matters. To acquire a just character at first, a ship should be repeatedly surveyed while she is being built; and to learn her condition at any subsequent period, some of the planks should be taken off, and her hull and rigging subjected to a thorough examination. This is the only method to be followed if we wish to arrive at results that may be safely depended on. The *age* of a ship should not be altogether overlooked in estimating her condition; but it is not a criterion that, taken by itself, is worth almost any thing. There is the greatest possible difference in the materials of which different ships are built, in the way in which they are built, and in the wear and tear to which they are exposed. Some are so very bad, that they actually go to pieces on their first voyage; others, with difficulty, last for 3, 4, or 7 years; and others, again, run for 10, 15, and even 20 years, and upwards, with but little repair. It may be presumed that the condition of ships built of similar materials, on the same plan, and employed in the same departments of trade, will depend materially on their ages: but a thousand circumstances conspire to defeat this presumption; and it would be ludicrous to suppose that it should apply at all in the case of ships constructed of different materials, and engaged in different lines.

But, notwithstanding the criterion of age is thus really worth less than nothing as a rule by which to judge of a ship's condition, it is almost the only one that was referred to in this country down to a late period. From about the year 1760, or perhaps earlier, down to 1834, ships were arranged, by the underwriters at Lloyd's, in classes marked by the letters A, E, I, and O, and the figures 1, 2, and 3; the former referring to the hull of the ship and the latter to the rigging. A ship marked A 1. was in the highest class; that is, her hull and rigging were both declared to be in the best condition; ships marked E 1. were in the next class; those marked I 1. were in the lowest available class, or that formed of such as were fit only for carrying coals, or other goods not liable to sea damage along the coast; ships marked O were unseaworthy. But to get into the highest class, no examination of the ship, or none worthy of the name, was required. Unless some very flagrant defect were obvious in their construction, all ships were entitled, when new, to be marked in the highest class; and they were entitled, whatever might be their real condition, to stand in it for a certain number of years, varying from 6 to 12, according to the *port* in which they happened to be built! It is not easy to imagine any thing more absurd than such a classification; but the whole extent of the injury arising from it is not immediately obvious. The great majority of merchants and underwriters have not, and could not be expected to have, any personal knowledge of different ships, and have nothing to trust to but the classified accounts. Suppose, now, that two ships were built at the same time in London or any other port; that one was constructed of the best materials, and in the best way, while the other was constructed of the worst materials, and in the most defective manner: these two ships were placed side by side in the class A 1.; the underwriters, seeing them there, were ready, without further inquiry, to insure them at the *same premium*, and the merchants were, for the same reason, quite as willing to

employ the one as the other! A bounty was thus given on the construction of what have been called *slop-built* ships, or ships of an inferior class. For a half, or, at most, two thirds, of what would be required to construct a good and really sufficient ship, a ship owner got an inferior vessel of an equal burden sent to sea; and, owing to the matchless absurdity of the system of classification, the inferior was placed in the same rank with the superior ship; enjoyed all the advantages such distinction could give; and was, in the public estimation, deemed quite as good and as deserving of employment as the other. This has been a more copious source of shipwreck than all the currents, rocks, and fogs that infest our seas; but it was not the only one. At the end of a certain number of years, depending (as already stated) on the port where the ship was built, both the vessels referred to above were degraded to the class E; and yet it might happen, that the superior ship was, when so degraded, better entitled to continue in the class A than the inferior ship was ever to be in it. But even this does not exhaust the whole absurdity of this preposterous scheme; for, supposing that the superior ship had been so thoroughly repaired as to be as good as the day she came off the stocks, and that the inferior ship had got no repair at all, still they were both placed, side by side, in the class E! All the annals of all the maritime nations of the world, from the Phœnicians downwards, furnish no example of a more perverse, contradictory, and absurd regulation. That it should have existed amongst us for the greater part of a century, strikingly exemplifies the power of habit to procure toleration for the most destructive practices and errors.

It may be said, perhaps, that, whatever system of classification is adopted, there must be great numbers of inferior vessels; for, though we did not, foreigners would build them; and, being consequently able to sail them cheaper, would drive us totally out of all trades in which they could come fairly into competition with us. This is true; but, provided they be not engaged in the conveyance of passengers, who ever thought of proscribing inferior ships, or of dictating to the ship owner what sort of ships he should build, or to the merchant what sort he should employ? We do not object to inferior ships, but we do object to the *same character* being given to them that is given to superior ships. This is practising a gross fraud upon the public; and gives an unfair and unjust advantage to the owners of inferior vessels. The interests of navigation and of humanity imperatively require that ships should be correctly classified; that those that are not seaworthy should not be classed with those that are, but that the *real state* of each should be distinctly set forth in the register, and be made known to every one. If this be done, the merchant and the underwriter may be safely left to deal with them as they think fit.

In consequence of the laudable exertions of Mr. Marshall and other gentlemen, the attention of the principal merchants, ship owners, underwriters, &c. of the metropolis was some years ago directed to this subject; and in 1824 a committee, consisting of representatives from these different bodies, was appointed to inquire into and report on it. The committee collected a great deal of valuable evidence; and laid an able report before a general meeting of merchants, ship owners, &c., on the 1st of June, 1826. We subjoin an extract from this report, which more than bears out all that we have stated: —

"From the absence of all control on the original construction of ships while building, and the impossibility of ascertaining by any inspection, after completion, their real quality, it appears to be indisputably proved, by an almost uniform concurrence of testimony, that the first character, or A 1., is indiscriminately extended to ships differing widely in strength, durability of materials, and all those qualities on which character ought to be dependent; that many ships to which the first class is assigned are decidedly inferior to others which are placed, from lapse of time alone, in a lower class; that many become totally unfit for the conveyance of dry cargoes, long before the expiration of the period during which they are entitled, according to the present system, to remain on the first letter, in which they are notwithstanding continued; that instances are on record of first class ships which have been unfit from their origin for the conveyance of dry cargoes; and some are declared to have been hardly fit, when new, to proceed to sea with safety. One case is even adduced, in which, from ill construction and insufficiency of fastening in a new ship, her insecurity was predicted, and she actually foundered on her first voyage; and yet this identical vessel was ranked, according to the indiscriminate system pursued, in the first class.

"Such, as respects new ships, appears by the evidence to be the practical results of a system which, assuming to designate by marks their intrinsic quality, provides no means of actually ascertaining that quality; but offers, in effect, *a premium for the building of inferior and insufficient ships*, by the inducement it holds forth to fraudulent construction, and by the equality of character it indiscriminately extends to the best and the worst ships built at the same port.

"Nor, your committee regret to have to report, is the evidence of the errors, inconsistencies, and evils arising from the existing system, as applied to old ships, by any means less conclusive. By the *refusal to restore character, in consequence of repairs, however extensive*, the inducement to maintain ships in an efficient state is removed; whilst, from the absence of all regular provision for stated or periodical examination, their efficiency or inefficiency is rendered dependent upon the varying views, the caprices, or the interests of the proprietors. Hence, though the second character, or E, is declared by the rules of the system to be the designation of ships which, having lost the first character from age, are kept in perfect repair, and appear, on survey, to have no defects, and to be completely calculated to carry dry cargoes with safety, the whole body of evidence distinctly proves that character to be, in very numerous instances, assigned to ships which, from original defect or want of requisite repairs, are *utterly unfit and unsafe* for dry cargoes; while others, which, from sound constitution or efficient reparation, are pronounced in the evidence to be superior to many new ships, are indiscriminately classed with the actually worthless and

unseaworthy. Hence, too, the employment of ships, after they have passed the period prescribed by a fallacious standard of classification, becomes uncertain, precarious, and difficult; the ship owner is injured; the shipper and underwriter misled; the building of superior ships, capable of long service, is discouraged, and direct inducement is held out to the construction of those of an inferior description; the general character of our mercantile marine is degraded; and it is to be feared that, could the system be traced to its ultimate results, it would be found to be productive of a lamentable loss of property and life."

It may have seemed surprising that, despite the continued complaints of the lowness of freights, and the want of employment for shipping, so many new ships should be annually built. But this was, to a considerable extent at least, occasioned by the system of classification now described. Instead of building a really good and durable ship, the principal object used to be to construct one that should, at farthest, be, as the phrase is, *run off her legs* in about 10 years or thereby; inasmuch as, whatever might be a ship's condition, she was then degraded from the class A 1., and that it was hardly possible, in most departments of trade, to find a merchant to employ, on any thing like reasonable terms, a ship to which these symbols of imaginary excellence were not attached. Hence the ship owner, instead of repairing his 10-years old ship, sold her for what she would fetch, and built a new one. But the person who purchased the ship degraded to E 1. forced her, though at an enormous reduction, into business; so that there were two bad or inferior ships in the field; whereas, under a reasonable system of classification, there would most likely have been only one good ship. The injury that this practice did to the shipping interest is too obvious to require to be pointed out. It has been infinitely more hostile to it than all those reciprocity treaties, and that foreign competition, about which there has been so much unfounded clamour. "If the system of classification were founded on the principle of *intrinsic merit*, if the real efficiency of the ship formed the basis on which character was given, the consequence, in numerous instances, would be, that, instead of supplying the place of those ships that at present lapse from age only into the second class with new ones, the owners would effectually repair the existing ships; so that there would speedily be not only a material improvement in the construction of ships, but a material increase in the amount of tonnage, and a corresponding increase in the rate of freight."—(*Marshall's Statements*, p. 19.)

The conclusive report and exposition referred to above did not produce the consequences that might have been anticipated. Government, for reasons known only to itself, seems to have concluded that this was not a subject with which it should interfere; and it was laid aside for some years more. But the still-increasing amount of shipwreck, and the loss of life and property consequent thereon, again roused the public attention to the subject; and at length the principal merchants, ship owners, and underwriters succeeded in setting on foot machinery by which a classified account of shipping has been obtained, founded on incomparably more correct principles. The public owe much to the able and intelligent individuals who imposed on themselves this difficult and important task. Notwithstanding the obstacles with which they had to contend, they have done much to improve the character of our mercantile marine, and to lessen the disasters incident to a seafaring life.

2. *New System of Classification.* — This new classification is conducted under the direction and superintendence of a committee of merchants, ship owners, and underwriters, established in 1834. The committee establish rules for classifying ships, and appoint, control, and dismiss the surveyors by whom they are inspected and examined. A classified register is annually published, which is gradually made more and more complete; and the expenses attending the institution are defrayed, partly by the fees charged on making an entry in the register, partly by the profits on the sale of the register or book, and partly from voluntary sources. But, as the subject is of the utmost importance to every one interested in commerce and navigation, we think we shall do an acceptable service to our readers, by laying before them the latest statement prefixed by the society to their register. It fully explains their objects, the principles on which they are proceeding, and the means they have adopted for carrying their views into effect.

Classification of Ships.

After announcing the formation of the committee, the official statement goes on to say, that —

This society was established in 1834, for the important purpose of obtaining a faithful and accurate classification of the mercantile marine of the U. Kingdom, and of the foreign vessels trading thereto, and for the government of which the following rules and regulations have been from time to time adopted: —

The superintendence of the affairs of this Society to be under the direction of a committee in London, of 24 members, consisting of an equal proportion of merchants, ship owners, and underwriters; and, in addition, the chairman for managing the affairs of Lloyd's, and the chairman of the General Ship Owners' Society for the time being, to be, *ex officio*, members of the committee.

The committee to appoint from their own body, annually, a chairman and deputy chairman, and also a chairman for a sub-committee of classification.

The committee to appoint a sub-committee of classification, to be so regulated that each member of the general committee may, in rotation, take his turn of duty therein throughout the year.

No member of the committee to be permitted to be present on the decision of the classification of any ship of which he is the owner, or wherein he is directly or indirectly interested.

The committee to be empowered to make such by-laws for their own government and proceedings as they may deem requisite, not being inconsistent with the original rules and regulations under which the Society was established; but no new rule or by-law to be introduced, nor any rule or by-law altered, without special notice being given for that purpose at the meeting of the committee next preceding that at which such motion is intended to be made; such notice to be inserted in the summons convening the meeting.

No new rule, or alteration in any existing rule, materially affecting the classification of ships, to take effect until the expiration of six months from the time it shall have been determined upon.

All reports of survey to be made in writing by the surveyors according to the forms prescribed, and submitted for the consideration of the general committee, or of the sub-committee of classification; but the classing assigned by the latter to be subject to confirmation by the general committee.

The reports of the surveyors, and all documents and proceedings relating to the classification of ships, to be carefully preserved, and parties proving themselves to be interested therein to have access thereto under the directions of the chairman or deputy chairman.

Foreign ships, and ships built in the British possessions abroad, to be surveyed on their arrival at a port in the U. Kingdom; but a due regard is to be had to the circumstance of their having been exempted from the supervision, while building, to which all British ships are subjected, and the class to be assigned to them is to be regulated according to their intrinsic quality, and from the best information the committee can obtain.

In every case in which the class assigned to a ship may be proposed to be reduced, notice is to be given in writing to the owner, master, or agent, with an intimation that if the reduction be objected to, the committee will be ready to direct a special survey, on the owner, master, or agent agreeing to pay the expenses attending the same, provided on the said survey there shall appear sufficient ground for the proposed reduction.

When the surveyors consider repairs to be requisite, they are respectfully to communicate the same in writing to the owner, master, or agent, and if such repairs be not entered upon within a reasonable time, a corresponding report is to be made to the committee for their decision thereon.

Parties considering the repairs suggested by the surveyor to be unnecessary or unreasonable, may appeal to the committee, who will direct a special survey to be held; but should the opinion of the surveyor be confirmed by the committee, then the expense of such special survey is to be paid by the party appealing.

The surveyor to the Society not to be permitted (without the special sanction of the committee) to receive any fee, gratuity, or reward whatsoever, for their own use or benefit, for any service performed by them in their capacity of surveyors to this Society, on pain of immediate dismissal.

The surveyors will be directed to attend on special surveys of ships under damage, or repairs for restoration, when required by merchants, ship owners, or underwriters; the charge for which is to be regulated according to the nature and extent of the service performed. In all cases, the application for the assistance of the surveyors must be made in writing addressed to the secretary.

Funds. — The funds to be under the authority and control of the committee, and a statement of the receipts and expenditure to be annually printed for the information of the subscribers.

The following fees to be charged to the owners of ships prior to their vessels being classed and registered in the book: —

For entering and classing ships, and for entering and classing ships surveyed for continuation, or repaired for restoration.

	Tons.	£	s.	d.
For each ship - - -	under 100	1	0	0
Ditto - -	of 100 tons and under 200	2	0	0
Ditto - -	200 — 300	3	0	0
Ditto - -	300 — 400	4	0	0
Ditto - -	400 and upwards -			

For registering repairs, or change of owners.

	Tons.	£	s.	d.
For each ship - - -	under 150	-	0	10	0
Ditto - -	of 150 tons and under 300	-	1	0	0
Ditto - -	300 — 500	-	2	0	0
Ditto - -	500 and upwards -		3	0	0

For re-classing ships (except when repaired), the characters of which have been expunged.

	Tons.	£	s.	d.
For each ship - -	under 100 - -	0	10	0
Ditto - -	200 and above	1	0	0

Special Surveys. — For special surveys, and where the surveyors to the Society are required by the owners to superintend the building of ships, or repairs for restoration, or otherwise, a charge will be made according to the nature and extent of the service performed.

Certificates of classification of the form No. 6., signed by the chairman of the general committee, or by the chairman of the sub-committee of classification, and countersigned by the secretary, will be granted on application; the charge for which is to be as follows: —

For ships under 200 tons - - -	5*s.* each.
Ditto of 200 tons and above - - -	10*s.* each.
Rules, each copy - - -	5*s.*

Rules for Classification.

1. The rules and regulations for the classification of ships, which were originally framed after much labour and deliberation, aided by the valuable practical knowledge of the committee of the General Ship Owners' Society, having been revised and considerably modified, the following have been determined upon as well calculated to meet the fair claims of all parties interested in their application, and from the adoption of which it is hoped that considerable benefit and convenience will result.

2. The characters to be assigned to ships to be, as nearly as possible, a correct indication of their real and intrinsic qualities; and to be in all cases fixed (not by the surveyors, but) by the committee, after the consideration of the reports of the surveyors and such other documents as may be submitted to them.

First Class Ships. — *First Description of the First Class.*

3. Will comprise all ships which have not passed a prescribed age, provided they are kept in a state of complete repair and efficiency; and they will be designated by the letter A.

4. The period to be assigned for their continuing on this class to be determined with reference to the original construction and quality of the vessel, the materials employed, and the mode of building; and their continuance for the time so assigned to depend upon its being shown by occasional surveys (annually if practicable) that their efficiency is duly maintained. It being also desirable, on grounds of national policy and of individual justice, that, after the expiration of the prescribed period, ships should be permitted to remain on the First Description of the First Class, or to be restored thereto for a further limited period, such extension of the period may be granted on the conditions hereinafter shown. (*See also Section* 24.)

5. New ships are to be surveyed while building by the surveyors to this Society, in the following three stages of their progress: —

First, — when the frame be completed.

Second, — when the beams are put in, but before the decks are laid, and with at least two strakes of the plank of the ceiling, between the lower deck and the bilge, unwrought, to admit of an examination of the inner surface of the plank at the bottom.

Third, — when completed, and, if possible, before the plank be painted or payed.

6. A full statement, agreeably to a form prepared by the society, of the dimensions, scantlings, &c. of all new ships, verified by the builder, is to be transmitted by the surveyor, and to be kept as a record in the office of the society.

Rules to be observed in building Ships.

7. *Timbering*. — The whole of the timber to be of good quality, of the descriptions specified by the Society, as applicable to the several terms of years for which ships so constructed may respectively be appointed to remain on the List of the First Description of the First Class; the stem, stern-post, beams, transoms, aprons, knight heads, hawse timbers, and keison of ships claiming to stand *twelve years*, to be entirely free from all defects; the frame to be well squared from the first foot-hook heads upwards, and free from sap, and likewise below, unless the timber be proportionably larger than the scantling thereafter described; every alternate set of timbers to be framed and bolted together to the gunwale. The butts of the timbers to be close, and not to be less in thickness than one third of the entire moulding at that place, and to be well chocked, with a butt at each end of the chock.

The Scantlings to be as follows: —

	Tons.	Tons.
For ships -	150	500
	Inches.	Inches.
Room and space to be - -	20	30
Floors sided, if square, and free from sap, to be not less at the keison than - -		13
First footbooks, sided, if square, at floor heads -		11

	Inches.	Inches.
Second footbooks, sided, if square at the heads	6½	10
Third footbooks sided and top timbers, if square	6	9
The frame to be moulded at keison -	8	13
The frame to be moulded at floor heads -	7	11
Top timbers to be moulded at their heads at the shearstrake - - -	4	5

8. The intermediate dimensions for the scantling of timbers between the floor heads and the gunwale to be regulated in proportion to the distance from the two points. Should the room and space be increased, the siding of the timbers to be increased in proportion.

	Tons.	Tons.
For ships	150	500
	Inches.	Inches.
To be moulded in the middle (not less than) -	7	9

	Inches.	Inches.
To be moulded at the ends (not less than) -	5	6½
And to be sided - - -	7	10

9. Those at the after end of the ship to be reduced in proportion to their length.

Hold Beams: —	Tons.	Tons.
For ships - - -	150	500
	Inches.	Inches.
To be moulded in the middle (not less than) -	9	13

	Inches.	Inches.
To be moulded at the ends (not less than) -	7	10
And to be sided - - -	9	13

10. Those at the after end of the ship to be reduced in proportion to their length.

11. The deck and hold beams to be sufficient in number*, and securely fastened to the sides either with lodging knees of iron or wood, or with shelf pieces; or with a shelf piece and knees; or with some other security equal thereto, so as sufficiently to connect the ends of the beams to the sides of the ship; and, in addition, all vessels of 200 tons shall have at least six *vertical* knees on each side to the deck beams; and for every additional 50 tons measurement above 200 tons, they shall have one more hanging knee on each side. And ships of 400 tons shall likewise have to their hold beams at least eight vertical knees, either as standards or hanging knees (the latter being preferred), and for every additional 100 tons burden, they shall have one more to each side. Every ship exceeding 150 tons to have at least one crutch for the security of the heels of the after timbers of the frame; one pair of pointers in addition to a knee at each end of the wing transom to connect the stern frame with the after body of the ship; and a transom over the heels of the stern timbers properly kneed.

Keel and Keisons: —	Tons.	Tons.
For ships - -	150	500
	Inches.	Inches.
Keel, sided - -	9	13
Keel, moulded below the rabbet not less than -		

	Inches.	Inches.
Main keison to be sided -	10	14
Main keison to be moulded -	10	14
The scarphs of keisons, where only or _____, to be 5 ft. 7 t.		
But where rider keisons are added, then they may be 4½ ft. 6 ft.		

12. Shifts of timber in ships of 200 tons and upwards, to be not less than 1-7th of the main breadth; and in ships under 200 tons, to be not less than 1-6th of the main breadth.

13. *Plank*. — The outside planking shall be of good quality, of the description prescribed in the Society's Form, No. 2., and shall be clear of all defects.

14. The inside planking to be of the description shown in the Society's Form, No. 3., and free from all foxy, druxy, or decayed planks. The whole to be properly shifted and fastened.

15. No butts to be nearer than 5 feet to each other, unless there be a strake wrought between them, and then a distance of 4 feet will be allowed; and no butts to be on the same timber, unless there be 3 strakes between; but vessels under 200 tons will be exempted from the full operation of this rule; and in ships of larger tonnage a literal compliance with it will be dispensed with in cases wherein it may be satisfactorily proved that the departure from the rule is only partial, being confined to the ends of the ship, or the thin planking of the topside, and does not injuriously affect the ship's general strength; but such relaxation will not be sanctioned unless an accurate description of the shifting of the plank be nitted by the surveyors, to enable the committee to form a proper judgment on the case.

Thickness of plank to be as under: —

	Tons.	Tons.
For ships -	150	500
	Inches.	Inches.
_____ _____ -	2½	4
Bilge planks -	2½	5
Bilge to keel		
Wales (average)		
Top sides -		
Shear strake		
Plank s		

	Inches.	Inches.
Ceiling below the hold b... -	2	3
Clamps and bilge planks -	2½	4
Upper deck clamps and spirkettings -	2½	3
Twist deck ceiling - -	2	2½
	Inches.	Inches.
Upper d	2½	3
Water ways, if of hard wood -	4	5
Do. if of Baltic fir, pitch pine, or red pine -	5	8

16. *Fastenings*. — The treenails† to be of good English or African oak, locust, or other hard wood, but

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* As regards the spacing of beams, it appears to the committee that the following scale would in general meet the convenience of stowage in all trades, as well as secure the requisite transverse strength, so essential to be attended to according to the tonnage of the vessel.

The spaces between the beams (hatchways excepted) not to exceed the following distances: —

	Hold Beams.	Deck Beams.
Vessels under 200 tons -	8 feet - -	4 feet.
Vessels 200 and under 400 tons -	8 feet and 4 feet alternately, or in that proportion -	One over every hold beam, and one in all double spaces.
Vessels 400 tons and above -	4 feet 6 inches -	

† Whenever copper bolts are substituted for treenails, their sizes should be as follows: —

For vessels of 150 tons and under 200 tons	-	-	⅞ in.
200 ditto	500	-	1 in.
500 and above		-	1⅛ in.

In no case is Baltic or American oak or elm to be used; and all planks above nine inches in width are to be treenailed double and single, except bolts intervene; and if less than that width, then to be treenailed single, and at least one-half of the treenails must go through the ceiling. All ships to be fastened with at least one bolt in every butt, and from the wales to the lower part of the bilges the bolt to be through and clenched. The bilges to have at least one bolt through and clenched in each foothook. The sizes of the bolts required in the several parts hereinafter described, to be not less than as against the same expressed, viz.: —

	Tons.	Tons.			Inches.	Inches.
For ships	150	500	Butt-bolts		0 5-8ths	0 3-4ths
	Inches.	Inches.	Hold beam bolts		0 7-8ths	1 1-8th
Heel-knee, and dead wood abaft	1	1¼	Deck beam bolts		0 5-8ths	0 7-8ths
Scarph of the keel	in No. 6. bolts of 1	in No. 8. bolts of 1	Hooks forward at throat		0 7-8ths	1 1-8th
			Hooks forward at arms		0 5-8ths	1
Kelson bolts, one through each floor	0 7-8ths	1 1-8th			0 7-8ths	1 1-8th
Bolts through the bilge and foot waling	0 5-8ths	0 7-8ths	The lower pintle of the rudder		2 ½	3 ½

17. In every case where the butt and bilge bolts are not through and clenched, one year will be deducted from the period which would otherwise be assigned in the classification of the vessel; but this rule will not be applied to ships built previously to the 1st of January, 1835.

18. The scantlings and dimensions of all intermediate-sized vessels to be proportionately regulated agreeably to a scale adopted by the society, a copy of which is in the hands of each of the surveyors.

19. Ships surveyed while building, in which *all the materials required for a 12 years' ship shall have been used*, and most of the other requisites for that class fulfilled, but which, from partial deficiencies, may not appear to be in all respects entitled to the highest class, although superior to the description of a 10 years' ship, may be marked in the book thus, 11 A; thereby denoting that they are to remain in the first description of the first class 11 years, provided they be kept in a state of efficient repair.

20. Ships surveyed while building, in which the scantling and shifts of the timbers, the thickness and shifts of the planks, and size of fastenings may be the same as are required by the preceding rules, and in which the description of materials prescribed in the annexed tables shall also have been used, but in which the alternate sets of timbers shall not have been framed, nor the chocks wrought with a butt at each end, nor the frame so well squared as is required for 12 years' ships, but which shall be in other respects equal thereto, shall be marked "10 A"; thereby denoting that they are to remain on the list of ships of the first description of the first class 10 years, provided they be kept in a state of efficient repair.

21. In all other cases, ships surveyed while building, and constructed of the materials of good quality, shown in the society's tables, No. 1, 2, and 3., will be classed for the several terms of years respectively appointed for their remaining on the list of ships of the first description of the first class; and in all ships, not built under survey, for which a class exceeding 4 years may be claimed, the timbers shall be required to be completely exposed for examination, by a listing or plank being taken out (if not originally left open) all fore and aft at the foothook heads, and another between decks; and the material of the frame being thus ascertained, shall be reported to the committee, and a class assigned accordingly.

22. Ships built in the U. Kingdom under a roof, and which shall have occupied a period of not less than 12 months in their construction, will have 1 year added to the period prescribed for their continuing on the list of ships of the first description of the first class.

23. Ships built in the U. Kingdom since the year 1834, and not surveyed while building by the surveyors to this society, or where the owners or builders may have refused to permit them to survey and examine the same at the several periods prescribed by the rules, will be subjected to the minutest possible examination previously to assigning the class in which they may be placed according to the regulations; but in all such cases one year will be deducted from the period which would otherwise be allowed, in consequence of their not having been submitted to such survey during their construction. In no case, however, will a higher grade than 10 A be assigned to ships built in the U. Kingdom, which shall not have been surveyed while building.

Continuation of Ships in the First Description of the First Class.

24. If, on the termination of the period of original designation, or if at any subsequent period within the limitation hereafter mentioned, a ship owner should wish to have his ship remain or be replaced on the letter A, he is to send a written notice thereof to the committee, who shall then direct a special survey to be held, consisting of not less than 3 competent persons, to be appointed by the committee (one of whom to be a surveyor, the exclusive servant of the society); that at such survey the attention of the surveyors shall be particularly directed to the state of the following parts of the ship, viz. — The upper and lower deck bolts, and the outside planks through which they pass; the waterways and beams, so far as they can be examined; the hawse timbers, knight-heads, breast-hooks, and transoms; the floors and kelsons; planking outside, from the light water-mark upwards; the ceiling inside, the frame and inner surface of the outside planking where it may be seen; the decks and comings; and the shear and general form of the ship: — that on these points they shall transmit a detailed report, accompanied by such observations as may occur to them, either from inspection of the ship, or from information of the repairs she may have received. And if from the report of such special survey, the ship shall appear to be in all respects in a sound and efficient state, and to have preserved her original form unaltered, the committee shall continue such ship on the letter A for such further period as they may think fit, not exceeding, however, one-third of the number of years which had been originally assigned. Ships so continued shall be distinguished in the register book by the number of years for which the classing is extended being inserted separately under the number assigned on the original classing, thereby denoting that the ship has been found on survey in such good and efficient order as to entitle her to continue years longer on the list of ships of the first description of the first class. In all cases in which ships are intended to be surveyed under this rule, they must either be docked or laid on the ways. The period assigned for continuation will, upon all occasions, commence from the time the ship may have gone off the letter A, without regard to the date when the survey for this purpose may have been held.

Restoration of Ships to the First Description of the First Class.

25. *First Rule.* — If, at any time before the expiration of two-thirds of the number of years beyond the period for which ships may have been originally assigned to remain in the first description of the first class, an owner be desirous to have his ship restored to the list of ships of that description, such restoration (on his consenting to the special survey hereinafter described, to be held by two surveyors, and performing the repairs found requisite) will be granted for a period not exceeding two-thirds of the time originally assigned for her remaining as a ship of the first description of the first class, the same to be calculated from the date of such repairs.

26. *Requisites for Restoration.* — All the bolts in the range of each deck to be driven out, and the planks taken out: the upper deck water-ways, and plank shears, and spirketting, and the strake next the water-ways on the lower deck in the midships, to be taken out; the sheathing to be entirely stripped off the bottom; a strake in the upper course of the bottom between the wales and the light-water mark, fore and aft, and a plank in the ceiling at the floor heads on each side, to be taken out; the limbers to be clear, and the hooks forward to be exposed; and in that state the ship to be submitted to a special survey and examination, at which the attention of the surveyors appointed by this society is to be particularly directed to the state of the decks, the remaining plank of the topsides, the wales, upper courses, and treenails, and other fastenings; also to the state of the frame, hawse timbers, and knight heads, kelson,

), foothooks, ceiling, and breast hooks, the rudder in all its parts and hangings; and if, after such examination, the owner should consent to take out all planks, timbers, beams, knees, water-ways, fastenings, and other parts that may be found defective, or objected to, and replace them with materials of the same species, or of equal quality, with those of which the ship was originally constructed, such ships to be entitled to restoration to the first description of the first class for a period proportionate to their real condition and the extent of the repairs performed; or if timber of an inferior description, or second-hand English or African oak or teak be used, then for a period not exceeding that for which such materials would have entitled a new ship to stand A 1. according to the tables, subject in either case to the ship being at all times thereafter kept in a state of efficient repair.

27. *Second Rule.*—If at any age of a vessel, an owner be desirous to have his ship restored to the first description of the first class, such restoration (on his consenting to the special survey hereinafter described, to be held by two surveyors, and performing the repairs thereby found requisite) will be granted for so long a period as may be deemed expedient by the committee, not exceeding, in any case, the term of six years.

28. *Requisites for Restoration.*—The whole of the outside plank of the vessel to be taken off as low as the second foothook heads, and the remainder of the planking, either outside or inside, together with all the decks, to be removed, so as to expose the timbers of the frame entirely to view, and in that state the ship to be submitted to a special survey and examination by the surveyors appointed by this society; and if, after such examination, all timbers, beams, knees, kelsons, transoms, breasthooks, remaining planks, inside or outside, or other parts found to be defective, be replaced with materials of the same species, or of equal quality with those of which the ship was originally constructed, and all the treenails driven out and renewed, such ship may be restored to the first description of the first class. But if timber of an inferior description, or second-hand English or African oak or teak, be used, then for a period not exceeding that for which such materials would have entitled a new ship to stand A 1. according to the tables, subject, in either case, to the ship being at all times thereafter kept in a state of efficient repair.

29. On the same principle of giving to ships which shall be actually proved to be superior of their class and in excellent condition, every advantage that can be extended to them consistently with the maintenance of the general principles on which the society was established, ships which have been restored to the class A, shall be entitled to an extension of the time, subject to the same conditions of survey and examination as are prescribed for ships proposed to be continued in the first description of the first class, at the expiration of the period first assigned to them; but, in like manner, the term of such extended continuance shall be limited to a period not exceeding one third of the number of years for which the ships may respectively have been restored, without any reference whatever to the period originally assigned to them.

First Class Ships.—*Second Description.*

30. Will comprise all ships which having passed the prescribed age, but have not undergone the repairs which would entitle them to be continued in or restored to the first description, or having been continued or restored, and the additional period thus assigned having expired, shall appear on survey to be still in a condition for the safe conveyance of dry and perishable cargoes; and they will be designated by the diphthong Æ: but such of the ships of this class as shall be found on survey to be of superior description, being fit for the safe conveyance of dry and perishable goods to and from all parts of the world, shall be distinguished by inserting their character in red with an asterisk thus prefixed, *Æ. Those ships, however, the original construction of which may not have entitled them to be classed in the first class A for a longer period than five years, will not be allowed the distinction of the asterisk.

31. For the purpose of continuing a ship on the list of ships of the second description of the first class, a careful survey will be required to be made annually, or on the return of the ship from every foreign voyage, by one of the surveyors to this society, who is to state distinctly and separately the actual condition of the upper deck fastenings, water-ways, spirketting, plankshears, topsides, upper deck with its appendages, lower deck fastening, wales, counter, plank, and treenails outside to the water's edge, rudder, windlass, and capstan, beams, breast-hooks, and timbers; but if not surveyed within twelve months after entering the second description of the first class, such ship having been during that time in some port in the United Kingdom, the character will be omitted until such survey be held; or as the case may be, she will be allowed to pass into the class E. Whenever it shall appear to the surveyors that a vessel classed Æ with the asterisk shall no longer be in a condition to deserve that distinction, notice of the proposal to reduce her shall be given in writing to the owner, master, or agent.

British North American Built Ships, and Fir Ships.

32. Ships built in the British North American colonies, and all ships, wherever built, the frames of which are composed of fir, of 300 tons and above, shall, in order to entitle them to be classed in the register book of the society, be secured in their bilges by the application of iron riders to cover the joints of the floor and foothook heads, to extend from the height of the hold beams to the floors so as to receive not less than two bolts in a substantial part of the floors; the number of iron riders to be not less than one on every fourth floor on each side from two feet abaft the mainmast to two feet abaft the foremast, the size thereof to be not less than 3¼ inches by 1⅛ inches at the joints of the timbers for ships of from 300 to 400 tons, and to be increased one quarter of an inch each way, for every 100 tons of increased size. That all such ships shall also be secured by iron hanging knees to the hold beams, one knee to every alternate hold beam, provided the distance of the said beams from each other does not exceed 4 feet 6 inches, and the tonnage be less than 400 tons; but if the distance exceeds 4 feet 6 inches, or the ship is 400 tons and above, then one to every hold beam. The knees to be connected with the riders or not, at the option or convenience of the owners; but if not so connected, the side arms are to be long enough to receive at least four bolts; the whole to be securely bolted with bolts of sufficient size. In cases of refusal, the words "not fastened as per rule, section 62.," will be inserted against the vessels' names.

33. All British North American built ships, which have gone or may go off the list of ships of the first description of the first class, or which may be of an age exceeding the period for which they might have had claims to be put upon that class (whether classed or not), shall, as from time to time they come under examination, be subjected to a careful survey, to be made by one of the surveyors to this society; and no further character shall be assigned them unless a survey shall be held as thus prescribed, and a strake of the planking, either inside or outside, be removed from stem to sternpost (on both sides) immediately above the turn of the bilge in midships, and in such range forward and aft as to expose the timbers of the frame to view; that a special report of the state of these timbers, and of the general state and condition of the upper deck fastenings, water-ways, spirketting, plankshears, topsides, upper deck with its appendages, lower deck fastenings, wales, counter, plank and treenails outside to the water's edge, rudder, windlass, and capstan, beams, and breasthooks, shall be transmitted by the surveyors to the committee; and on the receipt of such report the classing shall take place. If the diphthong character be then assigned, it shall be continued (subject to an annual survey) for a period not exceeding the number of years originally assigned for the ship's remaining in the first description of the first class; at the expiration of which the character will be discontinued, unless a similar survey and examination of the frame be again submitted to.

34. *Second class ships* will comprise all ships which shall be found on survey unfit for carrying dry

cargoes, but perfectly fit for the conveyance, on any voyage, of cargoes not in their nature subject to sea damage; and they will be designated by the letter E.

35. Subject to occasional inspection, at least once in every two years, ships will continue in this class so long as their condition shall, in the opinion of the committee, entitle them thereto.

36. *Third class ships* will comprise ships that are in good condition, and which shall be found on survey fit for the conveyance, on short voyages (not out of Europe), of cargoes in their nature not subject to sea damage; and they will be designated by the letter I.

37. The bottom of every ship is to be caulked once in every five years, unless wood sheathed and felted, and then once in every seven years, except in the case of teak-built ships, upon which a special survey may have been requested, and the surveyors having ascertained, by the removal of a strake of sheathing fore and aft under the wales, and a strake at the first foothook heads, and by causing listings to be cut out at the wood's ends, that such caulking is not required, the same may then be dispensed with. If any ship shall be stripped within the periods above mentioned, her bottom is to be caulked.

38. In all cases in which it shall satisfactorily appear to the surveyors to this society that doubling of sufficient thickness (not less than two inches) properly wrought and fastened, may be allowed as a substitute for the shifting of plank, either in the wales or bottom, the surveyor is to make a special report thereof, together with his reasons, to the committee, who will determine thereon.

39. *Iron fastened Ships.* — All ships (except those built in India) although iron fastened, shall be classed in the same manner as copper fastened ships, so long as they remain unsheathed with copper, provided they are, in all other respects, constructed in accordance with the rules; but when sheathed with copper over the iron fastenings, the words "coppered over iron fastenings" shall be added to the character in the register book, and continued until the ship be thoroughly copper fastened.

40. Ships built in India, although fastened with iron, shall be permitted to be copper sheathed without any mark being placed in the book, provided the bottom be felted or chunamed, and wood-sheathed, and subject to a careful examination of the iron fastenings on every occasion on which the sheathing is stripped off, for which purpose some of the bolts and nails are to be taken out of the lower part of the bottom, and to be seen by the surveyor; but no such ship shall be permitted to continue either on the A or on the Æ class for a longer period than one-half the number of years beyond the term originally assigned for her remaining on the first description of the first class, unless the bottom shall have been doubled, or the whole of the iron fastenings taken out or properly secured, and the bottom fastened with copper bolts, or treenails, or both.

Ships' Anchors, Cables, and Stores.

41. All vessels are required to have their masts, spars, and standing rigging in good order, and sails in sufficient number and good condition; and every ship is to be supplied with a good hempen stream cable or tow line, of sufficient size and length, and with at least one good warp; and all vessels are to be provided with anchors of proper weight, and cables of approved quality, in number and length according to the undermentioned scale: —

42. *Anchors.* — All vessels under 200 tons to have at least two bower anchors; and all vessels of 200 tons and above, to be provided with at least three bower anchors.

44. *Cables.*—All vessels of

Tons.		Tons.		
— 150	— 250	— 180	—	
— 250	— 350	— 200	—	
— 350	— 500	— 240	—	
— 500	— 700	— 270	—	
— 700 and upwards		— 300	—	

and under 150 to have at least 150 if chain.

45. But in all cases where hempen cables are used, then one-sixth more in length will be required.

46. *Boats.* — All vessels under 150 tons to be provided with one good boat; and every vessel of 150 tons and above to be provided with at least two good boats.

47. The efficient state and condition of ships' anchors, cables, and stores will be designated by the figure 1.; and where the same are found insufficient in quantity, or defective in quality, by the figure 2.

48. In all cases in which the application of the rules must necessarily be regulated by the ship's admeasurement, the least tonnage (whether the result of the old or new method) is to be adopted.

Ships navigated by Steam.

49. All sea-going vessels navigated by steam shall be required to be surveyed twice in each year, when a character will be assigned to them, according to the report of survey, as regards the classification of the hull and materials of the vessel.

50. That with respect to the boilers and machinery, the owners are required to produce to the surveyors to this society, at the above-directed surveys, a certificate from some competent master engineer, describing their state and condition at those periods; and to which certificate it is desirable there should be added a description of the particulars of the same as far as may be practicable, in the manner and form directed by the Society; to be appended to the report of survey, and delivered to the committee, who will thereupon insert in the register book the letters "M.C.," denoting that the boilers and machinery have been inspected, and certified to be in good order and safe working condition; but if no certificate of their condition be furnished by the owner or master, then no character can be assigned for the machinery.

51. *Hull.*—The surveyors to this society are directed to examine and report the scantling of timbers, plank, and fastenings, and to state where built, and by whom, in the same manner as directed for sailing vessels.

52. *Scantlings.*—The scantlings for a steam vessel under 300 tons register are to be deemed sufficient, if equal to those required by the scale prescribed in the rules of this society for a sailing vessel of two thirds of the registered tonnage of such steam vessel.

53. But for a steam vessel above 300 tons register, the scantlings are to be equal to those required by the scale for a sailing vessel of three fourths of the registered tonnage of such steam vessel.

54. *Floors.*—Where the vessel is not filled in solid to the floor heads in the engine room, an exception will be specially made against any reduction of the scantling of the floors, which, in such cases, will not be permitted to be upon the reduced scale of two thirds or three fourths of the dimensions for the scantlings of sailing vessels as before stated; but the floors will then be required to be equal to the dimensions set forth in the rules for ships of the actual registered tonnage of the steam vessel.

55. The surveyors are required to report the number, size, length, fastenings, and mode of arrangement of the engine and boiler sleepers, and the description of timber of which they are composed, and whether diagonally trussed with wood or iron, and to what extent; the length, size, and fastening of shelf-pieces and paddle beams: and whether the vessel be constructed with sponcings, and how they are formed; and to give the length and shifting of the plank outside and inside.

56. *Materials and Stores.*—The surveyors are to examine and report the number and description of the masts, sails, anchors, cables, hawsers, warps, and boats, as directed to be done for sailing vessels; but the anchors and cables will not be required to exceed in weight and length those of a sailing vessel of two thirds of the registered tonnage of the steam vessel.

57. The surveyors are to be particular in examining and reporting the condition of the boats of all vessels employed in carrying passengers.

The committee having, in consequence of various applications, given their serious attention to the

peculiarities in the construction of steam vessels, came to a resolution, on the 26th May, 1842, to allow of the following relaxation in favour of vessels of that class, subject to the conditions of survey hereinafter mentioned.

"That fir (to be either pitch pine, Baltic red fir, or American red pine), larch, hackmatack, or juniper, may be used for upper deck beams, to an extent not exceeding one-half the number of beams required, according to the vessel's tonnage.

"That the same materials may be used in the outside planking from the first foothook heads upwards, excepting for the wales, shearstrakes, and plankshears.

"That the same materials be likewise allowed to be used in the inside planking, excepting for the bilge planks, shelf pieces and stringers, and clamps.

"That steam vessels built in all other respects in conformity with the annexed tables shall be classed for the terms of years therein respectively prescribed, subject to the following conditions:—

"That the rule requiring a survey 'twice a year' be rigidly enforced, and that whenever the boilers are taken out, the vessel shall be subjected to a particular and special survey, in order to ascertain her general condition, and particularly the state of the fir, or other materials herein allowed to be used.

"That unless such surveys be held, the characters which may have been assigned to steam vessels shall be struck out annually on reprinting the register book."

In pursuance of this resolution, the characters of such steam vessels as have not been surveyed as prescribed, have this year been struck out accordingly.

By order of the Committee.

CHARLES GRAHAM, *Secretary*.

No. 2. White Lion Court, Cornhill, London, 1st July, 1843.

Iron Ships.

Notice is hereby given, that in pursuance of a resolution this day passed by the committee for managing the affairs of Lloyd's Register of British and Foreign Shipping, the character of A 1. will in future be granted to such ships as shall be constructed of iron under the survey of the surveyors to this society, and be reported, on their completion, to have been built of good and substantial materials, and with good workmanship.

Iron ships already built, upon being subject to a careful and minute survey, and being reported to be in a high state of repair and efficiency, will also be classed as above; but if not so reported, they will be allowed such other character as, on a due consideration of their respective claims, they may be found to deserve.

In every instance in which a character may be assigned to ships built of iron, it must be understood that such ships must be subjected to a careful annual survey, and that the continuance or otherwise of the character assigned will depend entirely upon the result of this survey. Vessels not surveyed annually will lose their character.

By order of the Committee.

CHARLES GRAHAM, *Secretary*.

2, White Lion Court, Cornhill, 4th January, 1844.

No one can question the advantages that will result from carrying a plan of this sort completely into execution, or those that have already been derived from the extent to which it has been carried. We confess, however, that we incline to think that the classification of ships should be effected by government agents. It is invidious to impose on one set of merchants and ship owners the task of deciding upon the condition of the ships or other property belonging to others; and, though we have every confidence in the integrity of the gentlemen composing the committee, the most honourable men are liable to be influenced by an *esprit du corps*, and by insensible biasses. We, therefore, cannot help thinking that the scheme would have a much better chance of success, and that the classification would be more likely to be correct, were it managed by individuals nowise connected with business. The surveyors, on whose capacity and honesty the whole scheme principally depends, should be quite independent of the good or ill will of those on whose property they have to report. But can that be said to be the case at present? and can it be fairly presumed that merchants or ship owners will deal by the property of their friends and neighbours as it might be dealt with by officers appointed by, and responsible only to, government? We apprehend that both those questions must be answered in the negative; and hence our conviction that this is a matter in which government should interfere. No one can doubt that it is bound to do every thing in its power to promote the safety of navigation, and to preserve the lives of our seamen. In this view it erects lighthouses, and prescribes regulations as to pilotage, &c. But, how indispensable soever, these are not more essential to the interests of navigation than a proper classification of ships; and, if other means should fail fully to effect this desirable purpose, government will certainly neglect a most important duty if it do not interpose. In the mean time, however, the mercantile and shipping interests are deeply indebted to the gentlemen who have done so much to obviate the abuses of the old system. — (For a further discussion of this important question, see the article on the Frequency of Shipwrecks in the 122d number of the *Edinburgh Review*; see also the *Reports of the Commons Committees* of 1836 and 1843, on Shipwreck.)

SHIPS' PAPERS, the papers or documents required for the manifestation of the property of the ship and cargo, &c. They are of 2 sorts; viz. 1st, those required by the law of a particular country — as the certificate of registry, licence, charterparty, bills of lading, bill of health, &c. — (see these titles) — required by the law of England to be on board British ships; and, 2dly, those required by the law of nations to be on board neutral ships, to vindicate their title to that character. Mr. Serjeant Marshall, following Hubner (*De la Saisie des Bâtimens Neutres*, i. 241—252.), has given the following description of the latter class of documents: —

1. *The Passport, Sea Brief, or Sea Letter.* — This is a permission from the neutral state to the captain or master of the ship, to proceed on the voyage proposed, and usually contains his name and residence; the name, property, description, tonnage, and destination of the ship; the nature and quantity of the cargo, the place whence it comes, and its destination; with such other matters as the practice of the place requires. This document is indispensably necessary for the safety of every neutral ship. Hubner says that it is the only paper rigorously insisted on by the Barbary corsairs; by the production of which alone their friends are protected from insult.

2. *The Proofs of Property.* — These ought to show that the ship really belongs to the subjects of a neutral state. If she appear to either belligerent to have been built in the enemy's country, proof is generally required that she was purchased by the neutral before, or captured and legally condemned and sold to the neutral after, the declaration of war; and in the latter case the *bill of sale*, properly authenticated, ought to be produced. Hubner admits that these proofs are so essential to every neutral vessel, for the prevention of frauds, that such as sail without them have no reason to complain if they be interrupted in their voyages, and their neutrality disputed.

3. *The Muster Roll.* — This, which the French call *rôle d'équipage*, contains the names, ages, quality, place of residence, and, above all, *the place of birth*, of every person of the ship's company. This document is of great use in ascertaining a ship's neutrality. It must naturally excite a strong suspicion, if the majority of the crew be found to consist of foreigners; still more, if they be natives of the enemy's country. — (See SEAMEN.)

4. *The Charterparty.* — Where the ship is chartered, this instrument serves to authenticate many of the facts on which the truth of her neutrality must rest, and should therefore be always found on board chartered ships.

5. *The Bills of Lading.* — By these the captain acknowledges the receipt of the goods specified therein, and promises to deliver them to the consignee or his order. Of these there are usually several duplicates; one of which is kept by the captain, one by the shipper of the goods, and one transmitted to the consignee. This instrument, being only the evidence of a private transaction between the owner of the goods and the captain, does not carry with it the same degree of authenticity as the charterparty.

6. *The Invoices.* — These contain the particulars and prices of each parcel of goods, with the amount of the freight, duties, and other charges thereon, which are usually transmitted from the shippers to their factors or consignees. These invoices prove by whom the goods were shipped, and to whom consigned. They carry with them, however, but little authenticity; being easily fabricated where fraud is intended.

7. *The Log Book, or Ship's Journal.* — This contains a minute account of the ship's course, with a short history of every occurrence during the voyage. If this be faithfully kept, it will throw great light on the question of neutrality; if it be in any respect fabricated, the fraud may in general be easily detected.

8. *The Bill of Health.* — This is a certificate, properly authenticated, that the ship comes from a place where no contagious distemper prevails; and that none of the crew, at the time of her departure, were infected with any such disorder. It is generally found on board ships coming from the Levant, or from the coast of Barbary, where the plague so frequently prevails.

A ship using false or simulated papers is liable to confiscation. — (*Marshall on Insurance*, book i. c. 9. § 6.)

SHOES (Du. *Schoenen*; Fr. *Souliers*; Ger. *Schuhe*; It. *Scarpe*; Rus. *Baschmaki*; Sp. *Zapatos*), articles of clothing that are universally worn, and require no description. The shoe manufacture is of great value and importance. The finest sort of shoes is made in London; but the manufacture is carried on upon the largest scale in Northamptonshire and Staffordshire. The London warehouses derive considerable supplies from Nantwich, Congleton, and Sandbach, in Cheshire. During the late war, the contractor for shoes generally furnished about 600,000 pairs annually. — (For an estimate of the value of the shoes annually manufactured in Britain, see LEATHER.)

SHUMAC OR SUMACH (Ger. *Schmack*, *Sumach*; Fr. *Sumac*, *Roure*, *Roux*; It. *Sommaco*; Sp. *Zumaque*; Rus. *Sumak*). Common shumac (*Rhus Coriaria*) is a shrub that grows naturally in Syria, Palestine, Spain, and Portugal. That which is cultivated in Italy, and is improperly called *young fustic*, is the *Rhus Cotinus*. It is cultivated with great care: its shoots are cut down every year quite to the root; and, after being dried, they are chipped or reduced to powder by a mill, and thus prepared for the purposes of dyeing and tanning. The shumac cultivated in the neighbourhood of Montpellier is called *rédoul* or *roudo*. Shumac may be considered of good quality when its odour is strong, colour of a lively green, is well ground, and free from stalks. Italian shumac is used in dyeing a full high yellow, approaching to the orange, upon wool or cloth; but the colour is fugitive. Common shumac is useful for drab and dove colours in calico printing, and is also capable of dyeing black. — (*Bancroft on Colours*, vol. ii. p. 100.)

Of 187,029 cwts. of shumac imported in 1840, no fewer than 182,097 cwts. were from Italy. The entries for consumption in 1842 amounted to 184,687 cwts. The price of shumac varies (duty 1*s.* per ton paid) from 7*s.* to 12*s.* a cwt.

Shumac, the produce of Europe, may not be imported for home consumption except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under penalty of confiscation, and forfeiture of 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. and 22.)

SIERRA LEONE, an English settlement, near the mouth of the river of the same name, on the west coast of Africa, lat. 8° 30′ N., lon. 13° 5′ W.

Objects of the Colony. — This colony was founded partly as a commercial establishment, but more from motives of humanity. It was intended to consist principally of free blacks, who, being instructed in the Christian religion, and in the arts of Europe, should become, as it were, a focus whence civilisation might be diffused among the surrounding tribes. About 1,200 free negroes, who, having joined the royal standard in the American war, were obliged, at the termination of that contest, to take refuge in Nova Scotia, were conveyed thither in 1792: to these were afterwards added the Maroons from Jamaica; and, since the legal abolition of the slave trade, the negroes taken in the captured vessels, and liberated by the mixed commission courts, have been carried to the colony. The total population of the colony in 1839 amounted to about 42,000, all black or coloured, with the exception of about 100 whites.

Success of the Efforts to civilise the Blacks. — Great efforts have been made to introduce order and industrious habits amongst these persons. We are sorry, however, to be obliged to add, that these efforts, though prosecuted at an enormous expense of blood and treasure, have been signally unsuccessful. There is, no doubt, some discrepancy in the accounts of the progress made by the blacks. It is, however, sufficiently clear, that it has been very inconsiderable, and we do not think that any other result could be rationally anticipated. Their laziness has been loudly complained of, but without reason. Men are not industrious without a motive; and most of those motives that stimulate all classes in colder climates to engage in laborious employments, are unknown to the indolent inhabitants of this burning region, where clothing is of little importance, where sufficient supplies of food may be obtained with comparatively little exertion, and where more than half the necessaries and conveniences of Europeans would be positive incumbrances. And had it been otherwise, what progress could a colony be expected to make, into which there have been annually imported thousands of liberated negroes, most of whom are barbarians in the lowest stage of civilisation?

Influence of the Colony upon the illicit Slave Trade. — As a means of checking the prevalence of the illicit slave trade, the establishment of a colony at Sierra Leone has been worse than useless. That trade is principally carried on with the countries round the bight of Biafra and the bight of Benin, many hundred miles distant from Sierra Leone; and the mortality in the captured ships during their voyage to the latter is often very great. The truth is that this traffic will never be effectually put down otherwise than by the great powers declaring it to be *piracy*, and treating those engaged in it, wherever and by whomsoever they may be found, as sea robbers or pirates. Such a declaration would be quite conformable to the spirit of the declaration put forth by the Congress of Vienna in 1824. — (See SLAVE TRADE.) But the jealousies with respect to the right of visitation and search are so very great, that it is exceedingly doubtful whether the maritime powers will ever be brought to concur in any declaration of the kind now alluded to; unless, however, something of this sort be done, we apprehend there are but slender grounds for supposing that the trade will be speedily suppressed.

Climate of Sierra Leone. — The soil in the vicinity of Sierra Leone seems to be but of indifferent fertility, and the climate is about the most destructive that can be imagined. The mortality among the Africans sent to it seems unusually great; and amongst the whites it is quite excessive. Much as we desire the improvement of the blacks, we protest against its being attempted by sending our countrymen to certain destruction in this most pestiferous of all pestiferous places. It would seem, too, that it is quite unnecessary, and that blacks may be employed to fill the official situations in the colony. But if otherwise, it should be unconditionally abandoned.

Commerce of Sierra Leone, and the West Coast of Africa. — Commercially considered, Sierra Leone appears to quite as little advantage as in other points of view. We import from it about 13,000 loads of teak wood a year, with small quantities of camwood, ivory, palm oil, hides, gums, and a few other articles; but their value is inconsiderable, amounting to not more than from 60,000*l.* to 100,000*l.* a year. The great article of import from the coast of Africa is palm oil, and of this we imported, in 1841, 397,076 cwt., of which only 9,336 cwt. came from Sierra Leone. The great bulk of it was furnished by the coast to the west and south of the Rio Volta, many hundred miles from Sierra Leone. We doubt, indeed, whether the commerce with the western coast of Africa will ever be of much importance. The condition of the natives would require to be very much changed before they can become considerable consumers of European manufactures. It is singular, that speculative persons in this country should be so

much bent on prosecuting, without regard to expense, a trade with barbarous uncivilised hordes, while they contribute to the neglect or oppression of the incomparably more extensive and beneficial intercourse we might carry on with the opulent and civilised nations in our immediate vicinity. The equalisation of the duties on Canadian and Baltic timber, and the reduction of the oppressive duties on foreign sugar and brandy, and on French silks and gloves, would do ten times more to extend our commerce, than the discovery of 50 navigable rivers, and the possession of as many forts, on the African coast. If, however, an establishment be really required for the advantageous prosecution of the trade to Western Africa, it is abundantly obvious that it should be placed much further to the south than Sierra Leone. The island of Fernando Po has been suggested for this purpose; but, after the dear-bought experience we have already had, it is to be hoped that nothing will be done with respect to it without mature consideration.

Account of the Quantities of the Articles imported into the U. Kingdom from the West Coast of Africa in 1841, specifying the Districts whence they were imported, and the Quantities brought from each.

Articles.	Senegal and the Coast from Morocco to the River Gambia exclusive.	Sierra Leone and the Coast from the River Gambia, inclusive, to the River Mesurada.	Windward Coast from the River Mesurada to Cape Apollonia.	Cape Coast Castle and the Gold Coast, from Cape Apollonia to the Rio Volta.	Coast from the Rio Volta to the Cape of Good Hope.	West Coast of Africa not otherwise described.	Total.
Barwood - - tons	- -	- -	- -	170	1,842	- -	2,012
Camwood - - —	- -	658 -	22	175	101	- -	956
Coffee - - lbs.	- -	93,098 -	- -	- -	1,146	- -	94,244
Ebony - - tons	- -	39 -	- -	10	13	- -	62
Ginger - - cwts.	- -	738 -	- -	- -	- -	- -	738
Grains, Guinea, and of Paradise - lbs.	- -	768 -	- -	6,482	661	- -	7,911
Gum, animi and copal, cwts.	- -	87 -	- -	81	30	- -	198
Do., Senegal - —	5,691	124 -	- -	- -	- -	- -	5,815
Hides, untanned - —	- -	4,917 -	- -	- -	25	- -	4,942
Oil, palm - - —	- -	9,336 -	2,144	42,745	342,851	- -	397,076
Pepper - - lbs.	2	22,012 -	- -	- -	345	- -	22,359
Red or Guinea wood - tons	- -	- -	- -	6	- -	- -	6
Rice, not in the husk - cwts.	- -	80 -	- -	- -	- -	- -	80
Do., in the husk - bushels	- -	3,385 -	- -	- -	- -	- -	3,385
Teeth, elephants' and sea horse - - cwts.	- -	254 -	1	851	1,023	- -	2,129
Teak wood - - loads	- -	12,616 -	- -	- -	511	- -	13,127
Wax, bees' - - cwts.	- -	5,018 -	- -	72	40	- -	5,160

The total value of the exports of British produce and manufacture to the west coast of Africa, amounted in 1841, to 410,798*l.*; of which cotton goods made 183,622*l.*, hardware and cutlery, 19,378*l.*, brass and copper manufactures, 16,452*l.*, &c. The exports to Sierra Leone did not amount to ¼th part of the whole, being only 96,092*l.*

Expenses incurred on account of Sierra Leone. — The pecuniary expense occasioned by this colony, and our unsuccessful efforts to suppress the foreign slave trade, have been altogether enormous. Mr. Keith Douglas is reported to have stated, in his place in the House of Commons, in July, 1831, that "down to the year 1824, the *civil* expenses of Sierra Leone amounted to 2,268,000*l.*; and that the same expenses had amounted, from 1824 to 1830, to 1,082,000*l.* The naval expenses, from 1807 to 1824, had been 1,630,000*l.* The payments to Spain and Portugal, to induce them to relinquish the slave trade, amounted to 1,230,000*l.* The expenses on account of captured slaves were 533,092*l.* The expenses incurred on account of the mixed commission courts were 198,000*l.* Altogether, this establishment had cost the country nearly 8,000,000*l.*!"

The prodigality of this expenditure is unmatched, except by its uselessness. It is doubtful whether it has prevented a single African from being dragged into slavery, or conferred the smallest real advantage on Africa. The kings of Spain and Portugal turned their spurious humanity to good account. But there is now, we believe, an end of all attempts to bribe such monarchs to respect the treaties into which they have entered.

For further details with respect to Sierra Leone, and the trade of Western Africa, see the *Report of the Select Committee of the House of Commons, on the West Coast of Africa*, Sess. 1842.

SILK (Lat. *Sericum*, from *Seres*, the supposed ancient name of the Chinese), a fine glossy thread or filament spun by various species of caterpillars or larvæ of the *phalæna* genus. Of these, the *Phalæna atlas* produces the greatest quantity: but the *Phalæna bombyx* is that commonly employed for this purpose in Europe. The silkworm, in its caterpillar state, which may be considered as the first stage of its existence, after acquiring its full growth (about 3 inches in length), proceeds to enclose itself in an oval-shaped ball, or cocoon, which is formed by an exceedingly slender and long filament of fine yellow silk, emitted from the stomach of the insect preparatory to its assuming the shape of the chrysalis or moth. In this latter stage, after emancipating itself from its silken prison, it seeks its mate, which has undergone a similar transformation; and

in 2 or 3 days afterwards, the female having deposited her eggs (from 300 to 500 in number), both insects terminate their existence. According to Reaumur, the *phalæna* is not the only insect that affords this material, — several species of the *araneæ*, or spider, enclose their eggs in very fine silk.

Raw Silk is produced by the operation of winding off, at the same time, several of the balls or cocoons (which are immersed in hot water, to soften the natural gum on the filament) on a common reel, thereby forming one smooth even thread. When the skein is dry, it is taken from the reel and made up into hanks; but before it is fit for weaving, and in order to enable it to undergo the process of dyeing, without furring up or separating the fibres, it is converted into one of three forms; viz. *singles*, *tram*, or *organzine*.

Singles (a collective noun) is formed of *one* of the reeled threads, being twisted, in order to give it strength and firmness.

Tram is formed of 2 or more threads twisted together. In this state it is commonly used in weaving, as the *shoot* or *weft*.

Thrown Silk is formed of 2, 3, or more singles, according to the substance required, being twisted together in a *contrary* direction to that in which the singles of which it is composed are twisted. This process is termed organzining; and the silk so twisted, *organzine*. The art of throwing was originally confined to Italy, where it was kept a secret for a long period. Stow says it was known in this country since the 5th of Queen Elizabeth, "when it was gained from the strangers;" and in that year (1562), the silk throwsters of the metropolis were united into a fellowship. They were incorporated in the year 1629; but the art continued to be very imperfect in England until 1719. — (See *post.*)

1. *Historical Sketch of the Manufacture.* — The art of rearing silkworms, of unravelling the threads spun by them, and manufacturing the latter into articles of dress and ornament, seems to have been first practised by the Chinese. Virgil is the earliest of the Roman writers who has been supposed to allude to the production of silk in China, and the terms he employs show how little was then known at Rome of the real nature of the article: —

Velleraque ut foliis depectant tenuia Seres. — (*Georg.* lib. ii. lin. 121.)

But it may be doubted whether Virgil do not, in this line, refer to cotton rather than silk. Pliny, however, has distinctly described the formation of silk by the *bombyx*. — (*Hist. Nat.* lib. xi. c. 17.) It is uncertain when it first began to be introduced at Rome: but it was most probably in the age of Pompey and Julius Cæsar; the latter of whom displayed a profusion of silks in some of the magnificent theatrical spectacles with which he sought to conciliate and amuse the people. Owing principally, no doubt, to the great distance of China from Rome, and to the difficulties in the way of the intercourse with that country, which was carried on by land in caravans whose route lay through the Persian empire, and partly, perhaps, to the high price of silk in China, its cost, when it arrived at Rome, was very great; so much so, that a given weight of silk was sometimes sold for an equal weight of gold; at first it was only used by a few ladies eminent for their rank and opulence. In the beginning of the reign of Tiberius, a law was passed, *ne vestis serica viros fœdaret* — that no man should disgrace himself by wearing a silken garment. — (*Tacit. Annal.* lib. ii. c. 33.) But the profligate Heliogabalus despised this law, and was the first of the Roman emperors who wore a dress composed wholly of silk (*holosericum*). The example once set, the custom of wearing silk soon became general among the wealthy citizens of Rome, and throughout the provinces. According as the demand for the article increased, efforts were made to import larger quantities; and the price seems to have progressively declined from the reign of Aurelian. That this must have been the case, is obvious from the statement of Ammianus Marcellinus, that silk was in his time (anno 370), very generally worn, even by the lowest classes. *Sericum ad usum antehac nobilium, nunc etiam infimorum sine ullâ discretione proficiens.* — (Lib. xviii. c. 6.)

China continued to draw considerable sums from the Roman Empire in return for silk, now become indispensable to the Western World, till the 6th century. About the year 550, two Persian monks, who had long resided in China and made themselves acquainted with the mode of rearing the silkworm, encouraged by the gifts and promises of Justinian, succeeded in carrying the eggs of the insect to Constantinople. Under their direction they were hatched and fed; they lived and laboured in a foreign climate; a sufficient number of butterflies was saved to propagate the race, and mulberry trees were planted to afford nourishment to the rising generations. A new and important branch of industry was thus established in Europe. Experience and reflection gradually corrected the errors of a new attempt; and the Sogdoite ambassadors acknowledged in the succeeding reign, that the Romans were not inferior to the natives of China in the

education of the insects, and the manufacture of silk.—(*Gibbon, Decline and Fall*, vol. vii p. 99.)

Greece, particularly the Peloponnesus, was early distinguished by the rearing of silk-worms, and by the skill and success with which the inhabitants of Thebes, Corinth, and Argos carried on the manufacture. Until the 12th century, Greece continued to be the only European country in which these arts were practised: but the forces of Roger king of Sicily having, in 1147, sacked Corinth, Athens, and Thebes, carried off large numbers of the inhabitants to Palermo; who introduced the culture of the worm, and the manufacture of silk, into Sicily. From this island the arts spread into Italy; and Venice, Milan, Florence, Lucca, &c. were soon after distinguished for their success in raising silkworms, and for the extent and beauty of their manufactures of silk.—(*Gibbon*, vol. x. p. 110.; *Biographie Universelle*, art. *Roger II.*)

The silk manufacture was introduced into France in 1480; Louis XI. having invited workmen from Italy, who established themselves in Tours. The manufacture was not begun at Lyons till about 1520; when Francis I., having got possession of Milan, prevailed on some artisans of the latter city to establish themselves, under his protection, in the former. Nearly at the same period the rearing of silkworms began to be successfully prosecuted in Provence, and other provinces of the south of France. Henry IV. rewarded such of the early manufacturers as had supported and pursued the trade for 12 years, with patents of nobility.

Silk Manufacture of England.—The manufacture seems to have been introduced into England in the 15th century. Silk had, however, been used by persons of distinction two centuries previously. The manufacture does not appear to have made much progress till the age of Elizabeth; the tranquillity of whose long reign, and the influx of Flemings occasioned by the disturbances in the Low Countries, gave a powerful stimulus to the manufactures of England. The silk throwsters of the metropolis were united, as already observed, in a fellowship, in 1562; and were incorporated in 1629. Though retarded by the civil wars, the manufacture continued gradually to advance; and so flourishing had it become, that it is stated in a preamble to a statute passed in 1666 (13 & 14 Cha. 2. c. 15.), that there were at that time no fewer than 40,000 individuals engaged in the trade! And it is of importance to observe, that though the importation of French and other foreign silks was occasionally prohibited during the reigns of James I. and Charles I., the Protectorate, and the reign of Charles II., the prohibition was not strictly enforced; and, generally speaking, their importation was quite free.

A considerable stimulus, though not nearly so great as has been commonly supposed, was given to the English silk manufacture by the revocation of the edict of Nantes, in 1685. Louis XIV. drove, by that disgraceful measure, several hundreds of thousands of his most industrious subjects to seek an asylum in foreign countries; of whom it is supposed about 50,000 came to England. Such of these refugees as had been engaged in the silk manufacture established themselves in Spitalfields, where they introduced several new branches of the art. When the refugees fled to England, foreign silks were freely admitted; and it appears from the Custom-house returns, that from 600,000*l.* to 700,000*l.* worth were annually imported in the period from 1685 to 1692, being the very period during which the British silk manufacture made the most rapid advances. But the manufacture was not long permitted to continue on this footing. In 1692, the refugees, who seem to have been quite as conversant with the arts of monopoly as with those either of spinning or weaving, obtained a patent, giving them an exclusive right to manufacture lustrings and *à-la-modes*, the silks then in greatest demand. This, however, was not enough to satisfy them; for, in 1697, Parliament passed an act, in compliance with their solicitations, prohibiting the importation of all French and other European silk goods; and in 1701, the prohibition was extended to the silk goods of India and China.

These facts show the fallacy of the opinion, so generally entertained, that we owe the introduction and establishment of the silk manufacture to the prohibitive system. So far from this being the case, it is proved, by statements in numerous acts of parliament, and other authentic documents, that the silk manufacture had overcome all the difficulties incident to its first establishment, had been firmly rooted, and had become of great value and importance, long before it was subjected to the trammels of monopoly; that is, before the manufacturers were taught to trust more to fiscal regulations, and the exertions of custom-house officers, than to their skill and ingenuity, for the sale of their goods.

The year 1719 is an important epoch in the history of the British silk manufacture; a patent being then granted to Mr. (afterwards Sir Thomas) Lombe and his brother, for the exclusive property of the famous silk mill erected by them at Derby, for throwing silk, from models they had clandestinely obtained in Italy. At the expiration of the patent, Parliament refused the petition of Sir Thomas Lombe for its renewal; but granted him 14,000*l.* in consideration of the services he had rendered the country in

erecting a machine which, it was supposed, would very soon enable us to dispense wholly with the supplies of thrown silk we had previously been in the habit of importing from Italy: but instead of being of any advantage, it is most certainly true that the establishment of throwing mills in England has proved one of the most formidable obstacles to the extension of the manufacture amongst us. These mills could not have been constructed unless oppressive duties had been laid on thrown or organzine silk; and the circumstance of their having been erected, and a large amount of capital vested in them, was successfully urged, for more than a century, as a conclusive reason for continuing the high duties!

From this period down to 1824, the history of the silk manufacture presents little more than complaints, on the part of the manufacturers, of the importation of foreign silks; of impotent efforts on the part of parliament to exclude them; and of combinations and outrages on the part of the workmen. Among the multitude of acts that were passed in reference to this manufacture, from 1697 to the æra of Mr. Huskisson, we believe it would be exceedingly difficult to point out one that is bottomed on any thing like sound principle, or that was productive of any but mischievous consequences. The French writers estimate the average exportation of silks from France to England, during the period from 1688 to 1741, at about 12,500,000 francs, or 500,000*l.* a year! In 1763, attempts were made to check the prevalence of smuggling; and the silk mercers of the metropolis, to show their anxiety to forward the scheme, are said to have recalled their orders for foreign goods! It would seem, however, either that their patriotic ardour had very soon cooled, or they had been supplanted by others not quite so scrupulous; for it appears from a report of a committee of the privy council, appointed, in 1766, to inquire into the subject, that smuggling was then carried on to a greater extent than ever, and that 7,072 looms were out of employment. The same committee reported, that though the French were decidedly superior to us in some branches of the trade, we were quite equal, and even superior, to them in others; but instead of proposing, consistently with their report, to admit French silks on a reasonable duty, a measure which would have proved very advantageous to those branches of the manufacture in which we were superior, or nearly equal, to the French, without doing any material injury to the others, which were already in the most depressed condition, they recommended the continuance of the old system; substituting absolute prohibitions in the place of the prohibitory duties that formerly existed! Whatever immediate advantages the manufacturers might have reaped from this measure, the ultimate tendency of which could not fail of being most injurious, were effectually countervailed by the turbulent proceedings of the workmen, who succeeded, in 1773, in obtaining from the legislature an act which, by itself, was quite sufficient to have destroyed even a prosperous trade. This, which has been commonly called the Spitalfields Act, entitled the weavers of Middlesex to demand a fixed price for their labour, which should be settled by the magistrates; and while both masters and men were restricted from giving or receiving more or less than the fixed price, the manufacturers were liable in heavy penalties if they employed weavers out of the district! The monopoly which the manufacturers had hitherto enjoyed, though incomplete, had had sufficient influence to render inventions and discoveries of comparatively rare occurrence in the silk trade; but the Spitalfields Act extinguished every germ of improvement. Parliament, in its wisdom, having seen fit to enact that a manufacturer should be obliged to pay as much for work done by the best machinery as if it were done by hand, it would have been folly to have thought of attempting any thing new! It is not, however, to be denied that Macclesfied, Manchester, Norwich, Paisley, &c. are under obligations to this act. Had it extended to the whole kingdom, it would have totally extirpated the manufacture; but being confined to Middlesex, it gradually drove the most valuable branches from Spitalfields to places where the rate of wages was determined by the competition of the parties, on the principle of mutual interest and compromised advantage. After having done incalculable mischief, the act was repealed in 1824. Had it continued down to the present day, it would not have left employment in the metropolis for a single silk weaver.

But, as the effects of this act did not immediately manifest themselves, it was at first exceedingly popular. After 1785, however, the substitution of cottons in the place of silk gave a severe check to the manufacture, and the weavers then began to discover the real nature of the Spitalfields Act. Being interdicted from working at reduced wages, they were totally thrown out of employment; so that, in 1793, upwards of 4,000 Spitalfields looms were quite idle. In 1798, the trade began to revive; and continued to extend slowly till 1815 and 1816, when the Spitalfields weavers were again involved in sufferings far more extensive and severe than at any former period.

It appears from this brief sketch of the progress of the English silk trade, that from the year 1695, down to our own times, it has been exposed to the most appalling vicissitudes. The reason is obvious. The monopoly enjoyed by the manufacturers, and the Spitalfields Act, effectually put a stop to all improvement; so that the ma-

nufacture continued stationary in England, while on the Continent it was rapidly advancing. Whenever, therefore, the markets were, either from the miscalculation of the manufacturers, or a change of fashion, overloaded with silks, there were no means of disposing of the surplus profitably abroad, and the distress became extreme. Notwithstanding the unparalleled advances we had made in other departments of manufacturing industry, it was affirmed, in 1826, by the member for Coventry (Mr. Ellice), in his place in the House of Commons, "that there were in that city 9,700 looms; 7,500 of which were in the hands of operative weavers, who applied their manual labour, as well as their machinery, to the manufacture of ribands. These looms were, for the most part, of the *worst possible construction*; and it would scarcely be believed that the improved loom in France would, in a given time, produce 5 times as much riband as the common loom in England with the same manual labour! He could also state that there existed an improved manufacture in Germany, by which one man could make *forty-eight times as much velvet as could be made in an equal time by an English machine.* What chance was there that the English manufacturer could maintain such a competition?"

Perhaps these statements may have been somewhat exaggerated; but there can be no doubt of their substantial accuracy. Surely, however, no one believes that the inferiority of the machinery used by the English manufacturers was ascribable to any thing except that the protection they enjoyed had made them indifferent to improvements. No one believes that the French or Germans are superior to the English in the construction of machines; on the contrary, their inferiority is admitted by themselves, and by everybody else. That that spirit of invention, which has effected such astonishing results in the cotton manufacture, should have been so long wholly unknown in that of silk, is entirely to be ascribed to the fact of the former never having been the object of legislative protection. The cotton manufacturers were not bribed into the adoption of a routine system; they could not rest satisfied with mediocrity; but being compelled to put forth all their powers — to avail themselves of every resource of science and of art — they have, in a few years, raised the British cotton manufacture from a subordinate and trifling, to the very first place amongst the manufactures, not of this country only, but of the world!

Change, in 1826, *of the Monopoly System.* — At length, however, the impolicy of the system by which the silk manufacture had been so long depressed, became obvious to every intelligent individual. The principal manufacturers in and about London subscribed, in 1824, a petition to the House of Commons, in which they stated that "this important manufacture, though recently considerably extended, is still depressed below its natural level, by laws which prevent it from attaining that degree of prosperity which, under more favourable circumstances, it would acquire." Fortified by this authority, by the experience of 130 years, during which the prohibitive system had been allowed to paralyse the energies of the manufacturers, and by the sanction of parliamentary committees, Mr. Huskisson moved, on the 8th of March, 1824, that the prohibition of foreign silks should cease on the 5th of July, 1826, and that they should then be admitted for importation on payment of a duty of 30 per cent. *ad valorem.* On this occasion Mr. H. observed — "The monopoly had produced, what monopoly was always sure to produce, an indifference with regard to improvement. That useful zeal which gives life to industry, which fosters ingenuity, and which in manufactures occasions unceasing efforts to produce the article in the most economical form, had been comparatively extinguished. *To the prohibitive system it was to be ascribed, that in silk only, in the whole range of manufactures, we were left behind our neighbours!* We have here a proof of that chilling and benumbing effect which is sure to be produced when no genius is called into action, and when we are rendered indifferent to exertion by the indolent security derived from restrictive regulations. I have not the slightest doubt, that if the same system had been continued with respect to the cotton manufacture, it would have been at this moment as subordinate in amount to the woollen as it is junior in its introduction into the country." — (*Speeches*, vol. ii. p. 249.)

We have already alluded to the enormous duties imposed, in 1719, when Sir Thomas Lombe erected his throwing mill at Derby, on foreign organzine silk. These, though subsequently reduced, amounted, in 1824, to no less than 14*s.* 7½*d.* per lb. There was also, at the same time, a duty of 4*s.* per lb. on raw silk imported from Bengal, and of 5*s.* 7½*d.* per lb. on that imported from other places. Even had the manufacture been otherwise in a flourishing condition, such exorbitant duties on the raw material were enough to have destroyed it. Mr. Huskisson, therefore, proposed, by way of preparing the manufacturers for the approaching change of system, that the duty on foreign thrown silk should be immediately reduced to 7*s.* 6*d.* (it was further reduced to 5*s.* in 1826), and the duty on raw silk to 3*d.* per lb. These proposals were all agreed to; and considerable reductions were at the same time effected in the duties charged on most of the dye stuffs used in the manufacture.

It is to be regretted that Mr. Huskisson did not propose that the reduction of the

duties on raw and thrown silk, and the legalised importation of foreign silks, should be simultaneous and immediate. During the interval that was allowed our manufacturers to make preparations for the change, the French accumulated a large stock of goods to pour into our markets. To quiet the alarm occasioned by this circumstance, a singular device was fallen upon. The French had long been accustomed to manufacture their goods of a certain length: and, in the view of rendering their accumulated stock unfit for our markets, a law was passed in 1826, prohibiting the importation of any silks except such as were of entirely different lengths from those commonly manufactured by the French! No one can regret that this wretched trick, for it deserves no better name, entirely failed of its object. The French manufacturers immediately commenced, with redoubled zeal, the preparation of goods of the legitimate length: and the others, having become unsaleable at any thing like fair prices, were purchased up by the smugglers, and imported, almost entirely, into this country.

But no permanent injury arose from this circumstance; and, on the whole, the effect of the opening of the trade has been such as to justify all the anticipations which the advocates of the measure had formed of its success.

Effects of the Change of 1826. — We do not exaggerate, we only state the plain matter of fact, when we affirm that the silk manufacture has made a more rapid progress since the abolition of the prohibitive system in 1826, than it did during the preceding century. The former disparity in quality between goods of French and English make has been materially abated in most articles, while in a few the superiority is now on our side. Some of our readers will, probably, be not a little surprised to learn that the real or declared value of the silk goods of British manufacture exported to France, in 1842, amounted to 181,924*l.*

Most of the machines and processes known on the Continent have been introduced amongst us, and some of them have been materially improved. Nor, after what has taken place, can the least doubt remain in the mind of any one, that had full freedom been given to the silk manufacture 50 years ago, it would now have ranked among the most important and valuable businesses in the kingdom. Though a great step at the time, there can be no doubt that the change of system effected in 1826 was far from being sufficiently complete. The duty then imposed of 30 per cent. on the importation of foreign silks is, at least, more than double what it should be. The expenses of smuggling silk goods into England may, speaking generally, be estimated at about 12 per cent.; so that the high duty, instead of excluding foreign silks, acts as a bounty on their importation through clandestine channels; and occasions, by the temptation which it holds out to gambling adventures, a larger quantity to be imported than if the duty were more nearly proportioned to the expense of smuggling. The widespread corruption of the officers engaged in the collection of the silk duties in the port of London, should satisfy every one of the folly of attempting to levy duties which exceed the risk of loss by smuggling. Were the duties reduced to 12 or 15 per cent. *ad valorem*, the legitimate imports of foreign silk goods would be considerably increased; but their clandestine importation would be more than proportionally diminished; and the apparent protection given to the manufacture being reduced, a new stimulus would be applied to industry and invention. Were such a system adopted, we have little doubt that, in no very long time, perhaps not more than 5 or 6 years, our superiority over France in some important departments of the silk manufacture would be little less decided than in that of cotton.

"I maintain," said Mr. Poulett Thomson (afterwards Lord Sydenham), in his speech on the state of the silk trade (14th of April, 1829), "without fear of contradiction, that the very essence of commercial and manufacturing industry is freedom from legislative interference and legislative protection. Attempt to assist its course by legislative enactments, by fostering care, you arrest its progress, you destroy its vigour. Unbind the shackles in which your unwise tenderness has confined it — permit it to take unrestrained its own course — expose it to the wholesome breeze of competition, — you give it new life, you restore its former vigour. Industry has been well likened to the hardy Alpine plant; self-sown on the mountain side, exposed to the inclemency of the season, it gathers strength in its struggles for existence — it shoots forth in vigour and in beauty. Transplanted to the rich soil of the parterre, tended by the fostering hand of the gardener, nursed in the artificial atmosphere of the forcing-glass, it grows sickly and enervated, its shoots are vigourless, its flowers are inodorous. In one single word lies the soul of industry — competition. The answer of the statesman and the economist to his sovereign inquiring what he could do to assist the industry of his kingdom was, 'Let it take its own way.' Such is my prayer. Relieve us from the chains in which your indiscreet tenderness has shackled us; remove your oppressive protection; give us the fair field we ask; and we demand no more. The talent, the genius, the enterprise, the capital, the industry of this great people will do the rest; and England will not only retain her present position, but she will take a yet more forward place in the race of competition for wealth

and improvement which, by the nature of things, she is destined to run amongst the nations of the world. Place us in that condition, not by any violent change, but by slow and easy transition. Here we shall find security for our enterprise, and reward for our labours.

" ' Hic patet ingeniis campus; certusque merenti '
Stat favor; ornatur propriis industria donis.' "

It was not, however, to be supposed, that all departments of the silk manufacture would be equally benefited by the change of system from prohibition to duties. — *Non omnia possumus.* The probability is, that the trade, were it placed on a proper footing, would be divided between the English and French. In point of substantial excellence, the plain silk goods manufactured in England are superior to those of France; and the difference in favour of the latter in point of *finish* has become less perceptible; while in all mixed manufactures, of silk and wool, silk and cotton, silk and linen, &c., our ascendancy is admitted by the French themselves. On the other hand, the ribands, figured gauzes, and light fancy goods, manufactured in France, are superior to those of this country. Even in this department we have made a very great progress; and fancy goods are now produced at Spitalfields, Coventry, and other places, contrasting most advantageously, in point of taste and beauty, with those produced previously to the introduction of the new system. Still, however, we are not sanguine in our expectations of our countrymen being able to maintain a successful competition with our neighbours in the manufacturing of this class of articles. The greater attention paid to the art of designing in Lyons, the consequent better tastes of the artists, and the superior brightness and lustre of their colours, give them advantages with which it will be very difficult to contend.

But supposing that the trade is partitioned between the two countries in the way now stated, it is easy to see that the best share will belong to us, and that that share will be incomparably more valuable than the whole manufacture formerly was. The proofs of the accuracy of this statement are at hand. Notwithstanding the decline of the trade at Spitalfields and a few other places, the manufacture, taken as a whole, has greatly increased. During 1821, 1822, and 1823, when the restrictive system was in its vigour, the entries for consumption, of all sorts of raw and thrown silk, amounted at an average to 2,399,000 lbs. a year. But, despite the sinister predictions indulged in with respect to the ruin of the manufacture, the entries amounted, at an average of 1839, 1840, and 1841, to 4,835,898 lbs.; being an increase of more than 100 per cent. upon the quantity entered during the monopoly!

The manufacture of silk in France has, we are glad to say (for we have nothing in common with those who grudge or envy the prosperity of others), been materially improved of late years, and a large increase has taken place in the value of the silks exported, which amounted, in 1841, to about 162,000,000 fr., or about 6,500,000*l.* But it is satisfactory to know that we have been able to make head against this formidable competitor, and that, while the value of the exports of our silk goods amounted, in 1823, when the monopoly system was in full vigour, to only 351,409, it amounted, in 1836, to 917,822*l.*, being an increase in the interval of more than 2½ times! The exports have not, it is true, been quite so large since; but this diminution is wholly owing to the distress that has prevailed in the interim in the U. States and the other leading markets for our silks: in fact, we undersell the French in some of the heavier and more important species of goods in every market equally accessible to both parties. The value of our exports of silk goods to the U. States amounted, in 1839, to 410,093*l.*; and does any one suppose that the Americans would have bought so largely of us, or that they would have bought anything at all, had the French or any other party been able to supply them on lower terms?

What has now been stated renders it obvious, that though the manufacturers of fine and fancy goods might be obliged, were the silk trade placed on a more liberal and solid foundation, to change their employment, a new, and at the same time a more extensive, secure, and fruitful field would be opened for their exertions. We lament the hardships incident to the transition even from one department of the same business to another, but the suffering thence arising speedily disappears, and when the change has been effected, the manufacturers enter with fresh vigour on a new career of prosperity.

It is to be regretted, that it is not possible either to abandon a routine system, or to introduce new and improved methods of production, without injury to individuals. But because such is the fact — because the bridge cannot be built without displacing watermen, nor the plough introduced without superseding the spade, nor wine brought from abroad without diminishing the demand for ale and beer — is that any reason for proscribing inventions, and denying ourselves gratifications within our reach? To maintain the affirmative, would be evidently absurd, — it would be equivalent to maintaining that the interests of society are best promoted by perpetuating poverty, ignorance, and barbarism! The injury occasioned by the adoption of an improved method of produc-

tion, the reduction of a duty, or the opening of new markets whence cheaper supplies of any article may be obtained, is temporary only, and affects but a very small portion of the community; while the advantage is permanent, and benefits every individual, even those whom it may, in the first instance, force to resort to other businesses.

Those unacquainted with the history of the silk trade, who may have looked into the pamphlets and speeches of those opposed to the alterations in 1825, and to those that are still required, will probably be disposed to think that, though more limited in point of numbers, the condition of the workmen engaged in the trade was better previously to 1825 than it has been since. But those who have looked, however cursorily, into the history of the trade, must know that such is not the fact; and that, speaking generally, the situation of those engaged in it has been materially improved since 1825. We have already adverted to the state of the trade in 1793 and 1816. At the last mentioned period, 7 years before any relaxation of the monopoly had been so much as thought of, the distress in the silk trade was infinitely more severe than it has ever been since the introduction of the new system. In proof of this, we may mention that, at a public meeting held for the relief of the Spitalfields weavers, at the Mansion-house, on the 26th of November, 1816, the secretary stated, that *two thirds* of them were without employment, and without the means of support; "that some had deserted their houses in despair, unable to endure the sight of their starving families; and many pined under languishing diseases brought on by the want of food and clothing." And Sir Fowell Buxton stated, at the same meeting, that the distress among the silk manufacturers was so intense, that "*it partook of the nature of a pestilence*, which spreads its contagion around, and devastates an entire district." Such was the state of the workmen under that monopoly system that has been the worthless theme of so much eulogy. But such, we are glad to say, is not their state at present. The trade, being now diverted to a considerable extent into those branches in which we have a superiority, is comparatively secure against revulsions: it would, indeed, be an absurdity to imagine, that measures that have about doubled the manufacture, should have reduced the rate of wages, or been otherwise than advantageous to the workmen.

We have already noticed the smuggling of foreign silks carried on in the early part and towards the middle of last century. The evil was not afterwards abated. The vigilance of the custom-house officer was no match for the ingenuity of the smuggler; and at the very moment when the most strenuous efforts were made to exclude them, the silks of France and Hindostan were openly displayed in the drawing-rooms of St. James's, and in the House of Commons, in mockery of the impotent legislation which sought to exclude them. "I have lately," said Mr. Huskisson, in an able speech in vindication of his policy as to the silk trade, "taken some pains to ascertain the quantity of smuggled silks that has been seized inland throughout the kingdom during the last 10 years; and I find that the whole does not exceed 5,000*l.* a year. I have endeavoured, on the other hand, to get an account of the quantity of silk goods actually smuggled into this country. Any estimate of this quantity must be very vague; but I have been given to understand that the value of such goods as are regularly entered at the custom-houses of France, for exportation to this country, is from 100,000*l.* to 150,000*l.* a year; and this, of course, is exclusive of the *far greater supply* which is poured in throughout all the channels of smuggling, without being subjected to any entry. In fact, to such an extent is this illicit trade carried, that there is scarcely a haberdasher's shop in the smallest village of the United Kindom, in which prohibited silks are not sold; and that in the face of day, and to a very considerable extent.

"The honourable member for Coventry (Mr. Ellice) has mentioned the silk goods from India as those against which anything but prohibition would prove an unavailing protection. Now, in my opinion, it is scarcely possible to conceive a stronger case than those very silks furnish against the honourable member's own argument. I believe it is universally known that a large quantity of Bandana handkerchiefs are sold every year, for exportation, by the East India Company. But does any gentleman suppose that these Bandanas are sent to the Continent for the purpose of remaining there? No such thing! They are sold at the Company's sales, to the number of about 800,000 or 1,000,000 a year, at about 4*s.* each; they are immediately shipped off for Hamburg, Antwerp, Rotterdam, Ostend, or Guernsey, and from thence they nearly all illicitly find their way back to this country.

"Mark, then, the effect of this beautiful system. — These Bandanas, which had previously been sold for exportation at 4*s.*, are finally distributed in retail to the people of England at about 8*s.* each: and the result of this prohibition is to levy upon the consumer a tax, and to give those who live by evading your law a bounty of 4*s.* upon each handkerchief sold in this country!" — (*Speeches*, vol. ii. p. 510.)

This, no doubt, is all very true and very striking. But had Mr. Huskisson been in the House of Commons in 1844, he might have used nearly the same language. He scotched, but did not kill, the snake. The 30 per cent. *ad valorem* duty which he esta-

blished is but little less productive of smuggling than the prohibition which he repealed; and has given rise within the port of London, and, indeed, within the very walls of the Custom-house, to a system of fraud ruinous alike to the interests of the revenue and of the honest dealers. And hence it is that a duty of 12 or 15 per cent., or a duty which should not materially exceed the cost of smuggling, would really afford the manufacturer a more efficient protection than he derives from the existing duty, at the same time that it would place all classes of dealers on the same footing; whereas, the advantage is at present most decidedly on the side of those who engage in fraudulent schemes.

Regulations as to the Importation of Silks. — Silk manufactures are not to be imported in any vessel under 70 tons burden, except by licence from the commissioners of the customs to vessels belonging to Dover, to import such manufactures direct from Calais, though such vessels may not exceed 60 tons burden. Silk goods, the manufacture of Europe, not to be imported except into the port of London or the port of Dublin direct from Bordeaux, or the port of Dover direct from Calais.—(3 & 4 *Will.* 4. c. 52. § 58.; *ante*, p. 663.)

When the shoot or the warp only is of silk, the article is to be considered as composed of *not more* than one half part of silk, and subject to the *ad valorem* duty of 30 per cent.; but if the shoot or the warp be entirely of silk, and a portion of the other be of silk also, the article is to be considered to be composed of more than one half part of silk, and subject to the rated duties at per lb., or to the *ad valorem* duties, at the option of the officers. — (*Min. Com. Cus.* 14th of August, 1829.) But in all cases where the duties charged by weight upon mixed articles would manifestly exceed 30 per cent, by reason of the weight of the wool, or other ingredient thereof besides silk, the article is to be admitted to entry at value. — (*Min. Com. Cus.* 19th of December, 1831.)

For the regulations as to the smuggling of silks, see SMUGGLING.

I. Account, illustrative of the Progress of the Silk Manufacture, showing the Quantities of Raw, Waste, and Thrown Silk imported at different Periods. — (*Report of* 1832 *on Silk Trade*, p. 10., and later *Parl. Papers.*)

Average Imports.	Raw	Waste.	Thrown.	Total.
	Lbs.		*Lbs.*	*Lbs.*
1765, 1766, 1767, being the commencement of the absolute prohibition -	352,000		363,000	715,000
1785, 1786, 1787 - - - - - - - - -	554,000		337,000	891,000
1801 to 1812 - - - - - - - - -	760,000		350,000	1,110,000
1815, 1816, 1817, being 50 years after prohibition, and the first 3 years of peace -	1,095,000	27,000	293,000	1,415,000
1821, 1822, 1823, being the years immediately previous to the abolition of the prohibition - - - - - - - - -	1,970,000	74,000	355,000	2,399,000
1831, 1832, 1833 - - - - - - - -	3,137,45	688,369	345,270	4,170,91
1839, 1840, 1841 - - - - - - - -	3,518,076	1,055,737	264,085	4,555,

II. Account of the Quantities of Raw, Waste, and Thrown Silk *entered for Consumption* in each Year from 1814, with the total Amount of Duty received on the same.—(*Parl. Paper* No. 296. Sess. 1842.)

				Total of all Sorts.	Duty received.		Rates of Duty.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	£	*s.*	
1814	1,504,235	29,234	586,505	2,119,974	769,202	16	*Rate of Duty, Raw.* — From India 4*s.* per lb., from other places 5*s.* 6*d.* per lb., to the 25th of March, 1824; 5*d.* per lb. from all places, to the 5th of July, 1826; 1*d.* per lb. from all places, from the 5th of July, 1826.
1815	1,069,596	27,971	377,822	1,475,389	516,027	12	
1816	873,414	4,162	210,758	1,088,334	345,696	7	
1817	1,515,051	49,055	294,553	1,858,659	539,850	1	
1818	1,444,881	86,910	391,166	1,922,987	651,431	17	
1819	1,446,097	71,331	331,125	1,848,553	591,514	12	
1820	1,682,709	91,883	309,953	2,027,653	614,478	15	*Rate of Duty, Waste.* — From India, 3*s.* 9*d.* per lb., from other places 4*s.* per lb., to the 25th of March, 1824; 3*d.* per lb. from all places, to the 5th of July, 1826; 1*d.* per lb. to the 5th of July, 1829; 1*s.* per cwt. from all places, after the 5th of July, 1829.
1821	1,864,513	105,047	360,248	2,329,808	739,542	7	
1822	1,993,764	64,921	382,878	2,441,563	772,451	19	
1823	2,051,895	52,362	365,864	2,468,121	768,650	18	
1824	3,414,520	133,457	463,271	4,011 048	306,981	7	
1825	2,848,506	195,910	559,642	3,604,058	236,450	12	
1826	1,964,188	Considered as raw silk in these years.	289,325	2,253,513	84,187	0	*Rate of Duty, Thrown.* — On all kinds, dyed, 2*l.* 5*s.* 6*d.*, and undyed, 14*s.* 8*d.* per lb. to the 25th of March, 1824; dyed and undyed, 7*s.* 6*d.* per lb., to the 5th of November, 1825; then 5*s.* per lb. on undyed, to the 5th of July, 1826; thereafter, 6*s.* 8*d.* on organzine and crape, and 4*s.* on tram and singles dyed, and 3*s.* on tram and singles not dyed, to the 5th of July, 1829; and then 5*s.* 2*d.* on organzine and crape, and 3*s.* on tram and singles dyed; 3*s.* 6*d.* on organzine and crapes, 2*s.* on tram, and 1*s.* 6*d.* on singles not dyed.
1827	3,759,138		454,015	4,213,153	128,509	4	
1828	4,169,550		386,258	4,547,808	111,908	0	
1829	2,719,962		172,939	2,892,901	45,247	3	
1830	3,771,969	485,013	436,535	4,693,517	89,544	0	
1831	3,055,832	762,258	514,240	4,312,330	96,065	14	
1832	3,401,445	660,696	329,932	4,392,073	66,509	19	
1833	3,838,795	654,381	268,367	4,761,543	59,679	3	
1834	3,346,750	1,009,932	165,669	4,522,351	41,522	14	
1835	4,151,008	1,382,872	254,578	5,788,458	48,603	14	
1836	4,372,501	1,599,721	294,038	6,266,160	66,853	3	
1837	3,730,427	875,781	213,368	4,819,576	50,685	16	
1838	3,683,739	960,147	243,570	4,887,456	54,229	18	
1839	3,483,563	1,042,655	229,940	4,755,958	51,027	17	
1840	3,860,980	745,243	288,981	4,895,204	65,001	19	
1841	3,209,885	1,379,514	267,333	4,856,732	59,890	2	

Sources of the Supply of Silk. — The following Table shows the sources whence we directly derive our supplies of raw and of foreign thrown silk: —

III. Account of the Quantities of Raw and Waste Silk imported into the U. Kingdom during each of the 10 Years ending with 1841, specifying the Countries from which they were imported and the Quantities brought from each.

	1832.	1833.	1834.	1835.	1836.			1839.	1840.	1841.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Holland - -	126,142	221,921	73,021	211,998	93,499	19,888	59,397	81,119	804,	166,977
France - -	1,006,433	1,316,947	1,233,104	1,826,747	2,018,611	949,675	1,615,876	1,587,655	1,584,980	1,545,188
Italy & Italian Is.	561,156	578,156	405,214	591,471	467,293	291,291	379,294	618,562	500,834	735,130
Turkey - -	457,866	368,669	419,368	677,561	678,751	383,855	478,775	731,905	725,189	732,646
E. Ind. Co.'s ter. and Ceylon -	1,652,858	989,618	1,798,627	1,105,297	1,450,222	1,298,037	1,151,399	1,587,944	4,108,465	1,175,308
China - -	28,105	22,181	582,854	737,489	1,277,251	1,760,213	702,677	360,500	247,755	277,093
All other countries	212,171	137,758	144,285	79,081	75,745	56,806	16,936	21,060	88,259	82,433
Total	4,047,731	3,434,560	4,656,463	5,159,444	6,061,370	5,089,762	4,404,354	4,788,738	7,459,542	4,734,758

IV. Account of the declared or real Values of the Silk Manufactures exported from the U. Kingdom during each of the 10 Years ending with 1841, specifying the Countries to which they were sent, and the Value of those sent to each.

Germany - - -					11,374	11,937	15,980	17,155	18,270	22,586
Holland - - -	23,782	7,367	21,713	66,000	24,305	35,686	23,154	14,306	9,487	6,446
Belgium - - -		27,329	18,240		14,245	13,899	15,586	10,316	12,273	16,304
France - - -	75,187	76,928	60,546		48,160	43,14	5,598	44,628	48,907	117,353
Spain and the Balearic Islands	14,776	17,159	7,861	4,755	3,116	1,450	1,482	1,185	6,627	8,890
Gibraltar - - -	10,906	10,962	6,994	5,638	9,854	4,256	9,147	8,049	7,341	5,673
Italy and the Italian Islands	9,108	9,716	5,635	1,155	2,663	2,129	3,124	4,100	5,969	7,255
Cape of Good Hope -	11,080	8,292	10,935	8,931	17,633	22,707		9,452	15,658	11,881
Mauritius - -	2,658	1,613	2,590	2,473	2,216	3,303		3,338	6,144	6,736
E. India Comp.'s territ. and Ceylon -	*17,383	*20,337	7,835	8,079	15,644	9,930	14,954	17,413	16,353	17,541
British settlements in Australia -	12,999	22,860	31,035	27,935	27,386	42,097	33,459	46,794	57,845	30,377
North American colonies -	80,685	94,304	60,963	85,179	90,106	76,598	74,561	136,750	125,880	93,162
West Indies - -	22,990	35,019	33,124	31,242	32,884	36,916	36,548	35,467	36,258	23,155
Cuba and other foreign West Indies -	14,437	10,565	13,497	8,561	7,843	15,380	15,566	9,131	15,902	12,021
United States of America -	92,235	231,278	100,306	537,040	524,301	109,629	348,506	410,093	274,179	306,757
Mexico - - -	2,431	5,810	5,006	5,158	6,132	11,801	8,999	14,920	12,442	20,430
Brazil - - -	12,172	27,783	27,600	20,137	33,102	12,031	12,869	23,117	23,515	29,217
States of the Rio de la Plata -	24,786	11,735	19,274	18,307	9,514	13,093	11,172	16,669	31,024	26,589
Chili - - -	23,681	23,545	20,633	3,887	8,093	10,113	6,246	44,733	30,681	7,521
Peru - - -	12,070	22,588	16,989	8,758	9,787	10,074	10,199	15,146	25,558	10,485
All other countries -	33,061	34,426	41,566	44,901	19,524	17,519	17,088	15,166	14,643	11,002
Total	529,691	737,404	637,198	973,786	917,822	503,673	777,280	900,818	812,648	788,894

* In these two sums are included the exports to China in 1832 and 1833.

The silk exported from Canton consists of two leading varieties, known in commerce by the names of Canton and Nanking. The first, which is raised principally in the province of Canton, is divided into 5 sorts. At an average, the picul of Canton silk brought at Canton, in 1831-32, 158 dollars. The Nanking silk, produced in the province of Kiangnan, is divided into 2 sorts, known in commerce by the names of Taatlee and Taysaam. It is very superior to the other, and usually fetches more than double its price.

East India native silk comes wholly from Bengal. About the year 1760, the East India Company introduced the Italian mode of reeling silk, which was productive of a very great improvement in the quality of the article; but we are not aware that any subsequent improvement has been effected. The silk goods brought from India are not only inferior, in point of quality, to those of Europe, but also to those of China. The quantity imported of late years is specified in the Table No. III.

Turkey silk wholly consisted some years back of what is termed long reel and short reel brutia, a rather coarse description, suited to few buyers, and chiefly used in the ribbon trade of Coventry; but of late it has been imported of a very far superior texture and quality, coming successfully into competition with Italian and China silk. The qualities now known as brutias may be classed as under, and the following are the present (March, 1843) nominal quotations with a dull market: —

	s.	d.	s.	d.	
Long reel brutia - - - - - -	9	6	10	6	per lb.
Short reel brutia - - - - - -	11	0	11	6	—
Long reel Mestup (being a finer thread than common brutia)	11	6	12	6	—
Short reel Mestup - - - - -	12	0	12	6	—
Selè (a finer sort, generally in loose skeins) - -	13	6	15	6	—
Demirdask (a superior kind) - - - -	16	6	18	6	—

At Brussa, the seat of the silk trade in Asia Minor, it is now sold by the oke of 400 drams, and not by the teffee of 610 drams, as formerly: the teffee is, however, still used at Constantinople. The plains of Brussa and the adjacent villages produce different qualities, varying considerably in size, colour, and quality. The village of Demirdask produces the finest, owing to the care taken by the natives in selecting the best cocoons, and attending carefully to the evenness of the thread throughout the process of reeling; consequently this description commands a high price, and is approved by our throwsters.

The water of this place is considered favourable to the brightness and glossiness of the silk, by which it may be distinguished from that of Brussa. The silk at Brussa is taken by the country people in small parcels to the bechestar or customs, where it pays duty. The proprietor, with a broker, then takes it to the silk bazaar, where it is handed round to the different stands and sold to the highest bidder, resembling, in this respect, the mode of selling the ores in Cornwall to the different smelters.

Thus a person buying okes at a time, assorts as well as he can the different qualities for packing. It is generally bought by speculators for the Constantinople market, and is forwarded to Ghemlek on camels for shipment per steamers to Constantinople, where it finds its way to the Mizam or some broker's room, where it is sold to the different merchants. The finest longs are mostly bought for the French and Russian markets, generally the latter. The long reels are going out of use in this country, as the more modern machinery is not adapted to its use.

The prices of silk at Brussa in September, 1841, were: —

1st quality Demirdask -	$235 to $240	per oke of 400 drams.		
2d quality ditto - -	210 — 215	—	—	
1st Selè - - -	190 — 193	—	—	
2d Selè - - -	180 — 185	—	—	
Long Mestups - -	165			
Long Brussas - -	150			
Short Brussas - -	170 — 175	—	—	

Cost and Charges on Silk bought at Brussa and shipped at Constantinople for London.

1 case 46 teffees = 70 okes 60 drams, at $216½ -		$15,167
Packing charges and commission - - -		428
		$15,595
Carriage from Brussa to Constantinople		
Loss on gold sent to Brussa - -	$28½ per oke,	
Bills, lading, and petty expenses -	or ca. 13½	
Inward duty, 70 okes 60 drams, at $18, and 7 0/0 thereon - -	per cent.	2,115
		$17,710
Export duty, 70 okes 60 drams, at $6, and 7 0/0 thereon - - -		
Carriage of money, ½ per cent. -		
Constantinople commission, 3 0/0		531
		$18,241

Ex. 11s. 1851. — 46 at 4½, 191 lbs. = 16s. 6d.
Discount and charges in London 2 3
18s. 3d.

By far the greater part of the raw and thrown silk that comes to us from France is not the growth of that country, but of Italy; being principally conveyed by the canal of Languedoc and the Garonne to Bordeaux, whence it is shipped for England. So much is this the case, that it appears from the official accounts published by the French government, that while the aggregate quantity of the French and foreign raw and thrown silk exported from France in 1841 amounted to 1,074,144 kilog., the portion which was of French origin amounted to only 12,294 kilog.! — (*Administration des Douanes for* 1841, p. 241.)

SILVER (Ger. *Silber*; Du. *Zilver*; Da. *Solv*; Sw. *Silfver*; Fr. *Argent*; It. *Argento*; Sp. *Plata*; Port. *Prata*; Rus. *Serebro*; Pol. *Srebro*; Lat. *Argentum*; Gr. ἄργυρος; Arab. *Fazzeh*). a metal of a fine white colour, without either taste or smell; being in point of brilliancy inferior to none of the metallic bodies, if we except polished

steel. It is softer than copper, but harder than gold. When melted its specific gravity is 10·474; when hammered, 10·51. In malleability, it is inferior to none of the metals, if we except gold. It may be beaten out into leaves only $\frac{1}{100000}$ of an inch thick. Its ductility is equally remarkable: it may be drawn out into wire much finer than a human hair; so fine, indeed, that a single grain of silver may be extended about 400 feet in length. Its tenacity is such, that a wire of silver 0·078 inch in diameter is capable of supporting a weight 187·13 lbs. avoirdupois without breaking. Silver is easily alloyed with copper by fusion. The compound is harder and more sonorous than silver, and retains its white colour even when the proportion of copper exceeds $\frac{1}{2}$. The hardness is at a maximum when the copper amounts to *one fifth* of the silver. The standard or sterling silver of Britain, of which coin is made, is a compound of $12\frac{1}{2}$ parts silver and 1 copper. Its specific gravity is 10·2. The specific gravity of Paris standard silver, composed of 137 parts silver and 7 copper, is 10·175. The French silver coin during the old government was not nearly so fine, being composed of 261 parts silver and 27 copper, or $9\frac{3}{4}$ parts silver to 1 part copper. The Austrian silver coin contains $\frac{13}{283}$ of copper. The silver coin of the ancients was nearly pure, and appears not to have been mixed with alloy. — (*Thomson's Chemistry.*)

The most productive silver mines are in America, particularly in Mexico and Peru. There are also silver mines in Hungary, Saxony, and other parts of Europe, and in Asiatic Russia. — (See PRECIOUS METALS.)

Besides being used as a coin, or money, silver is extensively employed in the arts. The value of the silver plate annually manufactured is very considerable. Large quantities are also used in plating. — (See PLATE.) For an account of the quantity of silver coined at the British mint, since 1790, see *antè*, p. 308.

SINGAPORE, an island and British settlement at the eastern extremity of the Straits of Malacca, the town being in lat. 1° 17′ 22″ N., lon. 103° 51′ 45″ E.

The island is of an elliptical form, about 27 miles in its greatest length and 11 in breadth, containing an estimated area of 275 square miles. But the whole British settlement embraces a circumference of above 120 miles; in which is included about 50 desert islets, and the seas and straits within 10 miles of the coast of the principal island. The latter is separated from the main land by a strait of the same name, of small breadth throughout, and scarcely, indeed, $\frac{1}{4}$ of a mile wide in its narrowest part, which, in the early period of European navigation, was the thoroughfare between India and China. But the grand commercial highway between the eastern and western portions of maritime Asia now passes along the south side of the island, on which the town is built, between it and a chain of desert islands about 9 miles distant; the safest and most convenient channel being so near to the island that ships in passing and repassing come close to the roads. The town is wholly indebted for its rapid rise and growing importance to its position on this strait. This has rendered it not merely a convenient *entrepôt* for the trade between the Western world and India on the one hand, and China on the other; but also for that between the former and the Eastern Archipelago, the Philippines, &c. It is situated on a river, or rather salt creek, navigable by lighters about $\frac{3}{4}$ of a mile from the sea. Ships lie in the roads, or open harbour, at the distance of from 1 to 2 miles from town, according to their draught of water. The assistance of a number of convenient lighters, which are always in readiness, enables them to load or unload, with scarcely any interruption, throughout the year. The creek is accessible to the lighters, and the goods are taken in and discharged at convenient quays, at the doors of the principal warehouses. — (See *Chart* of the *Island of Singapore* in the *Mercator's Chart* in this work.)

The climate of Singapore, though hot, is healthy. Fahrenheit's thermometer ranges from 71° to 89°. Being only about 80 miles from the equator, there is, of course, very little variety in the seasons. There is neither summer nor winter; and even the periodical rains are short, and not very well marked — moderate showers of rain falling for about 150 days each year. The settlement of Singapore was formed in February, 1819, and its sovereignty and property, in their present extent, confirmed to the British government in 1825, by a convention with the king of the Netherlands, and a treaty with the Malay princes to whom it belonged. Previously to its being taken possession of by the English, it had been inhabited for about 8 years by a colony of Malays, half fishermen and half pirates. When the first census was taken, in January, 1824, the population was found to amount to 10,683. In 1828, it had increased to 15,834; in both cases, exclusive of troops, camp followers, Indian convicts, and a floating population of about 3,000. In 1837 it amounted to 29,984 of whom 13,749 were Chinese settlers and 9,132 Malays, the Europeans being but few in number; and at present (1843) the population exceeds 45,000, of whom about a half are Chinese.

The principal merchants and agents are Englishmen, of whom also there are a few shopkeepers, auctioneers, &c. There are also some respectable Chinese merchants; and the bulk of the shopkeepers, with the most valuable part of the labouring population, consist of Chinese. About 5,000 adult males

arrive annually from China by the junks; about 1,000 of whom remain at Singapore, the rest dispersing themselves among the neighbouring Dutch, English, and Malay settlements. The boatmen are chiefly natives of the Coromandel coast; and the Malays employ themselves as fishermen, in cutting timber, and in supplying the settlement with the rude produce of the neighbourhood. There are good daily markets, open at all hours, and well supplied with vegetables, fruits, grain, fish, pork, and green turtle; the latter the cheapest animal food that can be procured. There are no export or import duties, nor anchorage, harbour, light-house dues, or any fees; but a register is kept of all exports and imports. Reports must be made to the master attendant by the masters of vessels, and invoices delivered to the superintendent of imports and exports.

Though there are neither duties on imports or exports, nor on the ships frequenting the port, the revenue of Singapore amounted, in 1842-43, to 509,000 rupees, while its expenditure, civil and military, amounted to only 494,029 do.

Currency, Weights, Language, &c. — The currency and weights are simple and convenient. Accounts are kept in Spanish dollars, divided into 100 parts, represented either by Dutch doits, or by English copper coins of the same value. The weights in use (and almost every thing is sold by weight, as in China) are the Chinese picul of 100 catties, or 133⅓ lbs. avoirdupois. Rice (the produce of Siam and the Archipelago) and salt are sold by the coyan of 40 piculs. Gold dust is sold by a Malay weight called the bungkal, which weighs 2 Spanish dollars, or 832 grains Troy. Bengal rice, wheat, and pulses of the same country, are sold by the bag, containing 2 Bengal maunds, or 164¼ lbs. avoirdupois. Piece goods, &c. are sold by the corge or score. English weights and measures are frequently used in reference to European commodities. The mode of transacting business among the European merchants is simple and efficient. Instead of trusting their affairs to native agents, as in other parts of India, they transact them in person, with the occasional assistance of a Chinese creole as an interpreter and broker. The European merchants transact business on their own account; but a great deal of their employment consists in acting as agents for houses in London, Liverpool, Glasgow, Amsterdam, Antwerp, Calcutta, Bombay, Madras, Canton, and Batavia. They are also agents for various insurance offices at Calcutta and elsewhere, and policies of insurance to any extent may be effected without difficulty. The language of commercial intercourse, where any of the natives of the East are concerned, is universally Malay, — a simple and easy dialect, of which all the resident merchants have a sufficient acquaintance to enable them to transact ordinary business. The *Singapore Free Press*, published once a week, contains a price current, an account of the arrivals and departure of shipping, and an official detail of the exports and imports of the preceding week. The administration of justice is entirely English, there being a recorder's court for the settlement, in common with the two neighbouring ones of Penang and Malacca.

Commodities and Prices. — Singapore is chiefly an *entrepôt*, having, with the exception of pearl sago manufactured on the spot from the raw material imported from the north coast of Sumatra, implements of agriculture, and some others fabricated by the Chinese from European iron, with gambier and catechu grown and manufactured on the island, few commodities of its own for exportation. The grain produced on the island not being sufficient for the consumption of the inhabitants for a week, their supplies of rice, wheat, &c. are mostly all imported principally from Java and Calcutta.

Trade of Singapore. — The following Table has been compiled from the official statements published in the *Singapore Free Press* of the 17th August, 1843.

Abstract Statement of the Trade of Singapore with the undermentioned Places, in the Years 1841–42, and 1842–43.

Countries.	Imports.		Exports.	
	1841-42.	1842-43.	1841-42.	1842-43.
	Spanish Dollars.	*Spanish Dollars.*	*Spanish Dollars.*	*Spanish Dolla*
Great Britain	2,681,324	2,847,577	1,750,140	1,405,400
Foreign Europe	243,971	353,092	141,137	280,317
United States	56,774	75,782	43,096	89,244
Mauritius, Cape, and Australia	32,903	35,961	195,080	274,608
Calcutta	3,116,115	2,927,505	1,280,211	1,565,329
Madras and coast	348,991	215,154	195,852	152,069
North America	-	-	20,374	-
Bombay	817,115	410,876	703,948	520,867
Arabia	11,119	27,476	93,676	117,667
Manilla	212,514	323,932	137,247	127,315
Ceylon	3,883	85	3,239	6,198
Rangoon and Maulmain	27,410	46,811	20,445	15,034
China	1,917,501	1,990,810	3,058,202	3,627,202
Java	898,823	1,108,123	422,477	451,056
Rhio	141,922	141,767	200,103	144,504
Siam	412,003	260,115	409,106	357,498
Cochin-China	298,184	254,765	248,244	227,448
East coast of Peninsula	452,967	411,330	393,484	454,962
West ditto ditto	11,123	2,150	11,914	1,054
Celebes and other Eastern Islands	327,552	113,709	344,324	125,919
Borneo	251,929	261,184	318,948	296,637
Bally, Lombock, and Sambawa	142,503	183,395	213,078	189,333
Sumatra	248,569	284,001	258,156	186,924
Neighbouring islands, and other places	128,517	169,771	95,141	161,449
Total	13,094 200	12,435,251	10,545,512	10,785,324
From Penang	- -	947,703	- -	473,210
From Malacca	- -	219,934	- -	129,604
	- -	13,152,888	- -	11,586,138
Of these, by native craft	- -	2,651,411	- -	2,935,688
by square rigged vessels	- -	10,501,477	- -	8,531,667

The following rates of commission and warehouse rent are charged at Singapore, except in cases special agreement: —

Commission.

1. On all sales or purchases, except the following, 5 per cent.
2. On purchases of goods or produce for returns, 2½ per
3. On sales or p , 3 per cent.
4. On sale or purchase of s sels, houses, or lands, 2½ per cent.
5. On sale, purchase, or shipment of bullion, 1 per cent.
6. On sale or purchase of diamonds, jewels, &c., 2 per cent.
7. On returns in treasure, bullion, or bills, 1 per cent.
8. On all goods consigned and withdrawn, ½ commission.
9. On sale, purchase, or negotiating of bills not serving for purchase of goods or produce, 1 per cent.
10. On all goods sold by auction by the agents themselves, in addition to the above, 2½ per cent.
11. On del credere, or guaranteeing sales when specially required, 2½ per cent.
12. Shruffage, 1 per cent. per mille.
13. On all advances of money for the purpose of trade, whether the goods are consigned to the agent or not, and where a commission of 5 per cent. is not charged, ½ per cent.
14. On ordering goods, or superintending the fulfilment of contracts whence no other commission is derived, 2½ per cent.
15. On guaranteeing bills, bonds, or other engagements, and on becoming security for administration of esta government or individuals for contracts, agreements, &c., ½ per cent.
16. On acting for the estates of persons deceased as executors or administrators, 5 per cent.

17. On the management of estates for others, on the amount received, 2½ per cent.
18. On procuring freight, or advertising as the agent of owner or commanders, on the amount of freight, whether the same passes through the hands of the agent or not, 5 per cent.
19. On chartering ships for other parties, 2½ per cent.
20. On making insurance, or writing orders for do., ½ per
21. On settling insurance losses, total or partial, and on procuring return of premium, 1 per cent.
22. On debts, when a process at law or arbitration is necessary, 2½ per cent.—And if received by such means, 5 per cent.
23. On bills of exchange noted or protested, 2 per cent.
24. On collecting house rent, 5 per cent.
25. On ships' disbursements, 2½ per cent.
26. On negotiating loans on respondentia, 2 per cent.
27. On letters of credit granted for mercantile purposes, 2½ per cent.
28. On purchasing or selling government securities, or on exchanging or transferring the same, ½ per cent.
29. On delivering up do., ½ per cent.
30. On all advances not punctually liquidated, the agent to have the option of charging a second commission, as upon a fresh advance, provided the charge be only made once in the same year.
31. On transhipping all goods or produce, except the following, 1 per cent.
32. On transhipping whole chests, of cassia, cassia seed, camphor, nankeens, and gunny bags, pe 1 dollar.
33. At the option of the agent, on the amount debited or credited within the year, including interest, and excepting only such items, on which at least 2½ per cent. has been charged, 1 per cent.

This charge is not to apply to paying over a balance due on [illegible] up to a particular period, unless where such balance is withdrawn without reasonable notice.

Warehouse Rent per Month.

Chests of opium or silk, bales of woollens, pipes of wine or brandy, leaguers of arrack, &c., 1 dollar.
Bales of Indian piece goods, cotton and gunny bags, 50 cents.
Cases of European piece goods, trusses of woollens, &c., 25 cents.
Hogsheads of liquor, ½ chests of wine, &c., 40 cents.
Pepper, rice, coffee, sugar, saltpetre, &c., 5 per cent. 10 per cent.
Iron, tin, tutenague, spelter, lead, &c., 5 per cent
All other goods not mentioned, to pay accordingly, or by measurement, at the rate of, per ton of 50 cubic feet 1 dollar.

Eastern Ports trading with Singapore. — As every thing that relates to the trade of the East is now becoming of the greatest importance, we make no apology for laying before the reader the following statements, taken from the *Singapore Free Press*, respecting the Eastern ports from which native ships arrive at Singapore. They are mostly all very imperfectly known even to residents in the settlement; and the names of some of them may now, perhaps, be learned for the first time by the English reader.

We have subjoined some details respecting the trade between Singapore and some of these ports in 1842-43, from the same journal.

Commencing with ports to the northward, those in China, from which junks (which are included among the *native craft*) arrive here, are, CANTON, TEW-CHEW, CHUNGLIM, and MACAO, in Canton province; AMOY and CHINCHEW in Fokien; and SHANGHAE and NINGPO, large commercial cities, in Chekeang province. They come also from HAILAM or HAINAN, which is subject to Canton. The average number of these vessels (some of which are of large burden, 300 to 400 tons), is 20 arriving here annually. The cargoes they bring are chiefly intended for the consumption of the numerous Chinese who are settled in Dutch and English colonies in these parts, as well as in the native states, and are re-exported thence by smaller vessels, to places where they may be mostly required. The only articles they bring, in any way required by Europeans, are raw silks, nankeens, and teas. These vessels likewise convey a large number of emigrants from China every year, probably from 4,000 to 5,000, most of whom, however, proceed to other places soon after landing here.

The ports in Cochin-China and Cambodia, from which similar vessels arrive, are KANGKAO and LOKNOI, in Cambodia, and TURON and SAIGON, in Cochin-China Proper. Anom or Anam, from which many vessels report themselves to come, is but a general name for either Cochin-China or Tonquin. The average number of vessels arriving from these ports are 40 annually, bringing, principally, sugar, rice, oil, salt, and some other articles of minor importance. These vessels are usually smaller than the Chinese and Siamese junks.

The total imports from Cochin-China during the official year 1842-43 were valued at 254,785 dollars. They consisted of raw silk, 149 piculs; rice, 12,010 piculs; sugar, 27,540 piculs; and salt, 15,120 piculs. The gross exports during this period were dollars 227,848, consisting chiefly of cotton, 1,084 bales and 985 piculs; British cotton goods, 3,588 pieces; opium, 263 chests; and woollens, to the value of 25,378 dollars. During the same time 82 boats, equal to 4,195 tons, arrived here from Cochin-China.

It was noticed in last year's report how extremely liable the Cochin-Chinese boats were to be plundered, and their crews murdered or made slaves of, by Malay and Chinese pirates, in consequence of their being entirely defenceless. During the past year many instances have occurred which too well justify the statement. It is to be hoped that the measures which government are contemplating may have the effect during the approaching season of materially diminishing, if not altogether checking the evil, at least in the vicinity of our shores.

BANKOK and CHANTIBUN are the only two ports in Siam of any note, and from these about 30 to 40 junks and topes arrive annually. They are manned and owned almost entirely by Chinese residing in Siam, and bring, chiefly, sugar, rice, oil, iron pans, sticklac, gamboge, salt, indigo, paddy, tobacco, and sapan-wood.

We have had too frequent occasion to notice the depredations and cruelties which every class of vessels from the places above mentioned have suffered at the hands of pirates every year, on their way to this port, which certainly contributes to check an increase of trade with the countries they come from.

The ports on the east coast of the Peninsula are SUNGORA and CALANTAN, subject to Siam; and TRINGANU, KEMMAMAN and PAHANG, independent states. There are other ports on this coast, but of little note; namely, Doongoon, Endau, Pakoh, Sadeelee, and Teloban. The produce usually brought here by pucats and other craft from those first mentioned consists chiefly of tin, gold dust, pepper, Malay sarongs and trowsers, bees' wax, hides, elephants' teeth. Junks occasionally touch at these ports, and we sometimes have the produce of Siam and China brought here from them. The average number of craft arriving thence may be about 120 or 130 annually.

BORNEO.—The imports into Singapore from Borneo in 1842-43 consisted of antimony ore, 7,478 piculs; gold dust, 4,337 bunkals, valued at 126,652 dollars; rattans, 9,050 piculs; specie, 7,395 dollars, &c. The antimony ore comes principally from Sarawak, where it is said Mr. Brooke has a monopoly of the trade. The exports for the year 1842-43 amounted to 266,637 dollars, showing a decrease of 22,311 dollars. The most important were British cotton goods, 3,908 corges and 15 dozen; opium, 227 chests; tea, 1,928 boxes and 52 piculs; and specie equal to 34,202 dollars.

During the year 1842-43, 88 boats, equal to 2,701 tons, arrived at this port from Borneo.

The ports in Borneo, from which vessels report themselves, are *BANJERMASSIN, BALKMBANGAN, BURNAI, COTI, MEMPAWA, MATTAN, PONTIANAK, PASSKIR, PEGGOTAN, SARAWAK, SAMBAS, SUCCADANA, *Brissil, Batulichen, Buncalan, Bintooloo, Calakak, Coti-ringin, Cooboo, Chinkol, Kayong, Monterado, Mukah, Makto, Oyak, Pambuang Sadong, Sampit, Tekrang, and Tunnah Darat.* Some of these ports are well known; but of others we know little except the names. Those with which trade is principally

* The places mentioned in this statement, of which the names are in capitals, are either well known to Europeans by long report or actual intercourse; while those in italics remain, so far as we have ascertained, not only unvisited by, but are only recently known by name to them: few or none of them earlier than the foundation of this settlement.

carried on are Brunai, or Borneo Proper, Banjermassin, Pontianak, Sambas, Cotl, Passier, Peggotan, and Sarawak. The products commonly brought here from Borneo, are, rattans, birds' nests, bees' wax, tortoiseshell, gold dust and diamonds, biche de mer, pearl and raw sago, camphor, rice and paddy, mother of pearl shells, garro and lakka woods, pepper, seaweed, mats, ebony, and antimony ore. The boats which come from the southern and eastern ports are commonly manned by Bugis, the principal carriers in the Archipelago, and, next to the Chinese, the most enterprising and industrious of the traders in these regions. They are considerably less tainted with piracy than the Malays.

MANILLA.—The commerce with Manilla continues to increase. During 1842-43, the gross imports were valued at 323,932 dollars. The most important articles consisted of hemp and rope, 2,014 piculs; cigars, 20,770,100; sugar, 6,546 piculs; tea, 585 piculs; and sapan wood, 19,306 piculs; it would also appear 5,300 pieces of British piece goods were imported, probably on account of their being unsuitable for the Manilla market. The exports amounted to 127,315 dollars. The chief articles were opium, 49 chests; iron, 3,762 piculs; and British cotton goods, 88 dozen, 60 corges and 4,189 pieces.

CELEBES is the parent country of the Bugis, which name, though properly belonging only to one of the tribes on Celebes, is applied generally to all traders from that island, from the east and south-east coasts of Borneo, and from the islands to the southward and eastward of it. Of these tribes, by far the most considerable in point of improvement and numbers are the Bugis of Wajo or Tuwajo, a country near the centre of Celebes, and situated up the Bay of Boni. The ports in Celebes from which prahus arrive here are Bonirati, Bugis Pari-para, Wajok, Bugis Pemana, Kallie, Macassar, Mandhar, and Sangye. They usually bring sarongs — the produce of their own looms — rattans, wax, tortoiseshell, pearl shells, seaweed, biche de mer, coffee, birds' nests, sandal and bookoo woods, and other articles of minor importance. The number of vessels arriving here from the above places averages about 50 or 60 annually.

The islands to the eastward and southward of Celebes, from which the Bugis bring cargoes to this port, are chiefly Bootoon, Enday or Flores, Selayer, Timor, Booroo, Lombok, Sumbawa, Amboyna, Ceram, and even from the Aroos and Papua. The articles are the same as those from Celebes, with the addition of kayu-pooteh oil, birds of paradise, and wild nutmegs. The vessels arriving from these places may average about 30 every year. The island of Bali, or Bally, contains several ports, from which upwards of 50 prahus annually arrive here: the principal of these are Baliling, Bali Badong, Sasak, Saliparang, and Ampanan.

The imports from these islands in 1842-43 were valued at 383,495 dollars, being a slight increase over the previous year. They consisted of coffee, 1,010 piculs; rice, 90,211 piculs; and tobacco, 2,449 piculs. The gross value of the exports amounted to 189,333 dollars. They were, British cotton goods, 6,193 pieces and 177 corges; opium, 217 chests; and copper tokens valued at 27,079 dollars. The trade during the past official year was carried on chiefly by square rigged vessels. Only 29 native boats arrived, whereas in the year 1841-42 the number was 123.

SUMATRA, the various ports on the east coast of which furnish the greatest number of native craft frequenting this port, amounting on an average to between 300 and 400 annually. The names of these ports are, Acheen, Apong, Assahan, Batubara, Bukithatu, Billah, Ayeretam, Campar, Delli, Gawang, Indragiri, Jamble, Kitaman, Langkat, Lampung, Manda, Merba, Pulo Padang, Panai, Palembang, Rantow, Rittee, Siac, Subee, and Tabing Tingie. The greatest portion of boats come from Apong, Manda, Rantow, and Tabing Tingie, with raw sago. The next in number are those from Campar, Jamble, and Siac, bringing coffee, rice, wax, rattans, ivory, gold dust, benzoin, dragons' blood, lakka wood, and a few other articles. From Palembang come the lacquered basons and ceeree boxes so much in request among natives, and the best rattan mats are made there. The coast near Siac furnishes in great abundance the *Trubo*, or fish-roe, so universally used, and affords our principal supply of sago, which has now become an article of commerce at Singapore.

The imports from Sumatra, in the year 1842-43, amounted to 284,001 dollars. They were, bees' wax, 611 piculs; benjamin, 852 piculs; betel nut, 9,324 piculs; coffee, 2,581 piculs; cotton, 3,660 piculs; gold dust, 647 bungals, valued at 19,705 dollars; rice, 8,153 piculs; pepper, 4,987 piculs; raw sago, 201,910 bundles; and specie equal to 57,810 dollars, &c. The exports exhibit a decrease of 69,234 dollars, having amounted in 1842-43 to 188,922. The chief were British cotton goods, 5,285 pieces and 336 corges; country ditto, 2,116 corges; China crockery, valued at 9,609 dollars; raw silk, 43 piculs; copper tokens, valued at 24,655 dollars, and specie, equal to 30,866 dollars.

The names of the petty places on the west side of the MALAY PENINSULA, opposite the Sumatra shore, between this and Penang, are — Batu Pahat, Beenook, Beladong, Dooyong, Brooas, Muar, Padang, Poontian, and Panghie; while the principal ports, besides Malacca and her dependencies, are — Perak, Salengore, Lingin, and Lookoot. From the former very few articles, and those only of trifling value, are brought here, consisting chiefly of fowls, cocoa nuts, paddy, fruit, &c.; but the other ports all furnish tin in large quantities, besides several other articles of less importance. The whole of this coast, however, bears a bad name for piracy. The number of prahus arriving here from all the places above named amounts to about 100 every year.

Of the neighbouring islands, Rhio is the one with which we carry on the most extensive and constant trade; the number of boats, or rather trips of a regular set of Chinese boats, called *sampan pucats*, employed in the trade, being about 300 a year. They bring chiefly pepper and gambier, the produce of Bintang. The chief imports in 1842-43 were, gambier, 36,558 piculs; pepper, 2,910 piculs; and rice, 4,060 piculs. Rhio is the only place from whence gambier is imported into Singapore; so there would be little difficulty in ascertaining the quantity produced in the island during the past 7 years. The quantity now grown and manufactured is certainly not less than 70,000 piculs. In 1841-42, 93,342 piculs were exported, and 18,644 piculs were imported, leaving 74,695 piculs to be accounted for. In the past official year 148,746 piculs were exported, and 38,595 were imported; showing a difference of 110,151 piculs. It is, however, very probable that a quantity was in hand, or in progess of shipment, when the official returns were made up. The decrease appears to be in opium, sugar, and salt. Rhio may be considered as a free port, as there are neither import nor export duties strictly so called. From LINGIN, or LINGA, also, we have upwards of 70 or 80 boats arriving annually, bringing a great variety of useful produce, but principally pepper, tin, rattans, &c. BILLITON sends about 25 boats yearly, which bring biche de mer, seaweed, tortoiseshell, wax, &c.

BUNGORAN (or Great Natunas) and SEANTAN (or N. Anambas) are the next in importance, from which 30 or 40 vessels trade with this settlement. The other islands are — Pulo Awore, Benawan, Condore, Carimons, Jamaja (or S. Anambas), Pulo Laut, Laboo, Leboc, Meppar, Nongsa, Sarassan, Sinkip, Soobie, Tajam, Timblan, Timiang, Tingih, Trong, Carimata, Ungaran, and some others.

JAVA.—The trade with this rich and flourishing island is of great importance. The imports of the official year 1842-43 exceed those of the preceding year by 209,450 dollars, the gross amount being 1,108,273 dollars. The most important items were, birds' nests, 47¼ piculs; benjamin, 1,181 piculs; coffee, 5,804 piculs; cotton goods, Malay, 2,423 corges and 800 dozens; rice, 194,817 piculs; copper, 673 piculs; mace, 72½ piculs; nutmegs, 135¾ piculs; cloves, 150 piculs; spirits, valued at 49,411 dollars; sugar, 17,548 piculs; tin, 4,198 piculs; tobacco, 712 corges and 12 piculs; woollens, valued at 46,032 dollars; and specie, equivalent to 196,527 dollars. The exports — 451,056 dollars, showing an increase of 28,579 over the preceding year. The principal articles were, country cotton goods, 9,173 corges and China cotton goods, 152 corges; crockery china, valued at 52,440 dollars; opium, 66 chests; raw silk, 55 piculs; tea, 10,258 boxes and 443 piculs; China paper, valued at 22,520 dollars; and specie, equal to 15,969 dollars. The small quantity of grain produced in Singapore, hardly equal to the consumption of the population for one week, renders it exceedingly desirable to have the means at hand of obtaining a large and constant supply: this Java furnishes us with, and this alone renders our trade with that island of considerable importance and interest. If the returns for 1842-43 are at all correct, 194,817 piculs were imported during

that year, equal to 25,975,600 lbs., which, estimating each adult to consume 730 lbs. per annum, would furnish a supply for 35,583 adults. The whole population of Singapore is supposed to be nearly 60,000.

Piracy in the Eastern Seas. — We regret to have to state that piracy has been of late years very frequent in the seas to the eastward of the Straits of Malacca, and even in the Straits themselves. It has always, it is true, prevailed to a less or greater extent in the Eastern Seas; but latterly the number of pirates has rapidly increased, and they have prosecuted their depredations with a boldness and success that require immediate attention. In so far as we can judge from the statements in the Singapore and Canton papers, we seem, to say the least of it, to have manifested the most singular indifference to the spread of this great and growing evil. In 1824, we bound ourselves by treaty with the Dutch to co-operate with them for the suppression of piracy in the Eastern Seas. It is affirmed that, until very recently, we did little or nothing towards the fulfilment of this engagement, though we are far more interested in the suppression of piracy than any other people. Hitherto the trade of Singapore has chiefly suffered from piratical attacks; but, besides waylaying the smaller junks and ships of the Chinese, Siamese, &c., the pirates, emboldened by impunity, have, within these half dozen years, attacked some British ships in the Straits of Malacca, and actually captured some ships in the seas more to the eastward, inflicting the most horrid barbarities on the unhappy passengers and crews. The Andromache ship of war destroyed in June, 1836, a nest of pirates: but, without the employment of armed steam-boats to assist the other vessels, the nuisance will not be suppressed; and it is at this moment carried on to a great extent from sundry ports on the coast of Borneo and elsewhere. In fact, so late as June last (1843), H. M. Ship Dido fell in with and destroyed a nest of pirates in one of the ports of Borneo. But an example of this sort, if not vigorously followed up, is of little use. This, however, is a matter of more importance, perhaps, than is commonly supposed. We believe we are within the mark when we affirm that from *sixteen* to *eighteen* millions' worth of British property (including the trade between India and Canton) is annually conveyed through the Straits of Malacca and the other Eastern Seas infested by pirates. The trade from England to China, already of vast importance, and now increasing more rapidly, perhaps, than any other department of our commerce, is wholly carried on through the channels referred to; and, as we do not hesitate to send powerful squadrons to secure less valuable interests in other quarters, it is not easy to see why we should not send some half-dozen war steamers to protect this great and growing trade, as well as that which we carry on with the Philippine Islands, New South Wales, &c., from the depredations of a piratical banditti. Nothing but the employment of steamers will be able effectually to abate the evil of piracy. The infinite number of small islands in the Eastern Seas, the difficulty of their navigation, and our little acquaintance with any but the principal lines of intercourse, afford the greatest facilities for the escape of pirates from ordinary cruisers. But steam ships of small draught of water could follow them into their haunts; and the pirates would not be able to escape from them, as they frequently do from sailing vessels, by taking to their oars while their pursuers are becalmed. Except when defending our own shores, the navy is never so legitimately employed as in the defence and extension of commerce. Its protection is one of the most important duties which government has to discharge; and, considering the immense naval force at our disposal, it may well excite astonishment that piracy in the Eastern Seas — one of the great highways by which commerce is carried on — should have been allowed to attain to any considerable magnitude, and that the reiterated complaints of the merchants and others, who have suffered by its prevalence, should have been so little attended to. A very little outlay on the part of government might make, in so far at least as piracy is concerned, the navigation of the Eastern Seas quite as safe as that of the Channel; and the advantages thence resulting to our trade would, in a very short period, far more than countervail the little sacrifice required at the outset.

Besides putting down piracy in the Eastern Seas, government should take the necessary measures for obtaining accurate information with respect to them, and the ports and countries to which they afford access. We know *very little* indeed of many, or rather, we should say, of most, of the islands to the east of Malacca; and yet several of them are of great extent, and they all abound in valuable products; and might, it is probable, were we better acquainted with their ports and capabilities, furnish the means of carrying on an advantageous commerce. Had utility been at all attended to in such matters, the exploration of New Guinea, and of the seas and numberless islands in its vicinity, would have taken precedence of many late expeditions. We subjoin

A Statement of the Prices of the Principal Articles of Eastern Produce at Singapore on the 13th of October, 1843, from the *Singapore Free Press* of that Date.

In this port there are no duties on imports and exports, and vessels of every nation are free of all charges.
Accounts are kept in Spanish dollars, divided into cents. The usual credit on sales is as follows: — Europe goods, 3 months; Indian and China goods, 2 months; opium, 2 months. The last article is frequently sold for cash. Produce is generally bought for cash.
The common weight is the picul of 133⅓ lbs. avoirdupois,

divided into 100 cattles. Salt and rice are sold by the coyan of 40 piculs. Java tobacco, by the corge of 40 baskets. Bengal rice, wheat, and gram, by the bag containing 2 Bengal maunds. Indian piece goods, by the corge of 20 pieces. Gold and silver thread, by the catty of 36 dollars weight. Gold dust, by the bunkal, which weighs dollars, or equal to 83½ grains troy.

Produce of India, China, Java, &c.		Prices. *Dollars.*
Arrack, Batavia	per 80 gallons	[illegible]
Antimony ore	per picul	—
Bees' wax	—	32 to 33
Benjamin, 1st sort	—	50
2d sort	—	35 37
inferior	—	5 15
Betel nut	—	1·60 2
Cloves	—	22 25
Cubebs	—	7½ 7½
China root	—	3 3½
Camphor, China	—	35
Cassia lignea	—	9½ 10
Coffee, Java	—	5½
Bulis	Nominal	5½ 5
Padang	Nominal	5½ 4
Kampar	Nominal	5 3½
Cordage, coir	—	5½
Manilla	—	7½
Cotton, Bombay, 1st quality	3 cwt. nett	15 16
Ditto, inferior	—	8 16
Bengal, 1st quality	300 lbs. nett	15 16
Ditto, inferior	— —	12 13
Madras, Tinnevelly	— —	17
Ditto, western	— —	12 13
Cotton Goods.		
Bengal, sannahs 39 to 40 in corge	per corge	20 24
garrahs, large	—	14 15
ditto, small	—	6 7
chintzes, star pattern	—	7
ditto, large, ditto	—	7
sail canvas	per bolt	2½ 4
Bugis sarongs	per corge	14 30
Bali, ditto	—	5 6
China nankin, junk	per box of 100 pieces	35
Cutch, Pegu	per picul	14 14
Dragons' blood, reed	—	20 30
ditto, lump	—	6 15
Ebony, Mauritius	—	1
Ceylon	—	80
	—	100
Elephants' teeth, large	—	140 110
small	—	60 80
Gram	per bag	5
Gambier	per picul	1·85
Gamboouge	—	58 60
Gallogalls	—	2½
Gold dust, Pahang	per bunkal	30 31
other sorts	—	26 28
Gunny bags	per 100	7 7½
Hemp, Manilla	per picul	4 4½

		Prices. *Sp. Dollars.*
Hides, buffalo	—	4½
Indigo, liquid, Manilla	—	4½ to 5
Java and Siam	—	3 4
Mother o' pearl shells	—	15
Mace	—	70 75
Nutmegs	—	40 55
Oil, cocoa nut, Manilla	per jar	5 6
Siam	per picul	7½ 9
Opium, Patna	per chest	800
Benares	—	770
Malwa	—	650
Turkey	per picul	560
Pepper, black, west coast	—	4 4½
Delhi	—	1·40
Borneo	—	4
Rhio and Singapore	—	3·85
white	—	7½
long	—	5½ 4
Rhubarb, inferior, $18 to $20, good $60 per picul.		
Rice, Bengal	per bag	1½ 2
Java and Siam, fine white	per koyan	58
Ditto, middling	—	55
Ditto, cargo	—	46
Maulmain	—	40 45
Rattans, Benjarmassing	per picul	2½ 2½
other sorts	—	2 2½
Sugar, Siam, first sort	—	6
second	—	5½
Cochin-China	—	4½
Java	—	4 4½
Manilla muscovado	—	2½ 3
Ditto, clayed	—	3½ 4
Singapore	—	5½
Sago, pearl, large grain	—	2½ 2·50½
small grain	—	2½ 2
flour	—	1·90 2·10
Salt, Siam $22, Cochin-China $6 to $10	per koyan.	
Saltpetre	per picul	5½ 6½
Sandal wood	—	5 6
Sapan wood, Manilla	—	1½ 1½
Siam	—	1½
Stick lac, Siam, without stick	—	6½ 7
Silk, raw, Canton, No. 3.	—	250
inferior	per 95 catties	230
Junk	per 90 —	230
Segars, No. 3. superior	per 1,000	9½
4. superior	—	7½
5. superior	—	7
Tea, junk	per 20 catty boxes	2½ 3
best chops	—	5 6
Tin, Straits	per picul	12 13
Banca	—	14½ 15
Tobacco, China, good	per basket	11 12
Java	per 40 baskets	110 120
Bali	per picul	3
Tortoise-shell	—	30 400
Wheat, Bengal	per bag	2½

SINOPE, a town of Asia Minor, on the S. coast of the Black Sea, lat. 42° 2′ 30″ N., lon. 35° 9′ 45″ E. Population uncertain, probably from 8,000 to 10,000. Sinope is situated on a low narrow isthmus, connecting the high rocky promontory of Ada with the main land. Its port, which is the best on this coast, on the south side of the town, is protected from the N. and N.E. gales by the isthmus and promontory already mentioned. Ships anchor within ¼ mile of the town, in from 13 to 17 fathoms; or nearer to it, in from 5 to 7 fathoms. There is a roadstead on the north side of the isthmus, but it is open and exposed. Sinope is one of the principal stations of the Turkish fleet; and there are docks and arsenals for its accommodation and outfit. Its exports are inconsiderable, the principal being timber, salt, cordage, fish oil, &c.

In ancient times, Sinope was a city of great wealth, magnitude, and importance. It was the birthplace of Diogenes the Cynic; and Mithridates made it the capital of his dominions. After its conquest by the Romans under Lucullus, it became the seat of a colony: and continued for a lengthened period to enjoy a good deal of consideration.

Should civilisation and the arts once more revive in the ancient Pontus, and the other countries to the south of the Black Sea, the excellence of its port could not fail to restore to Sinope some portion of its former grandeur. Even now a considerable intercourse is beginning to take place with the countries E. and S. of Sinope. Diarbeker on the Tigris, in lat. 37° 54′ N., lon. 39° 53′ 45″ E., is one of the principal seats of Eastern commerce; and caravans set out regularly from it for Aleppo, Smyrna, and Constantinople: but any one who consults a map of Asia Minor, and of the contiguous countries, will see at once that Trebisond and the neighbouring ports on the S. E. coast of the Black Sea are the natural channels through which Armenia, Koordistan, and the north-western parts of Persia may best maintain an intercourse with Europe. We shall afterwards show that the danger to vessels in the roads of Trebisond has been very much exaggerated. — (See TREBISOND.) In the event, however, of the commerce with the countries referred to becoming of any considerable importance, Sinope would be an advantageous *entrepôt* to which goods might be brought, and whence they might be conveyed in proper vessels, and at proper times, to the other ports. At all events, it is of material importance that a direct intercourse with the southern coast of the Black Sea should be established, and that the trade with it should not be carried on, as hitherto, through Odessa. — (For further particulars as to Sinope, see *Tournefort, Voyage du Levant*, tom. ii. pp. 202-212.; and *Norie's Sailing Directions for the Black Sea*. See also the article TREBISOND, in this work.)

SKINS. The term is applied in commercial language to the skins of those animals, as calves, deer, goats, lambs, &c., which, when prepared, are used in the lighter works of bookbinding, the manufacture of gloves, parchment, &c.; while the term hides is applied to the skins of the ox, horse, &c. which, when tanned, are used in the manufacture of shoes, harness, and other heavy and strong articles. Lamb and kid skins are principally

used in the glove manufacture; 120 skins being supposed to produce, at an average, 18 dozen pairs of gloves.

Account of the Quantities of the different Kinds of Skins imported into the U. Kingdom during each of the 6 Years ending with 1841, specifying the Countries whence they were brought, and the Quantities brought from each.

Countries.		1836.	1837.	1838.	1839.	1840.	1841.
Calf and kip (untanned) —							
Russia	- cwts.	27,005	8,417	17,978	18,909	32,288	22,532
Denmark	- —	2,311	42,108	1,922	1,204	801	1,107
Prussia	- —	3,557	3,560	2,805	4,241	3,229	2,431
Germany	- —	10,481	9,134	7,923	6,817	6,847	6,597
Holland	- —	4,748	2,719	5,880	3,840	3,845	4,307
Other countries	- —	418	592	676	3,859	7,236	8,339
Total	- - —	48,330	26,360	37,184	38,870	54,245	45,113
Retained for home consumption	- —	49,969	28,385	37,148	38,572	47,920	45,358
Deer (undressed) —							
U. States of Am	- number	192,139	138,785	171,875	100,006	409,208	126,970
Other countries	- —	123,277	8,854	42,728	2,703	2,577	64,065
Total	- - —	315,416	147,619	214,603	102,709	411,785	191,035
Retained for home consumption	- —	171,431	57,503	122,226	51,059	90,481	100,991
Goat (undressed) —							
Norway	- - —	10,731	8,070	6,750	7,605	8,301	6,158
Prussia	- - —	10,265	33,656	17,278	64,529	32,278	42,739
Germany	- - —	19,162	24,165	3,886	15,967	8,298	4,804
Holland	- - —	12,914	9,428	3,648	14,882	6,054	10,288
France	- - —	89,817	68,247	56,599	55,260	68,855	56,209
Portugal Proper	- - - —	35,775	59,910	25,960	602	1,245	2,663
Tripoli, Tunis, Algiers and Morocco	- - —	90,857	188,220	99,154	51,286	115,699	131,178
Cape of Good Hope	- - - —	116,289	91,871	109,258	118,724	98,511	139,573
East India Company's territories and Ceylon	- - —	16,102	4,035	81,651	124,058	28,118	215,695
Other countries	- - - —	5,961	91,736	50,758	20,189	20,079	40,103
Total	- - —	413,756	558,319	512,518	502,157	387,436	649,212
Retained for home consumption	—	585,944	423,291	465,341	530,732	322,858	473,031
Kid (undressed) —							
Italy and the Italian Islands	- - —	180,530	249,845	31,505	116,567	91,960	54,016
East India Company's territories and Ceylon	—	3,787	14,535	15,895	22,203	39,590	35,605
Other countries	- - - —	12,108	18,130	67,900	23,803	7,125	27,221
Total	- —	196,345	282,491	115,107	162,458	141,775	116,842
Retained for home consumption	—	153,210	217,023	115,630	162,651	136,241	92,947
Kid (dressed) —							
France	- - - - —	551,582	700,776	653,856	529,995	571,055	412,431
Other countries	- - - —	39,037	21,685	28,847	1,036	1,212	8,348
Total	- - —	590,619	722,461	682,703	531,031	572,267	420,779
Retained for home consumption		590,469	720,198	680,831	528,317	560,771	413,671
Lamb (undressed) —							
Germany	- - - -	123,948	28,071	35,812	33,299	28,199	8,252
France	- - - -	314,563	32,332	71,295	137,975	119,315	56,342
Italy and the Italian Islands	- - -	2,132,887	1,389,696	1,410,541	1,783,260	1,100,749	865,879
Turkey	- - - -	158,818	54,493	243,565	129,765	163,354	117,759
Other countries	- - -	71,293	143,689	119,058	9,668	42,876	368,028
Total	- -	2,781,811	1,648,281	1,880,271	2,093,947	1,754,793	1,416,260
Retained for home consumption						2,528	1,507,752
Seal (undressed) —							
British North American Colonies	-	113,736	269,504	344,694	268,575	523,298	279,908
The whale fisheries	- - -	1,212	10,502	32,333	1,496	17,170	19,117
Other countries	- - -	32,591	32,401	64,193	19,208	20,128	14,337
Total	- -	147,539	312,407	441,220	289,279	560,596	313,362
Retained for home consumption	- —	113,744	304,050	370,705	218,231	556,568	301,718

SLATE (ROOF), (Ger. *Schiefer*; Fr. *Ardoise*; It. *Lavagna, Lastra*; Sp. *Pizarra*), a fossil or compact stone (*argillaceous schistus*) that may be readily split into even, smooth, thin laminæ. There are several varieties of this valuable mineral, the prevailing colours being grey, blue, and brown. But the tints are very various; and slates are often marked with streaks of a different colour from the ground. Slate is principally used in the covering of houses, for which purpose it is infinitely superior to thatch or tiles, and is far less expensive than lead. Good roofing slate should not absorb water; and it should be so compact as not to be decomposed by the action of the atmosphere. When properly selected, roof slates are of almost perpetual duration; but those which are spongy and imbibe moisture speedily get covered with moss, and require, at no very distant period, to be renewed.

The use of slates in the covering of houses is entirely European. From the Hellespont to China inclusive there is not a single slated house; and this does not arise from any want of slate, which is as abundant in Asia as in Europe.

Slates carried by land have never been subjected to any duty; but those carried coastwise were, until 1831, charged with duties varying according to their size and species. The injustice of this distinction, and the impolicy of laying any duty on an article of this sort, are obvious. The revenue it produced was quite inconsiderable, not exceeding 35,000*l.* a year. It was repealed at the same time as the duty on coal carried coastwise.

Since the repeal of the duty, the consumption of slate has been materially increased; and it is now

extensively employed for various purposes to which it was not formerly made applicable, such as the flooring of warehouses and vaults, the paving of streets, the formation of cisterns, the covering of worn or decayed floors, and of the walls of houses in exposed situations, &c. The slate used for these purposes is cut by the circular saw into pieces of from ¼ an inch to 2 inches thick. Many hundred tons have been used in the course of the last few years in paving, flooring, &c. at the London Docks, and other large establishments.

The principal slate quarries in Great Britain are in Caernarvonshire. Those belonging to Mr. Pennant (formerly Lord Penrhyn's), near Bangor, employ about 1,500 men and boys, and are the most extensive and valuable in the empire. The other quarries in the same county employ about 1,620 men and there are some in other parts of Wales. There are also extensive quarries at Ulverstone, Lancashire; and others, of inferior magnitude, in various parts of Westmoreland and Cumberland.

The principal slate quarries in Scotland are at Easdale and Balachulish, in Argyleshire. Speaking generally, the Scotch quarries do not afford slates of the size and smoothness of those obtained from the Welsh quarries; and the wood-work of the roofs covered with them requires to be stronger.

Roofing slates are of different sizes, and are denominated Imperials, Queens, Princesses, &c. Their price, supposing their quality to be in other respects equal, depends partly on their size and partly on their weight.

SLAVES AND SLAVE TRADE. A slave, in the ordinary sense of the term, is an individual at the absolute disposal of another, who has a right to employ and treat him as he pleases. But the state of slavery is susceptible of innumerable modifications; and it has been usual, in most countries where it has been long established, to limit in various ways the power of the master over the slave. The *slave trade* is, of course, the business of those who deal in slaves.

Origin of Slavery. — A great deal of learning has been employed in tracing the history of slavery, though the subject is still far from exhausted. It seems most probable that it originally grew out of a state of war. In rude uncivilised communities, where the passion of revenge acquires a strength unknown in more advanced states of society, captives taken in war are adjudged to belong to the victors, who may either put them to the sword, or reduce them to a state of servitude. In antiquity, the ideas of war and slavery were inseparable. Probably in very remote ages, prisoners were most commonly put to death; but the selfish gradually predominated over the more passionate feelings, and for many ages it was usual to reduce them to the condition of slaves; being either sold by their captors to others, or employed by them as they might think fit.

The practice of reducing men to a state of slavery, having once begun, was extended in various ways. The progeny of slaves or of women in a state of slavery were slaves; men born free might sell themselves as slaves; and parents had authority, in Judæa and Rome, to dispose of their children for the same purpose. — (*Michaelis on the Laws of Moses*, ii. 163. Eng. ed.) It was the law of Rome, and of most other ancient states, that the persons of debtors who had contracted obligations which they could not discharge, should become the property of their creditors. "*Servi*," says Justinian, "*autem aut nascuntur aut fiunt: nascuntur ex ancillis nostris, fiunt aut jure gentium, id est ex captivitate; aut jure civili, cum liber homo major viginti annos ad pretium participandum sese venundari passus est.*" — (*Instit.* lib. i. tit. 3.)

Treatment of Slaves. — The treatment of slaves in antiquity, as in more modern times, differed very widely in different countries and periods, and among different classes of slaves in the same country, and at the same time. A great deal also depended on the character of particular masters. Slaves bred up in the house or family of the masters were uniformly treated with greater indulgence than others, and became entitled, by custom, to several important privileges. At Athens, slaves appear to have been better treated than in any other ancient state; and Demosthenes affirms, in his second Philippic, that, "a slave was better off at Athens than a free citizen in many other countries." In republican Rome, the masters had the power of life and death over their slaves, who were often treated with the most detestable barbarity. It was not an uncommon practice to expose old, useless, or sick slaves to starve in an island in the Tiber! We may, as Hume has justly remarked, "imagine what others would practise, when it was the professed maxim of the elder Cato to sell his superannuated slaves at any price, rather than maintain what he esteemed a useless burden." — (*Plutarch, in Vitâ Catonis,*) *Ergastula*, or dungeons, where slaves were confined and chained at night, and where they were sometimes made to work in the day, were common all over Italy. Columella advises that they be always built under ground — (lib. i. c. 6.): and remains of them are still seen in the lower stories of ancient buildings in Italy and Sicily. Hundreds of slaves were sometimes put to death for the crime of one only; and they were exposed, when they committed any petty fault, to all the violence of the most capricious and unrestrained despotism.

It was not uncommon in the barbarous ages to immolate captives on the tomb of such chiefs as had fallen in battle; and magnificent games were celebrated on these occasions.* The gladiatorial exhibitions, so common at Rome after the Punic wars, seem to have grown out of this practice. These were contests between slaves, denominated gladiators, trained to fight in public for the amusement of a ferocious populace, who took the

* Achilles sacrificed 12 Trojan captives on the tomb of Patroclus. — (*Iliad*, lib. 23.)

greatest delight in their sanguinary combats. Thousands of unfortunate wretches were annually sacrificed in this inhuman sport. After his triumph over the Dacians, Trajan exhibited spectacles, in which no fewer than 11,000 wild beasts of different kinds were killed, and 10,000 gladiators fought!—(*Adam's Roman Antiquities*, p. 317.)

The cruelties inflicted on the slaves occasioned frequent revolts, attended by the most dreadful excesses. Spartacus, a Thracian captive, destined for the profession of a gladiator, headed a rebellion of gladiators and slaves, which continued for 3 years, and required all the force of the republic to suppress. When finally defeated by Crassus, about 6,000 of his followers were nailed to the cross, in double rows, that extended almost from Capua to Rome.—(*Ferguson, Rom. Republic*, c. 16.) No one acquainted with the manners of the Romans can be surprised at the atrocities of so many of the emperors. The worst of them treated the citizens better than the latter treated the slaves. Humanity could not be looked for in the rulers of a state in which human life was held in contempt, and human suffering made the subject of popular sport.

In consequence partly of their ill usage, and partly of its being accounted cheaper to buy than to breed slaves, vast numbers were annually imported into Italy. Thrace and the countries round the Black Sea furnished large supplies of the best slaves; and numbers were obtained from Egypt, Syria, Britain, Gaul, and other countries. The famous island of Delos, in the centre of the Cyclades, was the greatest slave market of antiquity; as many as 10,000 slaves have been sold there in a single day.—(*Strabo*, lib. xiv.)

It should, however, be observed, that slavery among the ancients was very different from the slavery of modern times, at least from the slavery that exists in the U. States, Cuba, &c., and which did till lately exist in our West India islands. Slaves in antiquity were physically identical with freemen, and were discriminated only by peculiar marks*, or by the character of their employments. It was truly said of them, "*Servi homines sunt, et æque unum luctem biberunt, etiamsi illos malus fatus oppresserit.*" (*Petronius ed Burm.* cap. 71.) But modern slaves belong to a different variety of the human race; the distinction between them and their masters being obvious and striking. Owing to this difference between the slaves of ancient and modern times, the influence of slavery at the two periods has been materially different. The freemen of antiquity, who were accustomed to tyrannise over persons in all respects (except their social rank) on a level with themselves, could hardly fail to acquire a ferocity of disposition, and coarseness of manner, that either disappear, or are much softened down in a society where all are equal. But such results do not certainly follow to the same, nor perhaps to any extent, from the practice of modern slavery. In this case the masters do not tyrannise over their equals, but over those who differ from the class to which they belong by the broadest and most distinctly marked characters; and their behaviour towards their slaves is found to have very little influence over their behaviour towards their fellow citizens. The white inhabitants of Virginia, for example, are quite as gentlemanlike in their manners, and observant of the respect due to others, as their countrymen of New York or New England. Indeed, if there be any difference between them, it will probably be found to be in favour of the former.

Although, therefore, there can be no doubt that the slavery that existed in the ancient world had a brutalising influence over the manners of the people, and gave them a degree of ferocity to which happily we have long been strangers, it by no means follows that the slavery which prevails in the new world should have the same influence. In the former case, masters and slaves were of the same variety of the species; but in the latter, the masters belong to one variety, and the slaves to a totally distinct, and most probably lower, variety; so that the domination of the one set, and the subjection of the other, partake in some measure of the character of the supremacy exercised by man over the lower animals; and have comparatively little influence over the morals or conduct of the masters.

There can be no manner of doubt that the slavery that existed in the ancient world was unfavourable to the progress of arts and industry. In the most celebrated nations of antiquity, the greater number of mechanical employments were principally carried on by slaves and the dregs of the free population; so that, while the workmen employed in them were without emulation or invention, the employments themselves were looked upon as mean and servile. To such an extent did this prejudice operate, that in Rome, Sparta, and other celebrated states, agriculture and arms were the only occupations that were reckoned worthy of a freeman, or in which he could engage without being degraded.

But the principal difference between the slavery of the ancient and modern world

* Slaves wore their beards and hair long; and when manumitted they shaved their head and put on a cap, which has in consequence become the symbol of liberty. Brutus, after the assassination of Cæsar, coined money, on which the figure of a cap was impressed, to indicate that the people had been rendered free.—(See *Adam's Antiquities*, p. 376.; See, also, *Burlamaqui, Principes du Droit des Gens*, iv. 454., where the reader will remark a singular error.)

consists in the fact that in the former freemen were quite as well suited as slaves for carrying on every art and employment; while in the latter the peculiar constitution of the slaves fit them for employments which, though of the highest importance, cannot be carried on by their masters. The greater intelligence of the whites enables them to exercise a decided superiority over the black or coloured natives of the torrid zone, notwithstanding the latter are incomparably better adapted for the prosecution of those laborious occupations which are indigenous, as it were, to the soil they occupy. It is doubtful whether the constitution of the whites will ever be so accommodated to the climate of the Tropics, as to enable them to engage in that field labour, carried on in the lower and hotter districts (*tierras calientes*), which is congenial to the blacks. At all events, no such accommodation has hitherto taken place; and, therefore, it would appear that some modification of slavery, or that a supply of suitable compulsory labour of some sort or other, is necessary to enable civilised man to occupy, and to turn to a useful account, some of the most fertile and extensive regions of the earth. And hence the propriety of inquiring into the policy of institutions like this, of carefully considering the peculiar conditions or circumstances under which they are to be acted upon. Slavery in Europe may be, and we believe is (notwithstanding the opinion of Michaelis to the contrary), in all respects most objectionable; but it is quite another matter with slavery in Louisiana, Cuba, and Brazil; the circumstances under which they are placed are so very different from ours, that an institution exceedingly inexpedient on this side the Atlantic, may be especially suited to them.

The establishment of Christianity contributed more, perhaps, than any thing else, first to mitigate, and finally to suppress slavery in Europe. But, within no very long period after its abolition had been completely effected in this part of the world, it began to be established in America.

The African Slave Trade was commenced by the Portuguese, in 1442. It was, however, but of trifling extent till the commencement of the 16th century. In consequence, however, of the rapid destruction of the Indians employed in the mines of St. Domingo or Hayti, Charles V. authorised, in 1517, the introduction into the island of African slaves from the establishments of the Portuguese on the coast of Guinea. The concurrence of the emperor was obtained by the intercession of the celebrated Las Casas, bishop of Chiapa, who laboured to protect the Indians by enslaving the Africans; though, as the latter were certainly more vigorous and capable of bearing fatigue than the former, the measure was not in reality so contradictory as it would, at first sight, appear to be. — (*Robertson's Hist. America*, book iii.)

The importation of negroes into the West Indies and America, having once begun, gradually increased, until the traffic became of great extent and importance. Sir John Hawkins was the first Englishman who engaged in it: and such was the ardour with which our countrymen followed his example, that they exported from Africa more than 300,000 slaves between the years 1680 and 1700; and between 1700 and 1786, 610,000 Africans were imported into Jamaica only; to which adding the imports into the other islands and the continental colonies, and those who died on their passage, the number carried from Africa will appear immense. — (*Bryan Edwards, Hist. West Indies*, ii. 61.) The importations by other nations, particularly the French and Portuguese, were also very great.

We do not intend, though the subject be one of the highest interest, to make any lengthened inquiries as to the legitimacy or illegitimacy, the policy or impolicy, of the slave trade. We may, however, shortly observe that there can be no doubt that slavery has always existed in Africa; and it is sufficiently well known that previously to the commencement of the traffic, such of the captives taken in war as could not be advantageously employed as slaves were most commonly put to death; cannibalism, the exposure of infants, and human sacrifices being then also very frequent. The slave trade, by opening a ready and profitable market for slaves, assisted in putting an end to these enormities, though it be, at the same time, true that the desire of profiting by their sale has tempted the petty princes to make war on each other for the chance of making captives, and has given a stimulus to man-stealing and other atrocities. — (*Geog. Dict.* art. *Africa.*) There can, however, be no reasonable doubt that civilisation has been, on the whole, advanced by the practice of the trade. At all events, no evidence either has been, or, we believe, can be, produced to show that the state of Africa would have been perceptibly improved had the slave trade never been heard of. But it is quite certain, had such been the case, that there would have been a wide difference in the condition of the West Indies, the Southern States of North America, Brazil, &c. It will, we apprehend, be found that the culture of sugar and other great colonial staples cannot be profitably carried on in these countries, nor, perhaps, anywhere within the Tropics, without a supply of compulsory labour of some sort or other (*see ante*, p 324.). Neither, we apprehend, can there be a question that the extensive culture of these staples has added greatly to the comforts and conveniences of the

inhabitants of most civilised countries; and, if this addition to their enjoyments has been effected without injury to the slaves, it will not be so easy a matter as has been supposed to show the impolicy of the trade. But those who inquire dispassionately into the subject will probably come to the conclusion, that, instead of being injured, the slaves have gained by being carried from the Old to the New World. Speaking generally, the negroes are in the lowest state of abasement, possessing merely the rudiments of the most indispensable arts, a prey to the vilest superstition and tyranny, without any tincture of learning, and with little or no regard for the future. The circumstances under which they are placed in their native land may, perhaps, account for the low state in which we find them; but, however explained, the genuine negroes of Africa are admitted, even by those least inclined to depreciate them, to be, for the most part, "either ferocious savages, or stupid, sensual, and indolent."—(*Prichard, History of Man*, ii. 338. 3d ed.) — Excepting the violence done to their habits and inclinations, no one who knows any thing of their state in Africa and in the Western hemisphere can possibly doubt that they have gained most materially by their transference to the latter.

But, supposing their character to be such as represented, still it may be contended that their weakness or inferiority gives the whites no right to lord it over them, to convey them to foreign countries, and to reduce them to a state of bondage: and no doubt it is exceedingly difficult to specify in how far the civilised portion of mankind may be entitled to control those that are decidedly less intelligent and advanced than themselves. That they have done so from the earliest ages, is, however, indisputable; and every one who has any acquaintance, however slight, with the history of society, is aware that the consequences of this control have been in the highest degree advantageous; for, though polished nations have too often abused their superior power and intelligence, still it is abundantly certain that but for their dictating to and subjugating others, half the civilised world would at this moment have been immersed in the grossest barbarism. But without entering into any discussion respecting the application of this principle in the case of Africa, it is enough to know that the Europeans did not originate slavery in that continent; the Africans were enslaved and disposed of as other goods and chattels for centuries before they began to be purchased by the former; and the conduct of the whites is to be determined by the nature of the treatment which the slaves received at their hands.

Now, though it be abundantly certain that this has been on the whole indulgent, it is not to be denied that very many enormities have been perpetrated, which the law should have prohibited and severely punished. The crowding of slaves together in their passage across the Atlantic, and the cruelties which some worthless masters have been accustomed to commit, are of this description. But these outrages are not of the essence of slavery; and they might and should, no doubt, have been suppressed. An institution is not to be confounded with its abuse. The object of the slave trade was to procure a supply of compulsory labourers for the service of the colonists in the West Indies and other tropical countries; but it did not, therefore, follow that the colonists were to be under no restraints either as to the methods by which they sought to procure such bondmen, or as to the power which they might exercise over them.

Neither does it follow, because the slave trade may have been for the general advantage of mankind at a particular period, that it should be indefinitely extended. When as large a supply of negroes has been imported as may be necessary to supply its markets with labour, there can be no good reason for allowing their farther importation into a country, at the same time that there seem to be sundry good reasons why it should be put a stop to. By preventing the importation of fresh slaves, the proprietors may find it for their interest to be more attentive to the condition of those already in their possession than they might otherwise be; for it is evident that in such cases they could only look to the natural increase of their slaves for a supply of labour in future; and that they could not expect to supply by foreign importations the place of those who might perish by bad treatment. On these grounds we are inclined to think that the English and Americans acted with quite as much prudence as humanity, in forbidding, in 1807, the farther importation of slaves into their dominions. Cuba, and perhaps also Brazil, might, it is alleged, advantageously follow their example. The slave population in these countries is now probably large enough to furnish, with proper treatment, an adequate supply of labourers, how rapidly soever we may suppose them to advance in the career of industry.

We have ventured to submit these statements to the consideration of the reader, not because we have any desire to extenuate the evils inseparable from a state of slavery, or the cruelties of which slave-dealers and slave-proprietors may be justly accused. But, after making every allowance for these drawbacks, it is evident, if the preceding statements be well founded, that slavery as it exists in modern times, and still more as it might be established, is not the unqualified abuse it has uniformly almost been represented. On

the contrary, we are disposed to regard it as being, under proper modifications all but indispensable to the profitable cultivation of the western countries in which it is at present met with. It is to no purpose to say that free labour is cheaper than slave labour. We more than doubt whether, when applied to them, there be any foundation for such a statement; but that is really immaterial, the fact being, that were slavery abolished, few or no free labourers would be found to engage in the great departments of industry carried on in the slave-holding countries. It would, indeed, be a contradiction and an absurdity to suppose that it should be otherwise. In countries with a fruitful soil and under a tropical sun, the principal wants of the inhabitants are supplied with but little exertion, and the *dolce far niente* is their *summum bonum*. In such situations industry is a sickly plant; and instead of employing their surplus time in the production of articles of ostentation and luxury, the inhabitants most commonly waste it in idleness and apathy. Were the slaves completely emancipated in the U. States, Cuba, and Brazil, it is all but certain that the culture of sugar and cotton would be as completely abandoned in them as in Hayti. And if the change were accompanied by a considerable improvement in the condition of the black population, the sacrifice might not, perhaps, be deemed too great. But where is the ground for supposing that such would be the case? Indeed the fair presumption seems to be the other way. Little, at all events, would be gained by turning a laborious, well-fed slave, into an idle, improvident, and perhaps beggarly freeman.

There may, however, be such a thing in a colony as a *quasi* emancipation of slaves, or, which is the same thing, regulations may be enacted giving the slaves freedom, and at the same time excluding them from the possession of that which can alone make that freedom of any practical value. Speaking generally, the blacks in our colonies have little or no capital; and, therefore, they must live either by occupying patches of land on their own account, or by working for others. And provided they be debarred, by regulations effectual to their object, from acquiring or occupying small portions of land, they will necessarily be compelled, how much soever they may dislike it, to engage as labourers on the estates of others. This, however, is probably the very worst sort of compulsory labour. It gives the blacks enough of freedom to make them in the last degree dissatisfied with the regulations by which it is sought practically to nullify it, and, makes them at once discontented, refractory, and idle. But, wretched as it is, we believe that at this moment the obstacles that have been and may be thrown in the way of the blacks obtaining patches of land are the principal dependence of the colonists in our West India islands for the continued culture of colonial staples!

Without entering farther on a subject which would require a long essay for its discussion, we may remark that a good work on the subject of slavery is a desideratum which will not, probably, be speedily supplied. In this country it has been treated as if it were everywhere the same, and as if it were in every case an unmixed evil, and an outrage on humanity. This, however, is to confound the most obvious distinctions, to substitute abuse for reasoning, assertion for inquiry, and prejudice for principle. Those who inquire dispassionately into the matter will, perhaps, see abundant reason for agreeing in opinion with Michaelis and Grotius (*De Jure Belli*, lib. ii. cap. 27.), that while slavery has its evils, it may also have its advantages; and that if there be countries and states of society in which the former very decidedly preponderate, there are those also in which the preponderance is as certainly on the side of the latter.

Abolition of the Slave Trade. — Notwithstanding the sanction it received from parliament, and the supineness of the public, the slave trade was frequently denounced by distinguished individuals, in this and other countries, as essentially cruel and unjust.

The first motion with relation to it in parliament was made in 1776; but the subject was not taken up systematically till 1787, when a committee was formed, of which Mr. Granville Sharp and Mr. Clarkson, whose names are imperishably associated with the abolition of the slave trade, were members. This committee collected some highly coloured evidence of the enormities produced by the trade, which they circulated throughout the country, and thereby succeeded in making a great impression on the public mind. After a number of witnesses on both sides had been examined before the privy council, Mr. Wilberforce, on the 12th of May, 1789, moved a series of resolutions condemnatory of the traffic. They were supported by Mr. Burke, Mr. Pitt, and Mr. Fox. But, notwithstanding the resolutions were carried, nothing was done to give them effect. The friends of the trade having obtained leave to produce evidence at the bar of the House, contrived to interpose so many delays that the session passed off without any thing being done. In the following sessions the struggle was continued with various success, but without any definite result. At length the triumph of the abolitionists was finally consummated in 1807; a bill for the total and immediate abolition of the slave trade, having been carried in both Houses by immense

majorities, received the royal assent on the 25th of March, being the last act of the administration of Mr. Fox and Lord Grenville.

America abolished the slave trade at the same time as England.

But notwithstanding what had been done, further measures were soon discovered to be necessary. The Spanish and the Portuguese continued to carry on the trade to a greater extent than ever; and British subjects did not hesitate, under cover of their flags, to become partners in their adventures. An effectual stop was put to this practice in 1811, by the enactment of a law introduced by Mr. (now Lord) Brougham, that made trading in slaves punishable by transportation for 14 years, or by confinement to hard labour for a term of not more than 5 years nor less than 3 years. And since that period the British government has zealously exerted itself for the suppression of the slave trade in every part of the world. But, in defiance of its efforts, considerable numbers of slaves still continue to be carried across the Atlantic to Brazil and Cuba, and it will be no easy matter wholly to suppress the trade. Provided, indeed, the great powers were to concede a mutual right of search, and to make the traffic in slaves piracy, it might be effectually put down; but there are all but insuperable prejudices and jealousies in the way of their consenting to adopt such measures. (Mr. Bandinel's work on the Slave Trade contains the clearest and best exposition that is anywhere to be found of its rise, progress, and suppression; and of the efforts made by the British government to induce other nations to abandon it.)

The British laws relative to the slave trade were consolidated by the act 5 Geo. 4. c. 113. But, as the greater part of this act was superseded by the statute for the extinction of slavery (3 & 4 Will. 4. c. 73.), we shall merely lay before the reader the clauses still in force relating to dealing in slaves.

Dealing in Slaves in the High Seas, &c. to be deemed piracy. — And if any subject or subjects of his Majesty, or any person or persons residing or being within any of the dominions, forts, settlements, factories, or territories, now or hereafter belonging to his Majesty, or being in his Majesty's occupation or possession, or under the government of the United Company of Merchants of England trading to the East Indies, shall, except in such cases as are by this act permitted, after the 1st day of January, 1825, upon the high seas, or in any haven, river, creek, or place, where the admiral has jurisdiction, knowingly and wilfully carry away, convey, or remove, or aid or assist in carrying away, conveying, or removing, any person or persons as a slave or slaves, or for the purpose of his, her, or their being imported or brought as a slave or slaves into any island, colony, country, territory, or place whatsoever, or for the purpose of his, her, or their being sold, transferred, used, or dealt with as a slave or slaves; or shall, after the said 1st day of January, 1825, except in such cases as are by this act permitted, upon the high seas or within the jurisdiction aforesaid, knowingly and wilfully ship, embark, receive, detain, or confine, or assist in shipping, embarking, receiving, detaining, or confining, on board any ship, vessel, or boat, any person or persons for the purpose of his, her, or their being carried away, conveyed, or removed as a slave or slaves, or for the purpose of his, her, or their being imported, or brought as a slave or slaves into any island, colony, country, territory, or place whatsoever, or for the purpose of his, her, or their being sold, transferred, used, or dealt with as a slave or slaves; then and in every such case the *persons so offending shall be deemed and adjudged guilty of piracy*, felony, and robbery, *and being convicted thereof shall suffer death without benefit of clergy*, — and loss of lands, goods, and chattels, as pirates, felons, and robbers upon the seas ought to suffer. — § 9.

Persons dealing in Slaves, or exporting or importing Slaves, &c., guilty of Felony. — And (except in such special cases as are by this act permitted) if any persons shall deal or trade in, purchase, sell, barter, or ... ling in, purchase, sale, barter, or transfer of slaves, or persons intended to be dealt with as slaves; or shall, otherwise than as aforesaid, carry away or remove, or contract for the carrying away or removing of slaves or other persons, as or in order to their being dealt with as slaves; or shall import or bring, or contract for the importing or bringing into any place whatsoever, slaves, or other persons, as or in order to their being dealt with as slaves; or shall, otherwise than as aforesaid, ship, tranship, embark, receive, detain, or confine on board, or contract for the shipping, transhipping, embarking, receiving, detaining, or confining on board of any ship, vessel, or boat, slaves or other persons, for the purpose of their being carried away or removed, as or in order to their being dealt with as slaves; or shall ship, tranship, embark, receive, detain, or confine on board, or contract for the shipping, transhipping, embarking, receiving, detaining, or confining on board of any ship, vessel, or boat, slaves or other persons, for the purpose of their being imported or brought into any place whatsoever, as or in order to their being dealt with as slaves; or shall fit out, man, navigate, equip, despatch, use, employ, let or take to freight or on hire, or contract for the fitting out, manning, navigating, equipping, despatching, using, employing, letting, or taking to freight or on hire, any ship, vessel, or boat, in order to accomplish any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully lend or advance, or become security for the loan or advance, or contract for the lending or advancing, or becoming security for the loan or advance of money, goods, or effects, employed or to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully become guarantee or security, or contract for the becoming guarantee or security, for agents employed or to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful, or in any other manner to engage, or contract to engage, directly or indirectly, therein, as a partner, agent, or otherwise; or shall knowingly and wilfully ship, tranship, lade, or receive or put on board, or contract for the shipping, transhipping, lading, receiving, or putting on board of any ship, vessel, or boat, money, goods, or effects, to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall take the charge or command, or navigate or enter and embark on board, or contract for the taking the charge or command, or for the navigating or entering and embarking on board of any ship, vessel, or boat, as captain, master, mate, surgeon, or supercargo, knowing that such ship, vessel, or boat is actually employed, or is in the same voyage, or upon the same occasion, in respect of which they shall so take the charge or comamnd, or navigate or enter and embark, or contract so to do as aforesaid, intended to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully insure, or contract for the insuring of any slaves, or any property or other subject matter engaged or employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall wilfully and fraudulently forge or counterfeit any

certificate, certificate of valuation, sentence or decree of condemnation or restitution, copy of sentence or decree of condemnation or restitution, or any receipt (such receipts being required by this act), or any part of such certificate, certificate of valuation, sentence or decree of condemnation or restitution, copy of sentence or decree of condemnation or restitution, or receipt as aforesaid; or shall knowingly and wilfully utter or publish the same, knowing it to be forged or counterfeited, with intent to defraud his Majesty, or any other person or persons whatsoever, or any body politic or corporate; then, and in every such case the persons so offending, and their procurers, counsellors, aiders, and abettors, *shall be felons, and shall be transported* for a term not exceeding 14 years, or shall be confined and kept to hard labour for a term not exceeding 5 or less than 3 years, at the discretion of the court before whom such offenders shall be tried. — § 10.

Seamen, &c. serving on board such Ships guilty of Misdemeanour. — And (except in such special cases or for such special purposes as are by this act permitted) if any person shall enter and embark on board, or contract for the entering and embarking on board of any ship, vessel, or boat, as petty officer, seaman, marine, or servant, or in any other capacity not herein-before specifically mentioned, knowing that such ship, vessel, or boat is actually employed, or is in the same voyage, or upon the same occasion, in respect of which they shall so enter and embark on board, or contract so to do as aforesaid, intended to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; then, and in every such case, the persons so offending, and their procurers, counsellors, aiders, and abettors, shall be guilty of a misdemeanour only, and shall be punished by imprisonment for a term not exceeding 2 years. — § 11.

Abolition of Slavery. — We have already alluded (*antè*, p. 324.) to the memorable act of 1833, for the ABOLITION OF SLAVERY throughout the British colonies. In enacting this celebrated statute, parliament endeavoured to reconcile the apparently conflicting claims of humanity and justice, by providing for the emancipation of the slaves, without prejudice to the just rights and claims of their proprietors. This was effected by assigning to the latter the sum of *twenty millions* sterling, which was distributed amongst them on their complying with the provisions of the act. This is, perhaps, the greatest pecuniary sacrifice ever voluntarily made by any nation in vindication of the right of property. But it was not too great for the object in view; for had that right been violated in this instance, a precedent would have been set for its violation in others, and the consequences would have been most disastrous. The measure, in fact, reflects quite as much credit on the wisdom and honesty, as on the generosity, of the British nation.

We gave, in the previous edition of this work, an abstract of this celebrated statute, to which we beg to refer the reader who may wish to become minutely acquainted with its provisions. It is sufficient, now, to mention that it enacted that slavery should cease in all our possessions on the 1st of August, 1834; when the slaves were to become apprenticed labourers, their final and complete emancipation taking place partly on the 1st of August, 1838, and partly on the 1st of August, 1840. But a clamour having been raised against the duration of the apprenticeship, its period was shortened, and the blacks became universally free in 1838.

Distribution of Slave Compensation. — The commissioners for the apportionment of the 20,000,000*l.* granted by parliament as compensation to slave owners, under the act 3 & 4 Will. 4. cap. 73., issued the following table, showing the average value of a slave in each colony; the number of slaves in each; the total value of the slaves, supposing the annual value of each were realised; and the proportion of the 20,000,000*l.* received by each colony.

Colony.	Average Value of a Slave from 1822 to 1830.	Number of Slaves by the last Registration in this Country.	Relative Value of the Slaves.	Proportion of the 20,000,000*l.* to which each Colony is entitled.
	£ s. d.		£ s. d.	£ s. d.
Bermuda	27 4 11½	4,203	114,527 7 5½	50,581 7 0½ ·41
Bahamas	29 18 9½	9,705	280,573 15 3½	128,340 7 5½ ·17
Jamaica	44 15 2½	311,692	13,951,139 2 3½	6,161,927 5 10½ ·58
Honduras	120 4 7½	1,920	230,844 0 0	101,958 19 7½ ·92
Virgin Islands	31 16 1½	5,192	165,143 9 2	72,940 8 5½ ·76
Antigua	33 12 10½	29,537	964,198 0 10½	425,866 7 0½ ·13
Montserrat	38 17 10½	6,355	231,466 8 0½	103,558 18 5½ ·38
Nevis	39 3 11½	8,722	341,893 6 3½	151,007 2 11½ ·35
St. Christopher's	36 6 10½	20,660	750,840 7 1	331,630 10 7½ ·82
Dominica	43 8 7½	14,384	624,715 2 0	275,923 12 8½ ·30
Barbadoes	47 1 3½	82,807	3,897,276 19 0½	1,721,315 19 7½ ·87
Grenada	59 6 0½	23,536	1,393,684 16 0½	616,144 17 7½ ·03
St Vincent's	58 6 8½	22,992	1,341,491 13 4½	592,508 18 0½ ·93
Tobago	45 12 0½	11,021	529,941 16 2½	234,064 4 11½ ·55
St. Lucia	56 18 7½	13,348	750,900 10 4½	335,627 15 11½ ·19
Trinidad	105 4 5½	22,359	2,356,655 18 0½	1,039,119 1 5½ ·11
British Guiana	114 11 5½	84,915	9,729,047 13 5½	4,297,117 10 6½ ·30
Cape of Good Hope	73 9 11½	38,127	2,823,724 7 9½	1,247,401 0 7½ ·78
Mauritius	69 14 3½	68,613	4,783,183 15 3½	2,114,834 10 11½ ·06
				Deficient fractions ·08
		780,993	45,281,738 15 10½	£20,000,000 0 0

SMALTZ, OR SMALT (Ger. *Schmalz*; Du. *Smalt*; Fr. *Smalt*; It. *Smalto azzurro, Smaltino*; Sp. *Esmalte, Azul azur*; Rus. *Lasor*), an oxide of cobalt, melted with siliceous earth and potash. It is a sort of glass, of a beautiful deep blue colour; and being ground very fine, is known by the name of powder blue. The colour of smaltz is not affected by fire; and it is consequently in great demand in the painting of earthenware. It is also employed in the colouring of paper, and for other purposes in the arts. Beckmann has proved that the process used in the preparation of smaltz was invented about the end of the 15th or the beginning of the 16th century; and that the blue

glass of the ancients owes its colour, not to the presence of cobalt or of smaltz, but to that of iron. — (*Hist. of Inventions*, vol. ii. art. *Cobalt.*)

Smaltz is principally manufactured in Germany and Norway. Of 118,638 lbs. imported into Great Britain in 1840, 97,751 lbs. came from Norway, and the remainder from Germany and Holland. The entries of smaltz for home consumption have latterly decreased. In 1842 they amounted to 145,470 lbs.

SMUGGLING, the offence of importing prohibited articles, or of defrauding the revenue by the introduction of articles into consumption, without paying the duties chargeable upon them. It may be committed indifferently either upon the excise or customs revenue.

Origin and Prevention of Smuggling. — This crime, which occupies so prominent a place in the criminal legislation of all modern states, is wholly the result of vicious commercial and financial legislation. It is the fruit either of prohibitions of importation, or of oppressively high duties. It does not originate in any depravity inherent in man; but in the folly and ignorance of legislators. A prohibition against importing a commodity does not take away the taste for it; and the imposition of a high duty on any article occasions a universal desire to escape or evade its payment. Hence the rise and occupation of the smuggler. The risk of being detected in the clandestine introduction of commodities under any system of fiscal regulations may always be valued at a certain average rate; and wherever the duties exceed this rate, smuggling immediately takes place. Now, there are plainly but two ways of checking this practice,— either the temptation to smuggle must be diminished by lowering the duties, or the difficulties in the way of smuggling must be increased. The first is obviously the more natural and efficient method of effecting the object in view; but the second has been most generally resorted to, even in cases where the duties were quite excessive. Governments have uniformly almost consulted the persons employed in the collection of the revenue with respect to the best mode of rendering taxes effectual; though it is clear that the interests, prejudices, and peculiar habits of such persons utterly disqualify them from forming a sound opinion on such a subject. They cannot recommend a reduction of duties as a means of repressing smuggling and increasing revenue, without acknowledging their own incapacity to detect and defeat illicit practices; and the result has been, that, instead of ascribing the prevalence of smuggling to its true causes, the officers of customs and excise have almost universally ascribed it to some defect in the laws, or in the mode of administering them, and have proposed repressing it by new regulations, and by increasing the number and severity of the penalties affecting the smuggler. As might have been expected, these attempts have, in the great majority of cases, proved signally unsuccessful. And it has been invariably found, that no vigilance on the part of the revenue officers, and no severity of punishment, can prevent the smuggling of such commodities as are either prohibited or loaded with oppressive duties. The smuggler is generally a popular character; and whatever the law may declare on the subject, it is ludicrous to expect that the bulk of society should ever be brought to think that those who furnish them with cheap brandy, geneva, tobacco, &c. are guilty of any very heinous offence.

"To pretend," says Dr. Smith, "to have any scruple about buying smuggled goods, though a manifest encouragement to the violation of the revenue laws, and to the perjury which almost always attends it, would, in most countries, be regarded as one of those pedantic pieces of hypocrisy, which, instead of gaining credit with anybody, seems only to expose the person who affects to practise them to the suspicion of being a greater knave than most of his neighbours. By this indulgence of the public, the smuggler is often encouraged to continue a trade, which he is thus taught to consider as, in some measure, innocent; and when the severity of the revenue laws is ready to fall upon him, he is frequently disposed to defend with violence what he has been accustomed to regard as his just property; and from being at first rather imprudent than criminal, he, at last, too often becomes one of the most determined violators of the laws of society." — (*Wealth of Nations*, p. 406.)

To create by means of high duties an overwhelming temptation to indulge in crime, and then to punish men for indulging in it, is a proceeding completely subversive of every principle of justice. It revolts the natural feelings of the people; and teaches them to feel an interest in the worst characters — for such smugglers generally are — to espouse their cause, and avenge their wrongs. A punishment which is not proportioned to the offence, and which does not carry the sanction of public opinion along with it, can never be productive of any good effect. The true way to put down smuggling is to render it unprofitable; to diminish the temptation to engage in it: and this is not to be done by surrounding the coasts with cordons of troops, by the muliplication of oaths and penalties, and making the country the theatre of ferocious and bloody contests in the field, and of perjury and chicanery in the courts of law; but by repealing prohibitions, and reducing duties, so that their collection may be enforced with a moderate degree of vigilance; and that the forfeiture of the article may be a sufficient penalty

upon the smuggler. It is in this, and in this only, that we must seek for an effectual check to illicit trafficking. Whenever the profits of the fair trader become nearly equal to those of the smuggler, the latter is forced to abandon his hazardous profession. But so long as prohibitions or oppressively high duties are kept up, or, which is, in fact, the same thing, so long as *high bounties* are held out to encourage the adventurous, the needy, and the profligate, to enter on this career, we may be assured that armies of excise, and custom-house officers, backed by the utmost severity of the revenue laws, will be insufficient to hinder them.

Smuggling in France and England.—The *Report* of Mr. Villiers (now Lord Clarendon) and Dr. Bowring, on the commercial relations between France and Great Britain, contains some curious and instructive details as to the smuggling carried on between them. They afford the most satisfactory proofs of the incapacity of restrictions and prohibitions to secure a real monopoly of any extensive market; and show that their principal effect is to promote illicit traffic; and to make that ingenuity and invention be exerted in devising means to defeat and elude the law, which, under a more liberal system, would be exerted to improve the methods of production. The introduction of prohibited goods is more easily effected by land than by sea; and smuggling into France is, in consequence, carried on principally through her north and east frontiers. Considerable quantities of prohibited or overtaxed goods are, however, introduced by sea. A regular tariff of risks is established; and persons of undoubted solidity contract, for certain premiums, which for the most part are abundantly moderate, to deliver any prohibited article in any part of France. Owing to the system of *octrois*, or of the collection of duties at the gates of large towns, where an inspection of the goods may also be made, the cost of smuggling into Paris and other populous places is considerably greater than that of smuggling into villages. At an average, however, most foreign goods may be delivered in Paris at a charge of from 25 to 30 per cent. *ad valorem* on their real value.

Notwithstanding the advantage of a sea frontier, a coast guard, and an overgrown Custom-house establishment, the facts embodied by Messrs. Villiers and Bowring in their *Report* show that smuggling about 10 years since, and certainly it has not decreased in the interval, was in quite as flourishing a condition on the shores of England as on the land frontier of France. The premium on the illicit introduction amongst us of prohibited or overtaxed goods varies from 12 to 40 per cent. *ad valorem*, according to the description of the article. The parties employing the smugglers run no risk. The latter, or their agents, attend regularly upon 'Change; and "it is their constant practice to deposit the value of the goods confided to their care in a banker's acceptance, as a security to the owner!"—(*Report*, p. 54.) It could hardly, indeed, have been otherwise. Brandy, which is a favourite article for smuggling speculations, may be bought for shipment in France at from 3*s.* 6*d.* to 5*s.* a gallon. It is highly popular amongst us; but instead of admitting it to consumption under a moderate duty, or even under the high duty of 8*s.* or 10*s.*, we load it with the oppressive and exorbitant duty of 22*s.* 6*d.*; that is, with a duty varying from 450 to 650 per cent. *ad valorem!* Had those who originally imposed this duty, and those by whom it has been kept up, been deeply interested in smuggling adventures, their conduct would have been intelligible; but as no such excuse can be made for them, it has been in the last degree irrational and absurd. The temptation to the illicit introduction of brandy, occasioned by the exorbitancy of the duty, has roused all the energies of the smuggler, who has defeated the utmost vigilance of the revenue officers, and eluded or defied the multiplied pains and penalties of the customs laws! Messrs. Villiers and Bowring estimated, from a comparison of the shipments of different articles from France for England with the imports into the latter, and other authentic data, that the total amount of duties evaded by the fraudulent importation of overtaxed French articles (exclusive of tobacco, whole cargoes of which are sometimes introduced into Ireland) into this country amounts to about 800,000*l.* a year.—(p. 54.) Of this sum, the loss on brandy makes by far the largest item; and is said to be "*considerably more than* 500,000*l.*!"—(p. 57.) Latterly, however, we incline to think that the smuggling of silks, gloves, ladies' shoes, and such like articles, has been carried to a still greater extent than the smuggling of brandy. But, whether this be so or not, it is plain that duties which exceed the cost of smuggling are practically useless as a means of raising anything like their proper amount of revenue: they are so, however, in a far greater degree than appears even from the above statements; for, in addition to the vast quantity of overtaxed articles clandestinely introduced, and on which a reasonable duty would be paid, they occasion the overloading of the market with spurious, counterfeit articles, by which the public health as well as the revenue is materially injured. Nor is this all. In order to render oppressive duties productive of any revenue, it is necessary to organise and keep constantly on foot a very numerous and costly customs establishment. It is abundantly certain that we lose, by the clandestine importation of silks, brandy, geneva, and tobacco, from France, Bel-

gium, and Holland, above 2,000,000*l.* a year of revenue; and it is admitted, on all hands, that but for the oppressive duties on these articles, a saving of 400,000*l.* a year might be effected in the customs department. Nothing, therefore, can be more futile than to attempt vindicating exorbitant duties on the pretence of their being required to keep up the revenue. In point of fact, such duties are about the most efficient engines that can be devised for its reduction. The revenue derived from coffee was trebled by reducing the duty from 1*s.* 7*d.* to 6*d.* per lb. —(see COFFEE); the revenue derived from British spirits was materially increased by reducing the duty from 5*s.* 6*d.* to 2*s.* 6*d.* the wine gallon — (see SPIRITS); and Mr. Pitt increased the duty derived from brandy, geneva, &c, in 1786, not by adding to, but by taking 50 per cent. from, the duties with which they had previously been loaded! There cannot, indeed, be the shadow of a doubt that the revenue derived from brandy and geneva would be very largely increased by reducing the duties to 8*s.* or 10*s.* a gallon. A measure of this sort, coupled as it should be with a reduction of the duties on silks and tobacco (see the articles on them), would do what neither coast guards, preventive services, revenue cruisers, or customs acts will ever do, — it would go far to annihilate smuggling; and would enable the services of a large number of revenue officers to be dispensed with.

But the demoralising influence of an extensive smuggling system is the worst consequence of oppressive duties and prohibitions. They make the smuggler be regarded as a public benefactor, and procure for him the sympathy of all classes, and the strenuous support of those in the lower walks of life. No one acquainted with the state of the peasantry in extensive districts of Kent and Sussex, will believe that it is easy to exaggerate the evils that spring from this source. The whole body of labourers may be said to be in combination with the smugglers; and numbers of them are every now and then withdrawn from their usual employment to assist in their desperate adventures. Lawless, predatory, and ferocious habits are thus widely diffused; and thousands, who, but for this moral contamination, would have been sober and industrious, are trained to despise and trample on the law, and to regard its functionaries as enemies whom it is meritorious to waylay and assault.

Such being the operation and result of those oppressive duties and absolute prohibitions to which smuggling owes its origin, it is not surely too much to hope that the former may be modified, and the latter repealed. When this has been done, smuggling will cease; but not one moment sooner. Till then it will continue, in despite of all the impotent efforts that may be made for its suppression, to scatter its seeds and spread its roots on all sides; impoverishing the fair and enriching the illicit dealer; corrupting revenue officers, and making even the Custom-house the scene of smuggling transactions; emptying the public treasury of the state, and filling its gaols with criminals!

Smuggling by Dogs. — The following extract from the *Report* of Messrs. Villiers and Bowring developes one of those ingenious devices by which mischievous customs laws are sure to be defeated.

"The director of the Custom-house made, on the 30th of July, 1831, some very curious statements to the minister of finance on the subject of the fraudulent introduction of articles by means of dogs. He says, that since the suppression of smuggling by horses, in 1825, dogs have been employed; that the first attempts were made in the neighbourhood of Valenciennes, and that it afterwards spread to Dunkirk and Charleville; that it has since extended to Thionville and Strasburg; and, last of all, in 1828, to Besançon.

"In 1823, it was estimated that 100,000 kilogrammes of goods were thus introduced into France; in 1825, 187,315; and in 1826, 2,100,000 kilogrammes; all these estimates being reported as rather under the mark: the calculation has been made at 2½ kilogrammes '*pro rata*' per dog. The dogs sometimes carry 10 kilogrammes, and sometimes even 12. The above estimate supposes that 1 dog in 10 in certain districts, and in others 1 in 20, is killed; but these calculations must necessarily be very vague. In the opinion of many of the custom-house officers, not more than 1 dog in 75 is destroyed, even when notice has been given, and the dogs are expected.

"Tobacco and colonial produce are generally the objects of this illicit trade; sometimes cotton twist and manufactures. In the neighbourhood of Dunkirk, dogs have been taken with burdens of the value of 600, 800, and even 1,200 francs. Publications hostile to the government have not unfrequently been so introduced.

"The dogs which are trained to these 'dishonest habits' are conducted in packs to the foreign frontier; they are kept without food for many hours; they are then beaten and laden, and at the beginning of the night started on their travels. They reach the abodes of their masters, which are generally selected at 2 or 3 leagues from the frontiers, as speedily as they can, where they are sure to be well treated and provided with a quantity of food. It is said they do much mischief by the destruction of agricultural property, inasmuch as they usually take the most direct course across the country. They are dogs of a large size for the most part.

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custom-house officers in case of interference.'

Various efforts have been made to suppress this species of smuggling, but without success. It is idle, indeed, to suppose, seeing the vast extent of the land frontier of France, that any means should ever be adopted capable of excluding cheap foreign products in extensive demand. Nothing short of surrounding the country by Bishop Berkeley's wall of brass could accomplish such an object. The director-general of the French customs informed Messrs. Villiers and Bowring, that smuggling was carried

on to an extent that was *vraiment effrayante*; and he might truly say so, when he estimated that English bobbinet, though prohibited, was introduced into France to the extent of 10,000,000 fr., or 400,000*l.*, a year; and at present bobbinet, and various other prohibited articles of British produce and manufacture, are everywhere met with.

Thus it is that the greatest and most civilised nations of Europe, by upholding vicious and destructive systems of commercial and financial legislation, mutually injure each other. France and England, by their proximity, and the difference and variety of their products, are fitted to carry on a far more extensive and beneficial commerce than is carried on by any other two nations. But, owing to their jealousy of each other's advancement, and the prevalence of unfounded theories as to the causes of national wealth, their intercourse has been subjected to oppressive fetters, and confined within comparatively narrow limits. Such, however, is their peculiar aptitude for supplying each other's wants, that, as has been already seen (*antè*, p. 656.), the trade with France is rapidly growing in magnitude and importance. And there cannot be a doubt, that but for the exorbitant duties, and the restrictions by which it is weighed down and forced into illegitimate channels, it would in no long time become by far the most extensive branch of commerce carried on between any two countries, and the most fruitful source of civilisation and of wealth. So true it is, as was long ago observed, that *Homines hominum causâ sunt generati ut ipsi inter se aliis prodesse possint. . . Sed ut magnas utilitates adipiscimur conspiratione hominum ac consensu, sic nulla tam detestabilis pestis est, quæ non homini ab homine nascatur.* —(*Cic. De Officiis*, lib. ii. c. 5.)

Law as to Smuggling in England. — The penalties imposed on illicit dealing in commodities subject to duties of excise have been specified in the articles on such commodities. The following formidable statute, with its multiplied provisions and penalties, refers entirely to customs duties. The importance of the subject has induced us to give a pretty full abstract of such parts of it as are of general interest.

ACT 3 & 4 WILL. 4. c. 53., FOR THE PREVENTION OF SMUGGLING.

Commencement of the Act. — First of September, 1833. — § 1.

Certain Vessels found within certain Distances of the U. Kingdom to be forfeited. — If any vessel, not being square-rigged, or any boat, belonging in the whole or in part to his Majesty's subjects, or having ½ the persons on board subjects of his Majesty, shall be found or discovered to have been within 100 leagues of the coast of the U. Kingdom; or if any vessel belonging in the whole or in part to his Majesty's subjects, or having ½ the persons on board subjects of his Majesty, or any foreign vessel not being square-rigged, or any foreign boat, in which there shall be 1 or more subjects of his Majesty, shall be found or discovered to have been within 4 leagues of that part of the U. Kingdom which is between the North Foreland on the coast of Kent, and Beachy Head on the coast of Sussex, or within 8 leagues of any other part of the coast of the U. Kingdom: or if any foreign vessel or boat shall be found or discovered to have been within 1 league of the coast of the U. Kingdom; or if any vessel or boat shall be found or discovered to have been within 1 league of the islands of Guernsey, Jersey, Alderney, Sark, or Man respectively, or within any bay, harbour, river, or creek of or belonging to any one of the said islands; any such vessel or boat so found or discovered, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, any spirits not being in a cask or package containing 40 gallons at the least, or any tea exceeding 6 lbs. weight in the whole, or any tobacco or snuff not being in a cask or package containing 450 lbs.* weight at least, or being packed separately in any manner within any cask or package, or any cordage or other articles adapted and prepared for slinging or sinking small casks, or any casks or other vessels whatsoever of less size or content than 40 gallons, of the description used for the smuggling of spirits, then and in every such case the said spirits, tea, tobacco, or snuff, together with the casks or packages containing the same, and the cordage or other articles, casks, and other vessels of the description aforesaid, and also the vessel or boat, shall be forfeited. — § 2.

Any Vessel or Boat arriving within any Port of the U. Kingdom having prohibited Goods on board, forfeited, unless there was no Want of Care in the Master or Owner. — If any vessel or boat whatever shall arrive or shall be found or discovered to have been within any port, harbour, river, or creek of the U. Kingdom, not being driven thereinto by stress of weather or other unavoidable accident, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, within any such port, harbour, river, or creek, any spirits not being in a cask or package containing 40 gallons at the least, or any tobacco or snuff not being in a cask or package containing 450 lbs. weight at least, or being packed separately in any manner within any cask or package, every such vessel or boat, together with such spirits or tobacco or snuff, shall be forfeited: provided always, that if it shall be made to appear to the satisfaction of the commissioners of his Majesty's customs that the said spirits, tobacco, or snuff were on board without the knowledge or privity of the owner or master of such vessel or boat, and without any wilful neglect or want of reasonable care on their or either of their behalves, that then and in such case the said commissioners shall and they are hereby authorised and required to deliver up the said vessel or boat to the owner or master of the same. — § 3.

Certain Cases in which Vessels shall not be forfeited. — Nothing herein contained shall extend to render any vessel liable to forfeiture on account of any tobacco or snuff from the East Indies being in packages of 100 lbs. weight each at least, or on account of any segars being in packages of 100 lbs. weight each at least, or on account of any tobacco made up in rolls, being the produce of and imported from the State of Colombia, and in packages containing 320 lbs. weight each at least, or on account of any tobacco of the dominions of the Turkish empire which may be separated or divided in any manner within the outward package, provided such package be a hogshead, cask, chest, or case containing 450 lbs. weight nett at least, or on account of any rum of and from the British plantations in casks containing 20 gallons at the least, or on account of any spirits, tea, or tobacco really intended for the consumption of the seamen and passengers on board during their voyage, and not being more in quantity than is necessary for that purpose, or to render any square-rigged vessels liable to forfeiture on account of any tea, or of any spirits

* See articles SPIRITS, and TOBACCO.

to render any vessel liable to forfeiture if really bound from one foreign port to another foreign port, and pursuing such voyage, wind and weather permitting. — § 4.

Vessels belonging to his Majesty's Subjects, &c. throwing overboard any Goods during Chase, forfeited. — When any vessel or boat belonging in the whole or in part to his Majesty's subjects, or having ¼ of the persons on board subjects of his Majesty, shall be found within 100 leagues of the coast of this kingdom, and shall not bring to upon signal made by any vessel or boat in his Majesty's service, or in the service of the revenue, hoisting the proper pendant and ensign, in order to bring such vessel or boat to, and thereupon chase shall be given, if any person or persons on board such vessel or boat so chased shall, during the chase or before such vessel or boat shall bring to, throw overboard any part of the lading of such vessel or boat, or shall stave or destroy any part of such lading, to prevent seizure thereof, then and in such case the said vessel or boat shall be forfeited; and all persons escaping from such vessels or boats, or from any foreign vessel or boat, during any chase made thereof by any vessel or boat in his Majesty's service or in the service of the revenue, shall be deemed and taken to be subjects of his Majesty, unless it shall be proved to the contrary. — § 5.

Vessels in Port with a Cargo, and afterwards found in Ballast, and Cargo unaccounted for, forfeited. — If any vessel or boat whatever shall be found within the limits of any port of the U. Kingdom with a cargo on board, and such vessel or boat shall afterwards be found light or in ballast, and the master is unable to give a due account of the port or place within the U. Kingdom where such vessel or boat shall have legally discharged her cargo, such vessel or boat shall be forfeited. — § 6.

Regulations as to Vessels sailing from Guernsey, Jersey, &c. — No vessel or boat belonging wholly or in part to his Majesty's subjects shall sail from Guernsey, Jersey, Alderney, Sark, or Man, without a clearance, whether in ballast or having a cargo; and if with a cargo, the master shall give bond to his Majesty, in double the value of the vessel or boat and of the cargo, for duly landing the same at the port for which the vessel clears; and every such vessel or boat not having such clearance, or which, having a clearance for a cargo, shall be found light or with any part of the cargo discharged before delivery thereof at the port specified in the clearance (unless through necessity or for preservation of the vessel or boat, to be proved to the satisfaction of the commissioners of his Majesty's customs), shall be forfeited. — § 7.

Vessels to bring to on being chased by Vessels or Boats of the Navy or in Preventive Service. — In case any vessel or boat liable to seizure or examination under any act or law for the prevention of smuggling shall not bring to on being required so to do, on being chased by any vessel or boat in H. M. navy having the proper pendant and ensign of H. M. ships hoisted, or by any vessel or boat duly employed for the prevention of smuggling, having a proper pendant and ensign hoisted, it shall be lawful for the captain, master, or other person having charge or command of such vessel or boat, in H. M. navy, or employed as aforesaid (first causing a gun to be fired as a signal), to fire at or into such vessel or boat; and such captain, master, or other person acting in his aid or assistance, or by his direction, shall be indemnified and discharged from any indictment, penalty, action, or other proceeding for so doing. — § 8.

Vessels belonging to his Majesty's Subjects not to hoist any Pendant, Ensign, or Colours usually worn by his Majesty's Ships. — If any person or persons shall, from and after the passing of this act, wear, carry, or hoist in or on board any vessel or boat whatever belonging to any of His Majesty's subjects, whether the same be merchant or otherwise, without particular warrant for so doing from his Majesty, or the High Admiral of Great Britain, or the commissioners for executing the office of High Admiral of Great Britain, H. M. jack, commonly called the Union jack, or any pendant, ensign, or colours usually worn by H. M. ships, or any flag, jack, pendant, ensign, or colours resembling those of his Majesty, or those used on board H. M. ships, or any other ensign or colours than the ensign or colours by any proclamation of his Majesty now in force or hereafter to be issued prescribed to be worn, then and in every such case the master or other person having the charge or command thereof, or the owner or owners on board the same, and every other person so offending, shall forfeit and pay the sum of 50*l.*; and it shall be lawful for any officer or officers of H. M. navy on full pay, or for any officer or officers of customs or excise, to enter on board any such vessel or boat, and to seize any such flag, jack, pendant, ensign, or colours, and the same shall thereupon be forfeited. — § 9.

Vessels and Boats used in Removal of run Goods to be forfeited. — All vessels and boats made use of in the removal, carriage, or conveyance of any goods liable to forfeiture under this or any other act relating to the revenue of customs, shall be forfeited. — § 10.

Boats of Vessels to have thereon the Name of Vessel, Port, and Master. — The owner of every vessel belonging in the whole or in part to any of his Majesty's subjects shall paint or cause to be painted upon the outside of the stern of every boat belonging to such vessel, the name of such vessel, and the port or place to which she belongs, and the master's name withinside the transom, in white or yellow Roman letters, not less than 2 inches in length, on a black ground, on pain of the forfeiture of such boat not so marked, wherever the same shall be found. — § 11.

Boats not belonging to Ships to have Name of Owner, &c. thereon. — The owner of every boat not belonging to any vessel shall paint or cause to be painted upon the stern of such boat, in white or yellow Roman letters of 2 inches in length, on a black ground, the name of the owner or owners of the boat, and the port or place to which she belongs, on pain of the forfeiture of such boat not so marked, wherever the same shall be found. — § 12.

Vessels and Boats used in piloting or fishing to be painted black. — The owner or owners of every vessel or boat employed on the coasts of the U. Kingdom in piloting or fishing shall paint or tar every such vessel or boat, or cause the same to be painted or tarred, entirely black, except the name or other description now required by law to be painted on such vessel or boat; and every such vessel or boat not so painted or tarred, and every boat so painted as to resemble any boat usually employed for the prevention of smuggling or in any other employment in H. M. service, shall be forfeited: provided always, that nothing herein contained shall extend to prevent any distinguishing mark being placed on any vessel or boat, or to be otherwise painted, if the commissioners of customs think proper to allow the same, expressing it so in the licence of said vessel or boat. — § 13.

British Vessels having secret Places, &c. forfeited. — All vessels and boats belonging in the whole or in part to H. M. subjects, having false bulkheads, false bows, double sides or bottoms, or any secret or disguised place whatsoever in the construction of the said vessel or boat adapted for the purpose of concealing goods, or having any hole, pipe, or other device in or about the vessel or boat adapted for the purpose of running goods, shall be forfeited, with all the guns, furniture, ammunition, tackle, and apparel belonging to such vessel or boat; and all foreign vessels or boats, not being square-rigged, coming to any port of the U. Kingdom, having on board any goods liable to the payment of duties, or prohibited to be imported, concealed in false bulkheads, false bows, double sides or bottoms, or any secret or disguised place in said vessel or boat, shall be forfeited. — § 14.

Goods concealed on board forfeited, and all Goods packed therewith. — If any goods which are subject to any duty or restriction in respect of importation, or which are prohibited to be imported into the U. Kingdom, shall be found concealed in any manner on board any vessel, or shall be found, either before or after landing, to have been concealed in any manner, in such case all such goods, and all other goods packed with them, shall be forfeited. — § 15.

LICENCES. — *N.B.* The clauses of this act, with respect to the licensing of ships, from § 16. to § 27. both inclusive, are given under the word LICENCES.

Goods unshipped without Payment of Duty, and prohibited Goods, liable to Forfeiture. — If any goods liable to the payment of duties be unshipped from any vessel or boat in the U. Kingdom or the Isle of Man (customs or other duties not being first paid or secured), or if any prohibited goods whatsoever be im-

ported into any part of the U. Kingdom or of the Isle of Man, or if any goods warehoused or otherwise secured in the U. Kingdom, for home consumption or exportation, be clandestinely or illegally removed from any warehouse or place of security, then and in every such case all such goods shall be forfeited, together with all horses and other animals, and all carriages and other things, made use of in the removal of such goods. — § 28.

Spirits and Tobacco found without a Permit to be deemed run. — All spirits or tobacco which shall be found removing without a legal permit for the same shall be deemed to be spirits or tobacco liable to and unshipped without payment of duty, unless the party in whose possession the same be found or seized prove to the contrary. — § 29.

Restricted Goods to be deemed run. — All goods the importation of which is in any way restricted, which are of a description admissible to duty, and which shall be found and seized in the U. Kingdom under any law relating to the customs or excise, shall, for the purpose of proceeding for the forfeiture of them, or for any penalty incurred in respect of them, be described in any information exhibited on account of such forfeiture or penalty as goods liable to and unshipped without payment of duties. — § 30.

Prohibited Goods shipped or waterborne, with intent to be exported, &c. forfeited, &c. — If any goods prohibited to be exported be put on board any vessel or boat with intent to be laden or shipped for exportation, or be brought to any quay, wharf, or other place in the U. Kingdom to be put on board any vessel or boat for the purpose of being exported, or if any goods prohibited to be exported be found in any package produced to the officer or officers of the customs as containing goods not so prohibited, then and in every such case, not only all such prohibited goods, but also all other goods packed therewith, shall be forfeited. — § 31.

Vessels, Boats, and Goods may be seized by Officers and Persons herein mentioned, &c. — All vessels and boats, and all goods whatsoever, liable to forfeiture under this or any other act relating to the revenue of customs, may be seized in any place, either upon land or water, by any officer or officers of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer or officers of customs or excise, or by any person having authority to seize from the commissioners of customs or excise; and all vessels, boats, and goods so seized shall, as soon as conveniently may be, be delivered into the care of the proper officer appointed to receive the same. — § 32.

Penalty on Officers &c. making collusive Seizures or taking Bribes, and on Persons offering them. — If any officer or officers of the customs or excise, or of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any other person or persons whatsoever duly employed for the prevention of smuggling, make any collusive seizure, or deliver up, or make any agreement to deliver up or not to seize, any vessel or boat or any goods liable to forfeiture, or take any bribe, gratuity, recompence, or reward for the neglect or non-performance of his duty, every such officer or other person shall forfeit for every such offence 500*l.* and be rendered incapable of serving his Majesty in any office whatever, either civil or military; and every person who shall give or offer or promise to give or procure to be given, any bribe, recompence, or reward to, or shall make any collusive agreement with, any such officer or person as aforesaid, to induce him in any way to neglect his duty, or to do, conceal, or connive at any act whereby any of the provisions of any act of parliament relating to the revenue of customs may be evaded, shall forfeit the sum of 200*l.* — § 33.

Vessels and Persons may be searched within the Limits of the Ports. — It shall and may be lawful for any officer or officers of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or for any officer or officers of customs, producing his or their warrant or deputation (if required), to go on board any vessel within the limits of any of the ports of this kingdom, and to rummage and search the cabin and all other parts of such vessel for prohibited and uncustomed goods, and to remain on board such vessel during the whole time that the same shall continue within the limits of such port, and also to search any person or persons either on board or who shall have landed from any vessel, provided such officer or officer have good reason to suppose that such person or persons hath or have any uncustomed or prohibited goods secreted about his, her, or their person or persons; and if any person obstruct any officer or officers in going or remaining on board, or in entering or searching such vessel or person, every such person shall forfeit and lose the sum of 100*l.* — § 34.

Before Persons are searched, they may require to be taken before a Justice, &c. — Before any person shall be searched by any such officer or officers, it shall be lawful for such person to require the officer or officers to take him or her before a justice of the peace, or before the collector, comptroller, or other superior officer of the customs, who shall determine whether there is reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person; and if it appear to such justice, collector, &c. that there is reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, such justice, collector, comptroller, or other superior officer of customs shall direct such person to be searched in such manner as he shall think fit; but if it shall appear to such justice, collecter, comptroller, &c. that there is not reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, then such justice, collector, &c. shall forthwith discharge such person, who shall not in such case be liable to be searched; and every such officer or officers is and are authorised and required to take such person, upon demand, before any justice, collector, &c., detaining him or her in the meantime: provided always, that no person being a female shall be searched except by a female duly authorised by the commissioners of customs. — § 35.

Penalty on Officers for Misconduct with respect to Search. — If any such officer or officers shall not take such person with reasonable despatch before such justice, collector, comptroller, or other superior officer of customs, when so required, or shall require any person to be searched by him, not having reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, such officer shall forfeit and pay the sum of 10*l.* — § 36.

Penalty on Persons denying having Foreign Goods about them. — If any passenger or other person on board any vessel or boat shall, upon being questioned by any officer of customs, whether he or she has any foreign goods upon his or her person, or in his or her possession, deny the same, and any such goods shall, after such denial, be discovered upon his or her person, or in his or her possession, such goods shall be forfeited, and such person shall forfeit treble the value of such goods. — § 37.

Officers, authorised by Writ of Assistance, may search Houses for prohibited Goods, &c. — It shall and may be lawful for any officer or officers of customs, or person acting under the direction of the commissioners of customs, having a writ of assistance under the seal of the Court of Exchequer, to take a constable, headborough, or other public officer inhabiting near the place, and in the daytime to enter into and search any house, shop, cellar, warehouse, room, or other place, and in case of resistance to break open doors, chests, trunks, and other packages, there to seize and from thence to bring any uncustomed or prohibited goods, and to put and secure the same in the Custom-house warehouse in the port next to the place whence such goods shall be taken: provided always, that for the purposes of this act any such constable, headborough, or other public officer, duly sworn as such, may act as well without the limits of any parish, ville, or other place for which he shall be so sworn, as within such limits. — § 38.

Duration of Writs. — All writs of assistance so issued from the Court of Exchequer shall continue and be in force during the whole of the reign in which such writs have been granted, and for 6 months from its conclusion. — § 39.

Officers may, on probable Cause, stop Carts, &c. and search for Goods. — It shall be lawful for any officer of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, upon reasonable suspicion, to stop and examine any cart, wagon, or other means of conveyance, for the purpose of ascertaining whether any smuggled goods are contained

therein; and if no such goods be found, the officer or other person stopping and examining such cart, wagon, &c., having had probable cause to suspect that smuggled goods were contained therein, shall not, on account of such stoppage and search, be liable to any action at law on account thereof; and all persons driving or conducting such cart, wagon, &c. refusing to stop when required so to do in the King's name, shall forfeit 100*l.* — § 40.

Police Officers seizing Goods to carry them to Warehouse. — If any goods subject or liable to forfeiture under this or any other act relating to the customs be stopped or taken by any police officer or other person acting by virtue of any act of parliament, or otherwise duly authorised, such goods shall be carried to the Custom-house warehouse next to the place where the goods were stopped or taken, and there delivered to the proper officer appointed to receive the same, within 48 hours after the said goods were stopped and taken. — § 41.

Goods stopped by Police Officers may be retained until Trial of Persons charged with stealing them. — If any goods be stopped or taken by a police officer on suspicion that the same have been feloniously stolen, it shall be lawful for the said officer to carry the same to the police office to which the offender is taken, there to remain to be produced at the trial of said offender; and in such case the officer is required to give notice in writing to the commissioners of customs of his having so detained the goods, with the particulars of the same; and immediately after the trial all such goods are to be deposited in the Custom-house warehouse, to be proceeded against according to law; and in case any police officer making detention of any such goods neglect to convey the same to such warehouse, or to give notice of having stopped the same as before described, he shall forfeit 20*l.* — § 42.

Commissioners of Treasury, &c. may restore Seizures. — It shall and may be lawful for the commissioners of the treasury, or any 3 or more of them, or for the commissioners of customs or excise, by an order for that purpose, to direct any vessel, boat, goods, or commodities seized under this or any act relating to the customs or excise, or to the trade or navigation of the U. Kingdom, or to any of his Majesty's possessions abroad, to be delivered to the proprietor or proprietors, whether condemnation have taken place or not, upon such terms and conditions as they may deem expedient, and which shall be mentioned in the said order; and it shall be also lawful for the said commissioners of the treasury, and of the customs and excise, to mitigate or remit any penalty or fine which shall have been incurred, or any part of such penalty or fine incurred under any such act: provided always, that no person shall be entitled to the benefit of any order for delivery or mitigation unless the terms and conditions expressed in the said order are fully and effectually complied with. — § 43.

Persons unshipping, &c. any prohibited or uncustomed Goods, to forfeit treble the Value, or 100*l.* — Every person who shall, either in the U. Kingdom or the Isle of Man, assist or be concerned in the unshipping of any goods prohibited to be imported into the U. Kingdom, or into the Isle of Man, or the duties for which have not been paid or secured, or who shall knowingly harbour, keep, or conceal, or knowingly permit or suffer to be harboured, kept, or concealed, any goods which have been illegally unshipped without payment of duties, or which have been illegally removed, without payment of the same, from any warehouse or place of security in which they may have been deposited, or any goods prohibited to be imported, or to be used or consumed in the U. Kingdom or in the Isle of Man, and every person, either in the U. Kingdom or the Isle of Man, to whose possession any such uncustomed or prohibited goods shall knowingly come, or who shall assist or be in anywise concerned in the illegal removal of any goods from any warehouse or place of security in which they have been deposited, shall forfeit either the treble value thereof, or the penalty of 100*l.*, at the election of the commissioners of customs. — § 44.

How Value is to be ascertained. — In all cases where any penalty, the amount of which is to be determined by the value of any goods, is directed to be sued for under any law now in force or to be made for the prevention of smuggling, or relating to the revenue of customs or excise, such value shall be taken to be according to the rate and price which goods of the like sort or denomination and of the best quality bear at such time, and upon which the duties due upon importation have been paid. — § 45.

Persons insuring the Delivery of prohibited or uncustomed Goods to forfeit 500*l.* — Every person who by way of insurance or otherwise shall undertake or agree to deliver any goods to be imported from beyond the seas into any port or place in the U. Kingdom without paying the duties due on such importation, or any prohibited goods, or who in pursuance of such insurance shall deliver or cause to be delivered any uncustomed or prohibited goods, and every aider or abettor of such person, shall for every such offence forfeit 500*l.* over and above any other penalty to which he may be liable; and every person who shall agree to pay any money for the insurance or conveyance of such goods, or shall receive or take them into his custody or possession, or suffer them to be so received or taken, shall also forfeit 500*l.* over and above any penalty to which he may be liable on account of such goods. — § 46.

Penalty on Persons offering Goods for Sale under Pretence of being run or prohibited. — If any person or persons offer for sale any goods under pretence that the same are prohibited, or have been unshipped and run on shore without payment of duties, in such case all such goods (although not liable to any duties or prohibited) shall be forfeited, and the person or persons, and every of them, offering the same for sale, shall forfeit the treble value of such goods, or the penalty of 100*l.*, at the election of the commissioners of customs. — § 47.

Persons found to have been on board Vessels liable to Forfeiture subject to a Penalty of 100*l.* — Every person, being a subject of his Majesty, who shall be found or discovered to have been on board any vessel or boat liable to forfeiture under this or any other act relating to the customs for being found or discovered to have been within any of the distances, ports, or places in this act mentioned, from or in the U. Kingdom, or from or in the Isle of Man, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, such goods or things as subject such vessel or boat to forfeiture, or who shall be found or discovered to have been, within any such distance as aforesaid, on board any vessel or boat from which any part of the cargo or lading of such vessel or boat shall have been thrown overboard, or staved or destroyed, to prevent seizure, shall forfeit 100*l.*; and every person, not being a subject of his Majesty, who shall have been on board any vessel or boat liable to forfeiture for any of the causes aforesaid, within 1 league of the coast of the U. Kingdom or of the Isle of Man, or within any bay, harbour, river, or creek of the said island, shall forfeit for such offence 100*l.*; and it shall be lawful for any officer or officers of the army, navy, or marines, being duly employed for the prevention of smuggling, and on full pay, or any officer or officers of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, and he and they is and are hereby authorised, empowered, and required, to detain and to carry and convey every such person before any justice of the peace, to be dealt with as herein-after directed: provided always, that any such person proving, to the satisfaction of any justice or justices before whom he may be brought, that he was only a passenger in such vessel or boat, and had no interest whatever either in the vessel or boat, or in the cargo or goods on board the same, shall be forthwith discharged by such justices. — § 48.

Persons unshipping, &c. Spirits or Tobacco, to forfeit 100*l.*, *&c.* — Every person whatsoever who shall unship, or be aiding or concerned in the unshipping, of any spirits or tobacco liable to forfeiture under this or any other act relating to the customs or excise, in the U. Kingdom or the Isle of Man, or who shall carry, convey, or conceal, or be aiding, assisting, or concerned in the carrying, conveying, or concealing of any such spirits or tobacco, shall forfeit for such offence 100*l.*; and every such person may be detained by any officer of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer or officers of customs or excise, or other person acting in his or their aid or

assistance, or duly employed for the prevention of smuggling, and taken before any justice of the peace, to be dealt with as herein-after directed.—§ 49.

Persons carrying, &c. Tea or manufactured Silk to forfeit treble the Value, &c. — Every person whatsoever who shall unship, or be aiding, assisting, or otherwise concerned in the unshipping, of any tea or foreign manufactured silk of the value of 20*l.*, liable to forfeiture under any act relating to the customs or excise, or who shall carry, convey, or conceal, or be aiding, assisting, or concerned in the carrying, conveying, or concealing of such tea or silk, shall forfeit for every such offence treble the value thereof; and every such person shall and may be detained by any officer of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer of customs or excise, or by any other person acting in his aid or assistance, or duly employed for the prevention of smuggling, and taken before any justice of the peace, to be dealt with as herein directed: provided always, that it shall be lawful for such detained person to give security in treble the amount of the goods seized, to the satisfaction of such justice, to appear at a time and place appointed; and that no such person shall be liable to serve his Majesty in his naval service.—§ 50.

A Justice may order Persons taken before him for Offences relating to the Customs to be detained a reasonable Time. — Where any person or persons shall have been detained by any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or by any officer of customs or excise, or any person or persons acting in his or their aid or assistance, or duly employed for the prevention of smuggling, for any offence under this or any other act relating to the customs, and shall have been taken and carried before any justice of the peace, if it shall appear to such justice that there is reasonable cause to detain such person or persons, he may and he is authorised and required to order such person or persons to be detained a reasonable time, and at the expiration of such time to be brought before any 2 justices, who are authorised and required finally to hear and determine the matter.—§ 51.

Any Person liable to Arrest making his Escape, may be detained by any Officer of Customs. — If any person or persons liable to be detained under the provisions of this or any other act relating to the customs shall not be detained at the time of so committing the offence, or after detention shall make his or their escape, it shall be lawful for any officer or officers of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or for any officer of customs or excise, or any other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, to detain such person at any time afterwards, and to carry him before any justice of the peace, to be dealt with as if detained at the time of committing the said offence.—§ 52.

Persons making Signals to Smuggling Vessels at Sea, on Conviction to forfeit 100*l.*, *&c.* — No person shall, after sunset and before sunrise between the 21st day of September and the 1st day of April, or after the hour of 8 in the evening, and before the hour of 6 in the morning at any other time in the year, make, aid or assist in making, any signal in or on board or from any vessel or boat, or on or from any part of the coast or shore of the U. Kingdom, or within 6 miles of any part of such coasts or shores, for the purpose of giving any notice to any person on board any smuggling vessel or boat, whether any person so on board such vessel or boat be or be not within distance to notice such signal; and if any person, contrary to the intent and meaning of this act, make or cause to be made, or aid or assist in making, any such signal, such person shall be guilty of a misdemeanour; and it shall be lawful for any person to stop, arrest, and detain the person or persons who shall so offend, and to carry and convey such person or persons before any 1 or more justices of the peace residing near the place where such offence shall be committed, who, if he sees cause, shall commit the offender to the next county gaol, there to remain until the next court of oyer or terminer, great session, or gaol delivery, or until such person or persons shall be delivered by due course of law; and it shall not be necessary to prove on any indictment or information that any vessel or boat was actually on the coast; and the offender or offenders being duly convicted thereof, shall by order of the court before whom they are convicted, either forfeit and pay the penalty of 100*l.*, or, at the discretion of such court, be committed to the common gaol or house of correction, there to be kept to hard labour for any term not exceeding 1 year.—§ 53.

Proof of a Signal not being intended, to lie on the Defendant. — In case any person be charged with or indicted for having made or caused to be made, or been aiding or assisting in making, any such signal, the burden of proof that such signal so charged as having been made with intent and for the purpose of giving such notice as aforesaid was not made with such intent and for such purpose shall be upon the defendant.—§ 54.

Any Person may prevent Signals. — It shall be lawful for any person whatsoever to prevent any signal as aforesaid being made, and to enter upon any lands for that purpose, without being liable to any indictment, suit, or action for the same.—§ 55.

Persons resisting Officers, or rescuing or destroying Goods to prevent Seizure, forfeit 100*l.* — If any person whatsoever shall obstruct any officer or officers of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer or officers of customs or excise, or any person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, in the execution of his or their duty, or in the due seizing of any goods liable to forfeiture, or shall rescue or cause to be rescued any goods which have been seized, or shall attempt or endeavour to do so, or shall, before or at or after any seizure, stave, break, or otherwise destroy any goods, to prevent the seizure thereof or the securing the same, then and in such case the party or parties offending shall forfeit for every such offence 100*l.*—§ 56.

Penalty on Persons procuring others to assist in unshipping prohibited Goods. — Any person or persons who shall by any means procure or hire any person or persons, or who shall depute, authorise, or direct any person or persons to procure or hire any person or persons, to assemble for the purpose of being concerned in the landing or unshipping or carrying or conveying any goods prohibited to be imported, or the duties for which have not been paid or secured, shall for every person so procured or hired forfeit 100*l.*—§ 57.

Three or more armed Persons assembled to assist in the illegal Landing of Goods, &c. deemed Guilty of Felony. — If any persons, to the number of 3 or more, armed with fire-arms or other offensive weapons, shall, within the U. Kingdom, or within any port, harbour, or creek thereof, be assembled in order to aid and assist in the illegal landing, running, or carrying away of any prohibited goods, or any goods liable to any duties which have not been paid or secured, or in rescuing or taking away any goods, after seizure, from the officer of the customs or other officer authorised to seize the same, or from any person or persons employed by or assisting them, or from the place where the same have been lodged by them, or in rescuing any person who shall have been apprehended for any of the offences made felony by this or any act relating to the customs, or in the preventing the apprehension of any person guilty of such offence, or in case any persons to the number of 3 or more, so armed, shall, within the U. Kingdom, or within any port, harbour, or creek thereof, by so aiding or assisting, every person so offending, and every person aiding, abetting, or assisting therein, shall, being thereof convicted, be adjudged guilty of felony, and suffer death* as a felon.—§ 58.

Persons shooting at any Boat belonging to the Navy, &c. deemed guilty of Felony. — If any person shall maliciously shoot at any vessel or boat belonging to H. M. navy, or in the service of the revenue, within 100 leagues of any part of the coast of the U. Kingdom, or shall maliciously shoot at, maim, or dangerously wound any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, or any person acting in his aid or assistance, or employed for the prevention of smuggling, in the due execution of his office or duty, every person so offending, and every per-

* The punishment of death is now abolished in all cases of this description.

son aiding, abetting, or assisting therein, shall, being lawfully convicted, be adjudged guilty of felony, and suffer death as a felon. — § 59.

Any Person in company with 4 others having prohibited Goods, or with 1 other armed or disguised, guilty of Felony. — If any person being in company with more than 4 other persons be found with any goods liable to forfeiture, or in company with 1 other person, within 5 miles of the sea coast or of any navigable river leading therefrom, with such goods, and carrying offensive arms or weapons, or disguised in any way, every such person shall be adjudged guilty of felony, and shall, on conviction of such offence, be transported as a felon for the space of 7 years. — § 60.

Persons assaulting Officers by Force or Violence may be transported. — If any person shall by force or violence assault, resist, oppose, molest, hinder, or obstruct any officer of the army, navy, or marines employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, in the due execution of his or their office or duty, such person, being thereof convicted, shall be transported for 7 years, or sentenced to be imprisoned in any house of correction or common gaol, and kept to hard labour, for any term not exceeding 3 years, at the discretion of the court before whom the offender shall be tried and convicted as aforesaid. — § 61.

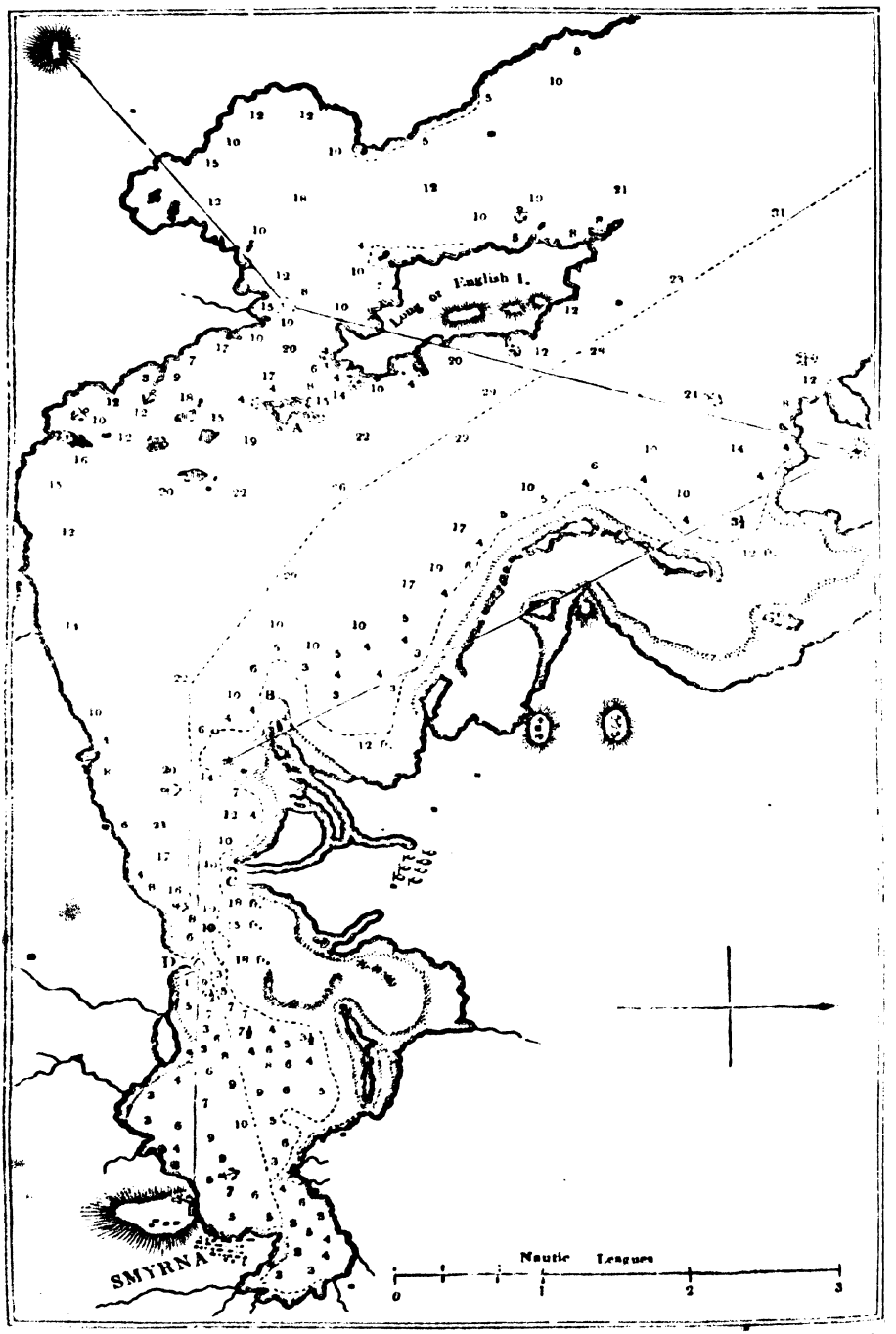
Commanding Officers of Vessels in the Service may haul their Vessels on shore without being liable to any Action for so doing. — It shall be lawful for the commanding officer of any vessel or boat employed for the prevention of smuggling to haul any such vessel or boat upon any part of the coasts of the U. Kingdom, or the shores, banks, or beaches of any river, creek, or inlet of the same (not being a garden or pleasure ground, or place ordinarily used for any bathing machine or machines), which shall be deemed most convenient for that purpose, and to moor any such vessel or boat on such part of the aforesaid coasts, shores, &c. below high water mark, and over which the tide flows on ordinary occasions, and to continue such vessel or boat so moored for such time as said commanding officer shall deem proper; and such officer, or person or persons acting under his direction, shall not be liable to any indictment, action, or suit for so doing, any law, statute, custom, or usage to the contrary notwithstanding. — § 62.

Officer, if wounded in the Service of the Customs, to be provided for, &c. — In all cases where any officer or seaman employed in the service of the customs or excise shall be killed, maimed, wounded, or in any way injured in the due execution of his office, or if any person acting in his aid, or duly employed for the prevention of smuggling, shall be so killed, maimed, wounded, or in any way injured while so aiding such officer or seaman, or so employed, it shall be lawful for the commissioners of customs and excise to make such provision for the officer or person so maimed, wounded, or injured as aforesaid, or for the widows and families of such as shall be killed, as they shall be authorised and empowered to do by warrant from the Lord High Treasurer or commissioners of the treasury. — § 63.

Vessels and Goods seized to be disposed of as the Commissioners direct. — All vessels and boats, and all goods whatsoever, seized and condemned for breach of any law relating to the customs, shall be disposed of as soon as conveniently may be after the condemnation thereof, in such manner as the commissioners of customs shall direct. — § 64.

The following clauses relate to the rewards to be given to the officers seizing smuggled goods, and to the proceedings before the justices, and in the courts relating to prosecutions under the act.

SMYRNA, a large city and sea-port of Asiatic Turkey, on the western side of Asia Minor, lat. 33° 25′ 36″ N., lon. 27° 6′ 45″ E. Population, probably, about 120,000; of whom 60,000 may be Turks, 40,000 Greeks, and the remainder Armenians, Franks, Jews, &c. Smyrna is situated at the bottom of a deep gulph; the entrance to which lies between the island of Mytilene on the north, and Cape Carabourun, in lat. 38° 41′ 30″ N., lon. 26° 21′ E., on the south. The woodcut on the next page gives a better idea of the Gulph of Smyrna than could be derived from any description. The dotted line shows the course inwards. The passage between James's Castle (D) on the south and the opposite sand-bank is narrow; but there is from 9 to 10 fathoms water, with a blue clay bottom. Merchant ships anchor abreast of the city in from 7 to 8 fathoms; but the water is so deep that they may come close to the quays. The *inbat*, or sea breeze, blows from morning till evening, and is always waited for by ships going up to the city. There is excellent anchorage in most parts of the gulph, merely avoiding the shoals on the north side. Smyrna is a place of great antiquity. The excellence of its port, and its admirable situation, have made it be several times rebuilt, after being destroyed by earthquakes. On approaching it from the sea, it has the appearance of an amphitheatre: the castle is at the back of the town, which it commands, on the top of the hill; but it is in a state of decay, and could oppose no resistance to an invading force. The interior of the city does not correspond to its external appearance; the streets being, for the most part, narrow, dirty, and ill paved. Owing to the want of cleanliness, and of all sorts of precautions, on the part of the Turks, Smyrna is frequently visited by the plague. In 1814, from 50,000 to 60,000 of the inhabitants are said to have been cut off by this dreadful scourge. The trade of this city is more extensive than that of any other in the Turkish empire. The caravans from Persia are chiefly composed of Armenians. They arrive and depart at fixed periods, which are nearly identical with those of the arrival and departure of most of the foreign ships frequenting the port. Bargains are principally effected by Jew brokers, many of whom have amassed considerable fortunes. The principal articles of import consist of grain, furs, iron, butter, &c. from Odessa and Taganrog; and of cotton stuffs and twist, silk and woollen goods, coffee, sugar, cochineal, and dye woods, iron, tin and tin plates, rum, brandy, paper, cheese, glass, wine, &c. from Great Britain, France, Italy, the United States, &c. The exports consist principally of raw silk, which is the most valuable article, and is daily increasing in importance; cotton, opium, rhubarb, and a variety of fruits, drugs, and gums; olive oil, madder roots, Turkey carpets, valonia, sponge, galls, wax, copper, hare skins, goats' wool, safflower, &c.—(For further details, see *Tournefort, Voyage du Levant*, tome ii. pp. 495—507. 4to ed.; and *Macgill's Travels in Turkey*, vol. i. Letters 5, 6, 7, 8, and 9.)



References to Plan. — A, Partridge Island, on the south side of which there is excellent anchorage in from 15 to 7 fathoms, muddy bottom. B, a mud point. C, Pelican Point. D, James' Castle. E. Low narrow islands. Soundings, except where otherwise marked, in fathoms.

Monies, Weights, and Measures, same as at Constantinople; which see. Accounts are kept in piastres of 40 paras, or medini. The value of the piastre fluctuates according to the exchange. It has been very much degraded; and is at present (1843) worth about 2*d.*, the exchange being 119 or 119½ piastres per 1*l.* sterling. The oke is the principal weight used. It is equivalent to 2 lbs. 13 oz. 5 dr. avoirdupois; 45 okes = 1 kintal = 100 rottolas = 127·48 lbs. avoirdupois. The kintal of Constantinople is only 44 okes. A teffee of silk = 4¾ lbs. avoirdupois. A chequee of opium = 1¾ lbs.; a chequee of goats' wool = 5¾ lbs. Corn is measured by the killow = 1·456 Winch. bushel. The pic, or long measure, = 27 Eng. inches: But for an account of what the Turkey weights usually render in England, see *post*.

COMMERCE OF SMYRNA. — The following details with respect to the commerce of Smyrna with Western Europe are copied, except when otherwise stated, from a letter addressed by an intelligent English merchant, established in Smyrna, to his correspondent in London, to whom we are indebted for it. Nothing so complete or satisfactory has ever been published as to the trade of this emporium. It is right, however, to mention, that since 1828, when this paper was drawn up, the commerce of Smyrna has lost some of its importance. Syria, the islands of the Archipelago, the eastern parts of Greece, &c. used formerly to derive a considerable part of their supplies of foreign produce at second hand from Smyrna; but they now, for the most part, are either supplied direct from England, Marseilles, &c., or indirectly from Syra, which is become a considerable *depôt*.

Charges on Selling and Buying.— As we conceive that a correct list of selling and buying charges is an essential piece of information for those interested in the commerce of the Levant, we annex the same, including every item of expense, namely: —

On Selling.

	Per cent.
Freight (according to the rate agreed upon in England) say	⅛
Custom duty (on general goods)	3
Porterage from 1 to 2 piastres per package (according to the size).	
Shroffage	0½
House and street brokerage	2
Commission for effecting sale	3
Ditto, if proceeds are remitted by bill or specie	1½
Del credere ditto (when required to be charged)	2
Warehouse rent	0½

On Buying.

	Per cent.
Custom duty (according to the quality of the article)	1 to 3
Porterage (included in the cost of packages, which vary according to the quality of the goods packed).	
House and street brokerage	1½
Commission (except on figs, which is 6 per cent.)	3
Warehouse rent	0½

With regard to the cost of packages, those for silk are about 24 piastres each; for galls, 18 do.; gums mastic, tragacanth, &c., 20 do.; scammony, 18 do.; opium, 30 to 36 do.; raisins, 12 to 14 do.; figs, 25 to 30 paras; cotton wool, from 12 to 20 piastres, &c.

We learn from ————, that your firm deals largely in skins and furs, but he does not state the quality of either; the latter article is, however, of a very limited and ordinary nature with us, and chiefly consists of hare skins, which are abundant, and shipped in considerable quantities for the German and French markets. They are most plentiful during the winter season, when they are also cheaper and keep better than in the hot months of the year. Sheep, goat, lamb, and kid skins are plentiful, and are often in request for America; particularly the 2 latter when in season; which is, for lamb skins, from the middle of March to the beginning of June, and for goat skins from November until April. We have no want of ox and cow hides, both dried and salted, the leather of which is said to be more pliable than those of Europe. They are now and then sent to Marseilles in small parcels; but as it would be difficult to convey, by a written description, the exact quality of those skins, we intend making up a little bale of such kinds as may for the moment be met with, and to forward it by an early vessel to London, when it shall be submitted to your inspection, with an invoice, and remain, if you think proper, at your disposal.

We now proceed to make you acquainted with the manner in which our sales, purchases, and barters are effected, together with the nature of sales made on credit or for cash, &c.

Sales are effected in this country between our house's brokers, and what is termed a street or out-door broker; the former receiving their instructions from us, and the latter acting on behalf of the buyer. When the terms are mutually agreed upon, the real buyer and seller personally meet; and a bond or obligatory note stating the terms and amount of the transaction is drawn out and signed by the buyer, and when not much approved of, one or more signatures are required to the bond, who individually and collectively become responsible for the fulfilment of it.

Purchases are similarly made, except that the purchaser or agent himself, in the first instance, and his brokers, inspect the goods he is about to treat for: cash down is generally expected; and it is but seldom that a short credit of 1 or 2 couriers is obtained: it not unfrequently happens, also, that ¼ or even ⅓ of the purchase amount is advanced to the seller, when an insufficient quantity of the article wanted by the buyer is in the place, and which must then be procured from the interior or place of growth. The money advanced (which is to be returned if the quality does not suit) is sent by a confidential person on the part of the purchaser, accompanied either by the seller in person, or by some one representing him.

Barters are generally attended with delay, impediments, and sacrifices to the European agent who exchanges his constituents' goods for native produce, and are never completed without his paying a large portion in cash, which is mostly ¼, sometimes even ⅓, but never less than ⅛ of the full amount; besides always paying a higher price for the produce than if it were bought for ready money. On the other hand, so far as the agent's transaction goes in goods, the price of which he also advances, it is equal to an advantageous cash sale, deducting a discount; but still he loses, as we have just stated, on that part of the operation which subjects him to the necessity of giving ready money for such part of the produce as remains above the counter-value given in goods, at a higher rate than it is worth in the open market. Thus the advantage is all in favour of this country, and against the agent. Indeed, barters are seldom undertaken unless when a profitable result is anticipated, when European goods are difficult to be placed upon saving conditions, either from the want of demand or a glutted market, or when (which is mostly the case) the holder of such goods has orders from the owners of them to remit them in produce, and thus realise their property, if not upon profitable terms, at least without the risk arising from bad debts: sometimes, also, outstanding bonds are taken in part payment, to the extent occasionally of ⅓; another ⅓ is taken in goods at an advance of from 5 to 10 or 12 per cent. above current prices; and the remaining ⅓ in cash against produce, at from 5 to 10 per cent. more than it fetches in the bazaars. However, it is by barter alone that any extensive transaction ever takes place, or that it can be either readily or safely effected.

Sales on Credit. — The terms of credit vary considerably, and depend entirely upon the quality of the goods which the agent sells: for current or demanded merchandise, 2 couriers (or 2 periods of 15 days), and two and three 31 days, are the present terms; which are extended to four, five, and six 31 days for articles not much in request. Couriers mean post days; of which we have 2 in each month: at each

courier, and 31 days, a proportionate payment becomes payable; for instance, on a credit of six 31 days, ⅛th falls due at the expiration of the first month; and if paid, is noted accordingly on the bond, and so on until the remaining 5 periods are expired: it must, however, be observed, that payments are by no means punctually made, except by a few of our more wealthy bazaar buyers, although for the first 3 or 4 periods of a long credit some regularity is observed; but as the time begins to shorten, payments are proportionably retarded, so that two 31 days on a bond of credit for 6 months may be considered as a fair average of time in addition to the limited term.

Sales for Cash.— These very seldom occur, indeed, and then only when money is abundant, or the article sold scarce and in great demand; in fact, not 1 sale in 100 is made on these terms; and in about the same ratio is a discount taken off from a bazaar bond at even an exorbitant rate, however short the period may be that it has to run; occasionally a sale is, however, effected for ¼ cash, and the other ¾ short credit, for some very current goods.

Character of Dealers.— Before entering upon the articles of commerce, we are desirous of making you acquainted with the character and customs of our bazaar dealers. The Greek dealers are in general petty shopkeepers, very cunning, and very bad payers. The Jews have similar defects, but are well supported by their brethren, who generally become guarantee for each other. The Armenians are by far the largest traffickers both for buying and selling; and though hard bargainers, are mostly all solvent, and honourable as well as honest. The Turks are, however, as far superior to the foregoing races in all moral qualities, as they are inferior to them in means and commercial abilities; yet they sometimes deal largely, and their bond is as punctually discharged, in general, as the day comes when it falls due. The laws in this country mostly favour the debtor at the expense of the creditor; and so far they encourage dishonesty. The number of insolvent native dealers was at one time excessive, but of late the means of each individual buyer have been so carefully investigated, that at present we are not aware that there is one bazaar dealer who is not able to meet the demands of those from whom he has purchased. The European consuls, who enjoy much consideration by the Turks, protect the interests of their countrymen in disputed points; and, in general, questions of a commercial nature are submitted to the decision of a Turkish tribunal, where very little pleading, but a good deal of plain straightforward justice, goes forward; except that, *perhaps*, the European is, if any thing, rather less favoured than the native.

We now proceed to offer some observations on the leading articles of our imports and exports for your government, the correctness of which may be relied upon.

IMPORTS.

Coffee.— This is by far the most current article received here, and is sent from England, France, Holland, Trieste, Marseilles, Leghorn, Genoa, and America; but first, and principally of late years, from the latter country; the vessels of which are frequently laden with coffee, and always partly so: the next in point of quantity comes from England; but is shipped mostly in small parcels at a time of from 300 to 600 sacks, although occasionally that amount is doubled. France follows, but on a less extensive scale; and Austria, Holland, and the small ports in the south of Europe, do not together export more than what is received from England alone. We have 4 different qualities of coffee in our markets; namely, Mocha, St. Domingo, Havannah, and Brazil: the first is sent from Alexandria, and by American vessels, and but seldom from Europe; the consumption is, however, limited, and does not exceed 60,000 okes annually. At Constantinople the consumption is much greater. An Asiatic cannot do without his coffee; and it is well known that in Smyrna alone not less than perhaps 400,000 cups of it are daily drunk, which, computed at the cost price of 2 paras each, amount to 20,000 piastres! St. Domingo and Havannah coffees are preferred to the Brazil, although, when the latter is of a fair round quality, there is not more than 5 per cent. difference in price; the small green West India berry certainly commands a ready sale, but, for the finest sort, not more than 6 or 8 per cent. can be obtained above the middling and sound quality. Coffee is amongst the very few articles which occasionally meet with a partial and entire cash sale and short credit; and is, moreover, from the means and character of the dealers in it, the least liable to risk from insolvency. It is also the easiest through which an advantageous barter can be effected, as a much larger quantity of coffee will be taken in exchange for produce than almost any other item of European merchandise. Annual consumption, about 3,000,000 okes.

Sugar is the next in consequence. This article is supplied from the same sources as coffee, and is attended in its disposal with similar results. We receive the following qualities:— White crushed, white Havannah, brown do., white East India, refined in small loaves of 4 lbs. and in large of 8 lbs. each: the 2 latter are mostly shipped from America and England. The brown and ordinary sorts are not so current. Annual consumption, 10,000 kintals.

Indigo follows the 2 preceding articles, not so much in extent as meeting a ready sale always, and not unfrequently a profitable one; it is attended likewise with all the advantages and facilities attached to coffee and sugar, and is furnished by Europe and America, but principally by England. The qualities we receive consist of East India purple and copper, ditto common, and Guatemala. The first of the 3 is the kind best adapted for our markets, and is placed sooner and better than the other 2; but, as is the case with coffee, the *very fine* will not pay cost price, and ought therefore never to be sent. The pieces suited for our buyers ought to be good sized, with about an equal proportion of purple and copper in each piece. The few chests on sale are all ordinary, and consequently dull; and the first arrival of 15 or 20 chests (and not more ought ever to be shipped at one time) of fair East India will meet with a ready and favourable sale at 20 piastres per oke. Annual consumption, 80 chests.

Manufactures.— This is, in point of amount, the most extensive branch of trade carried on in Turkey. We have, as you will perceive from our price current, a numerous assortment of British and East India cotton goods and English shallons. The white or unprinted cotton goods are most in demand during the warm weather, and the coloured or printed stuffs during winter, although a considerable quantity of all sorts is regularly and largely sold throughout the whole year. The East Indian manufactures are supplied by America and England exclusively; the latter country also sends fair imitations of the East India loom, in long cloths, seersuckers, &c. The native consumers are exceedingly fastidious in their choice of designs and colours, which ought very frequently to be altered, in order to meet their capricious taste. Manufactured goods are always sold at long credits, but large barters are often effected through them. A person desirous of entering into this item of our commerce is almost certain ultimately to reap an advantage; but he must have patience, a large capital, and must not be disheartened at the first or second result of his enterprise, should it disappoint his hopes of profit. He must also enter into the thing with spirit, and keep his agent always supplied with the goods he may recommend; and he is to remember that many months must elapse before he can expect a return by bills of exchange, but sooner if he order a barter. The capital employed must also at least be to the amount of 20,000*l.* to do any good; and further, this sum ought to be disbursed by him without any pecuniary embarrassment or inconvenience. For a person willing to undertake such a step, he would require to be regularly furnished with patterns, and advices of the manner in which they ought to be printed and varied; and we again repeat, that with *competent means*, a real desire to follow the branch up firmly, and full information hence of what is required, a most extensive and finally lucrative business would be done: and we recommend the matter strongly to your best consideration. Annual consumption of all kinds (British), about 367,200 pieces.

Cotton Twist forms no inconsiderable article in our trade, and is supplied exclusively from England. Mule twist has, however, superseded, in some degree, the demand which formerly existed for water twist, and is consequently more in request. Water twist is nevertheless saleable, and both qualities

ought to be of rather high numbers. This article is often given in barter, but mostly sold at rather long credits, and hardly ever for cash. Annual consumption of water twist, 10,000 okes ; ditto of mule ditto, 28,000 okes.

Iron in Bars, English, was formerly largely consumed ; but, from the buyers being plentifully supplied, it is at present but little demanded, even at the losing price of the day. Barters are very frequently effected through irons of all descriptions, and command a short credit, and sometimes a cash sale. Annual consumption, 16,000 to 18,000 kintals.

Iron Plates are generally employed for building purposes, and store doors.

Iron Rods are always saleable.

Iron Hoops are most saleable in August, September, and October, for fruit and other export barrels.

Iron, Russia and Swedish Bars. — These kinds are sent in rather large parcels, particularly the former, and fetch a higher price than the English, owing to their malleable qualities, which render labour easier, and by that advantage command a preference : though the high price, beyond the English make, puts the two qualities upon a level, and commands a larger consumption of the latter. Annual consumption, 3,500 kintals.

Tin in Bars is a good, steady, saleable article ; is often given on fair terms in barter, always disposed of on short credit, and now and then placed for cash. It comes from England exclusively. Annual consumption, 830 to 1,000 barrels of 4 cwt. each.

Tin in Plates is attended with the foregoing advantages, and is also supplied by England alone. Annual consumption, 1,200 double boxes.

Lead in Sheets, Pigs, and Shots.—These 3 items have lately, particularly shot, been sent from Germany, and prove dangerous competitors with the English ; in consequence of which, the thing is overdone, and we have more in market than meets the demand at losing prices.

Lead, Red and White. — These 2 articles have lately been much in request for the formation of paint. Some large parcels of red have lately arrived and sell well and currently, but we are altogether without white. The consumption of all sorts of lead has, however, considerably decreased of late years, and no longer forms an item of any great consequence in our trade.

Rum and Brandy.—Leeward Island and Jamaica are furnished by America and England ; the former particularly in the lower qualities, of which we have a full market at low prices. The better kind and brandy are supplied from England, but do not obtain a proportionate advance compared with the common sorts. Brandy is but of limited demand, and 2 or 3 puncheons are sufficient at a time. It ought, as well as rum, to be deeply coloured. Annual consumption of rum, 300 puncheons.

Spices are all saleable in small parcels at a time, particularly pepper and pimento ; the latter of which, in small sound berries, is demanded at good prices. Nutmegs are very abundant, and offering very low without finding purchasers. France, America, and England supply us with spices, but France more so in cloves than in other kinds ; and it may be remarked that the qualities received from England are preferred. Credit on selling is generally short.

Cochineal is a fair article now and then in small qualities ; and when in demand, at times fetches good prices, occasionally a cash sale, and always one of the shortest credits. Annual consumption, 4,500 okes.

In concluding our observations on Imports, we could wish to impress the conviction, that a poor man's purpose cannot be answered in speculating to this country ; for, should his circumstances require a speedy remittance in bills, he must submit to a heavy sacrifice, in order to meet his wants, by selling his property for whatever it may fetch in cash ; and such a measure cannot but be attended with very heavy loss. On the contrary, when an opulent person finds that his property cannot be realised at saving prices, he can afford to wait until a more favourable moment presents itself ; and such a moment, in less than 12 months, is almost certain to arrive, when he retires his money with an advantage more than equal to any interest he could obtain for it in Europe.

That the rate of exchange has regularly advanced, and will continue to advance, is the natural result of the continual deterioration of the Turkish specie. We remember when the piece of money denominated 'Mahmoudia,' passed at about its value, or nearly so, of 10 piastres : it rose to 25 soon afterwards ; and the few which remain are at present worth 38 each. At the period we allude to (1812), the exchange on London was at 25 piastres the pound sterling ; and until lately (owing to the great stagnation of trade, and to political events, which have lowered it), the rate has been up to 60 ! It cannot, however, increase beyond that rate more than 5 per cent., as it then will nearly be on a par with the value of the gold and silver current coin of the realm, when it will be better to remit in specie than by a bill at 63 piastres for 61 days' sight. (This supposition has not been verified ; the exchange, partly and principally from the degradation of the coin, and partly from the balance of payments being against Smyrna, is now, February, 1843, 119½ piastres per 1*l.* sterling ! This shows how dangerous it is to hold property on speculation in Turkey.) The rates of exchange fluctuate considerably, and a difference of ¼ to 1 per cent., occasioned by the abundance or scarcity of paper in the market, often occurs between one post day and another. It is for this reason that the rate always decreases during the fruit season, which takes place at the latter end of August, and continues until the middle of October ; when it rises again to meet the limited wants of drawers, and the larger demands of those remitters who did not ship fruit, and invest the funds of their employers in that article. These observations lead us to submit the question of the advantage which a person in Europe has in receiving *from* this country, instead of sending *to* it. Late extensive barters have proved to us, and which we have endeavoured to show you, the unprofitable terms upon which they are conducted, were it only in paying, and that in cash too, for at least ½ of the amount, at a higher rate than was current ; now this higher rate is, in itself, supposing the produce taken in barter to meet with a saving sale in Europe, of no small consideration ; — then you have the advantage of drawing at a high exchange in making a purchase ; and again you have the choice of selecting the good part of the produce, and of rejecting the inferior, — a choice which is not allowed in taking it in barter ; lastly, the principal advantage in buying over bartering is, that you can avail yourself of a depression in the produce market, and effect your purchase upon easy terms ; whereas, when a barter is proposed, it has the immediate effect of producing a general rise in the whole market, and also of engendering the most absurd pretensions on the part of produce holders, who are too conversant with commerce not to see that either the European house, wishing to barter, is in want of procuring returns for his principal, or else that the articles of produce wanted are in great demand in Europe — without which, the European agent would never submit to take produce at so much higher a price than he could procure it for with cash ! The only time in which the person sending *to* this country can calculate upon a profitable return, is during the fruit season ; and for that reason he ought to forward his shipments from Europe so as to meet the demand, and to be cashed by the beginning of August. A vessel from England hence is in general from 40 to 50 days in performing her voyage ; sometimes much less, and but seldom longer ; goods ought, if possible, always to be shipped in a fast and first class ship.

We now continue our remarks on the articles of our trade, and the following are some of them sent hence, and deserving of serious attention.

Exports.

Silk. — This is the richest raw article in our export trade with Europe in general, but almost exclusively with England, which consumes nearly our entire produce. There are 3 different qualities, viz. fine, middling, and coarse. Bales adapted for the English market are composed of the 3 qualities, but the lesser quantity is of the coarse kind ; at one time, all coarse was in request in London, but at present an assortment of the 3 qualities is preferred. When an order is given, it ought to be accompanied by a

description of the quality required; and it is necessary to state that, for *all* of the finest, without being mixed, a higher price is demanded. A bale contains 40 teffies; and, before being packed, is carefully examined and approved of by competent native judges. Silk is produced at Brussa, a large city about 200 miles distant from Smyrna, whence it is forwarded by caravans to the different places of consumption, which are Constantinople and this town. Until very lately, almost the entire crop of silk came for sale to Smyrna, but at present the most considerable part is sent to Constantinople, where the price is higher: we have, therefore, here an advantage, not only in price, but also in our manner of packing, which fetches 5 or 6 per cent. more in England than if packed in the capital. Silk is mostly a ready money article, though it sometimes may be had in small quantities at a short credit; or half cash and half 1 or 2 couriers: it is also now and then given in barter. Annual average produce, 2,500 bales, or about 480,000 lbs. For a recent and authentic account of Turkey silk, see art. "Silk."

Opium, in point of value, and as an article of speculation, hardly gives way to silk; but as it is largely shipped by Americans, and sent in smaller quantities to Holland, and the south of Europe, it is subject to much competition and variation of price, although we have invariably observed that the opening price of the new crop is always the lowest, which, however, is in some measure counterbalanced by the decrease in weight which occurs by keeping. This is also a cash article, and indeed subject to the same conditions as purchasing or bartering for silk; it nevertheless has one inferiority which the silk is not liable to — namely, a difference in the quality of the crops: last year, for instance, opium was of a very bad kind, and hardly saleable in England; this year, though small, it is fine. On the Continent and in America, the small sort is preferred to the larger sized. We observe that, in England, the prices of opium fluctuate considerably; but we are not aware that, by holding it, any loss has ever happened, — another reason why a wealthy man only should embark in the Turkey trade. It would be impossible, or at least difficult, and attended with much expense, to obtain a monopoly of the opium crop, as it is produced through some thousands of individuals, each one (and they are all poor) adding his produce; and when collected in sufficient quantities, it is brought to market by the natives, having each of them 1 or 2 baskets for sale. What might be done is this: — Send a person to the place of growth with ready money to purchase a certain but limited quantity, and which he can do easily, if not hurried, to the extent of 50, or even 100 baskets, and upon terms of advantage, from the simple fact that the collectors of it prefer to receive a remunerating price on the spot of growth, rather than perform a long and expensive journey, with the chance of not finding purchasers immediately. Opium is produced at sundry places in the interior, of from 10 to 30 days' distance hence; but that grown at Caissar, about 600 miles from Smyrna, is the most esteemed, from its cleanness and good quality; it comes to market in June, and finishes about December or January. Annual average produce, 3,000 baskets, or about 400,000 lbs.

Drugs and Gums form one of our principal branches of commerce, and is almost entirely in the hands of the Jews. At present, gum Arabic and mastic are exceedingly scarce; and it is only when that is the case, or the demand for exportation is very brisk, that much variation exists in the price of drugs. Trieste, and occasionally America, consume a considerable portion of gums, but the largest quantity goes to the English markets. Barters are often effected through this medium; but it is not attended with much advantage, as they are conducted by a race who never lose in any transaction they undertake. It is impossible to ascertain the quantities of drugs received in Smyrna, and equally so to know the quantity remaining, as they are dispersed all over the city, and consumed so irregularly in Europe, as bids defiance to all regular calculation.

Sponges have been, and still are, an article of considerable moment, particularly for the English markets, and are found about the islands in the Grecian Archipelago, brought here, and cleaned for exportation. They vary in price from 6 to 90 piastres per oke, according to fineness and quality: the better sort alone answers for speculation, and which, it would appear, from the considerable quantity sent to London, turns to good account. The produce depends so entirely on chance, that no correct estimate of the yearly quantity can be formed; however, we are seldom in want of a moderate supply.

Galls are shipped in considerable quantities for the English, German, and French markets; the two former, however, being the largest consumers: for England, the blue galls are those principally sent; though the market there for their sale being dull and low, prices with us, moderate as they are compared to last year, will still further decline, should a demand not spring up, of which there is no appearance. Annual produce of all sorts, 5,500 kintals.

Cotton Wool, of which we have several qualities, is chiefly exported to Trieste and Marseilles. Barters are made to a large extent in cottons. Annual average produce of all sorts, 60,000 kintals.

Valonia employs more British shipping for full cargoes of only one article, than any other species of produce, if we except, perhaps, fruit: it is also sent to Dublin and to the German markets in considerable quantities. Almost any supply can be obtained, and it is shipped generally near the places of growth, which are numerous, although there is never any want of it in the Smyrna market. It is much resorted to as a means of making barters, which perhaps are as easily effected, upon pretty fair terms, as with any other article of produce. The annual produce is sufficient to meet the wants of all Europe. It can be had to any extent, and at all periods.

Fruit. — This is an article which occupies the attention of all Smyrna, more or less, and produces, during the season, great interest and activity. Figs come to market early in September, and raisins are ready for shipping early in October; the former are procurable only at Smyrna, where the latter in all their qualities may be procured; but the shipments are generally made at Cesné, Vouria, Carabourna, Usbeck, &c., from which ports the name of the raisin takes its origin. Large sums are frequently gained in fruit speculations; and when the demand in England is brisk, and the prices and quality fair with us, it very seldom happens, indeed, that any loss is sustained: it is, however, attended with risk; must be shipped dry; and ought only to go in a very fast, sound vessel, as much depends upon a first, or at least an early arrival, which obtains in general a higher price than the later arrivals. The quantity produced is always uncertain.

For the remaining articles of exports hence, we refer you to our price current. Carpets are produced to the extent of about 80,000 to 100,000 pikes a year. Oil (olive), to the amount of 10 to 15 middling sized cargoes, from the islands of Mytilene, Candia, &c., is generally shipped for America and France; seldom for England: the season commences in September, but the crops of olives fluctuate exceedingly in point of quantity; hence arise dear and cheap years: last year was a high one, and it is expected to be lower this. Copper, old and new, may be computed at 30,000 okes, which are generally bought up as soon as offered, for Europe. Hare skins are computed at from 350,000 to 400,000 annually. Madder roots at 12,000 kintals. Peletons, at 12,000 to 15,000 chequees. Goats' wool of all kinds may be calculated per year at 45,000 to 50,000 chequees; sheep's wool at 23,000 kintals. Wax (yellow), 1,600 kintals.

We have now finished our general remarks on the exports and imports of the place; and in concluding them, we beg to state that, upon an average of all of them, (with the exception of fruit from, and of iron to, Turkey,) the selling charges may (excluding *del credere* commission) be calculated at about 12 per cent., and on purchasing at about 8 per cent.

Prices of various Articles at Smyrna, 9th February, 1843.

	Prices.	Costing on board in Sterling. Exchange $119.	Freights to London.
	Dollars.		
Madder roots - - - - per quintal	240 to 260	42*s.* to 45*s.* per quintal.	50*s.* per ton.
Yellow berries, Persian - - - per oke	17 — 22	7*l.* — 9*l.* —	
Carpets - - - - per pike	20 — 22	4*s.* — 4*s.* 2*d.* per pike.	
Goats' wool, white - - - - per 2 okes	45 — 46	17*d.* — 18*d.* per lb.	
Cotton wool - - - - per quintal	$200 — 215	3*l.* — 4*l.* —	
Valonia picked, English quality - - - —	110 — 120	16*l.* — 18*l.* per ton.	30*s.* to 35*s.* —
Trieste quality - - - - —	140		40*s.* " —
Oil, olive - - - - - —	200 — 205	38*l.* — 39*l.* —	
Galls, blue - - - - - —	330 — 340	55*s.* — 58*s.* per quintal.	
white - - - - - —	200 — 230	38*s.* — 41*s.* —	
Silk, long reel - - - - per teffee	220 — 230	9*s.* 9*d.* — 10*s.* 3*d.* per lb.	
short reel - - - - —	235 — 240	10*s.* 6*d.* — 10*s.* 9*d.* —	
Gum, tragacanth - - - - per oke	27 — 28	10*l.* — 10*l.* 10*s.* per quin.	
mastic - - - - —	40 — 45	2*s.* 4*d.* — 2*s.* 6*d* per lb.	
Scammony, first quality - - - —	200 — 250	17*s.* — 23*s.* —	
Otto of roses - - - - metual	9	10*s.* 6*d.* per oz.	
Opium - - - - - chequee	84	10*s.* per lb.	
		Nett to remit, exclusive of Freight and Insurance.	
Indigo, Bengal - - - - per oke	100 — 115	5*s.* to 5*s.* 9*d.* per lb.	
Cochineal, silver - - - - —	90 — 92	4*s.* 7*d.* — 4*s.* 8*d.* —	
Dyewood, Santa Martha - - - per quintal	100 — 125	9*l.* — 12*l.* per ton.	
Sugar, crushed, double refined - - - —	215 — 218	28*s.* — 28*s.* 4*d.* per quin.	
middling - - - - —	200 — 205	27*s.* 4*d.* — 27*s.* 9*d.* —	
ordinary - - - - —	190 — 200	26*s.* 6*d.* — 27*s.* —	
white, Havannah - - - - —	200 — 205	27*s.* — 27*s.* 9*d.* —	
Brazil - - - - —	180 — 190	25*s.* 4*d.* — 25*s.* 4*d.* —	
East Indies - - - - —	170 — 185	23*s.* — 25*s.* 4*d.* —	
yellow and brown - - - - —	145 — 150	20*s.* 6*d.* — 20*s.* 9*d.* —	
Tin plates - - - per double box	390	55*s.* per double box.	
English iron, assorted - - - per quintal	45 — 48	6*l.* to 6*l.* 5*s.* per ton.	

Accounts are kept in piastres composed of 40 paras and 80ths.

Exchange.

London, 119 to 119½ piastres per £ sterling.

Turkey weights generally render as follows in England :—

A quintal - - = 117 to 124 lbs.
An oke - - - = 2¾ — 2·79
A chequee of goats' wool = 5 — 5½
18 quintals of oil - = 1 ton.
A chequee of opium - = 1½ to 1¾

A teffee - - - = 4 lbs.
6½ metuals - - - = 1 oz. troy.
9 drams - - - = 1 oz.
A pike - - - = 27 niches

English weights at Smyrna render generally, viz. —

126 lbs. = 1 quintal of 45 okes.
112 = 40 okes.
$2\frac{79}{100}$ = 1 oke.

Pro Formâ Invoice of 10 Chests Opium bought and shipped at Smyrna.

			Piastres.
10 chests opium, weighing 664 okes $\frac{63}{100}$, or chequees 1063 $\frac{40}{100}$, at $44			46,789 24
Charges.		*Piastres.*	
Porterage, packing, weighing, at $68		680 00	
Export duty, at 363/120 and 5 0/0 fees		3,576 14	
Inspection, ½ per cent.		233 58	
Brokerage, 1½ per cent.		701 34	
			4,992 6
			$51,781 30
Commission and rent, 3½ 0/0			1,294 20
			$53,076 10
Bill brokerage, ¼ 0/0			132 30
			$53,209 0

Ex. 100½ £529 8*s.* 10*d.*; at 1$\frac{60}{100}$ lbs. per chequee, 1,700 lbs.; costing, 6/2½ per lb. on board.

Smyrna, August, 1843.

London Charges.

Freight, warehouse charges, and sea insurance, 4½ c. per lb.
Discount, brokerage, commission, &c., 6½ per cent. on selling price.

Pro Formâ Invoice of 40 Bales Cotton Wool bought and shipped at Smyrna.

			Piastres.
20 bales, weighing 66.54 nett quintals at $260			17,248 16
20 ditto $\frac{46}{112}$.36 ditto at $250			11,590 00
			$28,838 16
Charges.		*Piastres.*	
Porterage, weighing, and pettles, at $6		240 00	
Export duty, at 851/120 per quintal, and 5 0/0		841 18	
Brokerage, 1½ per cent.		432 23	
			1,514 01
			$30,352 17
Commission and rent, 3½ 0/0			1,062 13
			$31,414 30
Bill brokerage, ¼ 0/0			79 10
			$31,494 00

Ex. $103, £305 15*s.* 0*d.* Quintal, 115 lbs. or 21,900 lbs., costing on board, 5$\frac{30}{32}$*d.*

London Charges.

Freight, duty, warehouse charges, and sea insurance, 1$\frac{40}{100}$*d.* per lb.
Brokerage, commission, discount, &c. 6½ per cent. on selling price.

Arrivals and Departures of Shipping at Smyrna in 1841.

Flags.	Arrived.			Departed.		
	Vessels.	Tonnage.	Crews.	Vessels.	Tonnage.	Crews.
British	129	19,864	1,115	119	18,271	1,062
Ionian	20	2,878	163	23	2,878	163
Maltese	2	619	24	2	619	24
	24	5,753	216	23	5,568	208
Austrian	214	35,004	4,207	223	37,512	4,318
Belgium	3	574	27	3	574	27
Danish	2	275	17	2	275	17
Dutch	14	2,576	129	17	2,870	159
French	60	8,592	515	58	8,045	527
Greek	410	20,510	2,460	404	20,200	2,424
Hamburg	1	110	9	1	110	9
Neapolitan	1	235	14	1	235	14
Russian	49	5,254	421	42	4,255	368
Sardinian	15	2,268	119	15	2,268	119
Swedish	6	1,010	55	6	1,010	55
Tuscan	1	150	10	1	152	10
	951	105,362	9,564	937	104,724	9,534

Of the 129 arrivals of British ships at Smyrna in 1841, 65 were in ballast, 15 laden with coal, 38 had general cargoes of British produce, 1 manufactures, 2 part cargoes from England, 1 coffee, 5 iron, 1 bones, and 1 boxwood.

SNUFF (Ger. *Schnupftaback*; Fr. *Tabac en poudre*; It. *Tabacco da naso*; Sp. *Tabaco de polvo*; Rus. *Nosowoi tabak*), a powder in very general use as an errhine. Tobacco is the usual basis of snuff; but small quantities of other articles are frequently added to it, to vary its pungency, flavour, scent, &c. Though substantially the same, the kinds and names of snuff are infinite, and are perpetually changing. There are, however, 3 principal sorts: the first, granulated; the second, an impalpable powder; and the third, the bran or coarse part remaining after sifting the second sort. Unless taken in excess, no bad consequences result from its use.

Dealers in tobacco and snuff are obliged to take out a licence, renewable annually, which costs 5*s*. They are also obliged to enter their premises, and have their names written in large legible characters over their door, or on some conspicuous part of their house, under a penalty of 50*l*. The dyeing of snuff with ochre, amber, or any other colouring matter except water tinged with colour, is prohibited under a penalty of 100*l*.; and its intermixture with fustic, yellow ebony, touchwood, sand, dirt, leaves, &c. is prohibited under a penalty of 100*l*. and the forfeiture of the article. — (1 & 2 *Geo*. 4. c. 109.) If snuff be found to contain 4 per cent. of any substance, not being tobacco, and other than water only, or water tinged with colour, or flavoured only, such snuff shall be deemed adulterated, and shall be forfeited, and the parties subjected to a penalty of 100*l*. over and above all other penalties and forfeitures. — (*Ib*.) No quantity of snuff weighing above 2 lbs. shall be removed by land or water without a permit. — (29 *Geo*. 3. c. 68.) — (See TOBACCO.)

SNUFF-BOXES are made of every variety of pattern, and of an endless variety of materials. We only mention them here for the purpose of giving the following details, not to be met with in any other publication, with respect to the manufacture of Laurencekirk or Ayrshire boxes. These are made of wood, admirably jointed, painted, and varnished.

These beautiful boxes were first manufactured at the village of Laurencekirk, in Kincardineshire, about 50 years since. The original inventor was a cripple hardly possessed of the power of locomotion. Instead of curtains, his bed (rather a curious workshop) was surrounded with benches and receptacles for tools, in the contrivance and use of which he discovered the utmost ingenuity. The inventor, instead of taking out a patent, confided his secret to a joiner in the same village, who in a few years amassed a considerable property; while the other died, as he had lived, in the greatest poverty. The great difficulty of the manufacture lies in the formation of the hinge, which, in a genuine box, is so delicately made as hardly to be visible. Peculiar, or, as they are called, secret tools, are required in its formation; and though greatly improved by time and experience, the mystery attached to their preparation is still so studiously kept up, that the workmen employed in one shop are rigorously debarred from having any communication with those employed in another.

About the beginning of this century, an ingenious individual belonging to the village of Cumnock, in Ayrshire, of the name of Crawford, having seen one of the Laurencekirk snuff-boxes, succeeded, after various attempts, by the assistance of a watchmaker of the same village, who made the tools, in producing a similar box; and by his success greatly enriched his native parish and province. Unfortunately, however, he did not improve his own fortune by his ingenuity; and died early in the present year (1844) in very poor circumstances. For a while, the Laurencekirk boxes were most in demand; but Crawford and his neighbours in Cumnock not only copied the art, but so improved and perfected it, that in a very few years, for every box made in the north there were, probably, 20 made in the south. In 1826, the Cumnock trade was divided amongst 8 master manufacturers, who employed considerably more than 100 persons. But we are sorry to say that it has greatly declined in the interval; and that at present (1844) it does not employ more than 22 individuals. Mauchline is now the principal seat of the manufacture, and about 100 hands are there engaged in it. The manufacture is also carried on, though to a very limited extent, at Catrine, Auchinleck, and some other places. Plane is the wood in common use, and the cost of the wood in an ordinary sized box does not exceed 1*d*.; the paints and varnish are rated at 2*d*.; and though something is lost by selecting timber of the finest colour, the whole expense of the raw material falls considerably short of ¼ per cent. on the return it yields, which consists almost wholly of the wages of labour.

The snuff-box manufacture, like most other departments of industry, has been greatly facilitated by the division of labour; and in all workshops of any size 3 classes of persons are employed,—box-makers, painters, and checkers or polishers; the wages of which may at present amount, the 1st class from 14*s.* to 18*s.* per week; the 2d from 15*s.* to 25*s.*, and the 3d from 10*s.* to 12*s.* per do. When Crawford first commenced business, he obtained almost any price he chose to ask; and many instances occurred, in which ordinary sized snuff-boxes sold at 2*l.* 12*s.* 6*d.*, and ladies' work-boxes at 25*l.* But as the trade increased, it became necessary to employ apprentices, who first became journeymen, and then masters; and such have been the effects of improvement and competition, that articles such as those specified above may be obtained at the respective prices of *two* and *twenty-five shillings*; while common boxes, which, in 1837, sold for 18*s.* a dozen, may now (1844) be bought for 8*s.* 1 By means of the *Pentagraph*, which is much employed, the largest engravings are reduced to the size most convenient for the workman, without injury to the prints; so that a snuff-box manufacturer, like a Dunfermline weaver, can work to order by exhibiting on wood his employer's coat of arms, or any object he may fancy within the range of the pictorial art. Some of the painters display considerable talent, and, when they put forth their strength, produce box-lids worth being preserved as pictures. At first, nearly the whole subjects chosen as ornaments were taken from Burns's poems; and there can be no doubt that the "Cotter's Saturday Night," "Tam O'Shanter," "Willie brewed a peck o' maut," &c. &c. have penetrated in this form into every quarter of the habitable globe. Now, however, the artists take a wider range; the studios of Wilkie, Landseer, &c. have been laid under contribution; landscapes are as often met with as figures; and there is scarcely a celebrated scene in the country that is not pictured forth more or less perfectly on the lid of an Ayrshire snuff-box. We regret to say that the trade has been for some years past in a languishing state. But it is probable, from the extremely low prices at which boxes are now produced, that the demand for them may be again extended. The principal markets for snuff-boxes are London, Liverpool, Glasgow, and Edinburgh: but considerable numbers are exported. Some very wretched imitations of Ayrshire boxes have been produced in different parts of England: but they can deceive no one who ever saw a genuine box. The hinge, as well as the finishing, is clumsy in the extreme.

*** The article on this curious manufacture in our former edition was written by our esteemed friend, John M'Diarmid, Esq., editor of the *Dumfries Courier*: but the business has materially changed during the last 10 years. The statements in the present article have been derived from Mauchline and other seats of the manufacture.

SOAP (Ger. *Seife*; Fr. *Savon*; It. *Sapone*; Sp. *Jabon*; Rus. *Milo*; Lat. *Sapo*). The soap met with in commerce is generally divided into 2 sorts, *hard* and *soft*: the former is made of soda and tallow or oil, and the latter of potash and similar oily matters. Soap made of tallow and soda has a whitish colour, and is, therefore, sometimes denominated *white* soap: but it is usual for soap makers, in order to lower the price of the article, to mix a considerable portion of rosin with the tallow; this mixture forms the common *yellow* soap of this country. Soap made of tallow, &c. and potash does not assume a solid form; its consistence is never greater than that of hog's lard. The properties of soft soap as a detergent do not differ materially from those of hard soap, but it is not nearly so convenient to use. The alkali employed by the ancient Gauls and Germans in the formation of soap was potash; hence we see why it was described by the Romans as an unguent. The oil employed for making soft soap in this country is whale oil. A little tallow is also added, which, by a peculiar management, is dispersed through the soap in fine white spots. The soap made in countries which produce olive oil, as the south of France, Italy, and Spain, is preferable to the soap of this country, which is usually manufactured from grease, tallow, &c. — (*Thomson's Chemistry.*)

Account of the Quantities and Values of the Soap and Candles exported during each of the 5 Years ending with 1841, specifying the Countries to which they were exported, and the Quantity and Value of those sent to each.

Countries.	1837.		1838.		1839.		1840.		1841.	
	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.	Quantities.	Declared Value.
	Lbs.	£	*Lbs.*	£	*Lbs.*	£	*Lbs.*	£	*Lbs.*	£
Norway - -	121,656	2,201	19,866	456	113,745	2,080	66,400	1,380	189,639	3,387
Germany - -	193,728	3,293	18,848	892	179,389	3,234	306,996	4,597	321,506	4,961
Holland - -	26,269	576	39,315	1,022	62,231	1,340	98,168	1,615	25,824	497
Gibraltar - -	89,290	1,609	*104,383	2,145	81,856	1,567	112,126	2,017	50,763	1,494
Italy and the Italian Islands - -	30,455	731	16,276	646	151,910	2,345	74,310	1,621	25,391	653
Malta - -	42,809	914	141,741	2,864	142,192	2,831	82,215	1,507	110,493	2,225
Western coast of Africa	101,455	2,157	160,567	2,995	186,159	3,704	160,585	3,215	136,219	2,612
Cape of Good Hope -	450,247	7,875	565,046	9,072	1,362,083	22,812	887,051	13,617	451,065	7,022
E. I. Co.'s territories, and Ceylon - -	71,176	2,94	114,748	3,528	117,918	4,647	127,940	4,359	145,805	6,083
British settlements in Australia -	761,770	14,803	1,258,729	22,694	2,207,901	38,998	4,284,353	70,737	1,907,040	33,816
N. Amer. colonies	2,408,091	39,931	3,476,988	58,773	4,536,813	77,661	3,918,700	67,991	3,944,077	64,843
West Indies -	5,134,900	101,168	7,279,715	140,562	9,716,295	180,267	9,360,757	174,870	7,139,450	132,452
Brazil - - -	2,898,865	42,940	4,024,075	58,769	4,456,855	67,918	4,212,403	67,001	3,753,581	51,016
All other countries -	1,533,331	26,877	2,697,713	46,732	2,587,811	47,549	1,978,853	36,713	1,828,193	31,929
Total - -	13,864,022	251,083	19,911,140	351,130	25,706,382	466,954	26,301,517	450,640	20,029,046	342,620

The use of soap as a detergent is well known: it may, in fact, be considered as a necessary of life. Its consumption in most civilised countries is immense. Pliny informs us, that soap was first invented by the Gauls; that it was composed of tallow and ashes; and that the German soap was reckoned the best. — (Lib. xviii. c. 51.)

Regulations as to the Manufacture. — Soap is charged with a duty of excise, and its manufacture is consequently regulated by several provisions intended for the protection of the revenue. No person is permitted to make soap within the limits of the head office of excise in London, unless he occupy a tenement of 10*l.* a year, and is assessed to and pays the parish rates; nor elsewhere, unless he is assessed and pays to church and poor; and every soap-maker is required to take out a licence to be renewed annually, for which he is to pay 4*l.*; but persons in partnership require only 1 licence for 1 house. They are also required to provide sufficient wooden covers for all coppers and other utensils wherein they boil hard soap: which covers are to be locked and sealed down by the officer whenever any soap is left in the same; and the furnace door, cover, and the ash-house door is also to be locked and sealed at all times except when the same is at work. Regulations are also made for preventing the

use of any private conveyances or pipes; empowering officers to break up the ground to search for the same, and cut them up if found; if not, the officers must make compensation for the injury done. On cleansing or taking soap out of the coppers, the makers are required to give notice; and certain spaces of time are limited for completing the cleansing and taking out of the soap, according to the kind of soap, and the number of frames into which the same is put. Coppers and other utensils must be cleansed once in every month. The frames used in making hard soap, for cleansing and putting the same into when taken out of the vessel when boiled and prepared, must be either square or oblong, and the bottom, sides, and end of such frames are to be 2 inches thick and not more than 45 inches long, and 15 inches broad, the same being marked and numbered at the expense of the soap-maker. The making of yellow or mottled soap is regulated by 59 Geo. 3. c. 93., by which every maker is required, as soon as the same is cleansed or taken out of the vessel in which it has been made, to add and put into the copper or vessel all the fob and skimmings taken out of the same, and also grease, in the proportion of at least 10 cwt. of grease for every ton of yellow or mottled soap which the copper or vessel shall be by the officer computed to boil or make, and immediately remelt such grease in the presence of the officer of excise. No less 8*l.* for the making of soap may be manufactured for sale; nor may any barilla be ground or pounded for sale; nor when ground or pounded be sold exceeding the weight of 28 lbs. of such barilla at one time. In the removal of soap exceeding the quantity of 28 lbs., the word "soap" must be painted or marked in large letters of at least 2 inches long on every cask, basket, box, cask, or package containing the same; and the same word must be painted or marked in letters of at least 3 inches in length on every wagon, cart, or other carriage carrying more than 28 lbs., in some conspicuous and open part of the same, unless it is carried by a person being a known and public or common carrier of goods and merchandise from one part to another; officers may inspect the soap and the accompanying certificate. Soap-makers are also to keep books, and enter therein all quantities of soap sold exceeding 28 lbs. Every barrel of soap must contain 256 lbs. avoirdupois; every ½ barrel 128 lbs.; every firkin 64 lbs.; and every ¼ firkin 32 lbs.; besides the weight and tare of the cask. Soap-makers must keep scales and weights, and assist the excise officers in the use of them, and must weigh their materials for making soap before the officer, on penalty of 50*l.*—(*Chitty's Com. Law*, vol. ii. pp. 418—420.)

Duty.—The direct duty charged on hard soap, which is by far the most extensively used, amounted, till June 1833, to 3*d.* per lb., or 28*s.* per cwt., while the price of soap duty paid rarely exceeded 6*d.* per lb., or 56*s.* per cwt., so that the direct duty was fully 100 per cent.! But besides this enormous duty, the substances of which soap is made, viz. tallow, barilla, and turpentine, or resin, were respectively charged with duties of 3*s.* 4*d.*, 2*s.*, and 4*s.* 4*d.* a cwt.; and taking these indirect taxes into account, it may be truly stated that soap was taxed from 120 to 130 per cent. *ad valorem!* The imposition of so exorbitant a duty on an article indispensable to the prosecution of many branches of manufacture, and to the comfort and cleanliness of all orders of persons, was in the last degree inexpedient. During the 5 years ending with 1832, the consumption of duty-paid soap was nearly stationary; though there can be little doubt, from the increase of manufactures and population during that period, that it would have been very considerably extended, but for the increase of smuggling. This practice is facilitated by the total exemption which Ireland enjoys from this duty; for it not unfrequently happens that the soap made in this country, and sent to Ireland under a drawback, is again clandestinely introduced into Great Britain. It is, perhaps, needless to say that nothing but the effectual reduction of the duty could put a stop to the smuggling and fraud that had been so generally practised. So long as the profit to be made by breaking the law was so high as 120 or 130 per cent., so long was it sure to be broken, in despite of the multiplication of penalties and the utmost activity and vigilance of the officers. But since the duty has been reduced 50 per cent., the temptation to smuggle has been most materially diminished. And the increased consumption that has followed the reduction of duty, has hindered the revenue from declining more than ¼th part, or 25 per cent. Hence the advantages resulting from the diminished temptation to smuggling and fraud, and the influence of the reduced price of the article, in facilitating manufacturing industry, and in promoting habits of cleanliness, have been obtained without any very considerable sacrifice.

The entire repeal of the soap duty would be a popular measure; but, seeing that a large amount of revenue must be raised, and that those taxes only are productive which affect all classes of the community, we should not be disposed to recommend such a measure. It is not the tax itself, but the oppressive extent to which it was carried, that made it objectionable. Instead of proposing its repeal, we think it ought to be extended to Ireland. The exemption of one part of the empire from a duty of this sort imposed on another part, is contrary to all principle, and is fraught with pernicious results. It will be impossible to get rid of smuggling so long as this unjust distinction is suffered to exist. Were the duty extended to Ireland, the necessity for granting drawbacks on the soap exported to it, and of laying countervailing duties on that imported from it, would, of course, fall to the ground. And we feel pretty confident that, though a still further deduction were made from the rate of duty, its productiveness would not, under such circumstances, be impaired even in England.

Account of the Quantity of Hard and Soft Soap charged with Excise Duty in Great Britain since 1822, the Rates of Duty, and the Gross and Nett Produce of the Duties.

Years.	Pounds' weight of Soap.		Rates of Duty.		Gross Produce of the Duties.	Nett Produce of the Duties.
	Hard.	Soft.	Hard, per lb.	Soft, per lb.	£ s. d.	£ s. d.
	lbs.	*lbs.*	*d.*	*d.*		
1822	89,168,934	7,585,638	3	1½		
1823	92,901,382	8,073,803	—	—		
1824	97,071,456	8,246,022	—	—		
1825	100,261,353	9,207,185	—	—		
1826	102,627,167	8,910,204	—	—	1,347,761 12 10	1,179,612 2 4
1827	96,859,694	7,778,116	—	—	1,263,818 3 8	1,147,060 7 10½
1828	101,372,807	9,616,477	—	—	1,374,998 19 7	1,199,109 18 0
1829	108,110,198	10,024,665	—	—	1,425,516 11 9	1,210,754 11 1½
1830	103,011,961	9,068,918	—	—	1,354,152 0 9	1,151,909 15 4½
1831	117,341,320	10,209,519	—	—	1,513,149 19 9½	1,249,684 13 10½
1832	119,379,037	10,350,703	—	—	1,550,314 15 4½	1,186,219 11 11½
1833	138,221,137	11,731,156	1½d. fr. 31 May	1d. fr. 31st May	1,246,916 5 2½	871,740 3 6½
1834	144,510,043	10,101,281	1½d.	1d.	938,016 11 7½	756,112 13 5½
1835	148,906,207	12,103,109	—	—	974,098 18 5½	772,638 0 9½
1836	146,859,210	13,318,894	—	—	968,850 9 5½	754,547 18 7½
1837	140,822,611	11,791,834	—	—	927,249 6 5½	729,567 8 11½
1838	158,573,298	15,550,000	—	—	1,034,763 16 10½	809,030 11 6½
1839	155,585,980	14,871,063	from 15th May	from 15th May	1,019,258 11 9	794,934 0 10½
1840	159,928,194	15,553,056	1½d. and 5 p. ct.	1d. and 5 p. ct.	1,079,448 2 5½	806,704 15 0½
1841	158,138,969	14,325,181	—	—	1,078,190 11 11½	814,227 14 4½
1842	155,153,340	12,464,925	—	—	1,060,848 19 10½	828,005 14 5½

Account of all Soap exported to Ireland, specifying the Port whence it was shipped, and the Amount of Drawback paid thereon, in 1842.

Ports from which shipped.	Hard.	Soft.	Drawback.
	lbs.	*lbs.*	£ s. d.
Bristol - - -	132,380	18,240	914 9 10
Glasgow - - -	9,057	101,459	515 6 6
Greenock - - -	- -	3,840	16 16 0
Liverpool - - -	9,511,920	79,232	61,455 6 3
London - - -	77,417	- -	508 1 3
Runcorn - - -	4,480	- -	29 8 0
Totals -	9,735,254	205,771	63,473 7 10

Account of the Soap made in the different Towns of Great Britain in which the Manufacture is carried on, distinguishing Hard from Soft; and also the Quantity upon which the Silicated Duty has been charged, in 1842.

Towns.	Silicated Soap.	Other Hard Soap.	Soft Soap.
England.	Lbs.	Lbs.	Lbs.
Bath	-	568,960	
Towcester	-	51,690	
Bristol	-	6,963,028	140,068
Cambridge	-	74,520	
Canterbury	-	306,380	
Chester	-	373,890	
Leicester	-	37,500	
Derby	-	259,595	
Blandford	-	3,340	
Castle Cary	-	950	
Dorchester	-	166,530	
South Shields	-	1,169,180	
Braintree	-	11,970	
Maldon	-	138,460	
Gloucester	-	1,561,110	
Stroud	-	11,029	
Thornbury	-	140,010	
Stamford	-	465,010	
Burnley	-	390,220	
Farnham	-	3,250	
Gosport	-	107,980	
Portsmouth	-	761,560	
Bridlington	-	31,050	
Hull	-	3,593,800	275,520
Newport	-	4,671	
Southampton	-	-	760
Lancaster	-	74,560	
Preston	-	259,870	4,850
Bradford	-	-	1,142,820
Leeds	-	196,910	
Wakefield	-	2,171,540	
Birmingham	-	155,740	
Lincoln	-	150,540	
Louth	-	280,280	
Spilsby	-	55,860	
Liverpool	-	1,503,800	38,523,960	5,593,771
Holt	-	45,850	
Manchester	-	511,515	6,506
Gateshead	-	4,290,660	
Newcastle	-	2,756,840	
Northwich	-	11,550	
Runcorn	-	12,207,350	
Warrington	-	2,896,790	
Norwich	-	30,670	1,562,920	
Yarmouth	-	826,750	
Devonport	-	12,900	
England — *continued.*			
Plymouth	-	3,410,940	
Wallingford	-	21,110	
Deptford	-	912,820	
Greenwich	-	122,110	
Sturminster	-	3,310	
Sheffield	-	891,170	
Dudley	-	121,030	
Smethwick	-	3,472	2,736,010	
Westbromwich	-	41,010	25,411	
Bury	-	212,260	
Clare	-	155,629	
Ipswich	-	737,950	
Nayland	-	11,200	
Brentford	-	4,585,680	
Brompton	-	549,390	
Staines	-	20,520	
Wandsworth	-	190,170	
Arundel	-	377,340	
Horsham	-	83,210	
Lewes	-	306,720	
Bridgewater	-	30,010	
Collumpton	-	3,270	
Langport	-	38,220	
Taunton	-	40,060	
Bromsgrove	-	244,185	5,416,895	
York	-	-	983,700	
Country	-	1,823,167	105,678,474	7,164,275
London	-	327,580	36,715,357	956,426
Total, England	-	2,150,747	142,393,831	8,120,701
Scotland.				
Aberdeen	-	-	-	425,280
Ayr	-	-	8,915	46,660
Greenock	-	-	79,000	46,310
Paisley	-	-	718,810	952,290
Leith	-	-	2,434,100	169,028
Dunfermline	-	-	283,700	
Glasgow	-	1,160	5,638,080	2,721,110
Prestonpans	-	-	710,080	
Montrose	-	-	108,930	
Stirling	-	-	251,100	
Total, Scotland	-	1,460	10,323,345	4,343,968

		Silicated Soap.	Other Hard Soap.	Soft Soap.
		Lbs.	Lbs.	Lbs.
Totals	In England -	2,150,747	142,393,831	8,120,701
	In Scotland -	1,460	10,323,345	4,343,968
	Total, Great Britain -	2,152,207	152,717,176	12,464,669

SODA. See Alkali.

SOUTH SEA DUTIES. The act of the 9 Ann. c. 21., establishing the South Sea Company, conveyed to them the exclusive privilege of trading to the Pacific Ocean, and along the east coast of America, from the Orinoco to Cape Horn.

This privilege was taken away by the 47 Geo. 3. c. 23.; and in order to raise a guarantee fund for the indemnification of the Company, a duty of 2 per cent. *ad valorem* was imposed by the 55 Geo. 3. c. 57. on all goods (with the exception of those from Brazil and Dutch Surinam *; and with the exception of blubber, oil, &c. of whales, or fish caught by the crews of British or Irish ships) imported from within the aforesaid limits. A duty of 1*s.* 6*d.* per ton was also imposed on all vessels (except in ballast or importing the produce of the fishery of British subjects) entering inwards or clearing outwards from or to places within the said limits. The duties are to cease when the guarantee fund is completed.

SOY, a species of sauce prepared in China and Japan from a small bean, the produce of the *Dolichos soja*. It is eaten with fish and other articles. It should be chosen of a good flavour, not too salt nor too sweet, of a good thick consistence, a brown colour, and clear; when shaken in a glass, it should leave a coat on the surface, of a bright yellowish brown colour; if it do not, it is of an inferior kind, and should be rejected. Japan soy is deemed superior to the Chinese. It is worth, in bond, from 6*s.* to 7*s.* a gallon. It is believed to be extensively counterfeited. — (*Milburn's Orient. Com.*)

SPELTER, a name frequently given to Zinc; which see.

SPERMACETI (Ger. *Wallrath*; Fr. *Blanc de Baleine, Sperme de Baleine*; It. *Spermaceti*; Sp. *Esperma de Ballena*; Rus. *Spermazet*), a product obtained from the brain of the *physeter macrocephalus*, a species of whale inhabiting the Southern Ocean. The brain being dug out from the cavity of the head, the oil is separated from it by dripping. The residue is crude spermaceti, of which an ordinary sized whale will yield 12 barrels. After being brought to England, it is purified. It then concretes into a white, crystallised, brittle, semitransparent, unctuous substance, nearly inodorous and insipid. On being cut into small pieces it assumes a flaky aspect. It is very heavy; its specific gravity being 9·433. It is used in the manufacture of candles, in medicine, &c.

* The provinces of the Rio de la Plata have since been added. — (*Treas. Order*, 12th of March, 1828.)

SPICES (Ger. *Specereyen*; Du. *Speceryen*; Fr. *Epiceries, Epices*; It. *Spezj, Spezierie*; Sp. *Especias, Especerias*; Port. *Especiaria*; Rus. *Prianie korenja*). Under this denomination are included all those vegetable productions which are fragrant to the smell and pungent to the palate; such as cloves, ginger, nutmegs, allspice, &c. These will be found under their proper heads.

SPIRIT OF WINE. See ALCOHOL.

SPIRITS. All inflammable liquors obtained by distillation, as brandy, rum, geneva, whisky, gin, &c., are comprised under this designation. The term *British spirits* is applied indiscriminately to the various sorts of spirits manufactured in Great Britain and Ireland. Of these, gin and whisky are by far the most important.

The manufacture of spirits is placed under the *surveillance* of the excise, and a very large revenue is obtained from it. The act 6 Geo. 4. c. 80. lays down the regulations to be followed by the distillers in the manufacture, and by the officers in charging the duties. This act is of great length, having no fewer than 151 clauses; it is, besides, exceedingly complicated, and the penalties in it amount to many thousand pounds. It would, therefore, be to no purpose to attempt giving any abstract of it in this place. Every one carrying on the business of distillation must have the act in his possession, and be practically acquainted with its operation.

1. *Spirit Duties. Consumption of British Spirits in Great Britain and Ireland.* — There are, perhaps, no better subjects for taxation than spirituous and fermented liquors. They are essentially luxuries; and while moderate duties on them are, in consequence of their being very generally used, exceedingly productive, the increase of price which they occasion has a tendency to lessen their consumption by the poor, to whom, when taken in excess, they are exceedingly pernicious. Few governments, however, have been satisfied with imposing moderate duties on spirits; but, partly in the view of increasing the revenue, and partly in the view of placing them beyond the reach of the lower classes, have almost invariably loaded them with such oppressively high duties as have entirely defeated both objects. The imposition of such duties does not take away the appetite for spirits; and as no vigilance of the officers or severity of the laws has been found sufficient to secure a monopoly of the market to the legal distillers, the real effect of the high duties has been to throw the supply of a large proportion of the demand into the hands of the illicit distiller, and to superadd the atrocities of the smuggler to the idleness and dissipation of the drunkard.

During the latter part of the reign of George I., and the earlier part of that of George II., gin-drinking was exceedingly prevalent; and the cheapness of ardent spirits, and the multiplication of public houses, were denounced from the pulpit, and in the presentments of grand juries, as pregnant with the most destructive consequences to the health and morals of the community. At length, ministers determined to make a vigorous effort to put a stop to the further use of spirituous liquors, except as a cordial or medicine. For this purpose, an act was passed in 1736, the history and effects of which deserve to be studied by all who are clamorous for an increase of the duties on spirits. Its preamble is to this effect: — "Whereas the drinking of spirituous liquors, or strong water, is become very common, especially among people of lower and inferior rank, the constant and excessive use of which tends greatly to the destruction of their health, rendering them unfit for useful labour and business, debauching their morals, and inciting them to perpetrate all vices; and the ill consequences of the excessive use of such liquors are not confined to the present generation, but extend to future ages, and tend to the destruction and ruin of this kingdom." The enactments were such as might be expected to follow a preamble of this sort. They were not intended to repress the vice of gin-drinking, but to root it out altogether. To accomplish this, a duty of *twenty shillings* a gallon was laid on spirits, exclusive of a heavy licence duty on retailers. Extraordinary encouragements were at the same time held out to informers, and a fine of 100*l.* was ordered to be rigorously exacted from those who, were it even through inadvertency, should vend the smallest quantity of spirits which had not paid the full duty. Here was an act which might, one should think, have satisfied the bitterest enemy of gin. But instead of the anticipated effects, it produced those directly opposite. The respectable dealers withdrew from a trade proscribed by the legislature; so that the spirit business fell almost entirely into the hands of the lowest and most profligate characters, who, as they had nothing to lose, were not deterred by penalties from breaking through all its provisions. The populace having in this, as in all similar cases, espoused the cause of the smugglers and unlicensed dealers, the officers of the revenue were openly assaulted in the streets of London and other great towns; informers were hunted down like wild beasts; and drunkenness, disorders, and crimes increased with a frightful rapidity. "Within 2 years of the passing of the act," says Tindal, "it had become *odious and contemptible*, and policy as well as humanity forced the commissioners of excise to mitigate its penalties."—(*Continuation of Rapin*, vol. viii. p. 358. ed. 1759.) The same historian mentions (vol. viii. p. 390.), that during

the 2 years in question, no fewer than 12,000 persons were convicted of offences connected with the sale of spirits. But no exertion on the part of the revenue officers and magistrates could stem the torrent of smuggling. According to a statement made by the Earl of Cholmondeley, in the House of Lords—(*Timberland's Debates in the House of Lords*, vol. viii. p. 388.), it appears, that at the very moment when the sale of spirits was declared to be illegal, and every possible exertion made to suppress it, upwards of SEVEN MILLIONS of gallons were annually consumed in London, and other parts immediately adjacent! Under such circumstances, government had but one course to follow —to give up the unequal struggle. In 1742, the high prohibitory duties were accordingly repealed, and such moderate duties imposed, as were calculated to increase the revenue, by increasing the consumption of legally distilled spirits. The bill for this purpose was vehemently opposed in the House of Lords by most of the bishops, and many other peers, who exhausted all their rhetoric in depicting the mischievous consequences that would result from a toleration of the practice of gin-drinking. To these declamations it was unanswerably replied, that whatever the evils of the practice might be, it was impossible to repress them by prohibitory enactments; and that the attempts to do so had been productive of far more mischief than had ever resulted, or could be expected to result, from the greatest abuse of spirits. The consequences of the change were highly beneficial. An instant stop was put to smuggling; and if the vice of drunkenness was not materially diminished, it has never been stated that it was increased.

But it is unnecessary to go back to the reign of George II. for proofs of the impotency of high duties to take away the taste for such an article, or to lessen its consumption. The occurrences that took place in the late reign, though they would seem to be already forgotten, are equally decisive as to this question.

Duties in Ireland. — Perhaps no country has suffered more from the excessive height to which duties on spirits have been carried than Ireland. If heavy taxes, enforced by severe fiscal regulations, could make a people sober and industrious, the Irish would be the most so of any on the face of the earth. In order to make the possessors of property join heartily in suppressing illicit distillation, the novel expedient was here resorted to, of imposing a heavy fine on every parish, town land, manor land, or lordship in which an unlicensed still was found; while the unfortunate wretches found working it were subjected to *transportation for seven years*. But instead of putting down illicit distillation, these unheard-of severities rendered it universal, and filled the country with bloodshed, and even rebellion. It is stated by the Rev. Mr. Chichester, in his valuable pamphlet on the *Irish Distillery Laws*, published in 1818, that "the Irish system seemed to have been formed in order to perpetuate smuggling and anarchy. It has culled the evils of both savage and civilised life, and rejected all the advantages which they contain. The calamities of civilised warfare are, in general, inferior to those produced by the Irish distillery laws; and I doubt whether any nation of modern Europe, which is not in a state of actual revolution, can furnish instances of legal cruelty commensurate to those which I have represented."—(Pp. 92—107.)

These statements are borne out to the fullest extent by the official details in the *Reports of the Revenue Commissioners*. In 1811, say the commissioners (*Fifth Report*, p. 19.), when the duty on spirits was 2*s.* 6*d.* a gallon, duty was paid in Ireland on 6,500,361 gallons (Irish measure); whereas, in 1822, when the duty was 5*s.* 6*d.*, only 2,950,647 gallons were brought to the charge. The commissioners estimate, that the annual consumption of spirits in Ireland was at this very period not less than TEN MILLIONS of gallons; and, as scarcely *three* millions paid duty, it followed, that *seven* millions were illegally supplied; and "taking *one* million of gallons as the quantity fraudulently furnished for consumption by the licensed distillers, the produce of the unlicensed stills may be estimated at *six millions of gallons*."—(*Ib.* p. 8.) Now, it is material to keep in mind that this vast amount of smuggling was carried on in the teeth of the above barbarous statutes, and in despite of the utmost exertions of the police and military to prevent it; the only result being the exasperation of the populace, and the perpetration of revolting atrocities both by them and the military. "In Ireland," say the commissioners, "it will appear, from the evidence annexed to this Report, that parts of the country have been absolutely disorganised, and placed in opposition not only to the civil authority, but to the military force of the government. The profits to be obtained from the evasion of the law have been such as to encourage numerous individuals to persevere in these desperate pursuits, notwithstanding the risk of property and life with which they have been attended."

To put an end to such evils, the commissioners recommended that the duty on spirits should be reduced from 5*s.* 6*d.* to 2*s.* the wine gallon (2*s.* 4*d.* the Imperial gallon), and government wisely consented to act upon this recommendation. In 1823, the duties were accordingly reduced; and the following official account will show what has been the result of this measure: —

An Account of the Quantities of Corn Spirits made in Ireland, which have paid the Duties of Excise for Home Consumption; stating the Rate of Duty paid, and also the Nett Amount of Revenue received in each Year since 1820.—(Furnished by the *Excise*.)

Years.	Number of Gallons.	Rate per Imperial Gallon.	Nett Amount of Revenue.		
	Imperial Measure.		£	s.	d.
1821	3,511,462	5s. 7½d.	903,141	13	3
1822	2,910,483	Ditto.	801,987	18	8
1823	3,598,376	5s. 7½d. and 2s. 4½d.	619,271	0	3
1824	3,690,515	Ditto.	795,163	8	4
1825	9,264,744	Ditto.	1,107,449	15	7
1826	6,854,867	2s. 10d.	963,172	13	1
1827	8,260,664	Ditto.	1,155,783	15	1
1828	9,837,903	Ditto.	1,401,646	6	8
1829	9,213,223	Ditto.	1,304,655	1	8
1830	9,004,539	2s. 10d., 3s., and 3s. 4d.	1,409,128	3	7
1831	8,710,672	3s. 4d.	1,451,780	7	0
1832	8,657,756	Ditto.	1,442,845	9	0
1833	8,168,596	Ditto.	1,360,769	6	8
1834	9,708,468	3s. 4d. and 2s. 4d.	1,568,952	3	2
1835	11,381,223	2s. 4d.	1,327,805	14	8
1836	12,248,772	Ditto.	1,428,744	2	0
1837	11,233,635	Ditto.	1,310,765	13	9
1838	12,296,342	Ditto.	1,434,331	16	4
1839	10,815,709	Ditto.	1,261,711	17	6
1840	7,401,051	2s. 4d. and 2s. 8d.	933,652	19	4
1841	6,485,413	2s. 8d.	864,105	10	8
1842	5,290,630	2s. 8d. and 3s. 8d.	901,780	0	8
1843	5,546,483	3s. 8d. and 2s. 8d.	852,306	18	10

It may appear, on a superficial view of this Table, as if the consumption of spirits in Ireland had been nearly trebled in consequence of the reduction of the duty in 1823; but, in point of fact, it was not in any degree increased. The reduction of the duties substituted legal for illicit distillation, and freed the country from the perjuries and other atrocities that grew out of the previous system; but it would be wholly erroneous to say that it increased drunkenness. We have already seen that the commissioners, who had the best means of obtaining accurate information, estimated the consumption of spirits in Ireland, in 1823, at TEN millions of gallons; and when greatest, in 1838, 13 years after, the consumption was only 12,296,342 gallons. No doubt, therefore, the measure deserves to be considered as having been in every point of view most successful. It will be seen that the increase of duty from 2*s.* 10*d.* to 3*s.* 4*d.*, in 1830, perceptibly diminished the quantity of spirits brought to the charge; and as it was found to give a considerable stimulus to illicit distillation, which had previously been nearly extinct, the duty was reduced to 2*s.* 4*d.* in 1835. The extraordinary decrease in the consumption of spirits since 1839, though in some degree, perhaps, ascribable to the addition of 4*d.* a gallon made to the duty in 1840, is no doubt principally owing to the exertions of Father Mathew, and the spread of temperance societies; and notwithstanding the loss of revenue it has occasioned, the change has certainly been of great public advantage; and provided it be maintained, it is not easy to suppose that any thing should have occurred better fitted to improve the physical and moral condition of the people. The ill-advised addition of 1*s.* a gallon made to the duty in 1842 was repealed in 1844; for while it gave a powerful stimulus to clandestine distillation, it was pretty obvious it would not have added anything to the revenue, or given any additional impetus to the temperance movement.

Duties in Scotland.—The experience of Scotland is hardly less decisive as to this question. The exorbitancy of the duties produced nearly the same effects there as in Ireland. Mr. John Hay Forbes, formerly sheriff-depute of Perthshire, now one of the Lords of Session, stated in evidence before the commissioners, that, according to the best information he could obtain, the quantity of illegally distilled spirits annually produced in the Highlands could not amount to less than TWO *millions of gallons*. In corroboration of this, he stated that, in 1821, only 298,138 gallons were brought to the charge in the Highlands; and of these, 254,000 gallons were permitted to the Lowlands, leaving only 44,000 gallons for the consumption of the whole country;—a supply which, we are well assured, would hardly be sufficient for the demand of 2 moderately populous parishes. In a letter of Captain Munro of Teaninich to the commissioners, it is stated that, "at Tain, where there are upwards of 23 licensed public houses, *not one gallon had been permitted from the legal distilleries for upwards of twelve months*," though a small quantity of smuggled whisky had been purchased at the excise sales, to give a colour of legality to the trade. The same gentleman thus expresses himself in another part of his letter:—"The moral effects of this baneful trade of smuggling on the lower classes is most conspicuous, and increasing in an alarming degree, as evidenced by the multiplicity of crimes, and by a degree of insubordination formerly little known in this part of the country. In several districts, such as Strathconon, Strathcarron, &c., the excise officers are now often deforced, and dare not attempt to do their duty; and smuggled whisky is often carried to market by smugglers escorted by armed men, in defiance of the laws. In short, the Irish system is making progress in the Highlands of Scotland."

To arrest the progres of demoralisation, government, pursuant to the judicious advice

of the commissioners, reduced the duties on Scotch to the same level as those on Irish whisky; and the consequences were equally salutary. The subjoined official statement shows the consumption and rate of duty since 1821.

An Account of the Quantities of Corn Spirits made in Scotland, which have paid the Duties of Excise for Home Consumption; stating the Rate of Duty paid, and also the Nett Amount of Revenue received in each Year, since 1820.—(Furnished by the *Excise*.)

Years.	Number of Gallons.	Rate per Imperial Gallon.	Nett Amount of Revenue.		
	Imperial Measure.		£	s.	d.
1821	2,385,495	6*s.* 2*d.*	737,347	3	1
1822	2,225,124	Ditto.	686,369	15	11
1823	2,303,256	6*s.* 2*d.* and 2*s.* 4½*d.*	556,843	18	5
1824	4,530,301	2*s.* 4½*d.*	521,137	9	9
1825	5,981,540	Ditto.	717,872	1	4
1826	5,988,788	2*s.* 10*d.*	563,256	16	9
1827	4,772,199	Ditto.	672,450	6	6
1828	5,716,180	Ditto.	809,559	6	7
1829	5,777,280	Ditto.	818,172	4	2
1830	6,007,631	2*s.* 10*d.*, 3*s.*, and 3*s.* 4*d.*	939,258	6	0
1831	5,700,089	3*s.* 4*d.*	950,041	4	3
1832	5,405,459	Ditto.	901,906	10	0
1833	5,098,596	Ditto.	908,051	3	3
1834	6,045,043	Ditto.	1,007,505	10	0
1835	6,013,974	Ditto.	1,002,505	0	10
1836	6,620,856	Ditto.	1,103,450	3	4
1837	6,124,035	Ditto.	1,020,569	18	10
1838	6,259,711	Ditto.	1,043,180	18	4
1839	6,188,582	Ditto.	1,031,413	10	0
1840	6,184,158	3*s.* 4*d.* and 3*s.* 8*d.*	1,067,949	2	11
1841	5,989,905	3*s.* 8*d.*	1,098,118	11	
1842	5,595,186	Ditto.	1,025,743	13	7
1843	5,593,798	Ditto.	1,025,506	1	6

This table sets the influence of the reduction of the duty in 1823 in the most striking point of view, the consumption of duty-paid spirits having more than doubled in the course of two years, at the same time that illicit distillation was all but suppressed. The addition of 6*d.* made to the duty in 1830 gave a check to the consumption from which it did not speedily recover; and revived, though happily to no great extent, the dormant energies of the smuggler. The influence of the 4*d.* added to the duty in 1840 is also most perceptible.

Duties in England.— Previously to the reduction of the duty on Irish and Scotch spirits, the duty on English spirits had been as high as 11*s.* 8*d.* a gallon. This high duty, and the restrictions under which the trade was placed, were productive of the worst effects. They went far to enable the distillers to fix the price of spirits, "and consequently" (we quote the words of the commissioners of excise inquiry) "to raise it much beyond that which was sufficient to repay, with a profit, the cost of the manufacture and the duty advanced to the Crown." And, in proof of this, the commissioners mention, that in November, 1823, "when corn spirits might be purchased in Scotland for about 2*s.* 3*d.* a gallon, raw spirits could not be purchased in England for less than 4*s.* 6*d.* ready money, and 4*s.* 9*d.* credit, omitting, in both cases, the duty." In consequence of this state of things, the adulteration of spirits was carried on to a great extent in England; and the large profits made by the smuggler occasioned clandestine importation in considerable quantities from Scotland and Ireland. To obviate these inconveniences, and at the same time to neutralise the powerful additional stimulus that the reduction of the duties in Scotland and Ireland would have given to smuggling, had the duties in England been continued at their former amount, the latter were reduced, in 1826, to 7*s.* a gallon, facilities being at the same time given to the importation of spirits from the other parts of the empire. Many complaints have been made of the influence of this measure in increasing drunkenness; but nothing can be imagined more completely destitute of foundation. The commissioners estimated the consumption of British spirits in England and Wales, in 1823, at 5,000,000 gallons —(*Supp. to Fifth Report*, p. 8.); and it appears from the subjoined account, that it amounted, for the year ending 5th of January 1844, to 7,719,458 gallons; producing 3,023,445*l.* of revenue; so that, making allowance for the increase of population since 1823, and for the check given to adulteration and smuggling, and considering, also, that the consumption of foreign spirits was not greater in 1843 than in 1823, it may be safely affirmed that the practice of spirit-drinking has not increased in England during the last 20 years. No doubt, however, it is still a great deal too prevalent, and large sums of money are wasted by the poor on gin, which had far better be expended on other things. But how much soever we may deplore the prevalence of gin-drinking, we may be assured that the evil is not one that can be cured, or even mitigated, by increasing, to any considerable extent, the existing duties on spirits. Such increase would substitute illegitimate for legitimate channels of supply; it would injure the public revenue; and diffuse among the populace the idle, disorderly, and predatory habits that mark the character of the smuggler; and it would do all this without lessening in any degree the vice of drunkenness.

Account of the Quantities of Corn Spirits made in England, which have paid the Duties of Excise for Home Consumption, stating the Rate of Duty paid, and also the Nett Amount of Revenue received in each Year, since the Year 1820. — (Furnished by the *Excise*.)

Years.	Number of Gallons.	Rate per Imperial Gallon.	Nett Amount of Revenue. £	s.	d.
1821	4,125,616	11*s.* 8½*d.*	2,419,280	18	6
1822	4,694,055	Ditto.	2,749,372	5	5
1823	5,803,312	Ditto.	3,222,275	8	5
1824	4,392,611	Ditto.	2,567,378	5	6
1825	3,655,232	Ditto.	2,055,027	4	5
1826	7,407,204	7*s.*	2,592,521	15	1
1827	6,671,582	Ditto.	2,335,046	15	9
1828	7,779,887	Ditto.	2,715,990	9	0
1829	7,700,766	Ditto.	2,695,268	2	0
1830	7,732,101	7*s.* and 7*s.* 6*d.*	2,857,147	19	0
1831	7,434,047	7*s.* 6*d.*	2,787,767	12	6
1832	7,281,900	Ditto.	2,730,712	10	0
1833	7,717,305	Ditto.	2,893,988	12	6
1834	7,644,301	Ditto.	2,866,608	11	4
1835	7,315,055	Ditto.	2,743,144	15	1
1836	7,875,702	Ditto.	2,953,388	5	0
1837	7,133,869	Ditto.	2,674,899	16	9
1838	7,930,490	Ditto.	2,973,908	5	0
1839	8,186,552	Ditto.	3,069,952	6	0
1840	8,278,148	7*s.* 6*d.* and 7*s.* 10*d.*	3,183,563	1	0
1841	8,166,985	7*s.* 10*d.*	3,198,518	6	9
1842	7,956,054	Ditto.	3,116,121	3	0
1843	7,719,158	Ditto.	3,023,444	17	8

Account specifying the Total Number of Proof Gallons of Rum, Brandy, Geneva, and all other Spirits, that paid Duty in each of the U. Kingdoms from the 5th Day of January 1842, to the 5th Day of January 1843; specifying, also, the Rate of Duty per Gallon, and Amount thereof; the Total Number of Gallons of each Kind of Spirits, and Total Duty thereon; and the Total Number of Gallons of all Kinds of Spirits and Total Duty thereon, for the U. Kingdom.

Spirits.	England. Gallons.	England. Nett Duty. £	Scotland. Gallons.	Scotland. Nett Duty. £	Ireland. Gallons.	Ireland. Nett Duty. £	U. Kingdom. Gallons.	U. Kingdom. Nett Duty. £	Rates of Duty per Gallon.	£	s.	d.
Rum	2,050,331	956,827	35,951	16,781	11,465	5,351	2,027,747	978,959	Rum	0	9	4
Brandy	1,054,624	1,180,707	31,670	36,157	16,625	18,982	1,092,919	1,235,846	Brandy and Geneva	1	2	10
Geneva	9,586	10,937	3,747	4,278	1,216	1,406	14,579	16,621				
Other foreign & colonial spirits	5,001	6,049	559	516	210	271	5,770	6,836	Other foreign and colonial spirits	various rates.		
Total of foreign and colonial spirits	3,099,542	2,154,520	71,927	57,732	29,546	26,010	3,201,015	2,238,262				
									Spirits of the manufacture of U. Kingd. Guernsey, or Jersey:			
Spirits of the manufact. of U. Kingdom	7,956,054	3,116,121	5,595,186	1,025,784	5,290,650	904,909	18,841,890	5,046,814	In England	0	7	10
									In Scotland	0	5	8
Ditto of Guernsey & Jersey	6,711	2,628	1,312	241	- -	- -	8,023	2,869	In Ireland— to 11 Mar. 1842	0	2	8
									from 11 Mar. 1842	0	5	8
Spirits of all kinds	11,062,307	5,273,269	5,668,425	1,083,757	5,320,196	930,919	22,050,928	7,287,945				

An Account specifying the Number of Proof Gallons of Rum, distinguishing West India, East India, and Foreign; of Brandy, Geneva, and other Foreign, Colonial, or Jersey Spirits, imported; of the Quantities upon which Duty was paid for Home Consumption, the Quantities exported, and the Quantities shipped as Stores, and used by the Navy, for the Year ended the 5th of January, 1842; together with the Quantities of each Sort remaining in Bond on the 5th day of January, 1842, distinguishing London from the Country.

Quantities (includ. overproof).	Rum. Of British America and the Mauritius.	Rum. Of British Possessions in India.	Rum. Foreign.	Rum. Vatted, not otherwise described.	Rum. All Sorts.	Brandy.	Geneva.	Other Foreign and Colonial Spirits.	Spirits mixed in Bond.	Spirits of Guernsey and Jersey.	Total.
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*
Imported	2,961,123	1,035,572	108,851	-	4,065,546	2,918,587	534,422	173,809	-	14,917	7,705,111
Retained for home consumption	2,277,875	1	94	-	2,277,970	1,164,606	15,421	6,177	-	18,514	3,482,688
Exported	462,194	350,289	129,599	157,314	1,099,396	1,313,845	472,636	112,083	155,958	1,122	3,155,040
Shipped as stores	223,429	6,685	1,392	3,418	234,924	87,219	33,495	151	-	-	355,789
Delivered for the navy	202,982	205,506	-	-	408,488	-	-	-	-	-	408,488
In bond on 5th Jan. 1842 —											
At the port of London	1,025,660	345,594	38,566	190,950	1,600,770	1,342,751	20,990	81,194	7,246	6,752	3,059,703
At other ports of U. Kingdom	927,828	99,448	47,590	41,359	1,116,155	976,544	70,255	43,751	7,685	2,761	2,217,049
Total	1,953,488	445,042	86,086	232,309	2,716,925	2,319,295	91,245	124,945	14,929	9,513	5,276,752

Trade in Spirits. — No spirits made in England, Scotland, or Ireland shall be conveyed from England to Scotland or Ireland, or from Scotland or Ireland to England, otherwise than in casks containing *twenty* gallons at the least, and in vessels of not less than *fifty* tons burden.

All persons whatsoever, not being licensed distillers, rectifiers, or compounders, having more than *twenty* gallons of spirits in their possession, shall be deemed dealers in spirits, and subject to the survey of the officers of excise, and to all the regulations, penalties, &c. to which such persons are liable. — (6 *Geo.* 4. c. 80. sect. 122.)

Dealers in British spirits are prohibited selling or having in their possession any plain British spirits, except spirits of wine, of any strength exceeding the strength of 25 per cent. above

hydrometer, or of any strength below 17 per cent. under hydrometer proof, or any compounded spirits, except shrub, of any greater strength than 17 per cent., under hydrometer, under pain of forfeiting all such spirits, with the casks, &c. — Sect. 124.

Dealers in foreign and British spirits are to keep them separate, in cellars, vaults, or other places specially entered for that purpose, under a heavy penalty; and any person mixing, selling, or sending out any British spirits mixed with foreign or colonial spirits, shall forfeit 100*l.* for every such offence. — Sect. 126.

No retailer of spirits, or any other person licensed or unlicensed, shall sell or send out from his stock or custody any quantity of spirits exceeding 1 gallon, unless the same be accompanied by a true and lawful permit, under pain of forfeiting 200*l.*; and any rectifier, compounder, or dealer in spirits, receiving the same into their stock, or allowing any one else to receive it, and any carrier, boatman, or other person knowingly carrying the same, shall forfeit the sum of 200*l.*, with the boat, horse, cart, &c. used in the carriage. — Sect. 116.

No licence to be granted for retailing spirits within houses of correction, or workhouses for spirits to be used there, ex gular physician, surgeon, offence of this sort commit offence to be deemed a forfeiture of their office. — Sect. 134.

Persons *hawking spirits* to forfeit them and 100*l.*; and if the penalty be not immediately paid, they are to be committed to the house of correction for 3 months, or until paid. — (Sect. 138.) Any person is authorised to detain a hawker of spirits, and give notice to a peace officer, who is to carry the offender before a justice. — Sect. 140.

Any officer of excise, or other person employed in the excise, taking any sum of money or other reward from, or entering into any collusive agreement with, any person, to act contrary to his duty, to forfeit 500*l.*, and be incapacitated; and any person offering such reward or proposing such agreement, to forfeit 500*l.* — Sect. 145.

For the regulations as to the importation, &c. of foreign spirits, see BRANDY, GENEVA, and RUM.

SPONGE (Ger. *Schwamm*; Fr. *Eponge*; It. *Spugna*; Sp. *Esponja*), a soft, light, very porous, and compressible substance, readily imbibing water, and as readily giving it out again. It is found adhering to rocks, particularly in the Mediterranean Sea, about the islands of the Archipelago. It was formerly supposed to be a vegetable production, but is now classed among the zoöphytes; and analysed, it yields the same principles as animal substances in general. The inhabitants in several of the Greek islands have been trained from their infancy to dive for sponges. They adhere firmly to the bottom; and are not detached without a good deal of trouble. The extraordinary clearness of the water facilitates the operations of the divers. Smyrna is the great market for sponge. The price varies from 6 to 16 piastres per oke for ordinary and dirty, and from 80 to 100 piastres per oke for fine and picked specimens. Sponge is also fished for in the Red Sea. — (*Ure's Dictionary*; *Savary's Letters on Greece*, Eng. ed. p. 109.; and *private communications.*)

Sponge is used in surgery, and for a variety of purposes in the arts. The duty on sponge when brought from a foreign country, is 6*d.*, and when brought from a British possession, 1*d.* per lb. Now, as the far greater portion comes from the former, and as the duty produced, in 1840, 1,963*l.*, the entries may be partly presumed to have amounted in that year to about 78,500 lbs. No deduction is made from the duty on account of sand or dirt, unless it exceed 7 per cent., and then only for the excess above 7 per cent.

SQUILL (Ger. *Meerzwiebel*; Fr. *Scille, Oignon marin*; It. *Scilla, Cipolla marina*; Sp. *Cebolla albarranna*,) or, as it is sometimes denominated, the *Sea onion*, is a plant with a large bulbous root, which is the only part that is used. It grows spontaneously on sandy shores in Spain and the Levant; whence we are annually supplied with the roots. They should be chosen large, plump, fresh, and full of a clammy juice: some are of a reddish colour, and others white; but no difference is observed in the qualities of the 2 sorts. The root is very nauseous, intensely bitter, and acrimonious; much handled, it ulcerates the skin. The bulbs are brought to England, preserved fresh in sand. The acrimony of the roots, on which their virtue depends, is partially destroyed by drying and long keeping, and is completely destroyed by exposure to heat above 212°. Squill is one of the most powerful and useful remedies in the materia medica. (*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

STADE, a small city of Hanover, on the Schwinge, 22 miles W. by N. of Hamburg, lat. 53° 36′ 32″ N., lon. 9° 28′ 34″ E. It has very little trade; and would be quite unworthy of notice in a work of this sort, except for the circumstance that a toll or duty, charged by the Hanoverian government on all goods imported into Hamburg, whether for consumption or transit, is paid at the castle of Brunshausen, contiguous to this town. The duty is generally about ½ per cent. *ad valorem*. It is rated according to a tariff; and is computed from the ship's manifest, bills of lading, cockets, &c., which must be left at Brunshausen for that purpose. The duties are paid in Hamburg; and no vessel is allowed to unload, till a receipt, subscribed by the Hanoverian authorities in that city, be produced for the duties. We have already — (see HAMBURG) — expressed our surprise that an obstruction of this sort should have been tolerated for so long a period. The duties fall heavily on certain descriptions of goods; particularly on some manufactured articles; and are, at an average, decidedly higher than the duties charged in Hamburg. They are most objectionable, however, from their requiring many troublesome regulations to be complied with; the unintentional deviation from any one of which exposes the cargo to confiscation, and never fails to occasion a great deal of delay, trouble, and expense. As the principal part of the foreign trade of the Elbe is in our hands, we are, of course, principally affected by the Stade toll; and considering the source of the nuisance, it is not a little astonishing it should not have been abated long ago. The sum which the Hanoverian government derives from the duties is but trifling compared with the injury they inflict on our trade; it would, consequently, be good policy for the former to sell, and for the British government to buy, an exemption from so vexatious a duty; and few things would do more to extend our trade with Hamburg than the completion of an arrangement of this sort. We believe, however,

that the negotiations which have been for some time on foot with respect to this matter are in a fair way of being brought to a satisfactory conclusion, and that the merchants engaged in the trade to Hamburg may expect, at no distant period, to be relieved from the annoyance of the Stade duties.

Previously to 1736, English ships passing up the Elbe had to come to an anchor opposite Brunshausen: but they were then allowed, under certain conditions, to pass on to Hamburg. The proclamation to this effect, and which contains an epitome of the regulations that have still to be observed, is subjoined.

1. That all English vessels be exempted from coming to an anchor before the river Schwinge, and allowed to sail directly up to Hamburg.

2. Such English vessels shall be obliged, at their approach, within about ½ of a league thereof, to hoist their colours, to lower their sails, and only to drive, till the legitimation is made at the king's frigate lying there.

3. The master of the ship, or a proper person fully provided with the necessary documents, is to go on board the frigate, and afterwards to the Custom house at Brunshausen and Stade; and there to produce an exact manifest, and the original bills of lading, cockets, &c.

4. The documents being produced, the accounts shall be stated, and all duties must be paid at Brunshausen, Stade, or Hamburg.

5. The clearance shall be given at Brunshausen to the person sent thither by the master of the vessel; by whom it must be delivered to the king's commissary in Hamburg, together with the documents of the cargo, and a specification of the parcels, bales, casks, &c. which were received on board at the port of lading, whether designed for Hamburg or other places.

6. Bulk must not be broken till all this has been performed, except the king's commissary in Hamburg permits, in urgent cases, the unloading.

7. The vessels being thus allowed to pass the frigate without being searched, in case of suspecting any fraud, the masters shall be obliged to sign a proper oath; and the merchants in Hamburg, who receive effects by those vessels, shall make an exact report thereof, and give a certificate in lieu of an oath — that they neither have received nor expected more goods than have been specified, — which must be delivered to his Majesty's commissary in Hamburg, to enable him to examine the report made by the master.

8. No master is to depart from Hamburg before he has taken a certificate from his Majesty's commissary, proving that all has been duly performed; which is to be sent to the king's frigate, near Brunshausen.

9. The goals mentioned in the second article are likewise to be made when the ship repasses Stade.

10. The taking cognizance of, and punishing misdemeanours, frauds, and mismanagements, as well as the neglecting of the preceding articles, remains in the Court of the King's Customs at Stade: so that both merchants and masters of ships, who may be called to an account, shall, when summoned, appear before the said court, and submit to its decisions; but they have the liberty of appeal to the superior courts for a revision and relief.

11. As to all other points not expressly mentioned in the foregoing articles, they shall be observed at the king's Custom-houses at Brunshausen, Stade, and Hamburg, according to the regulati

12. This … *bene placito*, the king reserving to himself and his successors in his German dominions the right of revoking it, and making any alterations or new orders, whenever they shall see reason.

STARCH (Ger. *Amidan*; Fr. *Amidon*; It. *Amoli, Amito*; Sp. *Amidon, Almidon*; Rus. *Kruchmal*), a substance obtained from vegetables. It has a fine white colour, and is usually concreted in longish masses; it has scarcely any smell, and very little taste. When kept dry, it continues for a long time uninjured, though exposed to the air. It is insoluble in cold water; but combines with boiling water — forming with it a kind of jelly. It exists chiefly in the white and brittle parts of vegetables, particularly in tuberose roots, and the seeds of the gramineous plants. It may be extracted by pounding these parts, and agitating them in cold water; when the *parenchyma* or fibrous parts will first subside; and these being removed, a fine white powder, diffused through the water, will gradually subside, which is the starch. Or the pounded or grated substance, as the roots of potatoes, acorns, or horse chesnuts, for instance, may be put into a hair sieve, and the starch washed through with cold water, leaving the grosser matters behind. Farinaceous seeds may be ground and treated in a similar manner. Oily seeds require to have the oil expressed from them before the farina is extracted. Potato starch goes a good deal further than wheat starch — a less quantity of it sufficing to form a paste of equal thickness with water. It has a very perceptible crystallised appearance, and is apparently heavier than common starch. — (*Thomson's Chemistry; Ure's Dictionary.*)

Starch was charged, down to 1834, with an excise duty of 3½*d.* per lb; but the injurious influence of the duty, the nett produce of which did not exceed 85,000*l.*, having been forcibly pointed out by the Commissioners of Revenue Inquiry, it was repealed in the course of the above year. In 1833, duty was paid on 8,070,026 lbs. starch. The manufacture has since, however, been greatly extended.

STEAM VESSELS. We have already laid before the reader an account of the number of steam vessels belonging to the different ports and divisions of the U. Kingdom (*antè*, p. 1109.); and we believe we shall be doing an acceptable service to the bulk of our readers by laying before them the following extracts from a letter by the Secretary to the Treasury of the U. States, prepared in pursuance of a resolution of the House of Representatives, of the 20th of June, 1838. It communicates many interesting particulars with respect to the employment of steam engines and steam vessels in the U. States, and the accidents that have happened to the latter.

Number of Steam-boats, and other Steam Engines in the U. States. — "The whole number of steam engines, of every kind, in the U. States, reckoning one to each boat, is estimated to be 3,010. Of these, 2,653 have been ascertained, and 357 are estimated, in places from which the returns are either defective or not received at all. Of this whole number, about 800 are supposed to be employed in steam-boats, of which 700 are ascertained, and 100 estimated. About 350 are employed in locomotives upon railroads. Of these, 337 are ascertained and 13 estimated. The residue, being 1,860, are used in manufactories of various kinds. Of these, 1,616 are ascertained and 244 estimated."

Number of Accidents to Steam Engines. — "The number of accidents occasioning loss of life or much injury to property, which have occured in the use of steam engines of every kind in the U. States, is computed to have been about 260. Of these, 253 are

ascertained, and the rest are estimated. Such accidents, by explosions and other disasters to steam-boats, appear to have constituted a great portion of the whole, and are supposed to have equalled 230, of which 215 are ascertained. The first of these is believed to have occurred in the Washington, on the Ohio river, in 1816.

"Since the employment of steam-boats in the U. States, it is computed that quite 1,300 have been built here. Of these, about 260 have been lost by various accidents, as many as 240 worn out, and the rest are now running.

"The first steam-boat used for practical purposes here (or indeed in any part of the world) was in 1807, on the Hudson River, in the State of New York. She was built by Fulton, called the North River, with an engine of only 18-horse power, and made the passage between Albany and New York in thirty-three hours. Though with a steam engine manufactured abroad by Boulton and Watt, yet no boat was launched in Europe that proved successful in practice, till five years after, by Mr. Bell, at Glasgow, in 1812. At that time, the Car of Neptune, built in 1808, the Paragon, in 1811, and the Richmond, in 1812, were all, in addition to the boat first built, running from New York. Rumney is known to have made experiments on a small scale as to steam-boats, in Virginia, as early as 1787; but they were not reduced to any practical use. Both he and Fitch commenced trials in this country as early as 1783 and 1784, and Oliver Evans in 1785 and 1786. They had been preceded in France, in 1762, by the Marquis d'Jeaffrey; and the idea of applying steam in boats had been suggested in England as early as 1736, by Jonathan Hulls.

"The whole number of steam-boats ascertained and estimated to be now in this country, is 800. In England, in 1836, the whole number is computed to have been 600. On the Western and South-western waters alone, near 400 are now supposed to be running, where none were used till 1811, and where, in 1834, the number was computed to be only 234. Of these 400, about 141 are estimated. On the Ohio river alone, in 1837, about 413 different steam-boats are reported to have passed through the Louisville and Portland Canal, besides all below and above, which never passed through. But it deserves notice, that of those 413, near 60 went out of use by accidents, decay, &c., within that year; and several of the others, viz., 104, were new, and many of them probably were destined to run on other rivers. As an illustration of the rapid increase of business in steam-boats on the Ohio, the number of passages by them through the Louisville canal increased from 406, in 1831, to 1,501, in 1837, or nearly fourfold in six years. About 70 boats were running the present year on the North-western lakes, where a few years since the number was very small, having been in 1835 only 25. Of the 800 steam-boats now in the U. States, the greatest number ascertained to be in any State is 140, in the State of New York.

"It is a matter of surprise that so few of these are sea-going vessels, considering that the first steam-boat which ever crossed the Atlantic was built in New York, so long ago as 1819, and went from Savannah (the place after which she was called) to Liverpool in 26 days; and that the Robert Fulton, as early as 1822, made several trips to New Orleans and Havannah. A similar remark applies to the circumstances that only one of the whole number is a public vessel of war, when the first steam vessel of that kind ever launched was the Fulton, and was built in this country, so long ago as 1815. The Government of the U. States never owned but two steam vessels of war — both called the "Fulton." The first was lost by accident, in 1829; and now there is only the other before alluded to, built in 1838. It has, however, 13 other steam vessels, employed in the war department, on the public works, and in the transportation of troops and stores.

"Of the whole number of locomotives in the U. States propelled by steam, being about 350, the most which have been ascertained in any State is 96, in the State of Pennsylvania.

"None of them were introduced here till 1831, though they now run on nearly 1,500 miles of railroad. The first, it is believed, was in the State of Delaware on the New-castle railroad; the second, in Maryland, on the Baltimore and Ohio railroad; and the third, between New Orleans and Lake Pontchartrain, in the State of Louisiana. They had been tried in this country, by Oliver Evans, as early as 1804, and in England as early as 1805; but not reduced to useful practice in the latter till 1811 for freight, and in 1830 for passengers and speed. One succeeded on a common road, fro m London o Bath, in 1829. Of the whole number of other steam machines in the U. States, (being about 1,860), the state of Pennsylvania has the most, being 383. The number in some States is not accurately ascertained; but near 300 are ascertained and computed to exist in Louisiana alone. The introduction of them here, and especially with the high pressure machinery, was much promoted by Oliver Evans, about 1804. The first of them in use in the U. States was put up in 1787, in the State of New Jersey, for raising water and earth from mines. The next were about 1791, in a cotton factory at Kensington, near Philadelphia; and soon after in saw-mills, and iron slitting

and rolling mills, at Pittsburg. The power has been known in England to be applicable to mechanical uses since the experiments of the Marquis of Worcester, in 1663. It is said by some that he was preceded in France (and a pamphlet published on the subject as early as 1615,) by Solomon de Caus. But the views of the latter, like many who preceded him in the knowledge of steam as a moving power, are supposed to have been rather theoretical than practical. Several machines were made in England as early as 1720; and Watt's first patent was taken out, for improvements in them, as early as 1769. But they were not, even there, very extensively and successfully applied to mills and manufactories, till 1785, though 18 large engines were employed in the mines of Cornwall as early as 1770; and a flour mill, with 20 pairs of stones, was moved by steam in London in 1784.

"The greatest employment of these in the South is in the sugar manufacture, and in cleaning and pressing cotton; in the West, in grist and saw mills, and in various manufactures of iron machinery and tools; and in the East, in mills, in printing, in cotton manufactories, and the public works at navy yards and armouries.

"The government of the U. States owns 17 of these; they being employed at their navy yards, to empty docks, saw timber, &c.; and at some arsenals and armouries, in manufacturing arms.

"The tonnage of all the steam-boats in the U. States is computed to exceed 155,473. Of this, 137,473 is in boats ascertained or reported. By the official returns, the whole tonnage would now, probably, equal near 160,000 tons, having been, in 1837, equal to 153,660. Many boats included in those returns have been lost or worn out, and several new ones built since. In England, the tonnage is estimated to have been 67,969 in 1836. The tonnage of each boat here averages about 200; and the estimates, where the returns have been defective, were made on that basis. The power employed in all the steam engines in the U. States is ascertained and estimated at 100,318 horse-power: of this, 12,140 only is in engines estimated and not returned. In the aggregate, all this new mechanical force would be equal to the power of 601,808 men. Of this force, 57,019 horse-power is computed to be in steam-boats; 6,980 in railroads; and the rest, being 36,319, in other engines. This averages about 70 horse-power to each boat, or one horse to between two and three tons, and less than 20 horse-power to each of the other engines. It is a striking fact, that the steam-power employed in standing engines is equal to about two-thirds of all that is used in steam-boats. The largest boat in the U. States is supposed to be the Natches, of 860 tons, and near 300 horse-power, destined to run between New York and Mississippi; the Illinois and the Madison, on Lake Erie, are the next in size, the former being 755, and the latter 700 tons; the Massachusetts, in Long Island Sound, is the next largest, being 626 tons; and the Buffalo, on Lake Erie, next, being of 613 tons. The largest boats passing Louisville, in 1837, were the Uncle Sam, of 447 tons, and the Mogul, of 414 tons; though below Louisville, the Mediterranean, of 490 tons, and the North America, of 445 tons, on the Ohio, and the St. Louis, of 550 tons, on the Mississippi, are running. The greatest loss of life well authenticated on any one occasion in a steam-boat appears to have been by collision, and consequent sinking, in the case of the Monmouth, in 1837, on the Mississippi, by which 300 lives were lost. The next greatest were by explosions: of the Oronoka, in 1838, on the same river, by which 130, or more, lives were lost; and of the Moselle, at Cincinnati, Ohio, by which 100 to 120 persons were destroyed. The greatest injury to life by accidents to boats from snags and sawyers appears to have been 13 lost, in 1834, in the case of the St. Louis, on the Mississippi river. The greatest by shipwreck was in the case of the Home, in 1837, on the coast of North Carolina, where 100 persons were lost. The greatest by fire happened in the Ben Sherrod, on the Mississippi river, in 1837, when near 130 perished. The number of steam-boats built in the U. States in 1834 was 88; but in 1837 it was 184; or had increased over 200 per cent. in three years. The places where the greatest number of steam-boats and other steam machines appear to have been constructed in this country, are Pittsburg, Cincinnati, and Louisville, on the Western waters; and New York, Philadelphia, and Baltimore, on the Atlantic. At Louisville alone, from 1819 to 1838, there appear to have been built 244 steam engines; of which 62 were for boats. The fuel originally used in steam-boats in the U. States was wood; but of late years bituminous coal has, in many instances, been substituted; and, in several, anthracite coal: the latter, from the small space it occupies, would seem to possess a decided advantage in sea-going vessels, as well as in locomotives.

"Some steam-boats made of iron are believed to be in use in Georgia, if not in other parts of this country, though none of that material have been manufactured here; but it is computed that their cost is less than those of wood; and as they draw less water with the same freight, they are more useful on shallow streams."

STEEL (Fr *Acier*; Ger. *Stahl*; It. *Acciajo*; Lat. *Chalybs*; Rus. *Stal*; Sp. *Acero*; Sw. *Stål*) is iron combined with a small portion of carbon; and has been, for that

reason, called carburetted iron. The proportion of carbon has not been ascertained with much precision. It is supposed to amount, at an average, to $\frac{1}{10}$th part. Steel is so hard as to be unmalleable while cold; or at least it acquires that property by being immersed, while ignited, in a cold liquid: for this immersion, though it has no effect upon iron, adds greatly to the hardness of steel. It is brittle, resists the file, cuts glass, affords sparks with flint, and retains the magnetic virtue for any length of time. It loses this hardness by being ignited, and cooled very slowly. It is malleable when red hot, but scarcely so when raised to a white heat. It may be hammered out into much thinner plates than iron. It is more sonorous; and its specific gravity when hammered is greater than that of iron — varying from 7·78 to 7·84. Steel is usually divided into 3 sorts, according to the method in which it is prepared; as *natural steel, steel of cementation*, and *cast steel*. The latter is the most valuable of all, as its texture is the most compact, and it admits of the finest polish. It is used for razors, surgeons' instruments, and similar purposes. Steel is chiefly employed in the manufacture of swords, knives, and cutting instruments of all sorts used in the arts; for which it is peculiarly adapted by its hardness, and the fineness of the edge which may be given to it. — (*Thomson's Chemistry*; and see IRON.)

STETTIN, a city of Prussia, on the left bank of the Oder, about 36 miles from its mouth, in lat. 53° 23′ 20″ N., long. 14° 33′ E. It is well built, strongly fortified, and had a population, in 1838, of 31,100.

Stettin is the seat of an extensive and growing commerce; and is now, indeed, the principal port of importation in Prussia. She owes this distinction mainly to her situation. The Oder, which flows through the centre of the Prussian dominions, is navigable as far as Ratibor, near the extreme southern boundary of Prussian Silesia; and is united, by means of canals, with the Vistula, the Elbe, the Spree, &c. Stettin is, consequently, the principal emporium of some very extensive and flourishing countries; and is not only the port of Frankfort-on-the-Oder, Breslaw, &c., but also of Berlin. A railway from the latter to Stettin is nearly (1843) completed. Hence, at the proper seasons, its wharfs are crowded with lighters that bring down the produce of the different countries traversed by the river, and bring back colonial products, and other articles of foreign growth and manufacture. Vessels of considerable burden, or those drawing above 7 or 8 feet water, load and unload, by means of lighters, at the mouth of the river, at Swinemunde, the out-port of Stettin, on the east coast of the isle of Usedom, in lat. 53° 55′ N., long. 14° 15′ 15″ E. Formerly there were not more than 7 feet water over the bar adjacent to Swinemunde; but the harbour of the latter has recently been so much improved, by the construction of piers and breakwaters, dredging, &c., that it is now the best on the Prussian coast, and admits vessels drawing from 18 to 19 feet water. A lighthouse has been erected at the extremity of the eastern pier. Stettin is a free port; that is, a port into and from which all sorts of goods may be imported and re-exported free of duty. If goods brought through the Sound be imported at Stettin, and entered for home consumption in the Prussian states, they are charged with 2¼ per cent. less duty than if they had been imported through any other channel. This is intended to reimburse the merchant for the Sound duties, and to encourage importation by this direct route in preference to that carried on through Hamburg and Embden. There is a great wool fair in the month of June each year.

Monies, Weights, and Measures, same as at Dantzic, which see. The Bank of Berlin has a branch at Stettin, and there is also an insurance office.

Imports and Exports. — The principal articles of import at Stettin are sugar, coffee, dye-woods, wine, iron, and hard- ..... oil, tallow, cotton and cotton goods, herrings, spirits, linseed, coal, salt, &c. The principal exports are corn, especially wheat; spirits, rapeseed, spelter, timber, &c.; bones, manganese, fruits, &c.

Account of charges incurred by a British ship, of about 200 tons burden, at Swinemunde and Stettin: —

	Rixd.	gr.	Pf.
Stettin. — Pilotage and fee			
Town dues and clearances		28	
Poor rates - -		20	
Master roll - -		27	6
Brokerage and charter party		20	
Broker's commission		22	
Measuring - -			
Swinemunde. — Port charges, inwards		12	8
Ditto, outwards - - -		12	8
Harbour dues - - -		21	3
Commission - - -			
Prussian dollars, or about 100 Spanish dollars - - - -		12	25

Navigation. — Stettin is the principal shipping port in the Prussian dominions. In 1841 there belonged to it 200 ships of the burden of 49,892 tons, being about a third part of the shipping belonging to Prussia.

Port Regulations. — All vessels are prohibited entering Swinemunde, unless forced by stress of weather, without previously heaving-to for, and receiving, a pilot on board. But when compelled to enter without a pilot, the master is to observe the signals made from the beacons erected on the eastern and western moles as follows: —

Notice.

1. When pilots cannot put to sea, and captains of ships are nevertheless resolved to enter the harbour, a red flag will be hoisted on the direction beacon of the eastern mole.

2. The captains will then steer until they find themselves, S.E. by S. on the compass, from the lighthouse placed on the utmost point of the east mole, taking care to keep the outermost great white buoy, situate on the end of the western ground in a depth of 16 feet, on the starboard, and the next black buoy, in an oblique line towards the lighthouse, on the larboard.

3. In that situation of the vessel the two new beacons cover themselves in the direction of S. S. E., and this course, keeping the two beacons completely covered, the captains sail into the port up to the second landing berth of the eastern mole, four cables' length beyond the lighthouse, keeping off the mole half a cable's length.

4. At that place, the captain, taking care to remain a little South, are expected by the pilots to go on board of their vessels.

5. On entering the port all the white buoys are to remain on the starboard side of the vessel (see 2.).

6. For facilitating the finding and keeping the directions given in this instruction in case the buoys should have been removed by sea, or taken up on account of the advanced season, signals will be given with a red flag from the direction beacon on the eastern mole.

7. The captains must follow the signals in so far as to steer to that part where the flag is hoisted perpendicularly.

8. Should there be no pilot at sea, and no flag hoisted on the beckoning beacon, the captains must not attempt to enter the port at all, but either anchor in the roads or remain at sea.

Stettin, November 12, 1835.

The following regulations apply to all the Prussian ports: —

Notifications to Captains of Ships respecting Importation and Exportation by Sea in the Prussian Dominions: —

As soon as a ship arrives in the road, and has complied with the police regulations of the port (which are communicated to her), the captain repairs to the custom-house, and delivers a complete list or manifest of cargo. This list bears the title of a chief declaration or manifest, and in preparing it, the following conditions are to be observed: —

If the whole cargo be not destined for the port, *that* part which is to proceed further with the ship, is to be placed under a distinct division.

The goods accompanied with bills of lading are entered in rotation after each other for every bill of landing.

The account (or statement) is made out in kind and quantity, agreeable to those measures and divisions adopted in the tariff for the payment of duties.

If there be a number of packages of similar articles, and each package contains an equal quantity, they may be entered summarily, according to their number and size; and a general statement of the contents will suffice.

If the contents of the packages be different, then the contents of each must be specified.

The luggage of the passengers must be marked as such in the report. If it consist of general travelling luggage, it will be enough to state the particular boxes or parcels; but if it consist of goods, then must these be stated, according to number and kind.

The individual property of the captain, with the exception of the provisions, is stated like other tradesmen's property, with

omission of the declaration of a receiver; and it is also stated in the declaration what articles remain out of the ship's hold.

If the captain have not brought with him a report, he may have one completed in the port, by a customs officer; in which case he gives up all his papers to the said officer, who then stamps and numbers them, the last number being marked as such. The captain, at the same time, informs the officer of the property belonging to himself and passengers, of which there are no accounts; who thereupon makes out a list thereof, which is signed by the captain, and returned, in order to be used in preparing the report.

In case the report has to be prepared on shore, it must be delivered up in 24 hours, at latest, after the arrival of the captain in the road. If not, possession is taken of the ship, at his expense, which, according to the judgment of the customs, may take place even sooner, but free of expense.

Respecting the provisions, if they consist of articles which pay a consumption duty, a distinct or separate report must be given in duplicate. One is returned to the captain after a general revision, in order that he may take with him an equal quantity of the articles specified in it when he sails. If this do not happen, or if the departure do not take place within a twelvemonth, then the consumption duty is to be paid on the articles remaining on hand. The captain is, however, at liberty to deposit the provisions, subject to the consumption duty, at the custom-house, until he sail.

Other articles, not properly belonging to the cargo, are in so far admitted, that they undoubtedly belong to the ship's inventory, and are utensils for the voyage. Articles which are not counted as such are taxed if they be subject to a consumption tax, or, in order to take them again away, they are deposited at the custom-house.

If the ship remain in the road, and do not enter the harbour, but conveys there the cargoes by lighters, the consumption in the road is tax free. A report of the provisions suffices, and further control over it only takes place when, in particular cases, it is considered necessary.

If the captain have another destination, and only visits the harbour through necessity, then in order to the security of the vessel and cargo, a general inspection only takes place, so that no part of the cargo may be sold or disposed of. When, however, such security has been given, a report is made of the cargo, in as far as the ship's papers and the knowledge of the captain admit.

Respecting the further treatment of the business, the custom-house will take such other measures, according to circumstances, viz. whether the cargo remain untouched, or whether the same must be wholly or partly discharged for the repair of the ship, so that the cargo may be exported in its original state.

The cargo of vessels which put in to winter must be announced as soon as possible, in as far as the ship's papers give information and the knowledge of the captain extends upon the subject. The inspection of the external parts of the vessel, and the articles contained thereon, takes place directly, and the entrances to the ship's hold are locked. Until the declaration, inspection, and locking up of the vessel take place, she is guarded at the expense of the captain; which guard, in particular cases, may last as long as the customs department may deem necessary.

Vessels which only anchor in the roads, and do not enter a port, are out of control of the customs officers; they must not, however, hold any intercourse with the shore or the port, otherwise they must give in reports beforehand, and present their papers.

If the vessel remain in the roads longer than 24 hours after declaration is made, before proceeding to put in or unload, if the one or the other be not prevented by stress of weather, then an officer repairs to the ship, examines the decks and the articles thereon, and locks up the entrances, &c. to the hold.

To the officers who are ordered for service on board the vessel is afforded a proper maintenance or treatment, the same as is given to travellers of the trading class.

If the occupation of the vessel takes place at the cost of the captain, he is then obligated to give the officers the daily pay of their rank, as regulated, and to provide for their return to their dwelling-place.

If it happen that officers, owing to an interrupted communication with the shore, are forced to remain beyond 2 days on board, then the captain must give them their meals, on their paying for the same; and if any difficulty arise about the charge, it is to be decided by the police authorities.

In all cases, the captain must row back the officers from the road to the harbour.

The direction of the officers, touching the discharge of the vessel, in order that they may be able to exercise properly the control of the office, must be followed.

If a captain has a well-founded complaint to make about the conduct of the officers, he must present it at the head custom-house; and may, after previous examination, expect, without delay, their dismissal (Abstellung). To every captain, after clearing out, the register of complaints (which, according to § 116. of the regulation of taxes, must be in every custom-house) is presented, in order that he may enter therein his name, and whatever complaint he may have to make.

Table of Fees payable to the Brokers of Stettin, as fixed the 8 January, 1834.

	Dal. Sil. Pf. Gros.
On Goods, Bills of Exchange, and Money.	
On the negotiation of bills of exchange, per mille	1 0 0
On changing money, or papers considered as money, per mille	0 15 0
On every description of business in goods, excepting the corn trade, per cent.	0 7 6
On the corn trade, viz. —	
Wheat, rye, peas, and linseed (in so far as the latter is sold for the wispel), per cent.	0 7 6
Barley, oats, and malt, per cent.	0 15 0
N.B. — The items 1 to 4, inclusive, are to be paid both by the buyer and the seller.	
On sales by auction, from the seller, per cent.	0 15 0
If the same be withdrawn previous to the fixed period, as remuneration	1 0 0
On certificates or extract of the journal, exclusive of the stamp	0 20 0
Fees payable to Ship Brokers.	
For freighting vessels reckoned according to Prussian normal last, payable by the owner as well as the affreighter, per last	0 1 6
For the charter-party from both parties, the affreighter and charterer	1 0 0
The stamp is to be paid separately by the parties interested.	
For reporting a vessel arriving with cargo, per Prussian normal last	0 4 0
(Without distinction as to the number of persons interested in the cargo, or whence the vessel comes.)	
For reporting an outward-bound ship with cargo, per Prussian normal last	0 2 0
For reporting a vessel in ballast coming in or going out, per Prussian normal last	0 0 10
Note. — If a vessel, coming in or going out, be only partly laden, such cargo is reduced to Prussian normal lasts, in proportion to the number of lasts stated in the ships' register, and according to this the duties are calculated. The items 3, 4, 5, the broker has to charge to the ship.	
For procuring money on bottomry, payable by the lender as well as the borrower, for every 100 dollars	0 3 9
For sales of ships or single shares, from both parties, buyer and seller, whether by auction or privately, per cent. of the price	0 7 6
If the sale be not effected within the fixed period, on whole vessels	3 0 0
on shares	2 0 0
For certificates and extracts from the ship papers, statements of averages, or from the log book, exclusive stamp	0 20 0

Account of the Exports of Corn and Grain from Stettin in each of the 9 Years ending with 1842.

Years.	To England.					To other Countries.				
	Wheat.	Rye.	Barley.	Oats.	Peas.	Wheat.	Rye.	Barley.	Oats.	Peas.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
1834	4,752	- -	- -	900	727	17,099	88,278	10,868	1,004	3,250
1835	418	- -	- -	- -	121	631	17,442	4,269	675	1,810
1836	8,253	1,296	17,145	1,040	5,536	7,965	41,100	29,763	1,731	864
1837	22,944	490	6,410	15,154	4,792	21,209	68,540	24,460	2,794	1,108
1838	45,758	- -	2,365	- -	850	17,500	29,350	23,407	1,470	7,255
1839	170,842	2,800	30,780	4,240	4,604	17,780	59,682	3,490	250	1,580
1840	296,300	- -	39,672	14,810	13,702	21,965	54,350	6,939	- -	2,990
1841				(Returns imperfect.)						
1842	150,759	- -	525	-	9,907	18,900	93,198	5,271	640	1,000

Account of the Value of the Imports and Exports at Stettin for each of the 9 Years ending with 1842.

Years.	Imports.	Exports.	Years.	Imports.	Exports.
	£	£		£	£
1834	714,050	374,800	1839	1,169,000	813,000
1835	811,670	280,000	1840	1,328,000	1,105,000
1836	957,250	477,500	1841	1,243,400	1,098,000
1837	975,500	406,865	1842	1,108,000	1,621,600
1838	965,600	482,800			

Account of the Quantities of the principal Articles exported from Stettin by Sea in 1842, distinguishing the Quantities shipped for the U. Kingdom and all other Countries, with their aggregate Value.

Articles.	U. Kingdom.	All other Countries.	Total Quantity.	Value in Sterling at 68 Prussian Dollar per ℔.
Arsenic - - - - centner	-	382	382	380
Bones and bone dung - - - —	21,361	5,061	29,422	5,940
Brandy - - - - —	4,025	207,898	211,923	92,730
Brownstone - - - - —	-	2,779	2,779	1,080
Chemical fabrication - - - —	-	271	271	2,040
Cloth - - - - —	-	36	36	1,275
Flax - - - - —	5,467	-	5,467	6,540
Flour - - - - —	4,020	5,200	9,220	5,530
Glass of all kinds - - - —	-	1,584	1,584	2,250
Grain, peas - - - - last	934	181	1,115	22,580
barley - - - - —	50	502	552	6,710
oats - - - - —	-	61	61	510
rye - - - - —	-	8,876	8,876	143,800
wheat - - - - —	14,358	1,800	16,158	523,720
Herrings - - - - barrels	-	150	150	180
Indigo - - - - centner	-	23	23	2,070
Iron of all kinds - - - —	-	1,151	1,151	940
Linen - - - - —	2	639	641	3,360
Linseed - - - - —	618	4,251	4,869	24,780
Madders - - - - —	-	259	259	540
Medical produce - - - —	-	1,772	1,772	12,750
Oil, rape - - - - —	-	8,145	8,145	13,190
train - - - - —	375	-	375	510
cakes - - - - —	119,814	-	119,814	21,720
Potash - - - - —	-	387	387	420
Rags - - - - —	189	-	189	190
Rapeseed - - - - —	5,387	50,363	55,750	34,750
Red colour - - - - —	-	270	270	270
Seed, clover - - - - scheffel	140	2,688	2,828	1,120
Smalts - - - - centner	-	71	71	290
Spelter - - - - —	40,027	47,524	47,551	65,750
Wood, staves - - - - schock	5,236	10,851	16,097	36,820
fir timber - - - - pieces	895	20,431	21,326	29,205
oak - - - - last	3,966	46,223	50,189	42,920
mast and bowsprit - - - pieces	12	11	23	150
boards and planks - - - —	-	87,005	87,005	6,190
candles boxes - - - - —	-	10,026	10,026	290
lathwood - - - - fathom	64	-	64	290
Wool and yarn - - - - centner	-	632	632	5,700
Sundries - - - - —	688	3,115	3,803	5,970
Total value - - -	£608,200	£499,809		£1,108,000

Of the total value of the imports, amounting, in 1842, to 1,624,400*l.*, goods valued at 515,660*l.* were supplied by England. These consisted principally of iron, salt, coal, herrings, sugar, and other colonial products.

Account of the Export of Linseed and Rapeseed Cakes in —

1834	33,518 cwt.	1839	115,416 cwt.
1835	27,058	1840	162,457
1836	56,581	1841	143,816
1837	70,643	1842	119,514
1838	119,540		

STOCKHOLM, the capital of Sweden, situated at the junction of the lake Maelar with an inlet of the Baltic, in lat. 59° 20′ 31″ N., lon. 17° 54′ E.; a well-built, handsome city. Population, in 1839, 83,885. The entrance to the harbour is intricate and dangerous, and should not be attempted without a pilot; but the harbour itself is capacious and excellent, the largest vessels lying in safety close to the quays. Stockholm possesses from a third to a half the foreign trade of Sweden; but this is confined within comparatively narrow limits. The government has long been accustomed to endeavour to promote industry by excluding foreign products; latterly, however, this system has been considerably relaxed, with great advantage to the trade of the country, and the well-being of the people. Iron, timber, and deals form the great articles of export. Swedish iron is of very superior quality, and is rather extensively used in Great Britain; the imports of it amounting, in ordinary years, to about 16,000 tons exclusive of 600 tons of steel. In addition to the above leading articles, Stockholm exports pitch, tar, copper, &c. The timber is inferior to that from the southern ports of the Baltic. The imports principally consist of colonial products, cotton, dye stuffs, salt, British manufactured goods, hides, fish, wine, brandy, wool, fruit, &c. In seasons of scarcity corn is imported, but it is generally an article of export.

Pilotage.—Vessels bound for Stockholm take a pilot at the small island of Oja. Lands-hort lighthouse is erected on the southern extremity of this island, in lat. 58° 44′ 30″ N., lon. 17° 52′ 15″ E. It is painted white, and is furnished with a fixed light, elevated 158 feet above the level of the sea, which may be seen, under favourable circumstances, 5 leagues off. The signal for a pilot is a flag at the fore-top-mast head, or firing a gun.

Account of the principal Articles imported into and exported from Stockholm in 1842.

Imports.						Exports.		
Rum and other spirits	kann.	102,593	Hides	lbs.	1,486,024	Iron, bar	shippounds	250,865
Coffee	lbs.	3,041,265	Herrings	barrels	37,266	pig	—	5,998
Indigo	—	50,617	Salt	—	60,472	nails	—	4,307
Raw sugar	—	7,504,308	Coals	—	60,442	Copper	—	3,506
Tobacco, leaf	—	520,534	Hemp	shippounds	2,269	Steel	—	5,308
stems	—	891,263	Tallow	lispounds	78,525	Tar	barrels	25,332
Cotton	—	648,568	Fish, dried	—	66,924	Planks and boards	dozens	29,872
Cotton yarn (white)	—	465,780				Refined sugar	lbs.	1,012,739

There belonged to the port, in 1841, 149 ships, measuring 25,566 tons.

Money. — Accounts are kept here, in Gottenburg, and generally throughout Sweden, in paper money, consisting of rix-dollars *banco*; 1 rixdollar being equal to 48 skillings, and 1 skilling to 12 rundstycks. The exchange with London is at about 12 rixdollars banco per £., so that the rixdollar is worth about 1*s.* 8*d.* sterling. Rixdollars banco may be exchanged for specie rixdollars at the rate of 2⅔ the former for 1 of the latter. But there are very few coins, except of copper, in circulation; the currency consisting almost wholly of notes, varying from 5 skillings to 500 rixdollars banco.

Weights and Measures. — The victuall or commercial weights are punds, lispunds, and skippunds; 20 punds being equal to 1 lispund, and 20 lispunds = 1 skippund; 100 lbs. Swedish commercial weight = 93⅓ lbs. avoirdupois = 42½ kilog. = 87½ lbs. of Hamburg.

The iron weights are 3-5ths of the victuall or commercial weights; 20 marks = 1 mark pund; 20 mark punds = 1 skippund; and 7½ skippunds = 1 ton English. Hence, 100 punds Swedish iron weight = 75 lbs. avoirdupois, and 100 lbs. avoirdupois = 133 1/3 lbs. Swedish iron weight.

In corn measure: —

4 Quarts	-	=	1 Spann.
2 Spann	-	=	1 Tun or barrel
1 Tun	-	=	4 1-6th Winch. bush.

A last of rye from Riga - = 18 Tuns.
Ditto Liebau - = 19½ —
Ditto Stettin - = 22½ —
Ditto Stralsund = 24 —

The tun of 32 kappor contains 4 1-6th Winchester bushels.

In liquid measure: —

½ Stup	-	=	1 Kanna.
15 Kannor	-	=	1 Anker.
2 Ankers	-	=	1 Eimer.
½ Eimers	-	=	1 Ahm.
1½ Ahm	-	=	1 Oxhoft.
2 Oxhoft	-	=	1 Pipe.

The pipe = 124½ English wine gallons; and, consequently, the ahm = 41 5-12ths ditto, and 100 kannor = 69 1-5th ditto.

The Swedish foot = 11·684 English inches; the ell or alna = 2 feet; the fathom = 5 ells; the rod = 9 ells.

In estimating by lasts: —

1 Last of pitch, ashes, &c.	-	=	12 barrels.
1 ditto tar, oil, &c.	-	=	13 ditto.
1 Last of hemp, flax, tallow, &c.	-	=	6 skippunds.
1 Ton of Liverpool common salt	-	=	7 tuns Swed.

Pro formâ Invoice of 150 Shippounds or 20 Tons of Iron shipped from Stockholm for London in 1843.

								Bo. Rixd.		
150 shippounds at 14½ rixdollar banco -								2,175	0	0
Charges.										
Export duty, town dues, and shipping charges	-	-	-	Rixd.	81	12	0			
Brokerage for chartering the ship	-	-	-	-	2	4	0			
Ditto for purchase, ½ per cent.	-	-	-	-	5	21	0			
Stamps and postages	-	-	-	-	4	24	0			
								93	13	0
								2,268	13	0
Commission, 2 per cent.	-	-	-	-				45	18	0
								2,313	31	0
Bill brokerage, ½ per cent.	-	-	-	-				2	43	0
								2,316	26	0

Account of the official Value of the Articles imported into and exported from Sweden in 1841.

Country.	Exports.	Official Value.	Imports.	Official Value.
		Banco rixd.		*Banco rixd.*
Finland -	Bar iron, pig iron, sugar, grain, &c. -	711,190	Wood, tar, provisions, hides, skins -	1,256,550
Russia -	Corn, alum, &c. - - -	207,960	Hemp, hides, furs, tallow, wool -	1,649,660
Denmark	Iron, copper, deals, &c. - -	2,325,274	Colonial produce, grain, wool, &c. -	1,679,250
Prussia -	Iron, steel, copper, alum, tar, and wood -	1,540,930	Grain, &c. - - - -	279,430
Lubec -	Ditto - - -	1,084,994	Colonial produce, manufactures, wine, wool, &c.	3,116,898
Hamburg -	Iron, &c. - - - -	51,530		
Mecklenburg -	Same as to Prussia - - -	668,910	Ditto ditto - -	704,830
Bremen - -	Iron, &c. - - - -	329,180	Grain, wool, hides, skins - -	203,870
Hanover and Oldenburg	Ditto - - - -	160,880	Tobacco - - -	102,480
Holland - -	Iron, copper, tar, rock moss, ashes -	1,020,490	Dye stuffs, oils, paper, cheese, &c. -	505,950
Belgium - -	Iron, wood, steel, oats, linseed -	388,700	Hides, machinery, cotton, &c. -	195,710
Britain - -	Iron, steel, manganese, linseed, bones, wood, oats, &c. - - -	4,931,700	Cotton yarn, coals, manufactures, machinery, wine, indigo, colonial goods, &c. -	2,684,700
France - -	Iron, wood, tar - - -	1,452,810	Wine, brandy, manufactures, salt -	564,970
Spain - -	Wood - - - -	199,770	Wine, salt, fruits - - -	183,940
Portugal -	Iron, steel, wood, tar - - -	606,110	Wine, salt, fruits, leather - -	181,520
Gibraltar -	Iron, wood, tar - - -	11,040		
Italy - -	Ditto - - - -	131,550	Salt, wine, oils, fruits - - -	79,790
Austria - -	Iron, tar - - - -	52,740		
Turkey - -	Iron, wood, glass - - -	14,570		
Egypt - -	Wood - - - -	1,120		
Algiers - -	Wood, iron - - - -	290,510		
United States	Iron - - - - -	2,887,990	American and colonial produce -	1,132,090
Cape - -	Wood - - - -	22,930		
West Indies -	Iron, steel, wood - - -	36,470	Sugar, coffee - - - -	77,400
Brazils - -	Iron, deals - - - -	529,870	Sugar, coffee, and hides - -	2,005,240
River Plate -	Ditto - - - -	23,110	Hides, wool, &c. - - -	36,520
East Indies -	Ditto - - - -	299,370	Sugar, hides, coffee, arrack, spices, rice, &c. - - - -	678,890
Norway - -	Iron, grain, tar, sugar, paper, &c. -	1,087,830	Fish, oil, &c. - - - -	2,677,655
	Banco rixd. -	21,008,908	Banco rixd. -	19,797,031
	Bullion and coined money -	1,814,452	Bullion and coined money -	865,759
	Banco rixd. -	22,827,360	Banco rixd. -	20,662,790

Shipping of Sweden in 1841.

Employed in the foreign trade	-	771 ships of 117,638 tons.
Interior and coasting trade -	-	1,411 ships of 69,210 tons.
Belonging to private individuals	-	54 steamers of 2,010 horse power.

Regulations as to the working of Mines in Sweden. — The mines of Sweden, though inconsiderable as compared with those of this country, are a considerable source of national wealth. They are principally situated in the central provinces, which have no fewer than 261 out of the 586 mines said to exist in the kingdom. Swedish iron is of a very superior quality, and that of the Danemora mines is especially well fitted for conversion into steel; but, owing to injudicious restrictions and the want of coal, the production in Sweden is not supposed (including what is licensed and what is made for home consumption without a licence) to exceed 85,000 or 90,000 tons bar iron, of which about 70,000 are exported. In 1839 we imported 17,049 tons of Swedish iron. The copper mines produce, in all, only about 750 tons a year; the metal is not so good as that of England, and is impregnated with iron. Fahlun, the chief mine, has long been in a declining state, the number of workmen at present employed not exceeding 500. The works of this mine are conducted entirely by water power, and are remarkable for their completeness; connected with them is a manufactory of sulphuric acid. The smelting furnaces and iron works are licensed to produce certain quantities, some being as low as 50 tons, and others as high as 400 or 500 tons; and some fine bar iron works have licences for 1,000 tons each. These licences are granted by the College of Mines, which has a control over all iron works and mining operations. The iron masters make annual returns of their manufacture, which must not exceed the privileged or licensed quantity, on pain of the overplus being confiscated. The college has established courts of mines in every district, with supervising officers of various ranks. All iron sent to a port of shipment must be landed at the

public weigh-house, the superintendent of which is a delegate of the college; so that it is impossible for an iron master to send more iron to market than his licence authorises. It is true that sales are made to inland consumers at the forges, of which no returns are made out, and in so far the licences are exceeded; but it is not supposed that the quantity so disposed of exceeds a few thousand tons a year. Every furnace and forge pays a certain annual duty to the crown. Its amount is fixed by the college when the licence is granted; and care is taken not to grant the licence to any one unless he have the command of forests equal to the required supply of charcoal without encroaching on the supply of this material required for the existing forges in the neighbourhood. As the supply of pig-iron is limited to the quantity licensed to be made, the college, in granting new licences to bar-iron works, always takes into consideration how far this may be done without creating a scarcity of pig-iron. Hence, the erection of new forges depends — 1st, on having a supply of charcoal, without encroaching on the forests which supply your neighbours; and 2d, on the quantity of pig-iron which the college knows to be disposable. The courts of the mines decide all disputes that arise among the iron masters regarding the exceeding of their licences, encroachments, &c.; an appeal to the college lying from their decision, and ultimately to the king in council, or to the supreme court of the kingdom.

It is needless to dwell on the impolicy of such regulations. No doubt it is quite right for government to interfere to prevent the waste and destruction of the forests; but, having done this, it should abstain from all other interference, and leave every one at liberty to produce as much iron as he may think proper. Mines of any importance are usually held by a society of shareholders. Some of them are only worked occasionally; and, as the labour is performed by peasants, who live ostensibly by husbandry, it is impossible to form any correct estimate of the numbers engaged in mining industry.

STOCKINGS, as every one knows, are coverings for the legs. They are formed of only one thread entwined, so as to form a species of tissue, extremely elastic, and readily adapting itself to the figure of the part it is employed to cover. This tissue cannot be called cloth, for it has neither warp nor woof, but it approaches closely to it; and for the purposes to which it is applied, it is very superior.

1. *Historical Sketch of the Stocking Manufacture.* — It is well known that the Romans and other ancient nations had no particular clothing for the legs During the middle ages, however, hose or *leggins*, made of cloth, began to be used; and at a later period, the art of knitting stockings was discovered. Unluckily, nothing certain is known as to the individual by whom, the place where, or the time when, this important invention was made. Howell, in his *History of the World* (vol. iii. p. 222.); says, that Henry VIII. wore none but cloth hose, except there came from Spain by great chance a pair of silk stockings; that Sir Thomas Gresham, the famous merchant, presented Edward VI. with a pair of long silk stockings from Spain, and that the present was much taken notice of; and he adds, that Queen Elizabeth was presented, in the third year of her reign, with a pair of black knit silk stockings, and that from that time she ceased to wear cloth hose. It would appear from this circumstantial account, that the art of knitting stockings, or at least that the first specimens of knit stockings, had been introduced into England from Spain about the middle of the 16th century; and such seems to have been the general opinion, till an allusion to the practice of knitting, in the pretended poems of Rowley, forged by Chatterton, made the subject be more carefully investigated. The result of this investigation showed clearly that the practice of knitting was well known in England, and had been referred to in acts of parliament, a good many years previously to the period mentioned by Howell. But it had then, most probably, been applied only to the manufacture of woollen stockings; and the general use of cloth hose shows that even these had not been numerous. There is no evidence to show whether the art is native to England, or has been imported. — (See *Beckmann's Inventions*, vol. iv. art. *Knitting Nets and Stockings.*)

It is singular that the stocking frame, which, even in its rudest form, is a very complex and ingenious machine, that could not be discovered accidentally, but must have been the result of deep combination and profound sagacity, should have been discovered so early as 1589, before, in fact, the business of knitting was generally introduced. The inventor of this admirable machine was Mr. William Lee, of Woodborough, in Nottinghamshire. He attempted to set up an establishment at Calverton, near Nottingham, for the manufacture of stockings, but met with no success. In this situation he applied to the queen for assistance; but, instead of meeting with that remuneration to which his genius and inventions so well entitled him, he was discouraged and discountenanced! It need not, therefore, excite surprise that Lee accepted the invitation of Henry IV. of France, who, having heard of the invention, promised him a magnificent reward if he would carry it to France. Henry kept his word, and Lee introduced the stocking frame at Rouen with distinguished success; but after the assassination of the king, the concern got into difficulties, and Lee died in poverty at Paris. A knowledge of the machine was brought back from France to England by some of the workmen who had emigrated with Lee, and who established themselves in Nottinghamshire, which still continues to be the principal seat of the manufacture. — (See *Beckmann's Inventions*, vol. iv. pp. 313—324.; and *Letters on the Utility and Policy of Machines*, Lond. 1780.)

During the first century after the invention of the stocking frame, few improvements were made upon it, and 2 men were usually employed to work 1 frame. But in the course of last century, the machine was very greatly improved. The late ingenious Mr. Jedediah Strutt, of Derby, was the first individual who succeeded in adapting it to the manufacture of *ribbed* stockings.

Statistical View of the Stocking Trade. — We subjoin, from a paper by Mr. Felkin, of Nottingham, who is advantageously known by his statistical researches, the following view of the state of the British hosiery trade in 1832.

Worsted hosiery is chiefly made in Leicestershire; silk hosiery in Derby and Nottingham; and cotton hosiery throughout the counties of Nottingham and Derby, at Hinckley, and at Tewkesbury. The analysis furnished by Blackner, in 1812, may be, perhaps, modified as follows, so as to show the kinds and qualities of goods which the frames are now employed upon, viz. —

Plain cotton, 14 to 22-gauge, 1,600; 24 to 28-gauge, 1,600; 30 to 34-gauge, 2,790; 36 to 60-gauge, 1,600 frames - - - - -	7,590
Gauze, 600; gloves and caps, 1,000; drawers, 500; sundries, 560 - - - - -	2,660
Wide frames, making cut-ups and various other kinds	6,050
Worsted, 12 to 20-gauge, 4,100; 22 to 26-gauge, 3,600; 28 to 34-gauge, 1,450 frames - -	9,150
Angola, 1,350; lambs' wool, 1,000; shirts, 500 frames	3,750
Wide frames, on with worsted goods - -	500
Silk, 2,300; gloves, 350; and knots, 350 - -	3,000
Total of frames -	33,000

The following statement, it is believed, presents a sufficiently accurate approximation to the annual amount in quantity and value of the goods manufactured in this trade, to answer all practical purposes: —

Each narrow cotton frame produces about 40 dozen of hose a year, if of women's size; wide cotton frames, 300; narrow worsted, 75; wide worsted, 150; and silk, 30. There are —

Frames.			*Dozen.*		*Lbs.*		£	£	£	£
10,500	making	fashioned cotton hose -	produce 420,000	consume	880,000	cotton yarn	valued at 73,000	wages for making 220,000	finishing 32,000	makes in all 325,000
6,000	making	cut up, &c. -	produce 1,960,000	consume	2,940,000	—	valued at 172,000	wages for making 285,000	finishing 98,000	makes in all 555,000
9,500	making	fashioned worsted -	produce 710,000	consume	2,840,000	worsted -	valued at 281,000	wages for making 215,000	finishing 41,000	makes in all 510,000
1,000	making	cut up, &c. -	produce 100,000	consume	400,000	—	valued at 40,000	wages for making 30,000	finishing 10,000	makes in all 80,000
1,300	making	Angola -	produce 95,000	consume	332,500	—	valued at 45,000	wages for making 40,000	finishing 19,000	makes in all 104,000
1,900	making	lambs' wool -	produce 135,000	consume	639,500	—	valued at 80,000	wages for making 50,000	finishing 16,000	makes in all 146,000
3,000	making	silk - -	produce 90,000	consume	105,000	silk -	valued at 120,000	wages for making 108,000	finishing 13,000	makes in all 241,000
33,000			3,510,000		8,137,000		814,000	948,000	229,000	1,991,000

According to this calculation, the value of the cotton hosiery annually made is 880,000*l.*; that of worsted, &c. is 870,000*l.*; and that of silk is 241,000*l.*—To produce these goods, it is probable that 4,584,000 lbs. of raw cotton wool, value 153,000*l.*, are used; and 140,000 lbs. of raw silk (2-5ths China and 3-5ths Novi), value 91,000*l.*; also, 6,318,000 lbs. of English wool, value 316,000*l.* The total original value of the materials used is, therefore, 560,000*l.*, which, it appears, becomes of the ultimate cost value of 1,991,000*l.*, in this manufacture.

There are employed in the various processes, as follows, viz. —

	£
In cotton spinning, doubling, &c., 3,000; worsted carding, spinning, &c., 2,500; silk winding, throwing, &c., 1,000 -	6,500
In making stockings, 13,000 men, 10,000 women, and 10,000 youths; and women and children in seaming, winding, &c., 27,000 - - - -	60,000
In embroidering, mending, bleaching, dyeing, dressing, putting-up, &c., probably about - - -	6,500
Total persons employed -	73,000

The capital employed in the various branches of the trade may be thus estimated, taking the machinery and frames at neither their original cost, nor actual selling price, but at their working value, and the stocks of hosiery on an average of years: —

	£
The capital in mills and machinery, for preparing cotton, is - - - - - -	70,000
— — worsted, &c.	52,000
— — silk -	18,000
Fixed capital in mills, &c. - - -	140,000
— in frames - - -	245,000
Total of fixed capital -	£385,000

	£
In wool and yarn in process and stock - -	85,000
— — - - -	150,000
— — - - -	35,000
Floating capital in spinning, &c. -	£270,000
	£
Capital in narrow cotton frames - -	62,000
— wide — - -	60,000
— narrow worsted frames - -	76,000
— wide — - -	11,000
— silk frames - - -	36,000
Fixed capital in frames -	£245,000
	£
In goods in process and stock - -	350,000
— — - -	345,000
— — - -	85,000
Floating capital in making hose - -	780,000
— in spinning, &c. - -	270,000
Total of floating capital	£1,050,000

We have no more recent account of the manufacture, on which any reliance can be placed; but we are informed by Mr. Felkin, that the number of frames may at present (1843) be taken at 36,000, and that wages, though low, are rising.

According to the above estimate of the total value of the stocking manufacture in 1833 (1,991,000*l.*), it would not give more than 2*s.* 5*d.* for the average expenditure on stockings of each individual of the then existing inhabitants of Great Baitain. There can, however, be little or no doubt that this sum is decidedly under the mark; and its insufficiency will appear the more striking when it is recollected that a large portion of the hosiery whose value is included in the above estimate, does not consist of stockings, but of woollen and cotton shirts and drawers, gloves, mitts, night-caps, shawls, &c. Perhaps we shall not be far wrong in estimating the total average expenditure per individual of the population of Great Britain on stockings and other articles of hosiery, at 4*s.* each; which, taking the population at 18,500,000, would give 3,700,000*l.* for the total value of the manufacture. And this estimate, we incline to think, will be found to be pretty near the mark.

In the estimate given above, by Mr. Felkin, no notice is taken of the hosiery made in Westmoreland and Cumberland, and in Scotland, where, however, it is rather extensively produced. In fact, there are at present (1843) between 600 and 700 stocking frames at work in Dumfries and its vicinity, and about 1,300 in Hawick, exclusive of a farther number in Aberdeen, &c., and of the knitted stockings made in the Orkney and Shetland islands.

In our customs returns, cotton hosiery and lace are mixed up together, so that the value of the exports of each cannot be separately specified. The exports of both have, however, increased considerably of late years, and we are well assured that the increase has been as great in the hosiery as in the lace branch. The Germans, it is true, have succeeded in disposing of considerable quantities of hosiery in South America, particularly in Brazil; a consequence, partly, of the low price at which the goods are produced in the cottages of peasants who derive the principal part of their subsistence from other

sources; but more, we are informed, from the German stockings being better adapted to the taste of the people to whom they are offered, the English stockings being all too long. This, however, is a defect that, one should think, might be easily obviated; and if so, English hosiery would have the same preference in Brazil that it has in most other markets.

STORAX. See BALSAM.

STORES, MILITARY AND NAVAL, include arms, ammunition, &c. It is enacted, that no arms, ammunition, or utensils of war, be imported by way of merchandise, except by licence, for furnishing his Majesty's public stores only.—(*6 Geo.* 4. c. 107.)

STORES, in commercial navigation, the supplies of different articles provided for the subsistence and accommodation of the ship's crew and passengers.

It is laid down, in general, that the surplus stores of every ship arriving from parts beyond seas are to be subject to the same duties and regulations as those which affect similar commodities when imported as merchandise; but if it shall appear to the collector and comptroller that the quantity of such stores is not excessive, nor unsuitable, under all the circumstances of the voyage, they may be entered for the private use of the master, purser, or owner of such ship, on payment of the proper duties, or be warehoused for the future use of such ship, although the same could not be legally imported by way of merchandise.—(3 & 4 *Will.* 4. c. 52. § 35.)

A List, by which to calculate the Amount of Stores, of the estimated Average Number of Days' Duration of a Voyage from the U. Kingdom to the different Ports enumerated, and back.

Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.
Abo	100	Cyprus	180	Majorca	110	Rhodes Island	180
Algiers	120	Cape of Good Hope	240	Minorca	110	River Gambia	190
Almeria	100	Calloa	400	Marseilles	130	St. Andero	80
Azores Isles	90	Coquimbo	400	Messina	130	St. Ubes	80
Alicant	110	Chili	360	Montreal	150	Salee	120
Altea	110	Calcutta	400	Malta	140	Stettin	100
Antigua	180	Columbo	365	Martinico	180	Stockholm	100
Augustine's Bay	150	Ceylon	365	Mariegalante	180	St. John's, Newfound.	120
Ancona	160	Cuddalore	400	Miramichi	100	St. Mary's	95
Alexandria	180	China	420	Montserrat	180	St. Michael's, Azores	80
Ascension Isle	240	Canton	420	Maranham	180	St. John, New Bruns.	120
Archipelago Isles	180	Dantzic	100	Monte Video	230	St. Andrew, do.	120
Annabona	180	Dronheim	100	Madagascar	270	Salerno	150
Archangel	120	Delaware Bay	130	Mexico. *Vide* Vera Cruz and Acapulco.		Sardinia Isle	130
Australia	420	Demarara	150			Susa	120
Alexandretta	180	Dominica	180	Mogadore	105	Savannah	150
Acapulco, Mexico	450	Davis's Straits	240	Mauritius	270	Syracuse	140
Bergen	100	Embden	42	Madras	400	St. Augustine's Bay	150
Bona	120	Elbing	95	Malabar	365	St. Helena	240
Borrholm	100	Elsineur	100	Malacca	400	Sydney, N. S. Wales	400
Barcelona	110	Elba Isle	130	Manilla	420	Sumatra	400
Bay of Roses	110	Essequibo	180	Mangalore	365	Society Islands	420
Baltimore	120	Friendly Islands	420	Masulipatam	400	Swan River	365
Bahama Isles	150	Fare Islands, N. Sea	100	Mocha	365	Singapore	365
Barbadoes	180	Faro Islands, Canaries	95	Nantes	80	Surat	365
Berbice	180	Ferrol	80	Newfoundland	120	Sandwich Isles	480
Bermuda	120	Fayal	80	North Bergen	100	South Sea Fishery	3 years
Boston	120	Fernando Po	180	Naples	130	St. Bartholomew	180
Bahia	200	Falkland Islands	240	Narbonne	130	St. Croix	180
Brazils	300	Göttenburg	100	Nice	130	St. Christopher's	180
Buenos Ayres	240	Gibraltar	100	Nevis	180	St. Domingo	210
Bay of Campeachy	240	Genoa	130	Nova Scotia	120	St. Eustatia	186
Barcelor	365	Grenada	180	New York	120	St. Lucia	180
Bombay	365	Guadaloupe	180	New Providence	165	St. Martin	180
Bengal	400	Greek Islands, and Greece	180	New Orleans	190	St. Thomas	180
Botany Bay	420	Gallipoli	180	New Guinea	400	St. Vincent's	180
Batavia	400	Greenland Fishery	180	New South Wales	400	Salonica	240
Brem n	42	Goree	190	New Zealand	400	Santa Martha	240
Bayonne	80	Guayaquil	420	Negapatam	400	St. Salvador, or Bahia	200
Bilboa	80	Gaugapatam	400	New Brunswick	120	St. Sebastian	210
Bordeaux	80	Goa	365	Newport	120	Senegal	180
Corunna	80	Hamburg	42	Oporto	80	Sierra Leone	180
Cadiz	90	Heligoland	42	Odessa	240	Scandaroon	180
Carlscrona	100	Hayti	210	Onhaite	420	Syra	180
Carthagena	100	Halifax	120	Owhyhee	420	Smyrna	180
Cape de Verde Islands, viz.:—		Havannah	200	Petersburg	100	Tangier	120
St. Antonio	100	Honduras	240	Pillau	100	Trinity Bay	120
St. Vincent		Hudson's Bay	210	Placentia Harbour	120	Tunis	120
St. Jago		Hobart Town	400	Port St. John, Newfoundland	120	Tarragona	110
Ceuta	120	Iceland	100	Port-au-Prince, Hayti	210	Tonningen	42
Canary Isles	95	Ivica	110	Palermo	130	Toulon	130
Christiania	100	Italy	150	Pensacola	190	Tripoli	120
Copenhagen	100	Isle of Sable	120	Philadelphia	120	Teneriffe	95
Cette	130	Ionian Isles	130	Port Rico	210	Tortola	180
Civita Vecchia	130	Islands in the Archip.	180	Providence, Bahama Islands	160	Tobago	180
Corsica Isle	130	Isles of France and Bourbon	270	Pernambuco	190	Trinidad	180
Cayenne	180	Jamaica	210	Porto Bello	240	Trieste	160
Cape Hayti	210	Java	400	Para	185	Truxillo	410
Charlestown	120	Königsberg	100	Panama	420	Timor	420
Chesapeake Bay	120	Lima	400	Peru	400	Tellicherry	365
Cuba	210	Ladrones	420	Philippine Islands	420	Tranquebar	400
Curaçoa	180	Lisbon	80	Pondicherry	400	Trincomalee	380
Cronstadt	100	Lubeck	100	Pellew Islands	420	Vigo	80
Candia Isle	160	Leghorn	130	Quebec	150	Valencia	110
Cephalonia	160	Long Island	130	Queen Ann's Point	180	Venice	160
Corfu Isle	160	La Guayra	240	Rio Grande	200	Vera Cruz	260
Calabar	180	La Conception	400	Rio Janeiro	200	Venezuela	240
Cape Coast Castle	200	Maalstroom	100	Rochelle	80	Valdivia	400
Carthagena, Spanish main	240	Malaga	100	Revel	100	Valparaiso	400
Cape St. Mary	180	Madeira	90	Riga	100	Van Diemen's Land	365
Constantinople	180	Memel	100	Rugen	100	Wyburg	100
Colombia River	700	Mogadore	120	Rome	130	Zara	160
Cumana	240					Zea	160
						Zante Isle	160

For such places as are not included in the List, the same allowance should be granted as is given to the place nearest thereunto.

No stores shall be shipped for the use of any ship bound to parts beyond the seas, nor shall any goods be deemed to be such stores, except such as shall be borne upon the victualling bill. — (3 & 4 *Will.* 4. c. 52. sect. 16.)

Goods delivered into the charge of the searchers to be shipped as stores, may be so shipped without entry or payment of any duty, for any ship of the burden of 70 tons at least bound upon a voyage to foreign parts, the probable duration of which out and home will not be less than 40 days: provided such stores be duly borne upon the ship's victualling bill, and be shipped in such quantities, and subject to such directions and regulations, as the commissioners of customs shall direct and appoint. — (3 & 4 *Will.* 4. c. 57. sect. 16.)

Rum of the British plantations may be delivered to the searcher, to be shipped as stores for any ship, without entry or payment of any duty; and any surplus stores of any ship may be delivered to the searcher, to be re-shipped as stores for the same ship, or for the same master in another ship, without entry or payment of any duty, — such rum and such surplus stores being duly borne upon the victualling bills of such ships respectively; and if the ship, for the future use of which any surplus stores have been warehoused, shall have been broken up or sold, such stores may be so delivered for the use of any other ship belonging to the same owners, or may be entered for payment of duty, and delivered for the private use of such owners or any of them, or of the master or purser of the ship. — Sect. 17.

The searchers in London, on clearance of vessels coastwise to take in cargoes for foreign parts, are to apprise the collectors and comptrollers at the outports where the vessels may be bound, of the quantity and description of the goods which may have been shipped as stores on board such vessels, and that bond has been given by the masters of the vessels that no part of such stores shall be consumed by the crews, or any package opened or altered, until the vessels have actually been cleared on their foreign voyages; and the collectors and comptrollers at the out-ports are in like manner to cause a similar communication to be made to the ports where the outward cargoes are to be taken on board, and the officers at such ports are to take care to ascertain that the several goods so shipped are actually on board the vessels on their arrival, and have neither been consumed or run on shore during the coasting voyage; and if so, to report the same to the Board. — (*Min. by Com. of Customs*, 19th of Feb. 1833.)

List of Foreign Goods allowed to be shipped as Stores, from the bonded Warehouses free of Duty. — (Customs Minute, 29th of Nov. 1832.)

Tea, ½ of an oz., coffee or cocoa, 1 oz. per day for each person on board, with the option to ship the entire quantity required for the voyage of either species of these articles, *half* an oz. of tea being considered equal to *one* oz. of coffee or cocoa; the tea to be shipped in the original packages in which it was imported.

Wine, 1 quart per day for the master, each mate, and cabin passenger.

Wine bottled in the bonded warehouses for exportation may be shipped as stores, in packages containing not less than 3 doz. reputed quart, or 6 doz. reputed pint-bottles.

Spirits, viz. brandy, geneva, rum (British plantation), ½ pint per day for each person on board.

British plantation rum to be in the proportion of ½ of the whole quantity of spirits shipped. Each description of spirits intended as stores to be shipped in *one* cask capable of containing the entire quantity of brandy or of geneva or rum allowed for the voyage, or in casks containing not less than 40 gallons of brandy or geneva, or 20 gallons of British plantation rum, as the case may be: provided that if spirits shall have been imported in bottles, or bottled in the bonded warehouses for exportation, the same may be shipped as stores, in packages containing not less than 3 doz. reputed quart, or 6 doz. reputed pint bottles.

Raw Sugar and Molasses (*together or separate*), 2 oz. per day for each person on board.

Dried Fruits, 2 lbs. per week for each person on board.

Rice, 2 lbs. per week for each person on board.

Foreign Segars, ½ oz. per day for the master, each mate, and each cabin passenger.

The entire quantity of foreign segars allowed as stores for each voyage to be shipped in *one* package.

A List of British manufactured Goods to be allowed to be shipped as Stores on the usual Bounty or Drawback.

British refined Sugar, 3 oz. per day for the master, each mate, and each cabin passenger.

British manufactured Tobacco, ½ oz. per day per man.

British excisable Goods, viz. beer, ale, and porter (together or separate), 1 quart per day for the master, each mate, and each passenger.

Vinegar, ½ pint per week for each person on board.

Soap, ½ oz. per day for each person on board. The same indulgence, in respect of the shipment of stores, which has been granted to merchant vessels under the 2 & 3 Will. 4. c. 84., and by subsequent orders, is granted to transports under the following conditions, viz.: — On a certificate being produced for each vessel, from the office of a comptroller for victualling and transport services, setting forth the destination of the vessel, and the number of the crew and passengers on board, who are not to be messed by the victualling shipped by the public; and as respects soldiers embarked as guards in ships chartered for the transportation of convicts, on a certificate being produced from the proper department, specifying the number of soldiers to be embarked in each case; but no indulgence can be granted in regard to the article of soap. — (*Treas. Order*, 6th of March, 1833; see also *Ellis's British Tariff*.)

STRANDING, in navigation, the running of a ship on shore, or on the beach.

It is the invariable practice to subjoin the following *memorandum* to policies of insurance executed by private individuals in this country: — "*N. B.* — Corn, fish, salt, fruit, flour, and seed are warranted free from average, unless general, *or the ship be stranded*; sugar, tobacco, hemp, flax, hides, and skins are warranted free from average under *5l.* per cent.; and all other goods, also the ship and freight, are warranted free of average under *3l.* per cent., unless general, *or the ship be stranded.*"

It is, therefore, of the greatest importance accurately to define what shall be deemed a stranding. But this is no easy matter; and much diversity of opinion has been entertained with respect to it. It would, however, appear that merely striking against a rock, bank, or shore, is not a stranding; and that, to constitute it, the ship must be upon the rock, &c. for some time (how long?). — Mr. Justice Park has the following observations on this subject: — "It is not every touching or striking upon a fixed body in the sea or river that will constitute a stranding. Thus Lord Ellenborough held, that in order to establish a stranding, the ship must be *stationary*; for that merely striking on a rock, and *remaining there a short time* (as in the case then at the bar, about a minute and a half), and then passing on, though the vessel may have received some injury, is not a stranding. Lord Ellenborough's language is important. — *Ex vi termini* stranding means lying on the shore, or something analogous to that. To use a vulgar phrase, which has been applied to this subject, if it be *touch and go* with the ship, there is no stranding. It cannot be enough that the ship lie for a few moments on her beam ends. Every striking must necessarily produce a retardation of the ship's motion. If by the force of the elements she is run aground, and becomes stationary, it is immaterial whether this be on piles, on the muddy bank of a river, or on rocks on the sea shore; but a mere *striking* will not do, *wherever* that may happen. I cannot look to the consequences, without considering the *causa causans*. There has been a curiosity in the cases about stranding not creditable to the law. A little common sense may dispose of them more satisfactorily."

This is the clearest and most satisfactory statement we have met with on this subject; still, however, it is very vague. Lord Ellenborough and Mr Justice Park hold, that to constitute a stranding, the ship must be *stationary*; but they also hold, that if she merely remain upon a rock, &c. for a *short time*, she is not to be considered as having been stationary. Hence every thing turns upon what shall be considered as a short time. And we cannot help thinking that it would be better, in order to put to rest all doubts upon the subject, to decide either that every striking against a rock, the

shore, &c., by which damage is done to the ship, should be considered a stranding; or that no striking against a rock, &c. should be considered as such, provided the ship be got off within a *specified time*. Perhaps a *tide* would be the most proper period that could be fixed.

The insurance companies exclude the words, "*or the ship be stranded,*" from the memorandum. — (See INSURANCE, MARINE.)

STURGEON FISHERY. The sturgeon is a large, valuable, and well-known fish, of which there are several species, viz. the sturgeon, properly so called, or *Accipenser sturo*; the beluga, or *Accipenser huso*; the sevruga, or *Accipenser stellatus*, &c. The sturgeon annually ascends our rivers, but in no great number, and is taken by accident in the salmon nets. It is plentiful in the North American rivers, and on the southern shores of the Baltic; and is met with in the Mediterranean, &c. But it is found in the greatest abundance on the northern shores of the Caspian, and in the rivers Wolga and Ural; and there its fishery employs a great number of hands, and is an important object of national industry. Owing to the length and strictness of the Lents in the Greek Church, the consumption of fish in Russia is immense; and from its central position, and the facilities afforded for their conveyance by the Wolga, the products of the Caspian fishery, and those of its tributary streams, are easily distributed over a vast extent of country. Besides the pickled carcases of the fish, caviar is prepared from the roes; and isinglass, of the best quality, from the sounds. The caviar made by the Ural Cossacks is reckoned superior to any other; and both it and isinglass are exported in considerable quantities. The belugas are sometimes of a very large size, weighing from 1,000 to 1,500 lbs., and yield a good deal of oil. The seal fishery is also pretty extensively prosecuted in the Caspian. The reader will find a detailed account of the mode in which the fishery is carried on in the Caspian, and in the rivers Wolga and Ural, in *Tooke's Russia*, vol. iii. pp. 49—72. We subjoin the following official statement of the produce of the Russian fisheries of the Caspian and its tributary streams in 1828 and 1829: —

Year.	Number of Persons employed.		Number of Fish taken.					Products of Sturgeon.		
	In Fishing.	In hunting Seals.	Sturgeon.	Sevruga.	Beluga.	Sasans. (Carp).	Seals.	Caviar.	Fish Cartilage.	Isinglass.
								Poods. lbs.	*Poods. lbs.*	*Poods. lbs.*
1828	8,887	254	43,035	653,164	23,069	8,353	98,584	34,860 1	1,207 38	1,225 27
1829	8,760	257	68,325	697,716	20,391	5,940	69,872	28,420 7	1,173 26½	1,092 22

SUCCORY. See CHICCORY.

SUGAR (Fr. *Sucre;* Ger. *Zucher;* It. *Zucchero;* Russ. *Sachar;* Sp. *Azucar;* Arab. *Sukhir;* Malay, *Soola;* Sans. *Sarkarā*), a sweet granulated substance, too well known to require any particular description. It is every where in extensive use; and in this country ranks rather among the indispensable necessaries of life, than among luxuries. In point of commercial importance, it is second to very few articles. It is chiefly prepared from the expressed juice of the *arundo saccharifera*, or sugar cane; but it is also procured from an immense variety of other plants, as maple, beet-root, birch, parsnep, &c.

I. *Species of Sugar.* — The sugar met with in commerce is usually of 4 sorts; — brown, or muscovado sugar; clayed sugar; refined, or loaf sugar; and sugar candy. The difference between one sort of sugar and another depends altogether on the different modes in which they are prepared.

1. *Brown, or Muscovado Sugar.* — The plants or canes being crushed in a mill, the juice, having passed through a strainer, is collected in the clarifier, where it is first exposed to the action of a gentle fire, after being "tempered" (mixed with alkali), for the purpose of facilitating the separation of the liquor from its impurities. It is then conveyed into the large evaporating copper, and successively into two others, each of smaller size; the superintending boiler freeing it, during the process, from the scum and feculent matters which rise to the surface. The syrup then reaches the last copper vessel, called the "striking tache," where it is boiled till sufficiently concentrated to be capable of granulating in the cooler, whence it is transferred with the least possible delay, to prevent charring. Here it soon ceases to be a liquid; and when fully crystallised, is put into hogsheads (called "potting"), placed on their ends in the curing-house, with several apertures in their bottoms, through which the molasses drain into a cistern below. In this state they remain till properly cured, when the casks are filled up, and prepared for shipment.

2. *Clayed Sugar* is prepared by taking the juice, as in the case of muscovado sugar, when boiled to a proper consistency, and pouring it into conical pots with the apex downwards. These pots have a hole at the lower extremity, through which the molasses or syrup is allowed to drain. After this drain has continued for some time, a stratum

of moistened clay is spread over the surface of the pots; the moisture of which, percolating through the mass, is found to contribute powerfully to its purification.

3. *Refined Sugar* may be prepared from muscovado or clayed sugar, by redissolving the sugar in water, and, after boiling it with some purifying substances, pouring it, as before, into conical pots, which are again covered with moistened clay. A repetition of this process produces *double refined* sugar. But a variety of improved processes are now resorted to.

4. *Sugar Candy.* — Solutions of brown or clayed sugar, boiled till they become thick, and then removed into a hot room, form, upon sticks or strings put into the vessels for that purpose, into crystals, or candy.

II. *Historical Notice of Sugar.* — The history of sugar is involved in a good deal of obscurity. It was very imperfectly known by the Greeks and Romans. Theophrastus, who lived about 320 years before the Christian æra, the first writer whose works have come down to us by whom it is mentioned, calls it a sort of "honey extracted from canes or reeds." Strabo states, on the authority of Nearchus, Alexander's admiral, that "reeds in India yield honey without bees." And Seneca, who was put to death A.C. 65, alludes to sugar in a way which shows how little was then known respecting it (Epist. 84.): — *Aiunt*, says he, *inveniri apud Indos mel in arundinum foliis, quod aut ros illius cœli, aut ipsius arundinis humor dulcis et pinguior gignat.*

Of the ancients, Dioscorides and Pliny have given the most precise description of sugar. The former says, it is "a sort of concreted honey, found upon canes, in India and Arabia Felix; it is in consistence like salt, and is, like it, brittle between the teeth." And Pliny describes it as "honey collected from canes, like a gum, white and brittle between the teeth; the largest is of the size of a hazel nut. it is used in medicine only." — (*Saccharum et Arabia fert, sed laudatius India; est autem mel in arundinibus collectum, gummium modo candidum, dentibus fragile, amplissimum nucis avellanæ magnitudine, ad medicinæ tantum usum* — Lib. xii. c. 8.)

It is evident, from these statements, that the knowledge of the Greeks and Romans with respect to the mode of obtaining sugar was singularly imperfect. They appear to have thought that it was found adhering to the cane, or that it issued from it in the state of juice, and then concreted like gum. Indeed, Lucan expressly alludes to Indians near the Ganges, —

Quique bibunt tenerâ dulces ab arundine succos. — (Lib. iii. l. 237.)

But these statements are evidently without foundation. Sugar cannot be obtained from the cane without the aid of art. It is never found native. Instead of flowing from the plant, it must be forcibly expressed, and then subjected to a variety of processes. It is not, however, quite so clear as has been generally supposed that the Romans were wholly unacquainted with the mode of procuring sugar. The remarkable line of Statius —

Et quas percoquit Ebusia cannas — (Sylv. lib. i. v. 15.)

has been conjectured, apparently on good pretty grounds, to refer to the boiling of the juice of the cane. But the passage has been differently read, and is too enigmatical to be much depended on.

Dr. Moseley conjectures, apparently with much probability, that the sugar described by Pliny and Dioscorides, as being made use of at Rome, was sugar candy obtained from China. This, indeed, is the only sort of sugar to which their description will at all apply. And it would seem that the mode of preparing sugar candy has been understood and practised in China from a very remote antiquity; and that large quantities of it have been in all ages exported to India, whence, it is most probable, small quantities found their way to Rome. — (*Treatise on Sugar*, 2d edit. pp. 66—71. This, as well as Dr. Moseley's *Treatise on Coffee*, is a very learned and able work.)

Europe seems to be indebted to the Saracens not only for the first considerable supplies of sugar, but for the earliest example of its manufacture. Having, in the course of the 9th century, conquered Rhodes, Cyprus, Sicily, and Crete, they introduced into them the sugar cane, with the cultivation and preparation of which they were familiar. It is mentioned by the Venetian historians, that their countrymen imported, in the 12th century, sugar from Sicily at a cheaper rate than they could import it from Egypt. — (*Essai de l'Histoire du Commerce de Venise*, p. 100.) The crusades tended to spread a taste for sugar throughout the Western world; but there can be no doubt that it was cultivated, as now stated, in modern Europe, antecedently to the æra of the crusades; and that it was also previously imported by the Venetians, Amalphitans, and others, who carried on a commercial intercourse, from a very remote epoch, with Alexandria and other cities in the Levant. It was certainly imported into Venice in 996. — (See the *Essai, &c.* p. 70.)

The art of refining sugar, and making what is called loaf-sugar, is said, by Dr. Moseley, to be a modern European invention, the discovery of a Venetian about the

end of the 15th or the beginning of the 16th century. — (*Mosley*, p. 66.) But this is doubtful, for Le Grand D'Aussy has shown that white or, as he calls it, refined sugar (*sucre blanc ou raffiné*) had been introduced into and used in France for more than a century and a half previously to the date assigned for the discovery of the process of refining in Venice.* — (*Vie Privée des François*, ii. 198. ed. 1815.) This sugar was imported from Egypt principally by Italians; and the probability is, that the latter were the first Europeans who practised the art, which, however, would appear to have originated in the East.

The cane had, as already seen, been introduced into Sicily, and its culture practised, previously to the middle of the 12th century. It also was carried to Spain and cultivated by the Saracens soon after they obtained a footing in that country. The first plantations were at Valencia; but they were afterwards extended to Granada and Murcia. Mr. Thomas Willoughby, who travelled over great part of Spain in 1664, has given an interesting account of the state of the Spanish sugar plantations, and of the mode of manufacturing the sugar.

Plants of the sugar cane were carried by the Spaniards and Portuguese to the Canary Islands and Madeira, in the early part of the 15th century; and it has been asserted by many, that these islands furnished the first plants of the sugar cane that ever grew in America.

But though it is sufficiently established, that the Spaniards early conveyed plants of the sugar cane to the New World, there can be no doubt, notwithstanding Humboldt seems to incline to the opposite opinion (*Essai Politique sur la Nouvelle Espagne*, liv. iv. c. 10.), that this was a work of supererogation, and that the cane was indigenous both to the American continent and islands. It was not for the plant itself, which flourished spontaneously in many parts when it was discovered by Columbus, but for the art of making sugar from it, that the New World is indebted to the Spaniards and Portuguese: and these to the nations of the East. — (See *Lafitau, Mœurs des Sauvages*, tome ii. p. 150.; *Edwards's West Indies*, vol. ii. p. 238.)

Barbadoes is the oldest settlement of the English in the West Indies. We took possession of it in 1627; and so early as 1646 began to export sugar thence to England. The trade of Barbadoes attained its maximum in 1676, furnishing, it is said, employment, at that period, for 400 sail of vessels, averaging 150 tons burden: but this statement is most probably exaggerated.

Jamaica was discovered by Columbus, in his second voyage, and was first occupied by the Spaniards. It was wrested from them by an expedition sent against it by Cromwell, in 1656; and has since continued in our possession, forming by far the most valuable of our West Indian colonies. At the time when it was conquered, there were only 3 small sugar plantations upon it. But, in consequence of the influx of English settlers from Barbadoes and the mother country, fresh plantations were speedily formed, and continued rapidly to increase.

The sugar cane is said to have been first cultivated in St. Domingo, or Hayti, in 1506. It succeeded better there than in any other of the West Indian islands. Peter Martyr, in a work published in 1530, states that, in 1518, there were 28 sugar-works in St. Domingo established by the Spaniards. "It is marvellous," says he, "to consider how all things increase and prosper in the island. There are now 28 sugar presses, where with great plenty of sugar is made. The canes or reeds wherein the sugar groweth are bigger and higher than in any other place; and are as big as a man's wrist, and higher than the stature of a man by the half. This is more wonderful, that whereas in Valencia, in Spain, where a great quantity of sugar is made yearly, whensoever they apply themselves to the great increase thereof, yet doth every root bring forth not past 5 or 6, or at most 7 of these reeds; whereas in St. Domingo 1 root beareth 20, and oftentimes 30." — (Eng. trans. p. 172.)

Sugar from St. Domingo formed, for a lengthened period, the principal part of the European supplies. Previously to its devastation, in 1790, no fewer than 65,000 tons of sugar were exported from the French portion of the island.

III. *Sources whence the Supply of Sugar is derived.* — The West Indies, Java, Brazil, Bengal, Mauritius, Siam, the Isle de Bourbon, and the Philippines, are the principal sources whence the supplies required for the European and American markets are derived. The quantities exported from these countries may be estimated as follows: —

		Tons	Tons.
British Colonies. — West Indies (average of 3 years ending with 1842)	-	-	114,000
Mauritius	— - - -	-	32,500
Bengal	— - - -	-	58,000†
			204,500

* But white sugar is not necessarily, as Le Grand D'Aussy seems to suppose, refined; it may be merely clayed, like Havannah sugar, which is as white as refined sugar.

† This includes the exports, not merely to the U. Kingdom, but to *all* countries.

		Tons	
Spanish Colonies. — Cuba (1842)		158,000	
Porto Rico		35,000	
Philippines		18,000	
			211,000
Dutch Colonies. — Java (1842)		62,000	
Gulana		15,000	
			77,000
French Colonies. — Martinique, Guadaloupe, Isle de Bourbon, &c.	average of 3 years ending with 1841		81,500
Danish and Swedish Colonies. — St. Thomas, St. Cruz, &c.			12,000
Brazil			74,000
Siam, &c.			10,000
		Total	670,000

Loaf or lump sugar is unknown in the East, sugar candy being the only species of refined sugar that is made use of in India, China, &c. The manufacture of sugar candy is carried on in Hindostan, but the process is extremely rude and imperfect. In China, however, it is manufactured in a very superior manner, and large quantities are exported. When of the best description, it is in large white crystals, and is a very beautiful article. Two sorts of sugar candy are met with at Canton, viz. Chinchew and Canton; the former being the produce of the province of Fokien, and the latter, as its name implies, of that of Canton. The Chinchew is by far the best, and is about 50 per cent. dearer than the other. Chinese sugar candy is consumed, to the almost total exclusion of any other species of sugar, by the Europeans at the different settlements throughout the East. There were annually exported from Canton, at an average of the 3 years ending with 1837-38, 22,032 piculs, or 1,311 tons, sugar candy; but exclusive of this, considerable quantities of clayed sugar are also exported, of which, however, only a small quantity finds its way to Europe.

Consumption of Sugar. — It is exceedingly difficult, or rather we should say quite impossible, to get any correct information with respect to the consumption of sugar in most countries. It will be seen from the subjoined statements that, at an average of the 3 years ending with 1842, about 192,000 tons have been retained for home consumption in the U. Kingdom; exclusive of about 10,000 tons of bastards or inferior sugar obtained by the boiling of molasses, but inclusive of the refuse sugar and treacle remaining after the process of refining.

It appears from the statements given by Schnitzler (*Statistique de la France*, i. 296.), that at an average of 1840 and 1841 the consumption of colonial and foreign sugars amounted in France to 73,139,000 kilog., or 71,425 tons, a year; and to this quantity has to be added the produce of the beet-root plantations for these years, amounting to about 30,000,000 kilog., making the whole consumption about 103,000,000 kilog., exclusive of the quantity surreptitiously introduced. Inasmuch, however, as the home supply of sugar has greatly declined in the interval, the consumption of colonial and foreign sugar, allowing for the quantities clandestinely imported, may now (1843) be probably estimated at about 85,000,000 kilog. or 83,000 tons.

The Low Countries, Germany, and Austria are supplied through Holland, the Hanse Towns, the ports on the south shore of the Baltic, and Trieste. Most part of the produce of the Dutch colonies is imported into Holland, and considerable quantities are also imported from other countries; so that, on the whole, the imports into the Dutch ports may be fairly estimated at about 80,000 tons a year. The imports into Hamburg and Bremen amount, at an average, to about 40,000 tons a year; and those into Antwerp to above 13,000 tons. There is also a considerable importation of sugar into Stettin and other Baltic ports belonging to Germany and Prussia. The imports at Trieste in 1842 amounted to 25,800 tons; but the sales that year exceeded the imports, having amounted to 28,000; and, allowing for the quantities introduced through Venice and other channels, perhaps we shall not be far wrong in estimating the imports for consumption by the Austrian ports on the Adriatic at about 30,000 tons.

The consumption of sugar in Spain has been estimated by Montveran (*Statistique des Colonies*, p. 92.) at 41,050 tons. But, despite the considerable consumption of cocoa in Spain, and the moderation of the duties on sugar, we have little or no doubt that this estimate is considerably beyond the mark. Probably, were the consumption stated at 36,000 tons, it would be quite as much as it amounts to. On the like grounds we may, perhaps, estimate the consumption of Portugal at about 10,000 tons.

Duty is paid in Russia on about 30,000 tons of raw sugar, exclusive of what is clandestinely imported, and exclusive, also, of the clandestine imports of refined sugar.

At an average of the years ending the 30th September, 1840 and 1841, the U. States imported (principally from Cuba and Porto Rico) 152,568,123 lbs. a year, of which 15,302,033 lbs. were re-exported, leaving 137,266,090 lbs., or 61,279 tons, for the consumption of the Union. But in addition to this, the home supply of sugar, derived from the plantations in Louisiana, may be estimated (for it fluctuates very greatly) at about 100,000 hhds. of 10 cwt. each, or 50,000 tons; and a farther supply of 10,000 or 12,000 tons is derived from the maple; making the whole supply about 122,279 tons.

On the whole, therefore, we shall not perhaps be far wrong in estimating the consumption of exported colonial and tropical sugar as follows:

	Tons.	Tons.
The U. Kingdom		192,000
France		83,000
The Netherlands, Belgium, Germany, Prussia, Austria, Hungary, and Austrian Italy, per Dutch ports, deducting re-exports to Russia and other countries	70,000	
Hanse Towns	40,000	
Antwerp	13,000	
Rostock, Stettin, Königsberg, and other ports on the Baltic, excluding the imports from Holland and the Hanse Towns	8,000	
Trieste, Venice, Fiume, &c.	30,000	
		161,000
Spain		36,000
Portugal		10,000
Russia		35,000
Denmark and Sweden		12,000
Italy, Sicily, Malta, Turkey, Greece, and the Levant generally		35,000
U. States		61,000
Canada, Australia, Cape of Good Hope, &c.		15,000
		640,000

Now, supposing these statements to be reasonably correct, it would seem that the aggregate supply considerably exceeds the demand; the latter, it is true, is rapidly increasing, but, as the power to produce additional sugar is (at least so long as Brazil, Cuba, and Java are supplied with compulsory labour) all but illimitable, no permanent rise of price need be looked for. (The Supplement to the Spectator for the 15th April, 1843, contains an elaborate article with respect to the state of the sugar trade; and we have availed ourselves, though without adopting its statements, of the information which it affords.)

Taking the price of sugar at the low rate of 1*l.* 4*s.* a cwt., or 24*l.* a ton, the prime cost of the article to the people of Europe and the U. States will be 15,360,000*l.* sterling; to which adding 50 per cent. for duty, its total cost will be 23,040,000*l.*! This is sufficient to prove the paramount importance of the trade in this article. Exclusive, however, of sugar, the other products of the cane, as rum, molasses, treacle, &c., are of very great value. The revenue derived by the British treasury from rum only, amounts, at present, to about 1,000,000*l.* a year, but it has sometimes been nearly three times as great.

Progressive Consumption of Sugar in Great Britain. — We are not aware that there are any authentic accounts with respect to the precise period when sugar first began to be used in England. It was, however, imported in small quantities by the Venetians and Genoese in the 14th and 15th centuries*; but honey was then, and long after, the principal ingredient employed in sweetening liquors and dishes. Even in the early part of the 17th century, the quantity of sugar imported was very inconsiderable; and it was made use of only in the houses of the rich and great. It was not till the latter part of the century, when coffee and tea began to be introduced, that sugar came into general demand. In 1700, the quantity consumed was about 10,000 tons, or 22,000,000 lbs.; at this moment, the consumption has increased (bastards included) to above 180,000 tons, or more than 400,000,000 lbs.; so that sugar forms not only one of the principal articles of importation and sources of revenue, but an important necessary of life.

Great, however, as the increase in the use of sugar has certainly been, it may, we think, be easily shown that the demand for it is still much below its natural limit; and that, were the existing duties on sugar reduced, and the trade placed on a proper footing, its consumption, and the revenue derived from it, would be greatly increased.

During the first half of last century, the consumption of sugar increased five-fold. It amounted, as already stated —

In 1700,	to 10,000 tons	or 22,000,000 lbs.	
1710,	14,000	31,369,000	
1734,	42,000	94,080,000	
In 1754,	to 53,270 tons	or 119,320,000 lbs.	
1770—75,	72,500 (average)	162,500,000	
1786—90,	81,000 —	181,500,000	

In the reign of Queen Anne, the duty on sugar amounted to 3*s.* 5*d.* per cwt. Small additions were made to it in the reign of George II.; but in 1780 it was only 6*s.* 8*d.* In 1781, a considerable addition was made to the previous duty; and in 1787 it was as high as 12*s.* 4*d.* In 1791 it was raised to 15*s.*; and while its extensive and increasing consumption pointed it out as an article well fitted to augment the public revenue, the pressure on the public finances, caused by the French war, occasioned its being loaded with duties, which, though they yielded a large return, would, there is good reason to think, have been more productive had they been lower. In 1797, the duty was raised

* In Marin's *Storia del Commercio de' Veneziani* (vol. v. p. 306.), there is an account of a shipment made at Venice for England in 1319, of 100,000 lbs. sugar, and 10,000 lbs. sugar candy. The sugar is said to have been brought from the Levant.

An Account, showing the Quantities of the several Sorts of Sugar imported into the U. Kingdom; when entered for Home Consumption, and the Nett Revenue accruing thereon; in each Year since Years.

Years.	Quantities of Sugar imported into the U. Kingdom.					Quantities of Sugar retained for Consumption in the U. Kingdom.*			
	British Plantation.	Mauritius.	East India.	Foreign.	Total Quantity imported.	British Plantation.	East India.	Foreign.	Total Quantity retained for Home Consumption.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*
1815	3,642,807	- -	125,639	365,889	4,134,335	2,131,030	43,041	†37,228	2,211,299
1816	3,560,317	- -	127,052	192,780	3,880,149	2,446,458	33,980	49,493	2,529,931
1817	3,679,352		125,893	105,916	3,911,161	3,267,034	27,332	4,575	3,298,941
1818	3,775,379	Considered as East India sugar in these years.	162,395	138,032	4,076,806	1,701,421	25,056	419	1,726,896
1819	3,907,151		205,527	85,837	4,198,515	2,720,609	100,046	245	2,820,900
1820	3,769,458	- -	277,228	162,990	4,209,676	2,816,788	84,795	281	2,901,864
1821	3,906,967	- -	269,162	197,037	4,373,166	2,936,411	120,203	268	3,056,882
1822	3,435,061	- -	226,371	112,954	3,774,386	2,851,678	137,092	287	2,989,057
1823	3,773,528	- -	219,580	208,598	4,201,706	3,125,907	102,901	183	3,228,991
1824	3,935,052	- -	271,848	205,750	4,412,650	3,214,701	152,673	50	3,367,424
			British East India.			British Plantation and Mauritius.	British East India.		
1825	3,501,281	93,723	145,[illegible]	167,136	3,908,135	2,972,623	107,200	25	3,079,848
1826	4,002,426	186,782	155,986	73,901	4,419,095	3,430,652	143,312	26	3,573,990
1827	3,550,918	204,344	160,585	194,171	4,110,018	3,270,885	69,856	186	3,340,927
1828	4,313,430	361,325	132,722	160,543	4,968,020	3,504,164	97,244	11	3,601,419
1829	4,152,815	297,958	174,036	231,584	4,856,393	3,421,409	118,400	12	3,539,821
1830	3,913,268	485,710	213,494	303,532	4,916,001	3,590,041	131,979	24	3,722,044
1831	4,103,746	517,553	161,779	583,184	5,366,262	3,667,396	113,536	79	3,781,011
1832	3,784,245	541,770	88,357	453,477	4,867,749	3,575,329	79,600	605	3,655,534
1833	3,655,612	529,352	111,731	442,597	4,739,292	3,553,450	98,283	71	3,651,804
1834	3,844,244	555,860	76,617	266,693	4,743,414	3,620,522	121,007	50	3,741,579
1835	3,523,948	558,237	101,331	261,751	4,448,267	3,757,851	98,680	31	3,856,562
1836	3,600,517	497,303	152,229	399,112	4,649,161	3,378,144	110,222	33	3,488,399
1837	3,305,238	537,961	296,679	342,700	4,482,578	3,684,712	270,055	43	3,954,810
1838	3,521,434	604,671	428,854	476,415	5,030,374	3,491,225	418,375	65	3,909,665
1839	2,823,931	612,586	518,925	722,777	4,678,219	3,348,298	477,252	49	3,825,599
1840	2,202,833	545,009	482,856	805,167	4,035,845	3,074,198	518,320	2,316	3,594,834
1841	2,145,500	716,112	1,239,738	803,668	4,905,018	2,991,953	1,065,414	261	4,057,628
1842	2,508,910	689,335	940,452	617,314	4,756,011	2,932,415	935,948	103	3,868,466
Totals of last 3 years	6,857,243	1,950,456	2,663,026	2,226,149	13,696,874	8,928,566	2,519,682	2,680	11,520,928
Averages of last 3 years	2,285,744⅓	650,152	887,675⅓	742,049⅓	4,565,624⅔	2,999,522	839,894	893⅓	3,840,309⅓

* These are the quantities retained for consumption, after the quantities exported in a raw or refined state, after payment

† The quantities of foreign sugar above shown as retained for home consumption in the years 1815-18, consisted chiefly of 53 Geo. 3. c. 62.

the Quantities retained for actual Consumption within the same; the Rates of Duty charged on Sugar 1815; with a Statement of the Average Prices of British and Foreign Sugar in Bond for the same

Rates of Duty.				Nett Revenue from Duties on Sugar.	Average Prices of British Muscovado Sugar.	Average Prices of Brazil Sugar (Brown and Yellow.)
British Plantation.	Mauritius.	East India.	Foreign.		From the London Gazette.	From the Mercantile Prices Current.
Per Cwt. (Brown or Muscovado.) £ s. d.	*Per Cwt.*	*Per Cwt.*	*Per Cwt.* (Brown or Muscovado.) £ s. d.	£	s. d.	s. d.
1 10 0	- -	To 5th May - - 1 10 From 5th May - - 1 17	3 3 0	3,454,335	61 10	
£ s. to 5th September - 1 10 from 5th September - 1 7	- -	£ s. To 5th of May - - 1 19 5th of May to 5th September - - 2 0 From 5th September - 1 17	£ s. To 5th of September - 3 3 From 5th September - 3 0	3,612,193	48 7	
1 7 0	- -	£ s. d. 1 17 0	3 0 0	4,433,926	49 8	Not ascertained for these years.
1 10 0	charged as East India sugar in these years.	2 0 0	3 3 0	2,751,107	50 0	
to 5th May 1 10 5th May to 5th September - 1 8 from 5th September - 1 7	- -	To 5th May - - 2 0 5th May to 5th September - - 1 18 From 5th September - 1 17	To 5th May - 3 3 5th May to 5th September - 3 1 From 5th September - 3 0	3,996,543	41 4	
1 7 0	- -	1 17 0	3 0 0	3,925,387	36 2	
1 7 0	- -	1 17 0	3 0 0	4,188,958	33 2	
1 7 0	- -	1 17 0	3 0 0	4,060,441	31 0	
1 7 0	- -	1 17 0	3 0 0	4,407,410	32 11	
	- -	1 17 0	3 0 0	4,641,904	31 6	28 9
	To 5th July, charged as East India sugar.					24 2
1 7 0	From 5th July, charged as sugar of the British plantations.	1 17 0	3 0 0	4,176,655	38 6	35 5
Brown or Muscovado and clayed.			Brown or Muscovado and clayed.			
1 7 0	Charged as sugar of British plantations from this date.	1 17 0	3 3 0	4,950,998	30 7	28 9
1 7 0		1 17 0	3 3 0	4,650,192	35 9	29 9
1 7 0		1 17 0	3 3 0	5,002,297	31 8	27 10
1 7 0		1 17 0	3 3 0	4,896,212	28 7	21 8
to 5th July 1 7 from 5th July - 1 4	- -	To 5th July - - 1 17 From 5th July - - 1 12	3 3 0	4,767,342	24 11	18 11
1 4 0	- -	1 12 0	3 3 0	4,650,590	23 8	17 11
1 4 0	- -	1 12 0	3 3 0	4,594,336	27 8	21 5
1 4 0	- -	1 12 0	3 3 0	4,414,302	29 8	22 5
1 4 0	- -	1 12 0	3 3 0	4,559,392	29 5	23 3
1 4 0	- -	1 12 0	3 3 0	4,667,900	33 5	27 5
		To 13 August - - 1 12				
		From 13th August.				
		Of any British Possession within the Limits of the East India Company's Charter into which the Importation of Foreign Sugar is prohibited, and imported from thence.	Of any other British Possession within those Limits, and imported from thence.			
1 4 0	- -	£ s. d. 1 4 0	£ s. d. 1 12 0	3 3 0	4,184,165	40 10	27 11
1 4 0	- -	1 4 0	1 12 0	3 3 0	4,760,565	34 7	21 3
1 4 0	- -	1 4 0	1 12 0	3 3 0	4,656,892	33 8	21 3
1 4 0	- -	1 4 0	1 12 0	3 3 0	4,586,936	39 2	24 1
1 4 0	- -	1 4 0	1 12 0	3 3 0	4,449,070	49 1	21 6
1 4 0	- -	1 4 0	1 12 0	3 3 0	5,114,390	39 8	20 9
1 4 0	- -	1 4 0	1 12 0	3 3 0	4,874,812	36 11	18 3
With an additional 5*l.* per centum on the above rates from 16th of May, 1840.							
- - - - - - - - -				14,438,272	125 8	60 6
- - - - - - - - -				4,812,757½	41 10½	20 2

of the duty, have been deducted.
the produce of Martinique and Guadaloupe, imported previously to 12th May, 1813, and admitted to entry under Act

to 17*s.* 6*d.*; 2 years after, it was raised to 20*s.*; and, by successive augmentations in 1803, 1804, and 1806, it was raised to 30*s.*; but in the last-mentioned year it was enacted, that, in the event of the market price of sugar in bond, or exclusive of the duty, being for the 4 months previous to the 5th of January, the 5th of May, or the 5th of September, below 49*s.* a cwt., the Lords of the Treasury might remit 1*s.* a cwt. of the duty; that if the prices were below 48*s.*, they might remit 2*s.*; and if below 47*s.*, they might remit 3*s.*, which was the greatest reduction that could be made. In 1826, the duty on West India sugar was declared to be constant at 27*s.* without regard to price; the duty on sugar from the Mauritius being then also reduced to 27*s.* In 1830, the duty was reduced to 24*s.* on West India and Mauritius sugar, and to 32*s.* on East India sugar; and in 1836, the duty on the latter was reduced to the same level as that on the former.

The duty on foreign sugars is a prohibitory one of 63*s.* a cwt.

Account of the Quantity of Sugar retained for Home Consumption in GREAT BRITAIN, the Nett Revenue derived from it, and the Rates of Duty with which it was charged, in each Year from 1789 to 1814, both inclusive.

Years.	Quantities retained for Home Consumption.	Nett Revenue.	Rates of Duty.		
			British Plantation Sugar.	East India Sugar, including Mauritius.	
	Cwt.		*Per Cwt.*	*Per Cwt.*	*Per Cent. ad valorem.*
		£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.*
1789	1,517,109	862,632 11 11	0 12 4	- - -	37 16 3
1790	1,536,232	908,054 17 4			
1791	1,403,211	1,074,903 16 5	0 15 0	0 2 8	37 16 3
1792	1,361,592	1,012,538 12 1			
1793	1,677,097	1,316,502 14 3			
1794	1,489,392	1,031,492 4 2			
1795	1,336,230	949,961 16 1			
1796	1,554,062	1,225,243 7 5			
1797	1,273,732	1,209,744 0 7	0 17 6	0 5 2	37 16 3
1798	1,476,552	1,794,990 15 9	0 19 0	0 5 2	40 16 3
1799	2,772,438	2,321,935 16 5	1 0 0	0 2 6	42 16 3
1800	1,506,921	1,835,112 11 1			
1801	2,773,795	2,782,252 18 1	- - -	0 3 2	42 16 3
1802	2,250,311	2,210,801 6 11			
1803	1,492,565	1,551,457 17 11	1 4 0	1 6 4½	1 4 0
1804	2,141,569	2,458,124 18 3	1 6 6	1 9 1½	1 6 6
1805	2,076,103	2,439,795 1 10	1 7 0	1 9 8½	1 7 0
1806	2,801,747	3,097,590 3 6			
1807	2,277,665	3,150,753 6 3			
1808	2,812,813 *	4,177,916 3 4	- - -	1 10 0	1 0 0
1809	2,504,507	3,273,995 2 3			
1810	3,489,312	3,117,330 12 9	1 9 0 / 1 8 0	1 12 0 / 1 11 0	1 0 0 / 1 0 0
1811	3,226,757	3,339,218 4 3	1 7 0	1 10 0	1 0 0
1812	2,604,019	3,939,939 17 2			
1813	2,209,063	3,447,560 4 5	1 10 0	1 13 0	1 0 0
1814	1,997,999	3,276,513 6 5	- - -	*Per Cwt.* £1 10 0 / 1 11 0 / 1 19 0	

* Sugar used in distilleries included in these years.

Account of the Quantities of Sugar imported into the United Kingdom from the West Indies and British Guiana, distinguishing the Quantities from each Colony, in each Year from 1831 to 1842, both inclusive.

Colonies from which Imported.	Sugar, unrefined.											
	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	
Antigua -	193,177	143,336	129,519	257,177	174,818	135,482	82,170	203,043	222,689	203,071	144,103	
Barbadoes -	379,052	266,465	384,971	394,527	344,689	373,428	445,713	473,587	395,109	207,484	257,108	
Dominica -	56,339	58,270	47,372	54,876	25,014	35,213	33,721	48,290	29,385	31,673	42,342	
Grenada -	185,771	188,231	204,074	191,542	170,280	156,311	161,922	156,798	117,260	88,982	84,270	
Jamaica -	1,429,093	1,431,689	1,256,991	1,256,953	1,148,760	1,054,042	904,299	1,053,181	765,078	518,541	528,585	
Montserrat -	26,137	20,856	15,507	26,631	16,261	11,760	5,695	10,113	13,443	12,205	10,839	
Nevis -	49,921	39,843	42,287	59,748	39,637	24,723	24,269	25,110	36,731	27,857	12,121	
St. Christopher	101,968	80,602	80,390	103,555	87,614	64,810	73,270	93,527	135,548	94,390	63,936	
St. Lucia -	72,376	47,966	46,548	63,506	54,744	38,084	51,430	61,691	50,215	37,667	51,115	
St. Vincent -	221,662	186,812	194,889	213,017	195,057	146,482	201,191	194,182	151,899	101,090	110,205	
Tobago -	121,249	111,522	86,527	79,018	77,260	117,643	90,803	71,621	66,214	51,548	48,161	
Tortola -	15,559	14,999	14,969	21,926	13,821	13,510	13,534	7,279	5,249	7,566	8,397	
Trinidad -	327,167	312,266	286,303	339,615	289,393	312,141	295,367	286,247	208,669	245,778	284,605	
Bahamas -	- - -	- - -	- - -	- - 4	- - -	814	- - -	36	- - -	202	100	
Bermudas -	101	1	- - -	- - -	- - -	- - -	- - -	-	1	4,338		
Demerara -	802,134	736,562	754,122	687,282	760,376	864,134	792,852	669,374	440,132	486,487	415,261	
Berbice -	122,088	134,036	101,736	90,699	126,485	213,714	150,536	165,726	126,720	93,157	90,063	
Total -	4,103,800	3,773,456	3,646,205	3,843,976	3,524,209	3,601,791	3,306,775	3,520,676	2,824,372	2,214,764	2,151,817	2,508,910

We had occasion, in the former edition of this work, to remark on the impolicy and injustice of charging sugar from our possessions in the East Indies with a higher rate of duty than was laid on sugar from the West Indies. But, as already seen, this distinction was suppressed in 1826, and the sugar of our various colonial possessions and dependencies is now admitted for consumption on the same terms.

We incline, however, to think that the duty on sugar from British possessions is decidedly too high, and that, were the trade placed on a proper footing, it might be advantageously reduced from 24*s.* to 16*s.* a cwt. But whether the duty on sugar of our possessions be or be not too high, there cannot, we apprehend, be so much as the

shadow of a doubt that the duty on foreign sugars is fully twice as great as it should be. This duty, which has amounted for a lengthened period to 63*s.* a cwt., was, in fact, intended to be prohibitory; and, so long as our foreign dependencies furnished so much sugar as not only to supply the markets of the U. Kingdom, but to supply, besides, a considerable excess for exportation to others, there was little to object to in the magnitude of the duty. Latterly, however, it has become most oppressive in its operation. In consequence, as already seen, of the measures connected with the emancipation of the slaves, the imports of sugar from the West Indies have declined from 4,103,746 cwts. in 1831, to 2,508,910 cwts. in 1842. Owing to the immigration of hill-coolies, and other circumstances, the emancipation of the slaves in the Mauritius has not been so injurious as in the West Indies. Still, however, the exports of sugar from that island have declined, especially in 1843, and though there has been a great increase in the imports from India, they have not sufficed to balance the deficiency in the colonial supplies. On the one hand, therefore, we have a rapidly increasing population, and on the other we have had that population confined by an oppressive duty to a market for sugar, the supply of which has been progressively diminishing! The consequences have been such as every man of sense must have anticipated from the outset. The business of refining for the foreign market, and our export trade in sugar, have been all but annihilated, while the average gazette price of muscovado sugar admissible to the English markets amounted during the 3 years ending with 1842 to more than double the price of foreign sugar in bond, of equal or superior quality! We beg, in illustration of what is now stated, to subjoin an

Account of the Quantities of Sugar retained for Consumption, of the Nett Produce of the Duties thereon, and of the Prices of British Sugar (ex Duty) and Brazil Sugar in bond, in 1840, 1841, and 1842, with the Average for these 3 Years.

Years.	Quantities.	Nett Revenue from Duties on Sugar.	Average Prices of British Muscovado Sugar.	Average Prices of Brazil Sugar (Brown and Yellow.)
	Cwts.	£	*s.* *d.*	*s.* *d.*
1840 - -	3,594,834	4,449,070	49 1	21 6
1841 - -	4,057,628	5,114,390	39 8	20 9
1842 - -	3,868,466	4,874,812	36 11	18 3
Total -	11,520,928	14,438,272	125 8	60 6
Average of 3 Years -	3,840,309⅓	4,812,757⅓	41 10⅓	20 2

Now, it appears from this statement, that while the price of British sugar (exclusive of duty) amounted, during the 3 years ending with 1842, to 41*s.* 10⅓*d.* per cwt., the price of Brazil (and Cuba) sugar was only 20*s.* 2*d.* per do.! And hence it follows, that had the present prohibitory duty of 63*s.* on foreign sugar been reduced to the same rate (25*s.* 2*d.*, or 24*s.* plus 5 per cent.) as that on British sugars, the people of the U. Kingdom might have bought the same quantity of sugar for 20*s.* 2*d.* that cost them 41*s.* 10⅓*d.*, that is, they might have got more than 2 lbs. of sugar for the same sacrifice it has cost them to get 1 lb. The aggregate loss to the public from this preposterous arrangement of the sugar duties has been quite enormous. It appears from the above account that the average consumption of sugar, during each of the 3 years ending with 1842, amounted to 3,840,309⅓ cwts., which at 41*s.* 10⅓*d.* cost 8,040,646*l.* 19*s.* 4½*d.* But, had we been allowed to go into the foreign market for sugar, we might have got the same quantity for 3,872,311*l.* 18*s.* 2½*d.*, being a saving in 1 year of no less than 4,168,335*l.* 1*s.* 5*d.*, and on 3 years, of 12,505,055*l.* 4*s.* 3*d.* But it may, perhaps, be said, that had our ports been open to the free importation of Brazilian and other foreign sugars, the price of the latter would have been raised: and so, probably, it would; though, considering the vast extent and productiveness of the field from which sugar may be brought, we doubt whether this effect would be very sensible. But, supposing that the opening of our ports had raised the price of foreign sugar from 20*s.* 2*d.* to 25*s.* a cwt., still the saving would have amounted to 3,240,260*l.* 6*s.* a year!

Under these circumstances, the effectual reduction of the duty on foreign sugars does not appear to be a matter of the expediency, or rather of the necessity, of which there can be the smallest doubt. It is plainly in our power, not only without any sacrifice, but with a great increase of revenue, by merely substituting a free for a monopoly system in the trade of sugar, to add immensely to the supply of that indispensable necessary, and, by consequence, to the comfort and well-being of the great bulk of the community.

It is, however, contended, in opposition to the proposal for reducing the duty on foreign sugar, that this is not a question to be wholly decided on financial and commercial considerations; that, having done so much for the suppression of slavery, it would be most inconsequential to turn round and encourage it by admitting sugar raised by slaves into our markets; and that it would be unjust to our planters, seeing

that we have emancipated their slaves, to expose them, without any efficient protection, to the competition of those who have an ample supply of slave labour. We doubt, however, whether these considerations be entitled to much weight. We take, without any scruple, the cotton, tobacco, rice, and other products of slave-holding countries; and, such being the case, it is not very easy to see on what principle we refuse to take their sugar. There is no reason to think that we are at all likely to hasten, by this refusal, the emancipation of the slaves in these countries (even if that were certainly desirable), or to improve their condition: our policy in this respect is injurious to ourselves, without being of the smallest advantage to any one else.

But the truth is, that if we look a little narrowly into the circumstances, we shall find that we do the very thing we pretend not to do. We annually export about 2,500,000*l.* worth of British produce to Brazil; but most part of the products of that empire being excluded from our markets, we do not bring back the sugar, coffee, and other articles we receive in return from the Brazilians direct to this country, but we carry them to Hamburg and other continental emporiums, and there exchange them for wool and other continental products admitted to our markets. And hence, though we do not sweeten our tea with sugar produced by Brazilian or Cuban slaves, we clothe ourselves with wool, manure our lands with bones, and manufacture our paper of rags, which are all paid for with this very sugar! It is obvious, therefore, that, in so far as buying their products goes, we are direct encouragers of slavery in Brazil: and in so far as the consumption of their products goes, we are its indirect encouragers. And thus it is, that while our present system lays our trade with Brazil and Cuba under a disadvantage, and obliges our people to pay double its natural price for an important necessary of life, it promotes that very slavery we affect to deprecate! It is inefficient for any good purpose, and productive only of mischief.

The objection to the importation of foreign sugar, bottomed on its alleged injustice to our colonists, is, if possible, even less tenable. No doubt, we have emancipated their slaves; but we at the same time paid them 20,000,000*l.* to indemnify them for any loss they might sustain in consequence. They, therefore, have not so much as the shadow of a right to insist on their being continued in the monopoly of our markets: and though it would be wrong suddenly to withdraw the protecting duty in their favour, the public interests imperatively require that it should be gradually and not very slowly diminished; and that it should in the end be reduced to, at most, some 7*s.* or 8*s.* a cwt., or be wholly abolished.

The quantity of sugar consumed in Great Britain is, at present, allowing for the quantity sent to Ireland, more than double what it was in 1790. But had the duty continued at 12*s.* 4*d.*, its amount in 1790, there cannot, we think, be much doubt, provided foreign sugars had also been admitted under a reasonable duty (say 18*s.*), that the consumption would have been quadrupled. During the intervening period, the population has been little less than doubled; and the proportion which the middle classes now bear to the whole population has been decidedly augmented. The consumption of coffee — an article in the preparation of which a great deal of sugar is used in this country, by all who can afford it — is more than 28 times as great now as in 1790; that is, it has increased from under 1,000,000 lbs. to above 28,000,000 lbs.! The consumption of tea has about doubled: and there has been a great increase in the use of home-made wines, preserved and baked fruits, &c. Instead, therefore, of having done little more than increase proportionally to the increase of population, it may be fairly presumed that the consumption of sugar would, had there not been some powerful countervailing cause in operation, have increased in a far greater degree. Instead of amounting to little more than 3,000,000, the consumption of Great Britain should have amounted to from 5,000,000, to 6,000,000 cwt.

Taking the aggregate consumption of Great Britain at 400,000,000 lbs., and the population at 18,500,000, the average consumption of each individual will be about 21·6 lbs. This, though a far greater average than that of France, or any of the continental states, is small compared with what it might be were sugar supplied under a more liberal system. In workhouses, the customary annual allowance for each individual is, we believe, 34 lbs.; and, in private families, the smallest separate allowance for domestics is 1 lb. a week, or 52 lbs. a year. These facts strongly corroborate what we have already stated as to the extent to which the consumption of sugar may be increased; and others may be referred to, that are, if possible, still more conclusive. Mr. Huskisson stated, in his place in the House of Commons, on Mr. Grant's motion for a reduction of the sugar duties, 25th of May, 1829, that "in consequence of the present enormous duty on sugar, the poor working man with a large family, to whom pence were a serious consideration, was denied the use of that commodity; and he believed *he did not go too far when he stated, that* TWO-THIRDS *of the poorer consumers of coffee drank that beverage without sugar.* If, then, the price of sugar were reduced, it would become an article of his consumption, like many other articles — woollens, for

example, which are now used from their cheapness — which he was formerly unable to purchase."— (*Speeches*, vol. iii. p. 455.) There are no grounds for thinking that this statement was in any degree exaggerated; and, as the reduction of the duty in 1829 was too inconsiderable to have any material influence, it strikingly shows the great extent to which the consumption of sugar might be increased, were it brought fully under the command of the labouring classes.

It is in Ireland, however, that we should anticipate the greatest and most salutary effects from a reduction of the duties on sugar. The direct importations into Ireland do not exceed 18,500 tons; and if we add to these 6,500 tons for the second-hand importations (including bastards) from Great Britain, which, we believe, is quite as much or more than they amount to, the entire consumption of that country will be 25,000 tons, or 57,000,000 lbs., which, taking the population of Ireland at 8,000,000, gives 7·125 lbs. to each individual; or nearly 1-3d part of the average consumption of each individual in Great Britain. So singular a result must, no doubt, be principally ascribed to the comparative poverty of the Irish; but there can be no doubt that it is partly, also, owing to over taxation. The direct imports of sugar into Ireland were twice as great 30 years ago as they are at this moment; and there is no reason for thinking that the increase in the second-hand imports has been equivalent to the increase in the population. Hence, in order to diffuse a taste for so necessary an article as sugar among the population of Ireland, it would be very desirable, if possible, to reduce the duties even as low as 12*s.* a cwt.; and we are well convinced that such reduction, though it might occasion an immediate loss, would, in the end, be productive of an increase of revenue, besides being attended with other and still more beneficial consequences. The "one thing needful" in Ireland is to inspire the population with a taste for the conveniences and enjoyments of civilised life; but how is it possible to do this, if these conveniences be burdened with oppressive duties, that form an insuperable obstacle to their being used by any but the richer classes? Hence, the first step towards supplying what is confessedly the grand desideratum in the case of Ireland, is to reduce the duties on articles of convenience and luxury, so that they may become attainable by the mass of the people. If this be done, we may rest assured that the desire inherent in all individuals of improving their condition, will impel them to exert themselves to obtain them. A taste for the articles in question will be gradually diffused among all ranks; and, ultimately, it will be thought discreditable to be without them.

Adulteration.—Sugar is an article which is especially liable to adulteration; and its high price during the last few years, coupled with the high duty, has given a powerful stimulus to this nefarious practice. Perhaps, we might not be far from the mark, were we to estimate the quantity of foreign matters intentionally mixed up with sugar, and sold as such in this country, at 10,000, or 12,000 tons a year! Sago and potato flour are the articles most extensively used for this purpose. When mixed with sugar they give it a whiter and finer appearance; and, unless the dose be overdone, increase its price about 4*s.* a cwt.! It is extremely difficult to know how to deal with an abuse of this sort. No doubt the fall in the price of sugar that would follow the placing of the trade on a proper footing, and the reduction of the duty, would lessen the temptation to adulterate. But it would not wholly remove it, the materials employed to adulterate being decidedly cheaper than sugar, however supplied. In this, as in most cases of the sort, the best security against adulteration, is to deal only with grocers of the highest character.

Refining of Sugar for Home Consumption. — It will be immediately seen that the refining of British colonial sugar for exportation has almost ceased; but the refining of colonial sugar for home consumption is carried on to a great extent. There are at present (January, 1844) about 24 establishments, with an aggregate capital of about 850,000*l.*, for refining sugar for the home market, which use about 70,000 tons of raw sugar, yielding from 50,000 to 55,000 tons of refined do., exclusive of bastards and treacle. Hence, if we deduct the 70,000 tons of raw sugar converted into refined from the total quantity of about 192,000 tons taken for consumption, we have 122,000 tons for the quantity consumed in a raw state, the consumption of refined sugar amounting, in consequence of its comparative cheapness, to nearly ⅓ part of the whole.

Drawback or Bounty on the Exportation of Refined British Colonial Sugar. — The business of refining sugar for exportation has been carried on to a considerable extent in this country; but it may be doubted whether its prosecution has ever been productive of any material national advantage. It was long suspected — and the fact seems to have been sufficiently established — that the drawback formerly allowed on the exportation of refined sugar was greater than the duty charged on the raw sugar used in its manufacture; the excess being, in fact, a bounty paid to those engaged in the trade. Previously to 1826, the drawback on double refined sugar was 46*s.* a cwt.: it was then reduced to 43*s.*; but there is reason to think that that was still considerably above the mark. The average price of sugar in bond in this country was, for several years, from 5*s.* to 6*s.* a cwt. above what sugar of the same quality brought on the Continent; a difference which, as we then exported sugar, could not have been maintained, had it not been for the bounty. The same conclusion was established by the trials made under the superintendence of Dr. Ure at a sugar house taken for the purpose by government; and in consequence the

drawback has since been reduced to what is supposed to be the fair equivalent of the duties paid on the raw sugar; a measure, of the expediency of which no doubt can be entertained. It has been the practice, in making up returns to parliament, to reduce the refined sugar exported into raw sugar, by allowing 34 cwt. of the latter to 20 of the former. But the export of sugar is thus made to appear greater than it really is: for, though 34 cwt. of raw may be required to produce 20 cwt. of refined sugar, the whole of the molasses and bastards that remain (about 13 cwt.) are consumed at home.

Bounties (Drawbacks) on refined British Colonial Sugar. — The act 1 & 2 Vict. c. 33. enacts, that for every cwt. of refined sugar in loaf, complete and whole, or lumps duly refined, having been perfectly clarified and thoroughly dried in the stove, and being uniformly white throughout, or such sugar pounded, crashed, or broken, and also for every cwt. of sugar candy, there shall be paid —

If exported in a British ship - - - - -	£1 10s. 8d.
Foreign ship - - - - -	1 9 2
and for every cwt. double refined sugar, or of sugar equal in quality to double refined, the additional sum of - - - - -	0 5 0

The following clauses of the act 3 & 4 Will. 4. c. 58. refer to the refining of British sugar for bounty.

Bond to be given for the due Exportation. — The exporter of goods in respect of which any bounty is claimed under this act, or the person in whose name the same are entered outwards, shall, at the time of entry and before cocket be granted, give security by bond in double the value of the goods, with 1 sufficient surety, that the same shall be duly exported to the place for which they are entered, or be otherwise accounted for to the satisfaction of the commissioners of customs, and shall not be relanded in the U. Kingdom, or landed in the Isle of Man, unless expressly entered to be exported thereto. — § 3.

Candy in Packages of ½ Cwt. — No bounty shall be given upon the exportation of any refined sugar called candy, unless it be properly refined and manufactured, and free from dirt and scum, and packed in packages, each of which shall contain ½ a cwt. of such candy at the least. — § 4.

Sugar crashed for Exportation. — If any sugar in lumps or loaves is to be pounded, crashed, or broken before the same be exported, for the bounty payable thereon, such lumps or loaves shall, after due entry thereof, be lodged in some warehouse provided by the exporter, and approved by the commissioners of the customs for such purpose, to be then first examined by the officers of customs while in such lumps or loaves, as if for immediate shipment, and afterwards to be there pounded, crashed, or broken, and packed for exportation, in the presence of such officers and at the expense of the exporter; and such sugar shall be kept in such warehouse, and be removed thence for shipment, and be shipped under the care and in the charge of the searchers, that the shipment and exportation thereof may be duly certified by them upon the debenture, according to the quality ascertained by them of the same while in such lumps or loaves. — § 5.

Different Sorts of crashed Sugar to be kept separate. — The different sorts of such sugar shall be kept apart from each other in such manner and in such distinct rooms or divisions of such warehouse as shall be directed and appointed by the commissioners of the customs; and if any sort of such sugar shall be found in any part of such warehouse appointed for the keeping of sugar of a sort superior in quality thereto, the same shall be forfeited; and if any sort of such sugar shall be brought to such warehouse to be pounded, crashed, or broken, which shall be of a quality inferior to the sort of sugar expressed in the entry for the same, such sugar shall be forfeited. — § 6.

Sugar Refiners to provide Sample Loaves of Double Refined Sugar. — There shall be provided by and at the expense of the committee of sugar refiners in London, and by and at the expense of the committee of merchants in Dublin, as many loaves of double refined sugar, prepared in manner herein-after directed, as the commissioners of customs shall think necessary; which loaves, when approved of by the said commissioners, shall be deemed and taken to be standard samples; 1 of which loaves shall be lodged with the said committees respectively, and 1 other with such person or persons as the said commissioners shall direct, for the purpose of comparing therewith double refined sugar, or sugar equal in quality to double refined sugar, entered for exportation for the bounty; and fresh standard samples shall be again furnished by such committees, whenever it may be deemed expedient by the commissioners: provided always, that no loaf of sugar shall be deemed to be a proper sample loaf of double refined sugar, if it be of greater weight than 14 lbs., nor unless it be a loaf complete and whole, nor unless the same shall have been made by a distinct second process of refinement from a quantity of single refined sugar, every part of which had first been perfectly clarified and duly refined, and had been made into loaves or lumps which were of a uniform whiteness throughout, and had been thoroughly dried in the stove. — § 7.

Sugar entered not equal to the Standard shall be forfeited. — In case any sugar which shall be entered in order to obtain the bounty on double refined sugar, or sugar equal in quality to double refined sugar, shall, on examination by the proper officer, be found to be of a quality not equal to such standard sample, all sugar so entered shall be forfeited and may be seized. — § 8.

In addition to the sample loaves referred to above, the act 5 & 6 Vict. c. 47. enacts, that *standard sample loaves of sugar*, made on the patent principle, shall be provided at the expense of the committees of sugar refiners in London and Dublin. These sample loaves are to be equal in quality to double refined sugar; and when approved by the commissioners of customs are to be used as standards by which to compare sugar made on the patent principle for which a bounty is claimed.

Exports of British Refined Sugar. — The business of refining sugar, though, as already seen, it was for a lengthened period carried on in this country with the aid of a bounty, never attained to any very considerable magnitude, and has latterly all but ceased. Its extinction has been principally occasioned by the falling off in the imports of colonial sugar into England, and the consequent rise of its price, which wholly unfitted it for exportation whether in a raw or a refined state; and partly by the high duties laid on refined sugar when imported in most foreign states, which has put an end to the refining of foreign sugar. We subjoin

An Account of the annual Exports of Sugar from the U. Kingdom since 1815; the refined being converted into raw Sugar at the Rate of 20 Cwts. of the former to 34 Cwts. of the latter.

Years.	British Refined Sugar, reduced to its equivalent Quantity of Raw Sugar.	Years.	British Refined Sugar, reduced to its equivalent Quantity of Raw Sugar.	Years.	British Refined Sugar, reduced to its equivalent Quantity of Raw Sugar.	Years.	British Refined Sugar, reduced to its equivalent Quantity of Raw Su
	Cwt.		*Cwt.*		*Cwt.*		*Cwt.*
1814	897,347	1821	1,022,731	1828	776,924	1835	593,930
1815	994,045	1822	561,206	1829	808,435	1836	425,548
1816	953,314	1823	677,593	1830	1,032,886	1837	390,518
1817	1,141,721	1824	640,054	1831	989,120	1838	455,395
1818	1,157,082	1825	549,782	1832	774,939	1839	19,360
1819	847,798	1826	586,172	1833	417,687	1840	580
1820	1,098,616	1827	695,402	1834	657,386	1841	257

Most foreign countries have endeavoured to bolster up the refining business, not merely by excluding foreign refined sugars from their markets, but by granting the most lavish bounties on the exportation of sugar refined at home. In France, this sort of policy, if we may so call it, was carried so far, that out of a gross revenue of about 40,000,000 francs (1,570,000*l.*) paid into the treasury on account of the sugar duties in 1832, about 19,000,000 (760,000*l.*) were returned as drawback on the export of refined sugar. As the French government could not afford to lose the sugar duties, which would very

speedily have been swallowed up by the drawback, necessity has compelled them to modify their system, by making the allowance to the exporter more nearly correspond with the duty. The refining of sugar has been carried on within the last few years to a very great extent in Holland. But here also the business has been forced into existence, or received an unnatural extension, by artificial encouragement; and it is now understood to be productive of considerable loss and embarrassment.

Prussia, and most parts of Germany, to which we formerly exported large quantities of refined sugar, no longer admit it except at a high duty.

Refining of Foreign Sugar in Bond. — This has been permitted since 1834 under the provisions of the act 3 & 4 Will. 4. c. 61. (of which an abstract is subjoined), and at present (1844) employs 6 or 7 establishments, and is carried on to a considerable extent. The consumption of raw sugar by the refiners in bond may be estimated at about 22,000 tons, producing about 14,000 tons of refined sugar for exportation; but the bounty given by the Dutch to the exporters of refined sugar operates to the prejudice of this branch, and has rendered the export of last year (1843) less than that of the previous year. It may be worth while remarking, that there is no sort of restriction on the employment of slave-grown sugar for refining in bond. It consequently follows, that though parliament will not permit this sugar, notwithstanding its great comparative cheapness, to be used for home consumption, it permits our merchants and capitalists to employ themselves in bringing it to Europe, and in manufacturing and preparing it for the use of those by whom it is consumed! We may not taste slave-grown sugar, but we may get rich by manufacturing it and selling it to others!

We subjoin an abstract of the act 3 & 4 Will. 4. c. 61.

Commissioners of Customs may approve Premises for Bonded Sugar Houses. — Upon application to the commissioners of customs of any person actually carrying on the business of a sugar refiner in the ports of London, Liverpool, Bristol, Hull, Greenock, or Glasgow, or any other port approved by any 3 Lords of the Treasury, it shall be lawful for the commissioners of customs to approve of such premises as bonded sugar houses for the refining of sugar for exportation only, on it being made appear to the satisfaction of said commissioners that the said premises are fit in every respect for receiving such sugars, and wherein the same may be safely deposited. — § 1.

Officers of Customs empowered to deliver Sugars Duty-free, to be there refined for Exportation only. — On the approval of any premises as bonded sugar houses, it shall be lawful for the officers of the customs at the ports where such premises are situated to deliver, without payment of duty, to the party or parties so applying as aforesaid, on entry with the proper officer of customs, any quantity of foreign sugar, or of sugar the produce of any British possession, for the purpose of being there refined, under the locks of the Crown, for exportation only; and all sugars so delivered shall be lodged and secured in such premises, under such conditions, regulations, and restrictions as the said commissioners shall from time to time direct: provided, that it shall be lawful for the commissioners to revoke or alter any order of approval of any such premises. — § 2.

Refiner to give Bond that Sugar received be refined and exported, or delivered into Bonded Warehouse. — Upon the entry of sugar to be refined in any premises approved of under the authority of this act, the refiner on whose premises the same is to be refined shall give bond, to the satisfaction of the officers of the customs, in the penalty of double the amount of the duty payable upon a like quantity of sugar of the British plantations, with a condition that the whole of such sugar shall be actually subjected to the process of refinement upon the said premises, and that within 4 months from the date of such bond the whole of the refined sugar and treacle produced by such process shall be either duly exported from the said premises, or delivered into an approved bonded warehouse, under the locks of the Crown, for the purpose of being eventually exported to foreign parts. — § 3.

Regulations as to Importation, &c. of Sugar. — No allowance is to be made for damage or increase of weight by water, on sugar without special permission.

Tare on British plantation sugar: —

Under 8 cwt.	-	14 per cent.			
8 — and under 12	-	1 cwt. each cask.			
12 — — 15	-	1 cwt. 1 qr. 12 lbs. each cask.			
15 — — 17	-	1	2	0	—
17 — and upwards	-	1	3	0	—

Certificates of Growth are required before any sugar can be entered as the produce of a British possession in America, or of the Mauritius; and before it can be entered as the produce of any British possession within the limits of the East India Company's charter. — (See the clauses in the act 3 & 4 Will. 4. c. 52. *antè*, p. 660.)

There are, according to Mr. Cook, about 50 wholesale grocers in Great Britain, with an aggregate capital of about 1,000,000*l.*; and he justly adds, that "the importance of sugar, viewed as an article of commerce, is altogether very striking. The value of the 200,000 tons annually consumed, may be stated at from ten to twelve millions sterling; yet the London, Liverpool, and Bristol markets are supported by a system of credit so unique in its operations and extent, that the sugar trade of England exhibits a steadiness and solidity scarcely to be paralleled in any other department."

Beet-Root Sugar. — The manufacture of sugar from beet-root is carried on to a very considerable extent in several parts of the Continent, particularly in France. It began in the latter during the exclusion of colonial products in the reign of Napoleon, and received a severe check at the return of peace, by the admission of West India sugars at a reasonable duty. It is probable, indeed, that it would long since have been entirely extinguished, but for the oppressive additions made to the duties on colonial and foreign sugars in 1820 and 1822. After the last mentioned epoch, however, the production of beet-root sugar began rapidly to increase; and such has been its progress, that though, in 1828, its produce did not exceed 4,000,000 kilogs., it amounted, in 1838, to 39,199,408 kilogs.! But this extension of the cultivation, instead of being of any advantage, entailed a heavy loss on the public, inasmuch as the beet-root growers sold their sugar, which paid no duty, at the same rate that the colonists sold theirs,

which paid a large revenue to the treasury! It was not possible that such a system could be permanent. And the well-founded complaints of the colonists of the injustice of which they were victims, enforced by the rapid decline of the revenue derived from sugar, which, indeed, was threatened with total extinction, occasioned the imposition, in 1838, of a duty of 16 fr. 50 cents per 100 kilogs. (about 6*s.* 9*d.* a cwt.) on beet-root sugar, which, in 1840, was increased to 27 fr. 50 cents (about 11*s.* a cwt.). But even this last increase left a differential duty (or bounty) of 17 fr. 50 cents per 100 kilogs. in favour of beet-root sugar; so that, while the beet-root cultivators affirmed they would be ruined, the colonists vehemently complained of the preference given to the latter. It was, indeed, believed, that from the facility with which the beet-root growers had previously contrived to evade the duty, its increase would not be so injurious to them as had been supposed; but, in point of fact, the manufacture has sustained a severe check, and a great many plantations have been abandoned.

But farther and still more considerable changes have since been made in the conditions under which the culture of beet-root is carried on. In 1842, it was proposed, in order to get rid of the difficulties in which it had involved the country, to grub up the plantations, paying the planters 40,000,000 fr. (1,600,000*l.*) as an indemnity for their loss! And, harsh as it may appear, we incline to think that this proposal was, on the whole, the best that could have been made, inasmuch as it would have terminated the matter at once on an equitable principle. It was not, however, adopted: but in the course of next session it was resolved annually to raise the duty on beet-root sugar by about 5 fr. a cwt. till the duty on it be equalised with the duty on colonial sugar. This system comes into operation on the 1st of August this year (1844), and in August, 1848, the equalisation of the duties will be effected. There can be little doubt that, if carried out, this project will annihilate the growth of beet-root sugar in France quite as effectually as if the plantations had been grubbed up; and if so, there will be, between the present period and 1849, an increased demand in France for tropical sugar equivalent to the supply which is now derived from beet-root.

The same cause which has extended the growth of beet-root sugar in France, viz. its exemption from all duty, while it comes into competition with an article loaded with a heavy duty, has introduced its culture into Belgium, Germany, Prussia, and even Russia. Beet-root plantations have increased most in Silesia and Saxony, and supply a considerable portion of the sugar made use of in those countries.

When the last edition of this dictionary was published in 1834, we said, "We understand that a few small parcels of beet-root sugar have recently been produced in this country; and, with the present enormous duty on colonial sugar, we are not sure that the manufacture may not succeed. But, as the preservation of the revenue from sugar is of infinitely more importance than the introduction of this spurious business, the foundations of which must entirely rest on the miserable machinery of Custom-house regulations, sound policy would seem to dictate that the precedent established in the case of tobacco should be followed in this instance, and that the beet-root sugar manufacture should be abolished. Inasmuch, too, as it is better to check an evil at the outset, than to grapple with it afterwards, we trust that no time may be lost in taking vigorous measures, should there be any appearance of the business extending." This plan was not, however, adopted; but the act 1 Vict. c. 57. imposed a duty of 24*s.* a cwt. on all sugar made from beet-root in the U. Kingdom; and the 3 & 4 Vict. c. 57. imposed the like duty, with the additional 5 per cent., on all sugar made in the U. Kingdom.

Maple Sugar. — A species of maple (*Acer saccharinum* Lin.) yields a considerable quantity of sugar. It grows plentifully in the U. States and in Canada; and in some districts furnishes the inhabitants with most of the sugar they make use of. Though inferior both in grain and strength to that which is produced from the cane, maple sugar granulates better than that of the beet-root, or any other vegetable, the cane excepted. It is produced from the sap, which is obtained by perforating the tree in the spring, to the depth of about 2 inches, and setting a vessel for its reception. The quantity afforded varies with the tree and the season. From 2 to 3 gallons may be about the daily average yield of a single tree; but some trees have yielded more than 20 gallons in a day, and others not more than a pint. The process of boiling the juice does not differ materially from what is followed with the cane juice in the West Indies. It is necessary that it should be boiled as soon after it is drawn from the tree as possible. If it be allowed to stand above 24 hours, it is apt to undergo the vinous and acetous fermentation, by which its saccharine quality is destroyed. — (*Bouchette's British America*, vol. i. p. 371.; *Timber Trees and Fruits, Library of Entertaining Knowledge.*)

An Account of the Price of British Colonial and Foreign Sugars in Bond, in London, on the 30th of December, 1843.

	Per cwt. s. s.
Foreign.	
Manilla, yellow and grey	17s. 6d. to 19
brown	15 — 17
Siam, &c.	17 — 23
Java	15 — 23
Havannah, white	23 — 28
brown and yellow	17 — 21
Brazil, white	21 — 24
brown and grey	15 — 19
Foreign muscovado	16 — 19
British Plantation.	
West India, good and fine	39 — 45
middling	35 — 38
brown	32 — 34
Mauritius, fine	39 — 45
grey and yellow	32 — 38
brown	23 — 31
Bengal, good and fine white	40 — 46
Bengal, yellow, and middling white	33 to 39
brown	23 — 31

	Duty paid for Consumption.	In Bond for Export.
Refined sugar, viz. —		
single large lumps	72s.	25s. 9d.
small lumps	73s.	28s.
single loaves	none made	29s.
powder do.	do.	29s. 6d.
patent double loaves	80s. to 96s.	33s. to 34s.
Hamburg do.	74s. — 79s.	30s. — 31s.
Prussian lumps	74s. — 75s.	26s. — 27s.
crushed on board	—	26s.
Dutch crushed	—	22s. 6d. to 23s. 6d.
lastards, green	45s.	16s.
molasses, British	21s.	10s. 6d.
patent	22s. to 27s.	11s.
Molasses, raw, B. P. W. I.	22s. — 27s.	13s. to 18s.

Whatever may be thought of the speculative parts of this article, we flatter ourselves that its practical and more important portion will be found to be as nearly accurate as it could well be made. At all events, it has been submitted to the revision of the highest practical authority on such subjects, Mr. Cook having done us the favour to go carefully over the statements and to satisfy himself of their substantial correctness.

N.B.—Mr. Cook supplied us, for the previous edition of this work, with the following *pro formâ* accounts of the sales of sugar, exhibiting the various charges affecting this necessary article, from the time it is shipped in the colonies, Brazil, and the Havannah, till it finds its way into the hands of the grocer. As the charges continue the same, it has not been thought worth while to vary the other items.

Pro Formâ Sales of 100 Hogsheads Jamaica Sugar, per "Jean," Captain Yates, by Order and for Account of Thomason & Co.

			£	s.	d.	£	s.	d.
1834. Feb. 19.	100 hhds. (weighing each 14 cwt.)							
	Cwt. qrs. lbs.							
	1,400 0 0							
	151 3 4 tare and draft.	Average market tare 1 2 0 each; Draft 0 0 2 —						
	1,248 0 24 nett	at 2l. 16s. per cwt.				3,495	0	0
	Charges.							
	Warehousing entry					0	4	6
	Sea insurance, valuing at 20l. per hhd. 50s. per cent. on 2,000l.		50	0	0			
	Policy 5s. per cent., 5d. Commission ½ per cent., 10l.		15	0	0			
						65	0	0
	Insurance from fire, 3 months, at 3s. 3d. per cent. on 2,000l.					3	5	0
	Customs duty on 1,250 cwt. at 21s. per cwt., and entries					1,503	0	0
	Freight on 1,250 cwt., at 4l. 10s. per ton of 20 cwt.		281	5	0			
	Primage at 6d. each, 2l. 10s. Pierage at 4½d., 1l. 17s. 6d.		4	7	6			
						285	12	6
	Consolidated rate on 1,250 cwt. at 1d. per cwt.*					41	13	4
	Laying over at 6d. each					2	10	0
	Interest on freight, 25 days, 15s. 8d.; on duty, 70 days, 11l. 10s. 2d.; on charges, 70 days, 6s. 4d.					12	12	2
	Brokerage ½ per cent.					17	9	6
	Del credere 1 per cent.					34	19	0
	Commission 2½ per cent					87	7	6
						2,053	13	6
	Errors excepted.	Cash, 3d of May				1,441	6	6

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 5d. per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 100 Chests Bahia Sugar, per "Mary," Captain Smith, by Order and for Account of William Henry & Co.

				£	s.	d.
1834. Feb. 19.	Average weight of each chest about 16 cwt. gross. Revenue tares 13 per cent., and draft 2 lbs. per chest, allowed to buyers.					
	33 chests white	*Cwt. qrs. lbs.* 528 0 0	528 0 0			
	33 do. yellow	528 0 0	0 2 4 draft.			
	34 do. brown	0 2 4	527 1 24 gross.			
	100 chests	527 1 24	61 0 24 tare.			
		61 0 24	466 1 0 nett at 1l. 7s.		629	8 9
		469 1 0 nett	at 1l. 4s.		559	10 0
		466 1 0 nett	at 1l. 1s.		489	11 3
					1,678	10 6
		Discount 2½ per cent.			41	19 3
					1,636	10 9
	Charges.					
	Warehousing entry			0	4	6
	Sea insurance on 1,700l. at 2l. 7s. 6d. per cent.		40 7 6			
	Policy 5s. per cent., 4l. 5s. Commission ½ per cent., 8l. 10s.		12 15 0			
				53	2	6
	Insurance from fire on 1,700l. at 3s. 3d. per cent.			2	15	6
	Freight on 1,100 cwt. 1 qr. 12 lbs. at 3l. 10s. per ton of 20 cwt.		245 0 11			
	Primage 5s. per cent., 12l. 5s. Pierage at 3½d. per ton, 1l. 0s. 5d.		13 5 5			
				258	6 4	
	Consolidated rate on 1,400 cwt. 1 qr. 12 lbs. at 7d. per cwt.*			40	16 10	
	Laying over at 6d. each			2	10 0	
	Interest on freight, 25 days, 14s. 1d.; on dock charges, 25 days, 2s. 3d.			0	16 4	
	Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses			2	1 6	
	Brokerage 1 per cent.			16	15 8	
	Commission 2½ per cent.			41	19 3	
				419	8 5	
	Errors excepted.	Cash, 22d of March		1,217	2 4	

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 5d. per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 500 Bags Bengal Sugar, per "Peru," Captain Hawk, by Order and for Account of W. S. Warwick.

1834. Feb. 19.

500 bags (weighing each 1 0 21) — Cwt. qr. lbs.
Cwt. qr. lbs. 593 3 0 — 31 1 0 tare and draft — Revenue tare 6 lbs. each. Draft 1 lb. each.
562 2 0 nett — at 1*l.* 9*s.* per cwt. — £ 815 12 6

Charges.	£	s.	d.	£	s.	d.
Warehousing entry				0	4	6
Sea insurance on 800*l.* at 2*l.* 15*s.* per cent.	22	0	0			
Policy 5*s.* per cent., 2*l.* Commission ½ per cent., 4*l.*	6	0	0			
				28	0	0
Insurance from fire on 800*l.* at 3*s.* 3*d.* per cent.				1	6	0
Freight on 566 cwt. 3 qrs. 24 lbs. at 4*l.* per ton of 20 cwt.				113	8	0
Consolidated rate on 566 cwt. 3 qrs. 24 lbs. at 6*d.* per cwt.*	14	3	6			
Lotting at 1*d.* per cwt. gross	2	9	6			
				16	12	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				2	1	6
Brokerage ½ per cent.				4	1	7
Commission ½ per cent.				20	7	11
				186	2	0

Errors excepted. Cash, 24th of May — £ 629 10 6

London, 25*th of February*, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 2,000 Bags Mauritius Sugar, per "Africa," Captain Reynolds, by Order and for Account of S. R. Waters.

1834. Feb. 19.

2,000 bags (weighing each 1 1 0) — Cwt. qr. lb.
Cwt. qr. lbs. 2,500 0 0 — 107 0 16 tare and draft. — Revenue tare 5 lbs. each. Draft 1 lb. each.
2,392 3 12 nett — at 2*l.* 15*s.* per cwt. — 6,580 7 0

Charges.	£	s.	d.	£	s.	d.
Warehousing entry				0	4	6
Sea insurance on 3,700*l.* at 3*l.* per cent.	111	0	0			
Policy 5*s.* per cent., 9*l.* 5*s.* Commission ½ per cent., 18*l.* 10*s.*	27	15	0			
				138	15	0
Insurance from fire on 3,700*l.* at 3*s.* 3*d.* per cent.				6	0	6
Customs duty on 2,410 cwt. 2 qrs. 24 lbs. at 1*l.* 4*s.* per cwt. and entries				2,895	16	0
Freight on 2,410 cwt 2 qrs. 24 lbs. at 4*l.* 10*s.* per ton of 20 cwt.	542	8	4			
Primage 5*s.* per cent.	13	11	2			
				555	19	6
Consolidated rate on 2,410 cwt. 2 qrs. 24 lbs. at 6*d.* per cwt.*	60	5	4			
Lotting at 1*d.* per cwt. gross	10	8	4			
				70	13	8
Interest on duty, 70 days, 22*l.* 4*s.* 3*d.*; on freight, 25 days, 1*l.* 10*s.* 5*d.*; on charges, 70 days, 10*s.* 10*d.*				21	5	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				7	0	0
Brokerage and guarantee 1 per cent.				65	16	0
Commission 2½ per cent.				164	10	2
				3,929	0	10

Errors excepted. Cash, 3d of May — £ 2,651 6 2

London, 25*th of February*, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 500 Chests Havannah Sugar, per "Porcia," Captain Baker, by Order and for Account of Wm. Watkins.

1834. Feb. 19.

250 chests white (weighing each 4½ cwt.) — Cwt. qrs. lbs. 1,062 2 0 — 118 1 6 t. & d. — Revenue tare 52 lbs. each. Draft 1 lb. each.
250 do., yellow — Cwt. qrs. lbs. 1,062 2 0 — 118 1 6 t. & d. — 944 0 22 nett — at 1*l.* 14*s.* — 1,605 2 0
944 0 22 nett — at 1*l.* 5*s.* — 1,180 5 0
2,785 7 0
Discount 2½ per cent. — 69 12 6
2,715 14 6

Charges.	£	s.	d.	£	s.	d.
Warehousing entry				0	4	6
Sea insurance on 2,800*l.* at 2*l.* 5*s.* per cent.	63	0	0			
Policy 5*s.* per cent., 7*l.* Commission 10*s.* per cent., 14*l.*	21	0	0			
				84	0	0
Insurance from fire on 2,800*l.* at 3*s.* 3*d.* per cent.				4	11	0
Freight on 1,892 cwt. 3 qrs. 12 lbs. at 4*l.* 10*s.* per ton of 20 cwt.	425	18	6			
Primage 5*s.* per cent., 21*l.* 5*s.* 10*d.* Plerage 3½*d.* per ton, 1*l.* 7*s.* 7*d.*	22	13	5			
				488	11	11
Consolidated rate on 1,892 cwt. 3 qrs. 12 lbs. at 6*d.* per cwt.*				47	6	6
Laying over at 6*d.* each				12	10	0
Interest on freight, 25 days, 1*l.* 4*s.* 7*d.*; on dock charges, 25 days, 2*s.* 6*d.*				1	7	1
Auction duty ½ per cent.				13	18	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				3	1	6
Brokerage 1 per cent.				27	17	0
Commission 2½ per cent.				69	12	6
				713	0	6

Errors excepted. Cash, 22d of March — £ 2,002 14 0

London, 25*th of February*, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

N. B. — The freight is charged on the weight, exclusive of the tare, but inclusive of the draft.

SULPHUR, or BRIMSTONE (Fr. *Soufre*; Ger. *Schwefel*; It. *Zolfo, Solfo*; Sp. *Azufre*; Arab. *Kibreet*), a crystallised, hard, brittle substance, commonly of a greenish yellow colour, without any smell, and of a weak though perceptible taste; its specific gravity is from 1·9 to 2·1. It burns with a pale blue flame, and emits a great quantity of pungent suffocating vapours. In some parts of Italy and Sicily it is dug up in a state of comparative purity. That which is manufactured in this country is obtained by the roasting of pyrites. It is denominated *rough* or *roll sulphur*, from its being cast in cylindrical moulds, and contains 7 per cent. of orpiment. The Italian roll sulphur does not contain more than 3 per cent. of a simple earth; and is, therefore, in higher estimation than the English. When roll sulphur is purified, it receives the name of *sublimed sulphur*, and is in the form of a bright yellow powder. — (*Thomson's Chemistry, &c.*)

Sulphur is of great importance in the arts. It is used extensively in the manufacture of gunpowder, and in the formation of sulphuric acid, or oil of vitrol. It is also used extensively in medicine, and for other purposes. The entries for home consumption amounted, at an average of the 3 years ending with 1842, to 333,731 cwt. a year. The duty on refined or roll brimstone was reduced in 1842 to 2*s.* a cwt.; but as the duty on rough brimstone is only 6*d.* a cwt., the imports consist almost wholly of the latter. The price of rough brimstone in the London market, in 1843, varied from 5*l.* 10*s.* to 7*l.* 10*s.* a ton.

Our supplies of brimstone are almost wholly derived from Sicily. The mines of sulphur in that island have been wrought for several centuries; but it is only since 1820 that any considerable quantity has been prepared for exportation. Subsequently to 1833, the trade with this country increased so much that the export of sulphur to the U. Kingdom rose from 19,122 tons in that year to to 38,654 tons in 1838. We have elsewhere (see art. PALERMO) noticed the way in which this important and rapidly growing trade was interfered with by the Neapolitan government. Luckily, however, the monopoly established in favour of the French company was abolished in 1841, and the trade has since reverted to its old channels.

SYDNEY, the capital of New South Wales, and of the British settlements in New Holland, or Australia, on a cove on the south side of Port Jackson, about 7 miles from its mouth, lat. 33° 55′ S., lon. 150° 10′ E. Population, in 1841, 29,973. The water is of sufficient depth to allow the largest ships to come close to the shore. The inlet or harbour, denominated Port Jackson, is one of the finest natural basins in the world. It stretches about 15 miles into the country, and has numerous creeks and bays; the anchorage is everywhere excellent, and ships are protected from every wind. The entrance to this noble bay is between 2 gigantic cliffs not quite 2 miles apart. On the most southerly, in lat. 33° 51′ 30″ S., lon. 151° 16′ 30″ E., is a lighthouse, the lantern of which is elevated 67 feet above the ground, and about 345 above the sea. Owing to a want of attention at first, the streets of Sydney were laid out and the houses built, according to the views of individuals without any fixed or regular plan. But latterly this defect has been to a considerable degree remedied in the old streets; and the new ones are systematically laid out. The town covers a great extent of land; almost every house having a considerable piece of ground attached to it. There are different joint stock banks in Sydney; and there is also a savings bank. Schools for the instruction of poor children have been established; and there are, besides two establishments dignified with the pompous title of colleges, numerous seminaries, some of them said to be very well conducted, for the education of the middle and upper classes. There are several periodical publications.

Population, &c. — The British settlements in New South Wales were originally intended to serve as penal establishments, to which convicts might be transported, and employed in public and private works; and are still used for this purpose. The first vessel with convicts arrived at Botany Bay in January, 1788: but it having been found to be quite unsuitable as a site for a colony, the establishment was removed to Port Jackson. The progress of the colony has been much more rapid than might have been anticipated, considering the character and habits of the convicts annually landed upon its shores, the difficulties which the great distance from England interpose in the way of an emigration of voluntary settlers, and the inferiority of the soil. Owing to the circumstance of the great majority of the convicts and other emigrants being males, a great disproportion has always existed between the sexes in the colony, which has materially retarded its progress, and been, in other respects, productive of very pernicious results. Government, however, availing itself of the assistance of benevolent individuals at home, and in the colony, has within these few years endeavoured to lessen the disproportion referred to, by sending out considerable numbers of young unmarried females, free of expense. Much, it was obvious, of the influence of this measure, would depend on the discrimination with which the female emigrants were selected; and various precautions were taken, by the organisation of committees, and otherwise, to exclude from amongst them all whose character was in any degree suspicious. It was not, however, to be expected that these precautions should be completely successful; and the most conflicting accounts have been received as to the conduct of the females on their landing, and the influence of their immigration on the colony. There can be no question, indeed, that the latter fell in many respects, short of the anticipations of the promoters of the scheme, and that, whether from want of due care in the selection, or from the force of circumstances, many of the immigrants fell into vicious courses. On the whole, however, there can be no doubt that the measure has been decidedly advantageous; and that it has tended both to increase the population, and to improve the morals of the colony.

It appears from the returns previously given (*antè*, p. 334.), that the population of New South Wales, including Port Philip, amounted in 1842 to 155,222, of whom about 130,000 were free. The emigrants from the U. Kingdom to the Australian colonies, during the 18 years ending with 1842, amounted in all to 115,458 individuals. Of these no fewer than 38,164 emigrated in 1841.

Emigration to New South Wales holds out several advantages to the industrious emigrant, which, however, are partially at least, if they be not wholly, countervailed by sundry disadvantages. There is at all times a pretty brisk demand for additional labour; wages, though not extravagant, are high; provisions, except in years of drought, are moderately cheap; and above all, the climate is mild, healthy, and suitable for European constitutions. The great drawbacks are, — the immense distance from Europe, and the consequent cost of the voyage; the general inferiority and exorbitant price of the land; the frequent recurrence of droughts; and the large amount of convict population. The greater mildness and salubrity of the

climate appears to be the principal, or rather perhaps the only, recommendation in favour of emigrating to Australia rather than to Canada or the United States. Whether, however, this be a sufficient counterpoise to the peculiar disadvantages attending it, is a point which we do not presume to decide, but which deserves the most serious consideration from intending emigrants. It seems to be the unanimous opinion of every one acquainted with the colony, and entitled to be heard upon such a subject, that "*in every case, emigrants of every sort will find it for their interest to come out married.*" — (*Carmichael's Tract*, Sydney edit. p. 57.)

Climate. — The climate of such parts of New South Wales as have been explored by the English is particularly mild and salubrious. The high summer heat indicated by the thermometer has not the relaxing and enfeebling effect that a similar high temperature has in India and many other countries. Fearless of damps, and unmolested by noxious insects, the traveller may throw himself under the shade of the first tree that invites him, and sleep in safety. On the other hand, however, the climate has the serious defect of being too dry. It seems to be subject to the periodical recurrence of severe droughts. These prevail sometimes for 2, 3, or even 4 years together. The last "great drought" began in 1826, and did not terminate till 1829. Very little rain fell during the whole of this lengthened period, and for more than 6 months there was not a single shower! In consequence, the whole surface of the ground was so parched and withered, that all minor vegetation ceased; and even culinary vegetables were raised with much difficulty. It well nigh ruined many of the settlers; nor is the colony as yet quite recovered from its effects. — (*Breton's Excursions in New South Wales*, p. 296.; *Sturt's Southern Australia*, vol. i. p. 2.) There was also a pretty severe drought in 1835. This is, in fact, the great drawback upon the colony; and were it more populous, the droughts would expose it to still more serious difficulties.

Soil, Products, &c. — The fertility of the soil in most parts of New Holland that have been explored with any care is very far, indeed, from corresponding with the glowing descriptions of some of its casual visitors, whose imaginations seem to have been dazzled by the magnificence of its botanical productions, and the clearness and beauty of the climate. The truth is, that the bad land seems to bear a much greater proportion to the good in New Holland, than in almost any other country with which we are acquainted. Different theories have been framed to account for the fact; but of the fact itself there seems no manner of doubt. Of course, it is not to be supposed but that in a country of such vast extent there must be some fertile districts; but along the east coast, with which we are best acquainted, these seem to be much more confined than might have been expected; and the little experience we have had on the west side, at Swan River and other places, does not seem to lead to any more favourable conclusions. It is true that only a comparatively small part of the interior has as yet been explored; and it is not improbable that in the hitherto undiscovered regions of this vast continent, land suitable for tillage may be found. At present, however, it would appear that the soil and climate, not of New South Wales only, but of New Holland generally, are much better fitted for pastoral than for agricultural pursuits. The colony is mainly indebted for the introduction of the sheep farming system to the example and exertions of John Macarthur, Esq. Its success has exceeded the expectations of the most sanguine. The growth and exports of wool have increased with a rapidity hitherto unexampled in the history of industry. In 1822, only 152,880 lbs. of wool were exported; in 1825, the exports amounted to 411,600 lbs.; in 1830, to 899,750 lbs.; in 1835, to 3,273,353 lbs.; and in 1840, to no fewer than 7,668,960 lbs.! Indeed, the best informed individuals belonging to the colony are of opinion that the inhabitants would equally consult their security and their profit, were they to devote their entire attention to their flocks, fisheries, and commerce, depending for supplies of corn, flour, &c. on the imports from America, Madagascar India, the Philippine Islands, Van Diemen's Land, &c.

Monies, Weights, and Measures. — Accounts are kept in sterling money; but Spanish dollars are most abundant. They pass current at 5*s.* each. The weights and measures are the same as those of England.

Rates of Agency, Commission, and Warehouse Rent, agreed to at a Meeting of the New South Wales Chamber of Commerce, 1828.

1. On all sales or purchases of ships and other vessels, houses, or lands, where no advance on them has been made, 2½ per cent.
   On all other sales, purchases, or shipments, 5 per cent.
   On goods consigned and afterwards withdrawn, or sent to public auction, if no advance on them has been made, 2½ per cent.
2. On giving orders for the provision of goods, 2½ per cent.
3. On guaranteeing sales, bills, bonds, or other engagements, 2½ per cent.
4. On the management of estates for others, 5 per cent.
5. On procuring freight or charter, and on freight collected, 5 per cent.
6. On insurances effected, ½ per cent.
7. On settling losses, partial or general, 1 per cent.
8. On effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1 per cent.
9. On the recovery of money, 2½ per cent. If by law or arbitration, 5 per cent.
10. On collecting house rent, 5 per cent.
11. On attending the delivery of contract goods, 2 per cent.
12. On becoming security for contracts, 5 per cent.
13. On ships' disbursements, 5 per cent.
14. On obtaining money on respondentia, 2 per cent.
15. On letters of credit granted, 2½ per cent.
16. On purchasing, selling, receiving from any of the public offices, lodging in ditto, delivering up or exchanging government paper or other public securities, ½ per cent.
17. On all items on the debit or credit side of an account, on which a commission of 5 per cent. has not been previously charged in the same account, including government paper, 1 per cent.
18. On entering and clearing ships at the Custom-house, each, 1 guinea.
19. On the dishonour of foreign bills, exclusive of protest and other law expenses, a re-exchange of 25 per cent.

Warehouse Rent.

On all measurement goods, 1*s.* per ton of 40 cubic feet, per week.
On liquids, 1*s.* 1*d.* per tun of 252 gallons (old measure) per week.
On sugar, rice, salt, and similar articles, 6*d.* per ton per week.
On grain, 4*d.* per bushel for first month, and ½*d.* per bushel per month afterwards.
On iron, lead, &c. 4*d.* per ton per week.

Duties levied at Sydney under Acts of Parliament.

Articles upon which levied.	Present Duties levied.
Spirits made or distilled from grain the produce of the colony	5*s.* per gallon.
Ditto from sugar and molasses	10*s.* 2½*d.* per do.
Spirits, the produce and of the U. K., or of the plantations in the W. Indies, imported direct from the U. K.	7*s.* 9 6/10*d.*
Spirits of the plantations in N. America, imported direct from the U. K.	10*s.* 2 6/10*d.* per gal.
All other spirits	10*s.* 2½*d.* per do.
Tobacco imported unmanufactured	1*s.* 6*d.* per lb.
Ditto manufactured, and snuff	
Foreign goods imported	

Shipping Charges in Port Jackson, &c.

Pilotage Rates, payable to licensed pilots on ships and from and to a distance of 2 leagues out to sea, into and out of any port or harbour in New South Wales, for which a pilot shall be appointed; vessels registered in Sydney, not exceeding 50 tons, or while employed in the coasting trade from one part of New South Wales to another, and steam vessels while so employed, excepted, unless the assistance of a pilot be required and received.

For every vessel drawing	£	s.	d.	For every vessel drawing	£	s.	d.	For every vessel drawing	£	s.	d.
7 feet or under	4	0	0	13 feet and under 14 feet	6	10	0	19 feet and under 20 feet	9	10	0
8 — and under 9 feet	4	5	0	14 — —	7	0	0	20 — — 21 —	10	0	0
9 — — 10 —	4	10	0	15 — —	7	10	0	21 — — 22 —	11	0	0
10 — — 11 —	5	0	0	16 — —	8	0	0	22 — — 23 —	12	0	0
11 — — 12 —	5	10	0	17 — —	8	10	0	And so on, 1*l.* for every additional foot.			
12 — — 13 —	6	0	0	18 — —	9	0	0				

Harbour Dues and Charges, payable to the harbour master, for repairing on board and appointing the place of anchorage of ships and vessels entering any port or harbour in New South Wales; or for the removal of the same from one place of anchorage or mooring to another, not being for the purpose of leaving the port; vessels registered in Sydney, under 50 tons, or while employed in the coasting trade from one port of New South Wales to another, excepted.

	£	s.	d.
For every vessel under 100 tons	0	5	0
For every vessel of 100 — and under 200 tons	0	10	0
For every vessel of 200 tons and under 300 tons	0	15	0
300 — — 400 —	1	0	0
For every vessel of 400 tons and under 500 tons	1	5	0
500 — and upwards	1	10	0

Customs Charges payable to the collector or other officer of customs, for the entry inwards, or clearance outwards, of ships and vessels at any port or harbour of New South Wales, where an officer of customs is stationed; vessels under 50 tons, registered in Sydney, excepted; viz.

	Entry. £	s.	d.	*Clearance.* £	s.	d.
For every steam vessel employed in the coasting trade, from one port of New South Wales to another	0	1	3	0	1	3
For every vessel registered in Sydney, and so employed, if above 50 and not exceeding 100 tons	0	4	0	0	4	0
For every vessel so employed, if above 100 tons	0	10	0	0	10	0
For every other ship or vessel	0	15	0	0	15	0

Light-house Dues, payable to the collector of customs, Sydney, on ships and vessels above 50 tons, arriving at Port Jackson, towards the maintenance of the light-house at the entrance thereof; viz.

	£	s.	d.
On every ship or vessel above 50 and not exceeding 100 tons, employed in the coasting trade from one port of New South Wales to another	0	2	0
On every steam vessel, the ton register measurement	0	0	0½
On every other ship or vessel, the ton register measurement	0	0	2

Wharfage Rates, payable to the collector of customs, on articles landed at the King's Wharf, Sydney:—

For every	£	s.	d.
Tun or butt	0	2	0
Pipe or puncheon	0	1	0
Hogshead	0	0	9
Barrel	0	0	6
Cask or keg of smaller size	0	0	3
Crate, cask, or case of hardware, earthenware, or ironmongery	0	0	9
Bale, case, or box, not exceeding ½ ton measurement	0	0	6
Ditto, exceeding ½ ton	0	1	0
Chest of tea	0	0	3
½ chest or box of tea	0	0	1½
Bag of sugar	0	0	1½
Bag of coffee	0	0	1½
Package of rice	0	0	1½
Basket of tobacco	0	0	3
Bag of hops	0	1	0
Pocket of hops	0	0	6
Bushel of grain	0	0	1
Dozen of oars	0	0	2
100 deals	0	2	6
100 staves	0	1	0
Dozen of spades and shovels	0	1	0
Ton of iron, steel, lead, or other metal, including shot	0	2	6
Ton of salt	0	1	6
Ton of flax	0	1	0
Ton of cordage	0	2	6
Ton of potatoes	0	1	6
Bottle of paint, oil, or turpentine	0	0	2
Millstone	0	2	0
Four-wheeled carriage	0	5	0
Two-wheeled carriage	0	3	0
Small package, not otherwise enumerated	0	0	3
Ton of heavy goods, not otherwise enumerated	0	2	6

Postage of Single Letters from Sydney.

	d.
To Paramatta	4
Emu Plains (Penrith)	7
Windsor	7
Liverpool	5
Campbell Town	7
Newcastle	4
Port Macquarie	4
Bathurst	9

And at corresponding rates from other places.

Double and treble letters to be charged proportionably to the aforesaid rates. Letters the weight of an ounce to be charged 4 times the rate of postage of a single letter.

Newspapers printed in New South Wales or Van Diemen's Land, 1*d.* each.

Letters from and to New South Wales and Van Diemen's Land to pay a sea postage of 3*d.*, and all other *Ship Letters* a sea postage of 4*d.*, in addition to the inland postage payable thereon.

Parcels of Newspapers, printed Prices Current, or other periodical Publications, exported or imported, to be charged a sea postage at the rate of 1*d.* for every 4 ounces of their weight.

Auction Duty.

For each and every 100*l.* arising from the sale by auction of any estate, goods or effects whatsoever, 1*l.* 10*s.*

Licences.

	£	s.
Auctioneers', annually	2	0
Beer and spirits, to retail, do.	25	0
Distilling, do.	25	0
Hawkers', do.	20	0
Carts	0	5

Trade of Sydney.—Wool is the great article of export, and next to it are whale oil and whalebone, the produce of the southern whale fishery. Timber is also exported in considerable quantities; but the exports of other articles are inconsiderable.

The colony being much more suitable for sheep pasture than for tillage, but little corn is raised. In consequence grain and provisions form very important articles of import from Van Diemen's Land and other places. Considering the character of a large proportion of the population, one need not be surprised at the circumstance of drunkenness being a prevalent vice, and, consequently, that spirits and wines are largely imported. The other great articles of importation are manufactured goods and apparel of all sorts, hardware, earthenware, saddlery, and carriages, &c., from England. (For an account of the articles exported from England to the Australian colonies, see *antè*, p. 334.)

The value of the imports into Sydney has, for a lengthened period, uniformly exceeded the value of the exports, the balance being met by the expenditure on account of government, the disbursements of ships visiting the port, &c. But during the three years ending with 1840, in consequence of the great overtrading at Sydney, the value of the imports greatly exceeded the means of payment, and the real wants of the colony. We subjoin some statements illustrative of the trade of Sydney for some years past.

Account of the Value of the Imports into New South Wales, nine-tenths being into Sydney, during each of the Three Years ending with 1840.

	1838.	1839.	1840.
	£	£	£
Liquors of all kinds, or spirits, wine, ale, beer, cider, and perry	168,510	200,734	338,494
Grain, provisions, and other edibles, including sugar, tea, &c.	250,173	470,317	502,149
Other articles of consumption, as salt, soap, candles, tobacco, &c.	71,817	109,689	198,022
Forage	4,503	22,328	6,551
Wearing apparel, clothing, and bedding	481,804	565,855	787,958
Articles for domestic or personal use, as furniture, carriages, plate, &c.	112,239	106,645	122,249
Ditto for intellectual purposes, as books, prints, instruments, printing materials, &c.	54,811	42,248	50,032
Ditto for use in agriculture, manufactures, trade, and commerce	203,042	246,120	450,996
Coin	36,860	24,445	6,407
Totals	1,383,759	1,788,381	2,462,858

Among other articles, the imports of spirits in 1838 amounted to 1,151,583 galls.; in 1839, to 1,744,474 do.; and in 1840 to 2,260,774 do. The total quantity of wheat imported during the above 3 years amounted to 539,773 bush.

During the year 1840, the value of the exports from Sydney amounted to 1,251,544*l.*; of which wool and other colonial articles amounted to 562,172*l.*; the produce of the fisheries to 265,920*l.*; and British and foreign goods re-exported, to 423,452*l.* We subjoin

A Statement of the Quantities of Wool, Whale Oil, and Whalebone exported from New South Wales during each of the Five Years ending with 1840.

Years.	Wool.	Sperm Whale Oil.	Black Whale Oil.	Whalebone.
1836	3,611,118 lbs.	1,682 tuns	1,149 tuns	79 tons
1837	4,923,715	2,559	1,566	78
1838	5,428,993	1,891½	3,055	174
1839	6,597,981	1,279	1,229	135
1840	7,668,960	1,854	4,298	250

In 1840, wool was valued for export at 15*d.* per lb.; sperm whale oil at 85*l.* per tun; black whale oil at 18*l.* per do.; and whalebone at 100*l.* per ton.

Existing Depression in Sydney, and its Causes. — Banking has been for a lengthened period one of the principal businesses carried on in Sydney. Four or five joint stock associations have been established in the town for carrying on banking business, exclusive of several joint stock banking associations in London, which have branches in Sydney. The oldest of the native establishments, the bank of New South Wales, was founded in 1816. The banks have frequently divided at the rate of 20 and 22 per cent. per annum of profit! But, as might have been anticipated, this success, by tempting too many competitors into the field, led to an extraordinary over-issue of paper, and has been a principal cause of the wide-spread embarrassment and distress in which the colony has latterly been involved. It has been estimated, apparently on good grounds, that the bank notes afloat in Sydney, and bills discounted in March, 1837, amounted to about 1,000,000*l.* sterling, and that they amounted, in March, 1841, to 2,600,000*l.*! Such an extraordinary increase in the amount of the currency led to all manner of wild speculations, and to a rapid rise of prices. But this state of over-issue and excitement was as brief as it was signal; and the revulsion by which it was necessarily followed has been of the most severe description. In proof of this we may mention that the revenue from the sale of crown lands, which, at an average of the 4 years ending with 1839, had amounted to about 130,000*l.* a year, and which rose in 1840 to 316,626*l.*, fell, in 1842, to 7,541*l.*, and was, we believe, still less in 1843. In addition to this, there were 600 bankruptcies in the colony, between the 1st of February and the 31st of December, 1842; sheep that had cost 30*s.* have been sold for 3*s.* and 4*s.*; and even the fable of the goose and the golden eggs has been realised, large flocks of sheep having been slaughtered, and their carcases boiled down to raise an additional 2*s.* or 2*s.* 6*d.* by the sale of the tallow!

But though a large proportion of this unparalleled revulsion must be ascribed to the abuse of banking and of credit, much also must be ascribed to the regulations enforced in Australia with respect to the sale of land. The reader will find these regulations in another part of this work (*antè*, p. 337). Had they been intended to occasion the ruin of the colony, they might have been truly said to be well fitted to attain their object; but, otherwise, they are in the last degree contradictory and absurd. The lowest upset price of land has been fixed at 20*s.* an acre; and such is its inferiority, that it is affirmed that it requires in most parts 3 acres to feed a sheep; but supposing 2 acres to suffice, and the ordinary rate of interest to be 10 per cent., it follows that the cost of feeding a sheep would be 4*s.* a year, exclusive of the original cost of the animal, the expense of watching, &c. Now, supposing a sheep to produce annually 2¼ lbs. of wool, worth in Sydney, 1*s.* 3*d.* per lb., it follows that its yearly produce will be about 2*s.* 10*d.*, being 1*s.* 2*d.* less than the interest of the money expended on the land! The fact is, that if the upset price of land in New South Wales were fixed at 2*s.* 6*d.* an acre, it would be, if anything, too high. The existing system as to the sale of land in the Australian colonies is nothing, in truth, but a clumsy compound of fraud and quackery; and its abolition is indispensable to their real and continued prosperity.

SYRA, the ancient Scyros, one of the islands of the Greek Archipelago, in the group called the Northern Cyclades, its port, on the east side of the island, being in lat. 37° 26′ 30″ N., lon. 24° 55′ E. It is from 9 to 10 miles in length, and 5 in breadth. Though rugged, it is well cultivated, and produces corn, wine, cotton, olives, figs, &c. The population, in 1830, was set down by Mr. Urquhart at 4,500; but we have been assured that it is at present (1843) little, if at all, short of 25,000.

It is indebted for this extraordinary increase of population to the convenience and excellence of its port and its central situation, which have made it a considerable commercial *entrepôt*. Most part of the trade that formerly centred at Scio is now carried on here and the island has not only received numerous immigrants from that island, but also from many other parts of Greece. Great Britain and most European powers have consuls in Syra; and it also is the principal seat of the Protestant missionaries to the Levant. The town, which is in part old, has many new streets and houses, and an appearance of great bustle and animation. Pherycides, one of the most celebrated of the ancient Greek philosophers, the disciple of Pittacus, and the master of Pythagoras, was a native of this island. We subjoin an

Account exhibiting the Number of Ships, their Tonnage, and the Value of their Cargoes, that arrived at Syra in 1839, specifying also the different Countries to which they respectively belonged.

Countries.	Vessels.	Tonnage.	Value of Cargoes.	Countries.	Vessels.	Tonnage.	Value of Cargoes.
			£				£
British - - -	61	10,392	164,965	Sardinian - -	29	4,407	3,843
Greek - - -	982	65,179	188,110	Belgian - -	1	100	1,616
Ottoman - - -	291	8,059	35,257	Tuscan - -	1	193	1,773
Russian - - -	73	16,736	19,755	Neapolitan - -	4	1,062	15
Austrian - -	55	12,597	19,776	Hanoverian - -	1	200	2,223
steamers - -	51	7,943	21,803	Jerusalem - -	3	280	1,212
French - - -	23	3,303	5,240				
Ionian - - -	77	5,998	2,558	Total -	1,652	136,449	468,146

A few miles to the east of Syra, lies Delos. This island, regarded in antiquity with peculiar veneration, from its being the birthplace of Apollo and Diana, is no less celebrated in the commercial than in the religious history of ancient Greece. Its sacred character, by insuring its immunity from hostile attacks, and its central situation, made it a favourite mart for the products of the states of Greece, Asia Minor, Phœnicia, Egypt, &c. Religion, pleasure, and trade had all their votaries at its festivals; which were famous throughout the ancient world for the splendour of the rites and processions, and the magnitude of the business transacted. It were too much to expect that Syra should ever attain to equal importance, even as an *entrepôt*. But as she enjoys most of those advantages of position that contributed to render Delos one of the principal emporiums of antiquity, it may be hoped, now that there is a reasonable prospect of good order and freedom being again established in Greece, that she may also acquire some commercial celebrity. It may be worth while mentioning, as strikingly evincing the mutability of human affairs, that, at present, both the great and the little Delos are uninhabited. And Tournefort states, that the inhabitants of Mycone were, in the early part of last century, in the habit of holding the greater Delos, for the purposes of pasturage, paying to the Grand Seignior a rent of 20 crowns a year for that famous island! — (*Tournefort, Voyage du Levant*, 4to ed. tome i. pp. 290—325. There is a good account of the religious rites celebrated at Delos, though but a very indifferent one of its commerce, in the *Travels of Anacharsis*.)

T.

TACAMAHAC, a resin obtained from the *Fagara octandra*; and likewise, it is supposed, from the *Populus balsamifera*. It is imported from America in large oblong masses wrapt in flag leaves. It is of a light brown colour, very brittle, and easily melted when heated. When pure, it has an aromatic smell, between that of lavender and musk; and dissolves completely in alcohol, water having no action upon it. — (*Thomson's Chemistry*.)

TAGANROG, a city of European Russia, on the north coast of the Sea of Azof, near the mouth of the river Don, lat. 47° 12′ 48′ N., lon. 38° 39′ E. Population 18,000. It has a naval hospital, a lazaretto, &c.; and there are annual fairs in May, August, and November. Taganrog is a place of considerable commercial importance. It was intended by its illustrious founder, Peter the Great, to replace Azof, the ancient emporium of the Don, the port of which had become all but inaccessible; and its whole consequence is derived from this circumstance, or from its being the entrepôt of the commerce of the vast countries traversed by that great river. The exports consist principally of corn, particularly wheat; iron and hardware from Tula; with cordage, linen, and sail cloth, copper, tallow, wool, leather, furs, wax, ashes, caviar, isinglass, &c. The imports consist principally of wine, oil, fruit, drysalteries, cotton and woollen goods, spices, dye stuffs, tobacco, sugar, coffee, &c. The largest portion by far of the trade is carried on with Constantinople, Smyrna, and other Turkish ports; but a good deal is also carried on with the Italian and other foreign ports; and there is an extensive coasting trade with Odessa and other Russian ports. In 1836 the total value of the exports from Taganrog to foreign ports amounted to 7,422,277 paper roubles, and that of the imports to 7,864,118 do., the value of the exports to Russian ports amounting, during the same year, to 3,089,525 roubles, and that of the imports to 1,829,233 do. In 1841 the exports to foreign countries comprised, among other articles, 334,957 chetwerts of wheat, 7,464 poods tallow, 4,012 poods wool, 25,483 poods cordage, &c.: the total value of these exports amounted to 2,375,551 silver roubles, equal to 8,314,428 paper do.

Seeing that Taganrog was built to obviate the difficulties that had to be encountered by vessels entering the Don, through the shallowness of the water, it might have been supposed that care would be taken to place it in a position in which it should be, in as far as possible, free from this defect. This important consideration seems, however, to have been in a great measure overlooked. The gulph of the Don is seldom navigable by vessels drawing more than from 8 to 9 ft. water, and even these cannot approach within less than about 700 yards of the town. They are principally loaded by carts, drawn each by a single horse, the expenses being so very considerable that it costs from 120 to 150 copecks to ship a chetwert of wheat.

To obviate these inconveniences, it has been proposed to make Kertsch, on the E. coast of the Strait of Yenikalé, a depôt for the produce of the Sea of Azof; and while the latter would be much easier of access to foreign ships, the coasters that at present bring down the products of the basin of the Don from Nakhitchevan and Rostoff to Taganrog, would be able to bring them direct to Kertsch, where they might be landed and shipped with much greater facility, and less expense. In 1836, 761 vessels arrived at, and 730 sailed from, Taganrog; but, owing to the shallowness of the water, they were chiefly of small burden. With the exception of a few foreign houses, the merchants are mostly all either Greeks, or of Greek origin, and are not wealthy.

The emperor Alexander, whose reign will always form a memorable and brilliant æra in the history of Russia, expired at Taganrog on the 19th of November, 1825. — (For further particulars see *Schnitzler, La Russie*, p. 717.; *Hagemeister on the Trade of the Black Sea*, p. 31, *&c.; and Russian Official Accounts*.)

Monies, Weights, and Measures, same as those of PETERSBURG; which see.

Sea of Azof. — The navigation of this sea, the *Palus Mæotis* of antiquity, is impeded by numerous shoals, and can neither be entered nor safely navigated by vessels drawing more than 11 or 12 feet water.

Its greatest depth in the middle is about 7 fathoms: but it shoals gradually to the sides, and at Taganrog there is only from 9 to 10 feet water. Its depth is, however, materially affected by the direction and strength of the winds. The only entrance to this sea is by the Straits of Yenikalé, the *Bosphorus Cimmerius* of the ancients, a narrow and difficult passage, having in some places not more than 13 feet water. Owing to the great quantity of fresh water poured into the Sea of Azof, and its limited magnitude, its water is brackish merely. It is unnavigable from November to April, during the greater part of which time it is generally frozen over.—(*Norie's Sailing Directions for the Mediterranean and Black Seas; Annuaire du Commerce Maritime* for 1833, p. 161, &c.) We avail ourselves of this opportunity to lay before our readers the following details with respect to the

Magnitude, Ports, &c. of the Caspian Sea.—The Caspian Sea, or rather Lake (the *Mare Hyrcanum* of the ancients), extends lengthwise from N. to S. about 740 miles, varying in breadth from 112 to 275 miles. In some parts, particularly on the southern shores, it is so very deep that a line of 450 fathoms will not reach the bottom; whereas, in the northern parts, and opposite to the mouths of the Wolga, it is comparatively shallow; and owing to the frequent occurrence of shoals, it is not safely navigated by vessels drawing more than 10 or 12 feet water. Its level had been variously estimated by Olivier and Lowitz at from 64 to 53 feet below that of the Black Sea; but the observations of M. Humboldt made the difference of level between them no less than 300 feet! This, however, was supposed to involve some mistake; and its level has since been ascertained by an expedition fitted out by the Russian government to be 116 feet below the level of the Black Sea. The water of the Caspian is not salt, but brackish merely; it has no tides, but gales of wind raise a very heavy sea. It is extremely prolific of fish and seals. The value of the sturgeon caught in the Russian fisheries amounts to a very large sum.—(See Sturgeon Fishery.) They proceed in shoals up the rivers, where they are captured without the least apparent diminution of their numbers. The salmon is remarkably fine; and herrings are in such abundance, that, after a storm, the shores of the Persian provinces of Ghilan and Mazunderan are nearly covered with them.—(*Kinneir's Memoir of the Persian Empire*, p. 6.; *Memoir on the Caspian Sea, in Malte Brun's Geography; Humboldt, Fragmens de Géologie, &c.*)

Astrakhan is situated on an island of the Wolga, more than 50 miles from the mouth of that river; and owing to the extensive command of internal navigation it possesses, it is a place of very considerable commercial importance. Baku, acquired by the Russians in 1801, is, however, the best port on the western side of the Caspian. It is situated on the southern shore of a peninsula that projects far into the sea, in lat. 40° 22′ N., lon. 51° 10′ E. The harbour is spacious and convenient; and its central and advanced position gives it superior advantages as a trading station. Prodigious quantities of naphtha are procured in the vicinity of Baku. It is drawn from wells, some of which yield from 1,000 to 1,500 lbs. a day. It is used as a substitute for lamp oil; and when ignited, emits a clear light, with much smoke and a disagreeable smell. Large quantities are exported in skins to the Persian and Tartar ports on the south and east shores of the sea.

Vessels.—The largest class of vessels by which the Caspian Sea is navigated are called by the Russians *schuyts*, and belong wholly to Astrakhan and Baku; their burden varies from 90 to 150, and, in some instances, 200 tons. They are not built on any scientific principle, and are constructed of the worst materials, that is, of the timber of the barks that bring grain down the Wolga to Astrakhan. There are supposed to be, in all, about 100 sail of these vessels. There is a second class of vessels employed in the trade of the Caspian, called *razchives*. They carry from 70 to 140 tons, and sail better than the schuyts. Their number is estimated at about 50. Exclusive of the above, there are great numbers of small craft employed in the coasting trade, in the rivers, in the fisheries, and in acting as lighters to the schuyts. Steam boats have been introduced upon the Wolga; and one has been launched on the Caspian itself. The masters and crews of the vessels employed on this sea are, for the most part, as ignorant as can well be imagined. They are generally quite incapable of making an observation, or of keeping a reckoning; so that accidents frequently occur, that might be avoided by the most ordinary acquaintance with the principles of navigation.—(These statements are made, partly upon official, and partly upon private authority: the latter may, however, be safely relied on.)

The trade of this great sea is entirely in the hands of the Russians; by whom it is carried on from the ports of Astrakhan and Baku, with the Persian ports of Astrabad, Balfroosh, &c. on the south; and with the Tartar ports of Mangishlak, Balkan, &c. on the east. It is very insignificant, compared with what it ought to be; the value of the Russian produce exported by it in 1841 being only 435,219 silver roubles; and that of the imports 1,053,606 do. On the whole, however, a gradual improvement is taking place; and whatever objections may, on other grounds, be made to the encroachments of Russia in this quarter, there can be no manner of doubt that, by introducing comparative security and good order into the countries under her authority, she has materially improved their condition, and accelerated their progress to a more advanced state.

TALC, a species of fossil nearly allied to mica. It is soft, smooth, greasy to the feel, and may be split into fine plates or leaves, which are flexible, but not elastic. It has a greenish, whitish, or silver-like lustre. The leaves are transparent, and are used in many parts of India and China, as they were used in ancient Rome—(*Plin. Hist. Nat.* lib. xxxvi. c. 22.)—in windows instead of glass. In Bengal, a seer of talc costs about 2 rupees, and will sometimes yield a dozen panes 12 inches by 9, or 10 by 10, according to the form of the mass, transparent enough to allow ordinary subjects to be seen at 20 or 30 yards' distance. It should be chosen of a beautiful pearl colour; but it has, in general, either a yellowish or faint blue tinge. Its pure translucent flakes are frequently used by the Indians for ornamenting the baubles employed in their ceremonies. Talc is employed in the composition of *rouge végétal*. The Romans prepared with it a beautiful blue, by combining it with the colouring fluid of particular kinds of testaceous animals. Talc is met with in Aberdeenshire, Perthshire, and Banffshire in Scotland; and in various parts of the Continent, where rocks of serpentine and porphyry occur. The talc brought from the Tyrolese mountains is called in commerce Venetian talc. Several varieties are found in India and Ceylon.—(*Thomson's Chemistry; Rees's Cyclopædia; Milburn's Orient. Com.*; *Ainslie's Mat. Indica.*)

TALLOW (Fr. *Suif*; Ger. *Talg*; It. *Sevo, Sego*; Rus. *Salo, toplenoe*; Sp. *Sebo*), animal fat melted and separated from the fibrous matter mixed with it. Its quality depends partly on the animal from which it has been prepared; but more, perhaps, on the care taken in its purification. It is firm, brittle, and has a peculiar heavy odour. When pure, it is white, tasteless, and nearly insipid; but the tallow of commerce has usually a yellowish tinge; and is divided, according to the degree of its purity and consistence, into candle and soap tallow.

Tallow is an article of great importance. It is manufactured into candles and soap; and is extensively used in the dressing of leather, and in various processes of the arts. Besides our extensive supplies of native tallow, we annually import a very large quantity, principally from Russia. The exports of tallow from Petersburg amount, at an average, to between 3,000,000 and 4,000,000 poods, of which the largest portion by far is brought to England; the remainder being exported to Prussia, France, the Hanse Towns, Turkey, &c.

We borrow from the work of Mr. Borrisow, on the commerce of Petersburg, the following details with respect to the tallow trade of that city:—

Tallow is divided into different sorts; namely, white and yellow *candle tallow*, and common and Siberian *soap tallow*; although it is allowed that the same sort often differs in quality.

Tallow is brought to Petersburg from the interior; and the best soap tallow from Siberia, by various rivers, to the lake Ladoga; and thence, by the canal of Schlusselburg, to the Neva.

An *ambare*, or warehouse, is appropriated to the reception of tallow, where, on its arrival, it is selected and assorted (*bracked*). The casks are then marked with three circular stamps, which state the quality of the tallow, the period of selecting, and the name of the selector (*bracker*).

The casks in which white tallow is brought have a singular appearance: their form being conical, and their diameter at one end about 2½ feet, and at the other only 1½ foot: the casks of yellow tallow are of the common shape. There are also others, denominated ½ casks.

To calculate the tare, the tallow is removed from a certain number of casks, which are weighed, and an average tare is thence deduced for the whole lot. A cask weighs 8½, 9, 10, or 11 per cent., but the average is generally about 10 per cent., of the entire weight of tallow and cask.

Yellow candle tallow, when good, should be clean, dry, hard when broken, and of a fine yellow colour throughout. The white candle tallow, when good, is white, brittle, hard, dry, and clean. The best white tallow is brought from Woronesch. As for soap tallow, the more greasy and yellow it is, the better the quality. That from Siberia is the purest, and commonly fetches a higher price than the other sorts.

Formerly the oil and tallow warehouses were the same; and this occasioned great difficulties in shipping, because all vessels or lighters taking in tallow or oil were obliged to haul down to the *ambare*, and wait in rotation for their cargoes. The consequence was, that when much business was doing, a vessel was often detained for several weeks at the *ambare* before she could get her cargo on board. Now the tallow and oil warehouses are separated, and every article has its own place. When a shipment of tallow is made, the agent is furnished by the selector (*bracker*) with a sample from each cask.

Captains, in order to obtain more freight, usually load some casks of tallow upon deck; but it is more for the interest of the owner to avoid this, if possible, because the tallow loses, through the heat of the sun, considerably both in weight and quality.

One hundred and twenty poods of tallow, gross weight, make a Petersburg last, and 63 poods an English ton.

We subjoin an official account of the export of tallow from Russia in 1841, specifying the quantities shipped from the different ports, the countries for which the shipments were made, and the quantities shipped for each.

	Poods.	To	Poods.	To	
Petersburg - -	3,310,889	Sweden	55,987	Spain, Portugal, Italy -	2,677
Riga - -	873	Prussia	86,923	Austria -	2,710
Archangel - -	23,414	Denmark	782	Turkey	37,975
Odessa - -	375,829	Elsineur *	581,379	America -	1,000
Taganrog - -	7,464	Hanse Towns	53,630	Sundry -	7,510
Radziviloff - -	2,538	Holland	60,193		
Sundry - -	17,097	Great Britain	2,649,755		
		France	195,235		3,736,104
Total -	3,736,104				

* The ships receive, at Elsineur, orders for their ultimate destination, and most of them are for Gre

The value of the tallow exported in 1841 is estimated in the Russian official accounts' at 13,874,160 silver roubles, equal (taking the rouble at 3*s*. 2*d*.) to 2,196,742*l*.

Account of the Quantities of Tallow imported and retained for Consumption in the U. Kingdom during each of the 6 Years ending with 1841, specifying the Countries whence they were imported, and the Quantities brought from each.

Countries.	1836.	1837.	1838.	1839.	1840.	1841.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
Russia - - - -	1,127,283	1,276,924	1,038,762	1,215,161	1,115,041	1,018,446
Italy and the Italian Islands -	14,032	1,571	10,012	27,050	11,628	1,179
States of the Rio de la Plata -	8,386	16,808	41,150	55,024	62,723	206,326
All other countries - -	36,663	19,446	32,525	33,293	11,097	16,602
Total imported - -	1,186,364	1,314,649	1,122,449	1,330,528	1,200,489	1,242,553
Retained for consumption -	1,314,085	1,289,513	1,160,167	1,148,192	1,131,513	1,241,278

The price of tallow fluctuated very much during the war. This was occasioned, principally, by the obstacles that were at different periods thrown in the way of supplies from Russia. The price of tallow is also affected by the state of the seasons. Some very extensive speculations have at various periods been attempted in tallow; but seldom, it is believed, with much advantage to the parties.

Account of the Price of Tallow in the London Market, in July 1843.

		s. d.			s. d.
British town -	per cwt.	45 0	Russian, d. p. yellow - -	per cwt.	42 0
Fat by town -	per 8 lb.	2 5½	white - -		—
Stuff, melted -	per cwt.	34 0	South American d. p. - -		— 36 0 to 40 0
rough -		— 25 0	Soap, d. p. Archangel - -		—
Candle, moulds -	per dozen	9 6	St. Petersburg - -		— 41 3
dip -		— 8 0	Siberia - -		— 41 6
greaves -	per cwt.	18 0			

TALLY TRADE, the name given to a system of dealing carried on in London and other large towns, by which shopkeepers furnish certain articles on credit to their customers, the latter agreeing to pay the stipulated price by certain weekly or monthly instalments.

In the metropolis there are about 60 or 70 tally-shops of note; and from 500 to 600 on a smaller scale. They are also spread over the country to a considerable extent, particularly in the manufacturing districts. The customers of the tally-shops are mostly women; consisting, principally, of the wives of labourers, mechanics, porters, &c., servant girls, and females of loose character. Few only of the more respectable classes have been infatuated enough to resort to them. Drapery goods, wearing apparel, coals, household furniture, hardware, &c. are furnished; and even funerals are performed; but few or no articles of food, except tea, are sold upon the tally plan.

We believe that this is the very worst mode in which credit is afforded. The facility which it gives of obtaining an article when wanted, and the notion so apt to be entertained that the weekly or monthly instalments may be paid without difficulty, make those who resort to the tally-shops overlook the exorbitant price, and usual bad quality, of the articles they obtain from them; and generates habits of improvidence that seldom fail to involve the parties in irretrievable ruin. It is not going too far to say that nine tenths of the articles supplied by tally-shops might be dispensed with. As already observed, women are the principal customers; and it is not easy to exaggerate the mischief that has been entailed on the families of many industrious labourers by their wives having got entangled with tally-shops. They buy goods without the knowledge of their husbands; and these are not unfrequently pawned, and the proceeds spent in gin. So destructive, indeed, is the operation of the system, that the establishment of a tally-shop in any district is almost certain to occasion an increase in the paupers belonging to it. Even the unmarried females who do not pay are demoralised and ruined by the system; because, if a woman who buys 3 gowns pays for the 2 first, and runs away from the payment of the last, she gains nothing *in point of saving*, while she becomes indifferent to an act of dishonesty. As tally debts can only be collected whilst a supply of goods is kept up, as soon as that supply is stopped, the debtor either flies to another district, or awaits a summons. Where the wife has contracted the debt, she usually appears before the commissioners, who in general order the debt to be paid by weekly or monthly instalments. But it often occurs, from the wife not being able to keep up such payments, that execution issues, and the poor husband is frequently arrested and lodged in prison for a debt, of the existence of which he was entirely ignorant. In this way, numbers of the working classes are completely ruined; they lose their employment, and themselves and families are reduced to beggary. The intelligent keeper of Whitecross-street prison (Mr. Barrett) stated, that from 150 to 200 persons are annually imprisoned there for tally-shop debts, in sums of from 10*s*. to 5*l*., and that in one year 30 prisoners were at the suit of one tally-shop alone! Such imprisonments, however, are now much decreased, in consequence, as is believed, of the Court of Requests discouraging the tally system, by ordering claims of *this* kind to be paid by *extremely small* instalments, and these at *very distant* intervals; and also in consequence of no composition being allowed by the charities for the relief of poor prisoners with reference to such debts.

It is estimated that in London alone about 850,000*l*., or nearly 1,000,000*l*. sterling, is annually returned in this trade. From his large profits (generally from 25 to 40

per cent.), it is obvious that in a few transactions the tally-shop keeper becomes independent of the existing debt; and with capital and good management, it is said that some have realised considerable sums of money in this business.

According to the custom of the trade, Mondays, Tuesdays, Wednesdays, and Thursdays are the days set apart for collecting money from the customers. The tally-man sends round his collector through the different "walks," and the amount of a collection which keeps the collector engaged from morning till night, even in a good tally concern, seldom exceeds 4*l.* a day. The payments are invariably made in *shillings* and *sixpences* — but the people seldom or never pay at the tally-shops; they rarely call there unless something else is wanted. The tally-shop keeper trusts one party on the recommendation of another; but guarantees are never required — certainly no *written* guarantees; and a verbal guarantee is, according to Lord Tenterden's act, not binding. It is part of the collector's business, besides getting money, to beat up for fresh customers in his walk.

The greater number of the small tally concerns are kept by Scotchmen; it is a curious fact, that when a "Tally-walk" is to be sold, which is often the case, a Scotchman's walk will bring 15 per cent. more than an Englishman's! It is believed to contain a better description of customers.

From the causes above mentioned, assisted, perhaps, by the salutary influence of Savings Banks, this obnoxious trade is understood to be rather on the wane. It will never, however, be completely rooted out, except by adopting the plan we have previously suggested — (see CREDIT) — for placing all small debts beyond the pale of the law; and the fact, that the adoption of this plan would have so beneficial a result, is an additional and powerful recommendation in its favour. In cases where failures take place, the creditors of a tally-shop keeper are in general *terrified* into the acceptance of a small composition. The very sight of the tally Ledgers, from 10 to 20 in number, containing debts from 5*s.* to 5*l.*, dotted over the pages like a small pattern on a piece of printed cotton, and spread over every district in and round London, determines the creditors to accept of any offer, however small, rather than encounter the collection of such disreputable assets. In an affair of this kind, concluded a few years since, where the business was under the management of a respectable accountant in the city, the whole debts due to the concern, good, bad, and doubtful, amounted to 8,700*l.*, while the number of debtors was 7,600! giving an average of 22*s.* 10*d.* each.

N. B. — This article has been compiled wholly from *private*, but *authentic*, *information*.

TAMARINDS (Ger. *Tamarinden*; Fr. *Tamarins*; It. and Sp. *Tamarindo*; Arab. *Umblie*; Hind. *Tintiri*), the fruit of the *Tamarindus Indica*, a tree which grows in the East and West Indies, in Arabia, and Egypt. In the West Indies the pods or fruit, being gathered when ripe, and freed from the shelly fragments, are placed in layers in a cask, and boiling syrup poured over them, till the cask be filled: the syrup pervades every part quite down to the bottom; and when cool, the cask is headed for sale. The East India tamarinds are darker coloured and drier, and are said to be preserved without sugar. When good, tamarinds are free from any degree of mustiness; the seeds are hard, flat, and clean; the strings tough and entire; and a clean knife thrust into them does not receive any coating of copper. They should be preserved in closely covered jars. — (*Thomson's Dispensatory.*) The duty on tamarinds produced, in 1840, 572*l.* It was fixed, in 1842, at 3*d.* per lb. on those from a foreign country, and at 1*d.* on those from a British possession.

TAPIOCA, a species of starch or white coarse powder derived from the roots of the bitter cassava (*Jatropha manihot*), an American plant, raised all over South America, but principally in Brazil, where it is called *mandioc* or *manioc*. The roots of the plant, being peeled, are subjected to pressure in a kind of bag made of rushes; the juice which is forced out by this process being a deadly poison, and employed as such by the Indians to poison their arrows! But the residuum, or farinaceous matter remaining after the expulsion of the juice, is perfectly wholesome, and makes excellent bread. Tapioca, as stated above, is prepared from this residuum; and, being nutritious and easy of digestion, is extensively used in the making of puddings. When dressed, it is not easily distinguished from sago. Tapioca is almost wholly brought from Brazil, the imports thence having amounted, at an average of the 10 years ending with 1842, to 1,541 cwts. a year. (See *antè*, p. 1065.)

TAR (Fr. *Goudron*; Ger. *Theer*; It. *Catrame*; Pol. *Smola gesta*; Rus. *Degot*, *Smola shithaja*; Sw. *Tjära*), a thick, black, unctuous substance, chiefly obtained from the pine, and other turpentine trees, by burning them in a close smothering heat.

The tar of the north of Europe is very superior to that of the United States, and is an article of great commercial importance. The process followed in making it has been described as follows by Dr. Clarke: — "The inlets of the gulph (Bothnia) everywhere appeared of the grandest character; surrounded by noble forests, whose tall trees,

flourishing luxuriantly, covered the soil quite down to the water's edge. From the most southern parts of Westro-Bothnia, to the northern extremityof the gulph, the inhabitants are occupied in the manufacture of tar; proofs of which are visible in the whole extent of the coast. The process by which the tar is obtained is very simple: and as we often witnessed it, we shall now describe it, from a tar-work we halted to inspect upon the spot. The situation most favourable to the process is in a forest near to a marsh or bog; because the roots of the fir, from which tar is principally extracted, are always most productive in such places. A conical cavity is then made in the ground (generally in the side of a bank or sloping hill); and the roots of the fir, together with logs and billets of the same, being neatly trussed in a stack of the same conical shape, are let into this cavity. The whole is then covered with turf, to prevent the volatile parts from being dissipated, which, by means of a heavy wooden mallet, and a wooden stamper worked separately by two men, is beaten down and rendered as firm as possible above the wood. The stack of billets is then kindled, and a slow combustion of the fir takes place, without flame, as in making charcoal. During this combustion the tar exudes; and a cast iron pan being at the bottom of the funnel, with a spout which projects through the side of the bank, barrels are placed beneath this spout to collect the fluid as it comes away. As fast as the barrels are filled, they are bunged, and ready for immediate exportation. From this description it will be evident that the mode of obtaining tar is by a kind of distillation *per descensum*; the turpentine, melted by fire, mixing with the sap and juices of the fir, while the wood itself, becoming charred, is converted into charcoal. The most curious part of the story is, that this simple method of extracting tar is precisely that which is described by Theophrastus and Dioscorides; and there is not the smallest difference between a tar-work in the forests of Westro-Bothnia, and those of ancient Greece. The Greeks made stacks of pine; and having covered them with turf, they were suffered to burn in the same smothered manner; while the tar, melting, fell to the bottom of the stack, and ran out by a snfall channel cut for the purpose."

Of 14,146 lasts of tar imported in 1840, 12,233 were brought from Russia, 605 from Sweden, and 1,243 from the U. States. The last contains 12 barrels, and each barrel 31½ gallons.

Tar produced or manufactured in Europe is not to be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under penalty of forfeiting the same, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

TARE, an abatement or deduction made from the weight of a parcel of goods, on account of the weight of the chest, cask, bag, &c. in which they are contained. Tare is distinguished into *real tare*, *customary tare*, and *average tare*. The first is the actual weight of the package; the second, its supposed weight according to the practice among merchants; and the third is the medium tare, deduced from weighing a few packages, and taking it as the standard for the whole. In Amsterdam, and some other commercial cities, tares are generally fixed by custom; but in this country, the prevailing practice, as to all goods that can be unpacked without injury, both at the custom-house and among merchants, is to ascertain the real tare. Sometimes, however, the buyer and seller make a particular agreement about it. We have, for the most part, specified the different tares allowed upon particular commodities, in the descriptions given of them in this work. — (For the tares at Amsterdam, Bordeaux, &c., see these articles; see also ALLOWANCES.)

TARE, VETCH, OR FITCH, a plant (*Vicia sativa* Lin.) that has been cultivated in this country from time immemorial; principally for its stem and leaves, which are used in the feeding of sheep, horses, and cattle; but partly, also, for its seed. Horses thrive better upon tares than upon clover and rye grass; and cows that are fed upon them give most milk. The seed is principally used in the feeding of pigeons and other poultry. The entries for consumption amount to about 230,000 bushels a year.

TARIFF, a Table, alphabetically arranged, specifying the various duties, drawbacks, bounties, &c. charged and allowed on the importation and exportation of articles of foreign and domestic produce.

The first two columns of the subjoined Table contain an account of the duties existing on the 1st January, 1844, on the various articles of consumption imported into the U. Kingdom, distinguishing between the duties where the articles come from foreign countries and colonial possessions. Most part of these duties were imposed by the Tariff Act of 1842, 5 & 6 Vict. c. 47. The passing of this act forms an important æra in the history of commercial and financial legislation. It abolished numerous prohibitions, especially those against importing cattle, sheep, hogs, salmon, &c., which are now admitted on payment of reasonable duties; while, by reducing the duties on many important articles, it will, no doubt, materially increase their importation, and, most probably, also, the revenue derived from them. But it is essential to bear in mind, that, owing to the reciprocity which is of the essence of all commercial transactions, it is impossible to increase the importation of foreign articles, without, at the same time, proportionally increasing the exportation of the native products with which the former

must be paid. It is, therefore, no easy matter to estimate the probable influence of so extensive a measure as the new tariff on the trade and future prosperity of the empire. There can, however, be no doubt that it will be very considerable; and it is, indeed, most probable that it will not only materially deepen and enlarge the existing channels of commercial intercourse, but that it will gradually open others with which we may now, perhaps, be wholly unacquainted.

It is true that this tariff leaves much to be desired; and that, exclusive of the duties on corn and timber, which should be placed on a totally different footing, those on foreign sugar, tea, foreign spirits, tobacco, silk goods, gloves, and a few more articles, are still a great deal too high. But how defective soever, the existing tariff is a vast improvement on that by which it was preceded, and reflects the greatest credit on the administration of Sir Robert Peel.

In the schedule annexed to the Tariff Act, the duties are divided into no fewer than 19 different classes. It is needless, however, to say, that a table of this sort is quite unsuitable for consultation, it being frequently no easy matter to tell the class to which an article belongs, and consequently to find it. We, therefore, have thrown the following table into an alphabetical form; and in order to show the amount of the customs duties at different periods, we have subjoined to the table of existing duties two additional columns; the first exhibiting the amount of the customs duties in 1819, as fixed by the act 59 Geo. 3. c. 52.; and the second, their amount in 1787, as fixed by Mr. Pitt's Consolidation Act, the 27 Geo. 3. c. 13. The reader has, therefore, before him, and may compare the present customs duties with the duties as they existed after the termination of the last war and of the American war. No table of the sort is to be met with in any other publication, unless it be purloined from this. It was furnished for our former edition by Mr. J. D. Hume, of the Board of Trade.

Table exhibiting the Duties payable on the 1st of January, 1844, on Goods, Wares, and Merchandise imported into the U. Kingdom, from Foreign Parts; and those payable on the same articles in 1819 and 1787.

N.B. — It is enacted by the Act 5 & 6 Victoria, cap. 47. s. 42., that, in addition to the duties on imports in the following table, a farther duty of 4*d.* per gallon shall be charged on all spirits and strong waters imported into the United Kingdom, and a farther duty of 5 per cent. on the amount of the duties on the other articles, with the exception of corn.

Articles.	Rates of Duty in 1844. From Foreign Countries.	Rates of Duty in 1844. From British Possessions.	Duty, 1819.	Duty, 1787.*
	£ s. d.	£ s. d.		
A.				
Acetous acid. *See* Vinegar, in Liquids.				
Acorns. *See* Seed.				
Agates, or cornelians, [illegible]ery 100*l.* value	5 0 0		20 0 0	} 27 10 0
set, for every 100*l.* value	15 0 0		60 0 0	
Alabaster. *See* Gypsum, in Stones.				
Alkali, not being barilla, per cwt.			0 11 4	
Alkanet root, per cwt.			4 13 4	
Almond paste, for every 100*l.* value	20 0 0	20 0 0	60 0 0	
Almonds. *See* Fruit.				
Aloes, per lb.			0 2 6	
Alum, per cwt.			0 17 6	
roch, per cwt.			0 11 8	0 3 0
Amber, rough, per lb.			0 1 8 per lb.	0 1 3 per lb.
manufactures of amber, not enumerated, for every 100*l.* value	15 0			27 10 0 per cent.
Ambergris, per oz.	0 0			0 2 0
Amboyna or Kyabucca wood. *See* Wood.				
Anchovies. *See* Fish.				
Angelica, per cwt.	0 4 0	0 4 0		
Animals (living), viz. —				
asses, each	0 2 6	0 1 3		27 10 0 per cent.
goats, each		0 0 6		
kids, each		0 0 6		
oxen and bulls, each		0 10 0		
cows, each		0 7 6		
calves, each	0 10 0	0 5 0		
horses, mares, geldings, colts, and foals, each	1 0 0	0 10 0	6 13 0	2 4 0
mules, each	0 2 6	0 1 3	5 0 0	27 10 0 per cent.
sheep, each	0 3 0	0 1 6		
lambs, each	0 2 0	0 1 0		
swine and hogs, each	0 5	0 2		
pigs (sucking), each	0 2	0 1 0		
poultry, for every 100*l.* value	5 0	2 10 0		
Annotto, roll and flag, per cwt.	0 1	0 1 0	2 6 8 Roll, 5*l.* 12*s.*	
Antimony, viz.—				
ore, per ton		0 1 0	20 0 0 per cent.	27 10 0 per cent.
crude, per cwt.		0 0 6	0 15 0	0 4 8
regulus, per cwt.		0 1 0	2 0 0	0 9 4
Apples. *See* Fruit.				
Aquafortis, per cwt.		0 5 0	0 14 3	0 4 8
Argol, per cwt.	0 0	0 0 6	0 4 9	Free.
Aristolochia, per cwt.	0 1	0 1 0	0 0 10 per lb.	0 0 3 per lb.
Arquebusade water. *See* Spirits.				
Arrowroot, per cwt.		0 1 0	0 0 2 per lb.	27 10 0 per cent.
Arsenic, per cwt.		0 0 6	0 14 3	0 4 8
Asafœtida. *See* Gum.				

* By act 27 Geo. 3. c. 13., and 28 Geo. 3. c. 27., certain goods were allowed to be imported from France and Holland, on payment of duty, until the 10th of May, 1800, although prohibited to be imported from other countries.

Articles.	Rates of Duty in 1844. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.	Duty, 1787. £	s.	d.
Ashes, viz. —												
pearl and pot, per cwt.	0	0	6	Free.			0	11	2			
soap, weed, and wood, per cwt.	0	0	6	Free.			0	1	8	0	2	3
not enumerated, for every 100*l.* value	5	0	0	Free.			20	0	0	0	0	7
Asphaltum, per ton	0	1	0	0	1	0	4	13	4 per cwt.	27	10	0
Asses. *See* Animals.										0	18	8 per cwt.
B.												
Bacon, per cwt.	0	14	0	0	5	6	2	16	0			
Balm of Gilead. *See* Balsam.										2	7	0
Balsam, viz. —												
Canada, per lb.	0	0	1	0	0	1	0	1	3			
capivi, per cwt.	0	4	0	0	4	0	11	4	0	0	0	3
Peru, per lb.	0	0	3	0	0	3	0	4	6	4	4	0
Riga, per lb.	0	0	1	0	0	1	0	1	0	0	1	6
and further, as foreign spirits, for every gallon	1	2	10	1	2	10	1	10	6	0	1	6
Tolu, per lb.	0	0	2	0	0	2	0	4	6			
balm of Gilead, and all balsams not otherwise enumerated or described, per lb.	0	0	6	0	0	6	0	4	6	0	1	6
Bandstring twist, the dozen knots, each knot containing 32 yards	0	5	0	0	2	6	0	5	0	0	1	6
Barilla, per ton	0	5	0	0	5	0	As Alkali.			0	2	3
Bark, viz.										5	5	0
Peruvian and cascarilla, per cwt.	0	1	0	0	1	0	0	2	0 per lb.			
of other sorts, per cwt.	0	1	0	0	1	0	0	2	0 per lb.	0	0	9 per lb.
for tanners' or dyers' use, per cwt.	0	0	3	0	0	1	0	0	8	0	0	2 per lb.
extract of, or of other vegetable substances to be used only for tanning leather, per cwt.	0	1	0	0	0	1	0	3	0	0	0	1
Barwood. *See* Wood.										27	10	0 per cent.
Basket rods, peeled, not exceeding 3 feet in circumference at the band, per bundle	0	0	6	0	0	6	0	3	2			
unpeeled, per bundle	0	0	3	0	0	3				0	1	6
Baskets, for every 100*l.* value	10	0	0	10	0	0	50	0	0			
Bast ropes, twines, and strands, per cwt.	0	5	0	0	2	6	0	10	0	27	10	0
Bast or straw hats or bonnets. *See* Hats, and Plaiting.										0	1	10
Beads, viz. —												
arango, for every 100*l.* value	15	0	0	15	0	0	31	5	0	31	13	4
coral, for every 100*l.* value	15	0	0	15	0	0	0	15	10 per lb.	0	4	5 per lb.
jet, for every 100*l.* value	15	0	0	15	0	0	0	3	2 per lb.	0	1	5 per lb.
crystal. *See* Crystal.												
not otherwise enumerated or described, for every 100*l.* value	15	0	0	15	0	0	50	0	0	27	10	0
Beads and bugles of glass, per lb.	0	0	3	0	0	3						
Beans, kidney and French, per bushel	0	0	10	0	0	5	0	0	10	27	10	0 per cent.
Beef. *See* Provisions.												
Beef wood. *See* Wood.												
Beer. *See* Liquids.												
Berries, viz. —												
bay, per cwt.	0	1	0	0	1	0	0	11	1	0	4	8
juniper and yellow, per cwt.	0	1	0	0	1	0						
not enumerated, commonly made use of in chemical processes, per ton	0	1	0	0	1	0	1	8	6	0	11	0
unenumerated	0	2	0	0	2	0						
Birds, viz. singing birds, per dozen	0	8	0	0	8	0	0	8	0	0	2	6
Bitumen Judaicum, per ton	0	1	0	0	1	0	4	13	4 per cwt.	0	18	8 per cwt.
Blacking, per cwt.	1	0	0	1	0	0	3	12	0	0	17	8
Blackwood. *See* Woods.												
Bladders, per dozen	0	0	3	0	0	3	0	0	6	0	0	1½
Blubber. *See* Train oil, in Oil.												
Bones of cattle and other animals, and of fish, except whale fins, whether burnt or not, or as animal charcoal, per ton	0	0	6	0	0	6	1	0	0 per cent.	27	10	0 per cent.
Bonnets. *See* Hats.												
Books, viz. —												
being of editions printed prior to the year 1801, bound or unbound, per cwt.	1	0	0	1	0	0	6	10	0 bound.	0	19	3 bound.
being of editions printed in or since the year 1801, bound or unbound, per cwt.	5	0	0	5	0	0	5	0	0 unbound.	0	8	10 unbound
being of editions in the foreign living languages printed in or since the year 1801, bound or unbound, per cwt.	2	10	0	2	10	0						
But the importation of all British works the copyright of which has not expired is prohibited. — (5 & 6 Vict. c. 47.)												
Boots, shoes, and calashes. *See* Leather												
Boracic acid, per cwt.	0	0	6	0	0	6	50	0	0 per cent.	27	10	0 per cent.
Borax, refined, per cwt.	0	5	0	0	5	0	9	6	8	5	12	0
Borax or Tincal. *See* Tincal.												
Bottles. *See* Glass.												
of earth and stone, and empty, per dozen	0	0	2	0	0	2	0	3	2	0	1	2
Boxes of all sorts, excepting those made wholly or partly of glass, on which the proper glass duty will be levied, for every 100*l.* value	10	0	0	5	0	0	50	0	0	27	10	0
Box wood. *See* Woods.												
Brass, viz. —												
manufactures of, for every 100*l.* value	15	0	0	15	0	0	50	0	0	Prohibited.		
powder of, per lb.	0	0	6	0	0	6	0	5	6	0	2	8
Brazil wood. *See* Woods.												
Brazilletto wood. *See* Woods.												
Bricks or clinkers (Dutch), per 1,000	0	10	0	0	5	0	1	2	6	0	7	2
other sorts, per 1,000	0	15	0	0	7	6						
Brimstone, per cwt.	0	0	6	0	0	3	0	15	0			
refined, in rolls, per cwt.	0	2	0	0	1	0	1	0	0	0	6	8
in flour, per cwt.	0	2	0	0	1	0	1	3	9			
Bristles, viz. —												
rough and in the tufts, and not in any way sorted, per cwt.	0	2	6	0	2	6	0	3	7 dozen lbs.	0	0	1½ per lb.
in any way sorted or arranged in colours, and not entirely rough and in the tufts, per lb.	0	0	3	0	0	3	0	12	0 dozen lbs.	0	0	2¼ per lb.
Brocade of gold or silver, for every 100*l.* value	20	0	0	20	0	0	Prohibited.			Prohibited.		
Bronze, all works of art made of bronze, per cwt.	1	0	0	1	0	0	50	0	0 per cent.	27	10	0 per cent.
other manufactures of, for every 100*l.* value	15	0	0	15	0	0						
powder, for every 100*l.* value	15	0	0	15	0	0	50	0	0 per cent.	27	10	0 per cent.
other manufactures of, for every 100*l.* value	15	0	0	15	0	0						
Bugles. *See* Glass.												
Bullion and foreign coin, of gold or silver, and ore of gold or silver, or of which the major part in value is gold or silver	Free.			Free.			Free.			Free.		

Articles.	Rates of Duty in 1844. From Foreign Countries.			From British Possessions.			Duty, 1819.			Duty, 1787.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Bullrushes, per ton	0	10	0	0	10	0	0	12	0 per load.	0	4	5 per load.
Bulls and oxen. *See* Animals, Living.												
Butter, per cwt.	1	0	0	0	5	0	1	0	0	0	2	6
Buttons, for every 100*l.* value	15	0	0	15	0	0	Prohibited.			Prohibited.		
C.												
Cables, not being iron cables, tarred or untarred, per cwt.	0	6	0	0	3	0	1	1	6	0	8	6
not being iron cables in actual use of a British ship, and being fit and necessary for such ship, and not or until otherwise disposed of	Free.			Free.			1	1	6	0	8	6
If and when otherwise disposed of, for every 100*l.* value	10	0	0	5	0	0	1	1	6	0	8	6
Calves. *See* Animals, Living.												
Cambrics. *See* Linen.												
Camomile flowers, per lb.	0	0	1	0	0	1	0	0	6	27	10	0 per cent.
Camphor, per cwt.	0	1	0	0	1	0	7	0	0	1	17	4
refined, per cwt.	0	10	0	0	10	0	14	0	0	3	14	8
Camwood. *See* Woods.												
Candles, viz. —												
spermaceti, per lb.	0	0	6	0	0	6	0	2	6	0	1	4
stearine, per lb.	0	0	2½	0	0	2½						
tallow, per cwt.	0	10	0	0	10	0	3	3	4	1	12	8
wax, per lb.	0	0	4	0	0	4	0	2	6	0	1	8
Candlewicks, per cwt.	0	8	8	0	4	4	4	8	8	1	12	8
Canella alba, per lb.	0	0	1	0	0	1	0	0	8	27	10	0 per cent.
Canes, viz. —												
bamboo, per 1,000	0	0	6	0	0	6	1	14	0	2	1	3
rattans, not ground, per 1,000	0	5	0	0	5	0	1	0	0	0	19	3
reed canes, per 1,000	0	5	0	0	5	0	1	6	6	0	11	0
walking canes or sticks, mounted, painted, or otherwise ornamented, for every 100*l.* value	20	0	0	20	0	0	50	0	0	1	18	6 per 1,000
canes or sticks unenumerated, per 1,000	0	5	0	0	5	0	4	0	0	1	18	6
Cantharides, per lb.	0	0	3	0	0	3	0	3	6	0	1	0
Caoutchouc, per cwt.	0	1	0	0	1	0	0	0	5	27	10	0 per cent.
Capers, including the pickle, per lb.	0	0	6	0	0	3	0	1	0	0	0	2
Capsicum. *See* Spices.												
Cardamoms, per lb.	0	0	2	0	0	2	0	2	0	0	0	9
extract or preparation of. *See* Essences.												
Cards, viz. playing cards, per dozen packs	4	0	0	4	0	0	4	0	0	Prohibited.		
Carmine, per oz.	0	0	6	0	0	6	0	4	0	27	10	0 per cent.
Carriages of all sorts, for every 100*l.* value	20	0	0	20	0	0	50	0	0	27	10	0
Casks, empty, for every 100*l.* value	25	0	0	25	0	0	50	0	0	0	8	3 per tun.
Cassava powder	0	5	0	0	1	0						
Cassia, viz. —												
buds, per lb.	0	0	6	0	0	3	0	2	6	0	0	4
fistula, per cwt.	0	5	0	0	5	0	0	0	10 per lb.	0	0	3 per lb.
lignea. *See* Spices.												
Castor, per cwt.	0	2	0	0	2	0	0	5	0 per lb.	0	2	0 per lb.
Casts of busts, statues, or figures, per cwt.	0	2	6	0	2	6	0	2	6	27	10	0 per cent.
Catechu. *See* Terra Japonica.												
Cattlings, per gross, containing 12 dozen knots	0	3	0	0	3	0	0	6	4	0	2	6
Caviare, per cwt.	0	5	0	0	5	0	0	12	0	0	1	5
Cedar wood. *See* Woods.												
Chalk, viz. —												
unmanufactured, and not otherwise enumerated, for every 100*l.* value	5	0	0	2	10	0	20	0	0	27	10	0
prepared or manufactured, and not otherwise enumerated, for every 100*l.* value	10	0	0	5	0	0	40	0	0	27	10	0
Cheese, per cwt.	0	10	6	0	2	6	0	10	6	0	1	6
Cherries, raw, for every 100*l.* value	5	0	0	5	0	0	0	18	8 per cwt.	0	4	5 per cwt.
dried, per lb.	0	0	6	0	0	6	0	0	8	0	4	5
Chicory, or any other vegetable matter applicable to the uses of chicory or coffee, viz. —												
roasted or ground, per lb.	0	0	6	0	0	6	20	0	0 per cent.	27	10	0 per cent.
raw, or kiln-dried, per cwt.	1	0	0	1	0	0						
Chillies. *See* Spices.												
China root, per lb.	0	0	3	0	0	3	0	1	3	0	0	5
China or porcelain ware, viz. —												
plain, for every 100*l.* value	15	0	0	15	0	0	75	0	0	47	10	0
painted, gilt, or ornamented, for every 100*l.* value	20	0	0	20	0	0						
Chip, of willow, for platting, per cwt.	0	0	1	0	0	1						
Chocolate. *See* Cocoa paste.												
Cider, per tun	10	10	0	10	10	0	14	5	0	7	7	10½
Cinders, per ton	0	1	0	0	0	6	2	0	0	27	10	0 per cent.
Cinnabaris nativa, per cwt.	0	1	0	0	1	0	0	2	0 per lb.	0	1	0 per lb.
Cinnamon. *See* Spices.												
Citrate of lime, per cwt.	0	5	0	0	5	0	0	1	6 per lb.	27	10	0 per cent.
Citric acid, per lb.	0	0	2	0	0	2	20	0	0 per cent.	27	10	0
Citron preserved with salt, for every 100*l.* value	10	0	0	10	0	0	20	0	0	27	10	0
preserved with sugar. *See* Succades.												
Citron water. *See* Spirits.												
Civet, per oz.	0	2	0	0	2	0	0	4	9	0	2	0
Clinkers. *See* Stones.												
Clocks, for every 100*l.* value	20	0	0	20	0	0	50	0	0	27	10	0
or watches of any metal, impressed with any mark or stamp appearing to be, or to represent any British assay mark or stamp, or purporting, by any mark or appearance, to be of the manufacture of the U. Kingdom	Prohibited.			Prohibited.			25	0	0 per cent.	50	0	0 per cent.
Cloves. *See* Spices.												
Coals, culm and cinders, per ton	0	1	0	0	0	6	2	0	0	0	16	10
Cobalt, per ton	0	5	0	0	5	0	20	0	0 per cent.	27	10	0 per cent.
ore, for every 100*l.* value	1	0	0	1	0	0						
Cochineal and granilla, per cwt.	0	1	0	0	1	0	0	2	6 per lb.	Free.		
dust, per cwt.	0	1	0	0	1	0	0	0	5 per lb.	Free.		
Coccullus indicus, per cwt.	0	7	6	0	7	6	0	2	6	0	0	5
extract or preparation of. *See* Extract.												
Cocoa, per lb.	0	0	4	0	0	1	Excise.			0	0	6
husks and shells, per lb.	0	0	1	0	0	0½	Prohibited.			Prohibited.		
paste and chocolate, per lb.	0	0	6	0	0	2	Prohibited.			Prohibited.		
Cocus wood. *See* Ebony, in Woods.												
Coffee, per lb.	0	0	8	0	0	4	0	2	6 excise.	0	0	4
Coin, viz. copper. *See* Copper.												
foreign, of gold or silver. *See* Bullion.												
Coir rope, twine, and strands, per cwt.	0	2	6	0	1	3	1	1	6	0	8	6
Colocynth, per lb.	0	0	1	0	0	1	0	1	8	0	0	6
Columba root, per cwt.	0	1	0	0	1	0	0	2	0 per lb.	0	0	6 per lb.

Articles.	Rates of Duty in 1844. From Foreign Countries.	Rates of Duty in 1844. From British Possessions.	Duty, 1819.	Duty, 1787.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Comfits, dry, per lb.	0 0 6	0 0 3	0 2 6	0 0 6
Copper, ore of, viz. —				
containing not more than 15 parts of copper, in 100 parts of ore, per ton of metal	3 0 0	1 0 0		
not more than 20 parts of copper in 100 parts of ore, per ton of metal	4 10 0	1 0 0	1 1 0 per cwt.	0 0 9 per cwt.
containing more than 20 parts of copper in 100 of ore, per ton of metal	6 0 0	1 0 0		
old, fit only to be remanufactured, per cwt.	0 7 6	0 3 6	1 9 2	27 10 0 per cent.
unwrought, viz. in bricks or pigs, rose copper, and cast copper, per cwt.	0 8 9	0 4 0	2 14 2	0 10 6
in part wrought, viz bars, rods, or ingots, hammered or raised, per cwt.	0 10 0	0 5 0	3 15 6	2 2 0
in plates and copper coin, per cwt.	0 10 0	0 5 0	3 0 0	0 16 0
manufactures of copper, not otherwise enumerated or described, and copper plates engraved, for every 100l. value	15 0 0	15 0 0	50 0 0	Prohibited.
copper or brass wire, for every 100l. value	12 10 0	12 10 0	5 14 0 per cwt.	2 12 3 per cwt.
Copperas, viz. —				
blue, per ton	1 0 0	0 10 0	0 5 0 per cwt.	0 2 4 per cwt.
green, per ton	1 0 0	0 10 0	0 5 0 per cwt.	0 1 8 per cwt.
white, per ton	1 0 0	0 10 0	0 12 0 per cwt.	0 4 8 per cwt.
Coral, viz. —				
in fragments, per lb.	0 0 2	0 0 1	0 1 0	0 0 3
whole, polished, per lb.	0 12 0	0 0 6	0 12 0	0 3 0
unpolished, per lb.	0 5 6	0 0 6	0 5 6	0 1 6
Cordage, tarred or untarred (standing or running rigging in use excepted), per cwt.	0 6 0	0 3 0	1 1 6	0 8 6
in actual use of a British ship, and being fit and necessary for such ship, and not or until otherwise disposed of	Free.	Free.	1 1 6 per cwt.	0 8 6
if and when otherwise disposed of, for every 100l. value	5 0 0	2 10 0	1 1 6 per cwt.	0 8 6
Cordial waters. See Spirits.				
Cork, per ton	0 1 0	0 1 0	0 8 0 per cwt.	0 3 8 per cwt.
Corks, ready made, per lb.	0 0 8	0 0 8	0 7 0	0 0 6 per gross.
squared for rounding, per cwt.	0 16 0	0 16 0		
fishermen's, per cwt.	0 2 0	0 2 0		
Corn, viz. —				

	Rates of Duty in 1844. From Foreign Countries.	Rates of Duty in 1844. From British Possessions, (except Canada).
	£ s. d.	£ s. d.
Wheat. — Whenever the average price of wheat shall be under 51s. the duty shall be, per qr.	1 0 0	
51s. and under 52s.	0 19 0	
52s. — 53s.	0 18 0	
53s. — 54s.	0 18 0	
54s. — 55s.	0 18 0	0 5 0
55s. — 56s.	0 17 0	0 4 0
56s. — 57s.	0 16 0	0 3 0
57s. — 58s.	0 15 0	0 2 0
58s. — 59s.	0 14 0	0 1 0
59s. — 60s.	0 13 0	0 1 0
60s. — 61s.	0 12 0	0 1 0
61s. — 62s.	0 11 0	0 1 0
62s. — 63s.	0 10 0	0 1 0
63s. — 64s.	0 9 0	0 1 0
64s. — 65s.	0 8 0	0 1 0
65s. — 66s.	0 7 0	0 1 0
66s. — 67s.	0 6 0	0 1 0
67s. — 68s.	0 6 0	0 1 0
68s. — 69s.	0 6 0	0 1 0
69s. — 70s.	0 5 0	0 1 0
70s. — 71s.	0 4 0	0 1 0
71s. — 72s.	0 3 0	0 1 0
72s. — 73s.	0 2 0	0 1 0
73s. and upwards	0 1 0	0 1 0

	Per Cwt.	Per Barrel of 196 lbs.	Per Cwt.	Per Barrel of 196 lbs.
	s. d.	s. d.	s. d.	s. d.
Wheaten Flour or Meal, — under 51s.	6 10½	12 0 12*		
51s. and under 52s.	6 6½	11 5 5		
52s. — 53s.	6 2½	10 9 30		
53s. — 54s.	6 2½	10 9 30	1 8½	3 0 3
54s. — 55s.	6 2½	10 9 30	1 8½	3 0 3
55s. — 56s.	5 10½	10 2 23	1 4½	2 4 28
56s. — 57s.	5 6½	9 7 16	1 0½	1 9 21
57s. — 58s.	5 1½	9 0 9	0 8½	1 2 14
58s. — 59s.	4 9½	8 5 2	0 4½	0 7 7
59s. — 60s.	4 5½	7 9 27	0 4½	0 7 7
60s. — 61s.	4 1½	7 2 20	0 4½	0 7 7
61s. — 62s.	3 9½	6 7 13	0 4½	0 7 7
62s. — 63s.	3 5½	6 0 6	0 4½	0 7 7
63s. — 64s.	3 1½	5 4 31	0 4½	0 7 7
64s. — 65s.	2 9½	4 9 24	0 4½	0 7 7
65s. — 66s.	2 4½	4 2 17	0 4½	0 7 7
66s. — 67s.	2 0½	3 7 10	0 4½	0 7 7
67s. — 68s.	2 0½	3 7 10	0 4½	0 7 7
68s. — 69s.	2 0½	3 7 10	0 4½	0 7 7
69s. — 70s.	1 8½	3 0 3	0 4½	0 7 7
70s. — 71s.	1 4½	2 4 28	0 4½	0 7 7
71s. — 72s.	1 0½	1 9 21	0 4½	0 7 7
72s. — 73s.	0 8½	1 2 14	0 4½	0 7 7
73s. and upwards	0 4½	0 7 7	0 4½	0 7 7

	Wheat per Quarter.	Wheaten Flour. Per Cwt.	Wheaten Flour. Per Barrel.
	s. d.	s. d.	s. d.
Canadian wheat and wheaten flour	1 0	0 4½	0 7 7

	Rates of Duty in 1844. From Foreign Countries.	Rates of Duty in 1844. From British Possessions (except Canada).
	£ s. d.	£ s. d.
Barley, Maize, or Indian Corn, Buck-wheat, Beer or Bigg. — Whenever the average price of barley, maize, or Indian corn, buck-wheat, beer or bigg, shall be under 26s. the duty shall be, per qr.	0 11 0	
26s. and under 27s.	0 10 0	
27s. — 28s.	0 9 0	0 2 6
28s. — 29s.	0 9 0	0 2 0
29s. — 30s.	0 9 0	0 1 6
30s. — 31s.	0 8 0	0 1 0
31s. — 32s.	0 7 0	0 0 6
32s. — 33s.	0 6 0	0 0 6
33s. — 34s.	0 5 0	0 0 6
34s. — 35s.	0 4 0	0 0 6
35s. — 36s.	0 3 0	0 0 6
36s. — 37s.	0 2 0	0 0 6
37s. and upwards	0 1 0	0 0 6
Oats. — Whenever the average price of oats shall be under 19s. the duty shall be	0 8 0	
19s. and under 20s.	0 7 0	
20s. — 21s.	0 6 0	
21s. — 22s.	0 6 0	0 2 0
22s. — 23s.	0 6 0	0 1 6
23s. — 24s.	0 5 0	0 0 6
24s. — 25s.	0 4 0	0 0 6
25s. — 26s.	0 3 0	0 0 6
26s. — 27s.	0 2 0	0 0 6
27s. and upwards	0 1 0	0 0 6
Rye, Peas, and Beans. — When the average price of rye, peas or beans shall be under 30s. the duty shall be	0 11 6	0 3 0
30s. and under 31s.	0 10 6	0 2 6
31s. — 32s.	0 10 6	0 2 0
32s. — 33s.	0 10 6	0 1 6
33s. — 34s.	0 9 6	0 1 0
34s. — 35s.	0 8 6	0 0 6
35s. — 36s.	0 7 6	0 0 6
36s. — 37s.	0 6 6	0 0 6
37s. — 38s.	0 5 6	0 0 6
38s. — 39s.	0 4 6	0 0 6
39s. — 40s.	0 3 6	0 0 6
40s. — 41s.	0 2 6	0 0 6
41s. — 42s.	0 1 6	0 0 6
42s. and upwards	0 1 0	0 0 6

* The fractions under Barrel of Flour are so many 32 parts of a penny, and under Oatmeal so many 121 parts of a penny.

	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions, (Canada excepted). £ s. d.
Oatmeal. — Whenever the average price of oatmeal shall be under 19*s.* the duty shall be, per cwt. - -	0 4 11 29	
19*s.* and under 20*s.* - -	0 4 3 101	
20*s.* — 21*s.* - -	0 3 8 52	0 1 2 98
21*s.* — 22*s.* - -	0 3 8 52	0 0 11 13
22*s.* — 23*s.* - -	0 3 8 52	0 0 11 13
23*s.* — 24*s.* - -	0 3 1 3	0 0 3 85
24*s.* — 25*s.* - -	0 2 5 75	0 0 3 85
25*s.* — 26*s.* - -	0 1 10 26	0 0 3 85
26*s.* — 27*s.* - -	0 1 2 98	0 0 3 85
27*s.* and upwards - -	0 0 7 49	0 0 3 85
Wheaten Flour or Meal. — For every barrel being 196 lbs. a duty equal to the duty payable on 384 galls. of wheat.		
Oatmeal. — For every 180½ lbs. a duty equal to the duty payable on a quarter of oats.		

The act 5 & 6 Vict. c. 47. s. 53. makes the following abatements from the duties on corn, on account of waste in the warehouse: — In respect of any wheat, barley, rye, or oats, lodged in warehouses without payment of duty on the first importation thereof, the following allowances for natural waste shall be made upon the exportation thereof, or the entry thereof for home consumption; viz. —

On all wheat, barley, and rye, except as below, which has been in warehouse 1 month and less than 3 months, there shall be allowed 1½ per cent.:

On all wheat, barley, and rye, except as below, which has been in warehouse 3 months and less than 6 months, there shall be allowed 2 per cent.:

On all wheat, barley, and rye, except as below, which has been in warehouse 6 months and less than 12 months, there shall be allowed 2½ per cent.:

And on all wheat, barley, and rye, except as below, which has been in warehouse 12 months and upwards, there shall be allowed 3 per cent.:

On oats, except as below, which has been in warehouse 1 month and less than 3 months, there shall be allowed 2½ per cent.:

On oats, except as below, which have been in warehouse 3 months and less than 6 months, there shall be allowed 3½ per cent.:

On oats, except as below, which have been in warehouse 6 months and less than 12 months, there shall be allowed 4½ per cent.:

On oats, except as below, which have been in warehouse 12 months and upwards, there shall be allowed 5 per cent.

The exception referred to above is, that only half the above allowances directed to be made on wheat, barley, and oats respectively shall be made upon Spanish wheat, barley, and oats, and upon wheat and barley kiln-dried abroad; and that no such allowance shall be made in respect of rye that has been kiln-dried, and also, that no allowance shall be made unless there be an actual deficiency in the quantity of the wheat, rye, barley, and oats originally warehoused.

N.B. — For an account of the duties on corn in former periods, see art. CORN TRADE AND CORN LAWS, *ante*, p. 391—398.

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Cotton, manufactures of, for every 100*l.* value -	10 0 0	5 0 0	50 0 0	44 0 0
yarn, for every 100*l.* value -	10 0 0	5 0 0		
articles or manufactures of cotton, wholly or in part made up, not otherwise charged with duty, for every 100*l.* value -	20 0 0	10 0 0	50 0 0	44 0 0
wool, or waste of cotton wool. *See* Wool.				
Cows. *See* Animals.				
Cranberries, per gallon - -	0 0 1	0 0 1	0 1 3	27 10 0 per cent.
Crayons, for every 100*l.* value -	15 0 0	15 0 0	40 0 0	27 10 0
Cream of tartar, per cwt. - -	0 1 0	0 1 0	0 15 10	0 4 8
Crystal, viz. —				
rough, for every 100*l.* value -	5 0 0	2 10 0	20 0 0	27 10 0
cut, or manufactured, except beads, for every 100*l.* value - -	15 0 0	15 0 0	60 0 0	27 10 0
beads, per 1,000 - -	0 5 0	0 5 0		
Cubebs, per lb - -	0 0 1	0 0 1	0 2 0	0 0 2
Cucumbers, viz. —				
preserved, for every 100*l.* value -	10 0 0	5 0 0	20 0 0	27 10 0
Culm, per ton - -	0 1 0	0 0 6	2 0 0	0 12 7
Currants, per cwt. - -	1 2 2	1 2 2	2 4 4	1 3 4
Cutch, per ton - -	0 5 0	0 5 0		
D.				
Damask. *See* Linen.				
Dates, per cwt. - -	0 10 0	0 10 0	4 10 3	2 6 3
Diamonds - -	Free.	Free.	Free.	Free.
Dice, per pair - -	1 6 2	1 6 2	1 6 2	Prohibited.
Divi divi, per ton - -	0 5 0	0 5 0		
Down, per lb. - -	0 1 3	0 0 7½	0 1 3	0 0 6
Drawings. *See* Prints.				
Drugs, not enumerated, per cwt. -	0 1 0	0 1 0	50 0 0 per cent.	27 10 0 per cent.
E.				
Earthenware, not otherwise enumerated or described, for every 100*l.* value -	10 0 0	10 0 0	75 0 0	41 16 0
Ebony. *See* Woods.				
Eggs, per 120 - - -	0 0 10	0 0 2½	0 0 10	0 0 5
Embroidery and needlework, every 100*l.* value -	20 0 0	20 0 0	Prohibited.	Prohibited.
Enamel, per lb. - - -	0 2 0	0 2 0	0 7 2	0 3 4
Essences not otherwise described, viz. —				
extract of cardamoms, for every 100*l.* value -	20 0 0	20 0 0	75 0 0	27 10 0
cocculus indicus, for every 100*l.* value -	20 0 0	20 0 0	75 0 0	27 10 0
Guinea grains of Paradise, for every 100*l.* value	20 0 0	20 0 0	75 0 0	27 10 0
liquorice, for every 100*l.* value - -	20 0 0	20 0 0	75 0 0	27 10 0
nux vomica, for every 100*l.* value - -	20 0 0	20 0 0	75 0 0	27 10 0
opium, for every 100*l.* value - -	20 0 0	20 0 0	75 0 0	27 10 0
Guinea pepper, for every 100*l.* value -	20 0 0	20 0 0	75 0 0	27 10 0
Peruvian or Jesuits' bark, for every 100*l.* value	20 0 0	20 0 0	0 5 0 per lb.	27 10 0 per cent.
quassia, for every 100*l.* value - -	20 0 0	20 0 0	75 0 0	27 10 0
radix rhatanise, for every 100*l.* value -	20 0 0	20 0 0	0 5 0 per lb.	27 10 0
vitriol, for every 100*l.* value -	20 0 0	20 0 0	75 0 0	27 10 0
Extract or preparation of any article, not being particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value -	20 0 0	20 0 0	50 0 0	27 10 0
or, and in lieu of the above duty, at the option of the importer, per lb. -	0 5 0	0 5 0	Option not existing.	
nuts or kernels thereof, not particularly enumerated or described, and commonly used for expressing oil therefrom, per ton -	0 1 0	0 0 6		
Essences, viz. —				
being oil. *See* Essential Oil, in Oil.				
of spruce. *See* Liquids.				
Euphorbium, per cwt. - -	0 1 0	0 1 0	3 14 8	0 18 8
Ether, from Guernsey, Jersey, Alderney, Sark, or Man, (Custom-house order, 8th May, 1830,) per gallon - - -	0 19 7			
F.				
Feathers for beds, in beds or otherwise, per cwt. -	1 0 0	0 10 0	4 8 8	1 6 0
ostrich, dressed, per lb. - -	1 10 0	1 10 0	2 15 6	0 8 10
undressed, per lb. - -	0 0 1	0 0 1	1 0 0	0 4 5
not otherwise enumerated or described, viz. —				
dressed, for every 100*l.* value -	10 0 0	10 0 0	50 0 0	27 10 0
undressed, for every 100*l.* value -	5 0 0	5 0 0	20 0 0	27 10 0
paddy birds', per lb. - -	0 1 0	0 1 0		

TARIFF.

Articles.	Rates of Duty to 1811. From Foreign Countries.			From British Possessions.			Duty, 1819.			Duty, 1787.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Figs, per cwt.	0	15	0	-		-	1	1	6	0	14	10
Fish, viz.—												
anchovies, per lb.	0	2	8	-		-	0	1	0	0	0	11
eels, the ship lading	13	0	0	-		-	13	1	3	4	13	6
lobsters	Free.			-		-	Free.			Free.		
turbots, per cwt	0	3	0	-		-	Free.			Free.		
of foreign taking, imported from foreign places, in other than fishing vessels, viz.—												
oysters, per bushel	0	1	6	-		-	0	1	6	0	0	6
salmon, per cwt.	0	10	0	-		-	Prohibited.					
sides, per cwt.	0	5	0									
turtle, per cwt.	0	5	0									
fresh, not otherwise enumerated, per cwt.	0	1	0	-		-	Prohibited.					
cured, not otherwise enumerated, per cwt.	0	2	0									
of British taking, fresh or cured	Free.			Free.			Free.			Free.		
Fishing nets, old. *See* Rags.												
Flax and tow, or codilla of hemp or flax, dressed, per cwt.	0	0	1	0	0	1	10	14	6	5	4	6
undressed, per cwt.	0	0	1	0	0	1	0	0	5	Free.		
Flocks, per cwt.	0	5	0	0	2	6	0	19	0	0	8	10
Flower roots, for every 100*l.* value	5	0	0	5	0	0	20	0	0	27	10	0
Flowers, artificial, not made of silk, every 100*l.* value	25	0	0	25	0	0	50	0	0	27	10	0
Fossils. *See* Minerals, in Ores.												
specimens. *See* ditto, in ditto.												
Frames for pictures, prints, or drawings, for every 100*l.* value	10	0	0	10	0	0	50	0	0	27	10	0
Frankincense. *See* Olibanum.												
Fruit, viz.—												
raw, and not otherwise enumerated, for every 100*l.* value	5	0	0	5	0	0	20	0	0	27	10	0
almonds, not Jordan nor bitter, per cwt.	0	10	0	0	10	0	2	7	6	1	3	2
Jordan, per cwt.	1	5	0	1	5	0	4	15	0	2	6	3
bitter, per cwt.	0	2	0	0	2	0	1	11	8	0	14	0
paste of, for every 100*l.* value	20	0	0	20	0	0	60	0	0	27	10	0
apples, raw, per bushel	0	0	6	0	0	2	0	4	0	0	2	4
dried, per bushel	0	2	0	0	2	0	0	7	0	0	3	0
berries, unenumerated, per cwt.	0	2	0	0	2	0	1	3	6	0	11	0
cherries, raw, for every 100*l.* value	5	0	0	5	0	0	0	18	8 per cwt.	0	4	5 per cwt.
dried, per lb.	0	0	6	0	0	6	0	0	8			
citron, preserved with salt, for every 100*l.* value	10	0	0	10	0	0	20	0	0	27	10	0
cranberries, per gallon	0	0	1	0	0	1	0	1	3	27	10	0 per cent.
currants, per cwt.	1	2	2	1	2	2	2	4	4	1	3	4
dates, per cwt.	0	10	0	0	10	0	4	10	3	2	6	3
figs, per cwt.	0	15	0	0	15	0	1	1	6	0	12	10
grapes, for every 100*l.* value	5	0	0	5	0	0	50	0	0	27	10	0
medlars, per bushel	0	1	0	0	0	6	0	5	0	0	2	4
nuts, viz.—												
chesnuts, per bushel	0	2	0	0	2	0	0	4	0	0	1	5
cocoa nuts, per 1,200	-		-	0	1	0	20	0	0 per cent.	27	10	0 per cent.
pistachio nuts, per cwt.	0	10	0	0	10	0	4	13	4	1	8	0
small nuts, per bushel	0	2	0	0	2	0	0	4	0	0	0	9
walnuts, per bushel	0	2	0	0	2	0	0	4	0	0	0	9
nuts, not otherwise enumerated, except such as are commonly used for expressing oil therefrom, for every 100*l.* value	20	0	0	20	0	0	20	0	0	27	10	0
olives, per gallon	0	2	0	0	2	0	0	3	0	0	0	8
oranges and lemons, viz.—												
in chests and boxes not exceeding 5,000 cubic inches, per box	0	2	6	0	2	6						
over 5,000 cubic inches, and not exceeding 7,300 per box	0	3	9	0	3	9	1	5	0 per 1,000 oranges and lemons.	0	4	5 per 1,000 oranges and lemons.
over 7,300 cubic inches, and not exceeding 14,000, per box	0	7	6	0	7	6						
for every 1,000 cubic inches exceeding 14,000	0	0	7½	0	0	7½						
loose, per 1,000	0	15	0	0	15	0	1	5	0	0	4	5
entered at value, at the option of the importer, for every 100*l.* value	75	0	0	75	0	0	No option.			No option.		
pears, raw, per bushel	0	0	6	0	0	3	0	7	6	0	1	5
dried, per bushel	0	2	0	0	2	0	0	10	0	0	0	9
peel of lemons, per cwt.	0	1	0	0	1	0	0	0	5 per lb.	27	10	0 per cent.
of oranges, per cwt.	0	1	0	0	1	0	0	0	6 per lb.	27	10	0 per cent.
of pomegranates, per cwt.	0	1	0	0	1	0	0	15	0	0	4	8
plums (commonly called French plums) and prunelloes, per cwt.	1	0	0	1	0	0	7	0	6	1	8	0
dried or preserved, per cwt.	1	7	6	1	7	6	7	0	0	1	8	0
pomegranates, per 1,000	0	5	0	0	5	0	1	10	0	0	8	10
prunes, per cwt.	0	7	0	0	7	0	1	7	6	0	12	5
quinces, per 1,000	0	1	0	0	1	0	2	0	0	0	18	4
raisins, per cwt.	0	15	0	0	7	6						
tamarinds, per lb.	0	0	3	0	0	1	0	0	8	0	0	
Fustic, per ton	0	2	0	0	1	0	1	4	6	Free.		
G.												
Galls, per cwt.	0	1	0	0	1	0	0	11	2	Free.		
Gamboge, per cwt.	0	1	0	0	1	0	9	6	8	2	16	0
Garnets, per lb.	0	5	0	0	5	0	0	10	0	0	4	5
cut, per lb.	0	15	0	0	15	0	1	10	0	0	13	3
Garancine, per cwt.	0	5	0	0	5	0						
Gauze of thread, for every 100*l.* value	15	0	0	7	10	0	50	0	0	27	10	0
Gelatine, per cwt.	0	10	0	0	10	0	0	12	0	0	4	5
Gentian, per ton	0	5	0	0	5	0	2	16	0 per cwt.	0	9	4 per cwt.
Ginger. *See* Spices.												
Ginseng, per ton	0	5	0	0	5	0	8	8	0 per cwt.	3	14	8 per cwt.
Glass beads and bugles of glass, per lb.	0	0	3	0	0	3						
bottles of glass covered with wicker (not being flint or cut glass), or of green or common glass, per cwt.	0	4	0	0	4	0						
and further, on account of the excise duty, per cwt.	0	7	0	0	7	0						
of glass not otherwise enumerated or described, per cwt.	1	0	0	1	0	0	80	0	0 per cent.	60	0	0 per cent.
and further, on account of excise duty, per cwt.	1	0	0	1	0	0						
lass, viz.—												
crown glass, or any kind of window glass, not exceeding one-ninth of an inch in thickness, and not being plate glass or German sheet glass, per cwt.	1	10	0	1	10	0	4	18	0	60	0	0 per cent

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Glass — *continued.*				
and further, on account of the excise duty, per cwt.	5 3 0	5 3 0		
flint and cut glass, for every 100*l.* value	30 0 0	30 0 0		
and further, on account of the excise duty, per cwt.	1 0 0	1 0 0		
German sheet glass, white or coloured, not exceeding one-ninth of an inch in thickness and shades, per cwt.	1 10 0	1 10 0	4 18 0	60 0 0 per cent.
and further, on account of the excise duty, per cwt.	4 4 0	4 4 0		
all glass exceeding one-ninth of an inch in thickness; all silvered or polished glass, of whatever thickness, and plate glass, however small each pane, plate, or sheet, superficial measure, viz.—				
not containing more than 9 square feet, per square foot	0 4 0	0 4 0	0 6 0	
containing more than 9 square feet, and not more than 14 square feet, per square foot	0 5 0	0 5 0	0 8 0	
containing more than 14 square feet, and not more than 36 square feet, per square foot	0 6 0	0 6 0	0 9 6	60 0 0 per cent.
containing more than 36 square feet, per square foot	0 7 0	0 7 0	0 11 0	
manufactures not otherwise enumerated or described, and old broken glass fit only to be re-manufactured, per cwt.	1 0 0	1 0 0	80 0 0 per cent.	
and further, on account of the excise duty, per cwt.	1 0 0	1 0 0		
paintings on glass, for every 100*l.* value	5 0 0	5 0 0	80 0 0	27 10 0
and further, on account of the excise duty, per superficial foot	0 4 0	0 4 0		
Gloves of leather. *See* Leather.				
of linen. *See* Linen.				
Glue, per cwt.	0 3 0	0 3 0	0 12 0	0 4 5
clippings or waste of any kind, fit only for glue, for every 100*l.* value	1 0 0	1 0 0	0 4 9 per cwt.	0 1 4½ per cwt.
Gold, leaves of, per 100	0 3 0	0 3 0	0 5 0	0 1 2
Grain, not rated as corn or seeds, viz.—				
barley, pearled, per cwt.	0 5 0	0 5 0	0 17 6	0 8 10
beans, kidney and French, per bushel	0 0 10	0 0 5		
rice, not rough or in the husk, per cwt.	0 6 0	0 0 5	0 15 0	0 7 4 per cwt.
rice, rough and in the husk, per quarter	0 7 0	0 0 1	0 10 0 per cwt.	27 10 0 per cent.
Grains, Guinea and of Paradise, per cwt.	0 15 0	0 15 0	0 2 0 per lb.	
for extracts. *See* Essences.				
Granilla. *See* Cochineal.				
Grapes, for every 100*l.* value	5 0 0	5 0 0	50 0 0	27 10 0
Grease, per cwt.	0 1 8	0 0 3	0 1 8	Free.
Greaves, for dogs, per cwt.	0 2 0	0 2 0	0 2 0	0 0 11
Guinea wood. *See* Woods.				
Gum, viz.—				
Senegal, per cwt.	0 1 0	0 1 0	0 12 0	27 10 0 per cent.
Arabic, per cwt.	0 1 0	0 1 0	0 12 0	2 16 0
copal, per cwt.	0 1 0	0 1 0	2 6 8	3 14 8
animi, per cwt.	0 1 0	0 1 0	2 6 8	1 8 0
asafœtida, per cwt.	0 1 0	0 1 0		
ammoniacum, per cwt.	0 1 0	0 1 0	7 0 0	1 17 4
Gutacum, per cwt.	0 1 0	0 1 0	10 5 4	4 4 0
kino, per cwt.	0 1 0	0 1 0	8 8 0	27 10 0 per cent.
mastic, per cwt.	0 1 0	0 1 0	7 9 4	1 8 0
tragacanth, per cwt.	0 1 0	0 1 0	5 12 0	1 8 0
euphorbium, per cwt.	0 1 0	0 1 0	3 14 8	0 18 8
shellac, per cwt.	0 1 0	0 1 0	3 14 8	0 18 8
lac dye, per cwt.	0 1 0	0 1 0	2 16 0	27 10 0 per cent.
seed, per cwt.	0 1 0	0 1 0	2 16 0	0 18 8
not enumerated, per cwt.	0 1 0	0 1 0	50 0 0 per cent.	27 10 0 per cent.
Guano, per ton	0 1 0	0 1 0		
Gunpowder, per cwt.	1 0 0	1 0 0	3 0 0	1 15 3
Gun stocks in the rough, of walnut or other woods, per cwt.	0 0 6	0 0 6		
Gypsum. *See* Stones.				
H.				
Hair, viz.—				
camels' hair or wool, per lb.	0 0 1	Free.	0 1 8	0 0 8
cow, ox, bull, or elk hair, per cwt.	0 0 6	0 0 3	0 18 4	0 8 3
goats' hair. *See* Wool.				
horse hair, per cwt.	0 0 6	0 0 3	20 0 0 per cent.	4 4 0
human, per lb.	0 1 0	0 1 0	0 5 0	0 2 0
not otherwise enumerated or described, for every 100*l.* value	5 0 0	2 10 0	20 0 0	27 10 0
manufactures of hair or goats' wool, or of hair or goats' wool and any other material, and articles of such manufacture wholly or in part made up, not particularly enumerated, or otherwise charged with duty, for every 100*l.* value	15 0 0	7 10 0	50 0 0	27 10 0
Hams of all kinds, per cwt.	0 11 0	0 3 6	2 16 0	2 7 0
Harp strings or lute strings, silvered, for every 100*l.* value	20 0 0	20 0 0	0 6 4 per gross.	0 2 6 per gross.
Hats or bonnets, viz.—				
of chip, per lb.	0 5 0	0 5 0		
bast, cane, or horse hair hats or bonnets, each hat or bonnet not exceeding 22 inches in diameter, per dozen	0 10 0	0 10 0	1 0 0	0 3 6
each hat or bonnet exceeding 22 inches in diameter, per dozen	0 15 0	0 15 0	2 0 0	0 7 0
straw hats or bonnets, per lb.	0 8 6	0 8 6		
felt, hair, wool, or beaver hats, each	0 2 6	0 2 6	0 10 6	Prohibited.
made of silk, silk shag laid upon felt, linen, or other material, each	0 3 6	0 3 6		
Hay, per load	0 16 0	0 8 0	1 4 0	0 11 0
Heath, for brushes, per cwt.	0 5 0	0 5 0	0 9 2	0 4 5
Hellebore, per cwt.	0 3 0	0 3 0	0 0 6 per lb.	0 0 1½ per lb.
Hemp, dressed, per cwt.	0 4 0	0 4 0	4 15 0	2 4 0
rough or undressed, or any other vegetable substance of the nature and quality of undressed hemp, and applicable to the same purposes	0 0 1	0 0 1	0 9 2	0 3 8

Articles.	Rates of Duty in 1844. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.	Duty, 1787. £	s.	d.
Hides of horse, mare, gelding, buffalo, bull, cow, ox, calf, kip, swine and hog, sea-cow, elephant, and eland, or large deer; not tanned, tawed, curried, or in any way dressed, viz.— dry, per cwt.	0	0	6	0	0	2	} 0	0	10 per hide.	0	0	9 per hide.
wet, per cwt.	0	0	3	0	0	1						
whether whole, cut, rounded, or trimmed, or pieces thereof not cut into shapes, tanned, but not otherwise dressed, per lb.	0	0	2	0	0	1						
tawed, curried, or in any way dressed, not being varnished, japanned, or enamelled, per lb.	0	0	4	0	0	2						
if varnished, japanned, or enamelled, per lb.	0	0	6	0	0	3						
Ioshi hides, per lb.	0	0	4	0	0	2	0	1	8	0	0	10
Muscovy or Russia hides, or pieces thereof, tanned, coloured, shaved, or otherwise dressed, per lb.	0	0	4	0	0	2	0	1	8	0	0	10
Hides or pieces thereof, raw or undressed, not otherwise enumerated, for every 100*l.* value	5	0	0	2	10	0	5	17	6	Free.		
Hides or pieces thereof, tanned, tawed, curried, or in any way dressed, not otherwise enumerated, for every 100*l.* value	10	0	0	5	0	0	75	0	0	77	0	0 per cent.
Hones, per 100	1	0	0	1	0	0	1	3	0	0	11	0
Honey, per cwt.	0	10	0	0	5	0	0	15	0	0	8	10 per barrel.
Hoofs of cattle, for every 100*l.* value	1	0	0	1	0	0	20	0	0	27	10	0 per cent.
Hoops of iron, per ton	1	10	0	0	15	0	1	3	9 per cwt.	0	11	5 per cwt.
of wood, not exceeding 7½ feet in length, per 1,000	0	2	0	0	0	4	0	15	0	0	5	11
not exceeding 9 feet in length, per 1,000	0	3	0	0	0	6	0	15	0	0	5	11
exceeding 9 feet in length, per 1,000	0	5	0	0	1	0	0	15	0	0	5	11
Hops, per cwt.	4	10	0	4	10	0	8	11	0	5	18	10
Horns, horn tips, and pieces of horn, per ton	0	1	0	0	1	0	0	5	0 per cwt.	0	1	10 per 100.
Horses, mares, or geldings, each	1	0	0	0	10	0	6	13	0	2	4	0
Horse grease. *See* Oil, Animal.												
Hungary water. *See* Spirits.												
I.												
India rubber. *See* Caoutchouc.												
Indigo, per cwt.	0	2	0	0	1	0	0	0	5 per lb.	Free.		
Ink, for printers, per cwt.	0	10	0	0	10	0	1	1	0	0	8	10
Inkle, unwrought, per lb.	0	0	6	0	0	3	0	0	10	0	0	5½
wrought, per lb.	0	1	0	0	0	6	0	5	2	0	2	5½
Iron, ore of, per ton	0	2	0	0	0	6	0	8	9	0	2	9
pig, per ton	0	5	0	0	1	0	0	17	6	27	10	0 per cent.
bars, unwrought, per ton	1	0	0	0	2	6	6	10	0	2	16	2
old broken and old cast, per ton	0	5	0	0	1	0	0	17	6	0	15	9
and steel, wrought, not otherwise enumerated, for every 100*l.* value	15	0	0	15	0	0	50	0	0	Prohibited.		
bloom, per ton	0	7	6	0	2	6						
chromate of, per ton	0	5	0	0	2	6	20	0	0 per cent.	27	10	0 per cent.
slit or hammered into rods, per ton	1	10	0	0	15	0	1	0	0	Prohibited.		
cast, per ton	1	10	0	0	15	0	20	0	0	Prohibited.		
Isinglass, per cwt.	2	7	6	0	5	0	2	7	6	0	0	5½
J.												
Jalap, per lb.	0	0	1	0	0	1	0	2	0	0	0	9
Japanned or lacquered ware, for every 100*l.* value	15	0	0	15	0	0	62	10	0	49	10	0
Jet, per lb.	0	0	1	0	0	1	0	2	0	0	0	9
Jewels, emeralds, rubies, pearls, and all other precious stones (except diamonds), viz.— unset, for every 100*l.* value	0	10	0	0	10	0	20	0	0	Free.		
set, for every 100*l.* value	10	0	0	10	0	0	50	0	0	Free.		
Juice of lemons, limes, or oranges, per gallon	0	0	0½	0	0	0½	0	1	6	{ 0	0	4
Junk, old. *See* Rags, old.										{ 0	0	3½ limes.
K.												
Kelp. *See* Alkali.												
Kingwood. *See* Woods.												
L.												
Lac, viz. stick lac, per cwt.	0	0	1	0	0	1	1	0	0	Free.		
Lace, viz.— thread, for every 100*l.* value	12	10	0	12	10	0	40	0	0	0	17	8 per 12 yds.
cushion or pillow. *See* Linen.												
Lacquered ware. *See* Japanned Ware.												
Lamp black, per cwt.	1	0	0	1	0	0	3	6	6	1	15	3
Lapis calaminaris, per ton	0	1	0	0	1	0	0	8	0 per cwt.	0	3	8 per cwt.
Lard, per cwt.	0	2	0	0	0	6	0	8	0	Free.		
Latten, per cwt.	0	1	0	0	0	6	1	8	0	0	13	
shaven, per cwt.	0	1	0	0	0	6	2	10	0	1	2	
wire, for every 100*l.* value	12	10	0	12	10	0						
Lavender flowers, per lb.	0	0	1	0	0	1	0	0	10	0	0	4
Lead, ore of, per ton	0	10	0	0	2	0	1	16	0	0	17	8
black, per ton	1	0	0	0	5	0	0	4	0 per cwt.	0	6	8 per cwt.
pig and sheet, per ton	1	0	0	0	5	0	20	0	0 per cent.	27	10	0 per cent.
red, per ton	1	10	0	0	15	0	0	8	4 per cwt.	0	3	8 per cwt.
white, per ton	2	5	0	1	2	6	0	10	4 per cwt.	0	4	5 per cwt.
chromate of, per ton	5	0	0	2	10	0	20	0	0 per cent.	27	10	0 per cent.
manufactures of, not otherwise enumerated, for every 100*l.* value	15	0	0	15	0	0						
Leather manufactures, viz.— women's boots, shoes, and calashes, per dozen pairs	0	12	0	0	12	0						
if lined or trimmed with fur or other trimming, per dozen pairs	0	15	0	0	15	0						
shoes, with cork or double soles, quilted shoes and clogs, per dozen pairs	0	10	0	0	10	0						
if trimmed or lined with fur or any other trimming, per dozen pairs	0	12	0	0	12	0						
women's shoes of silk, satin, jeans, or other stuffs, kid, morocco, or other leather, per dozen pairs	0	9	0	0	9	0	Leather, 75 0 0 per cent. Of silk, prohibited.			} Prohibited.		
if trimmed or lined with fur or other trimming, per dozen pairs	0	10	0	0	10	0						
girls' boots, shoes, and calashes, not exceeding 7 inches in length, to be charged with two-thirds of the above duties.												
men's boots, per dozen pairs	1	8	0	1	8	0						
men's shoes, per dozen pairs	0	14	0	0	14	0						

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Leather manufactures — *continued.*				
boys' boots and shoes, not exceeding 7 inches in length, to be charged with 2-3rds of the above duties.				
Leather, viz. —				
boot fronts, not exceeding 9 inches in height, per dozen pairs	0 3 6	0 3 6		
exceeding 9 inches in height, per dozen pairs	0 5 6	0 5 6		
cut into shapes, or any article made of leather, or any manufacture whereof leather is the most valuable part, not otherwise enumerated or described, for every 100*l.* value	15 0 0	15 0 0	75 0 0	Prohibited.
gloves, of leather, viz.—				
habit mitts, per dozen pairs	0 2 4	0 2 4	} Prohibited.	
habit gloves, per dozen pairs	0 3 6	0 3 6		Prohibited.
men's gloves, per dozen pairs	0 3 6	0 3 6		
women's gloves or mitts, per dozen pairs	0 4 6	0 4 6		
Leaves of gold, per 100 leaves	0 3 0	0 3 0	0 3 0	0 1 2
of roses, per lb.	0 0 2	0 0 2	0 0 10	0 0 3
Leeches, for every 100*l.* value	5 0 0	5 0 0	20 0 0	27 10 0
Lemons. *See* Fruits.				
peel of, per cwt.	0 1 0	0 1 0	0 0 5 per lb.	27 10 0 per cent.
preserved in sugar. *See* Succades.				
Lentiles, per bushel	0 0 3	0 0 1½	0 0 10	0 0 0½ per lb.
Lignum quassia. *See* Quassia.				
Vitæ. *See* Woods.				
Linen, or linen and cotton, viz.—				
cambrics and lawns, commonly called French lawns, the piece not exceeding 8 yards in length, and not exceeding 7-8ths of a yard in breadth, and so in proportion for any greater or less quantity				
plain, per piece	0 5 0	0 5 0	} 0 11 6	0 5 0
bordered handkerchiefs, per piece	0 5 0	0 5 0		
lawns of any sort, not French, for every 100*l.* value	15 0 0	15 0 0		
lace thread, for every 100*l.* value	12 10 0	12 10 0		
made by the hand, commonly called cushion or pillow lace, whether of linen, cotton or silken thread, for every 100*l.* value	12 10 0	12 10 0		
damasks, per square yard	0 0 10	0 0 10		
damask diaper, per square yard	0 0 5	0 0 5		
plain linens and diaper, not otherwise enumerated or described, and whether chequered or striped with dyed yarn or not, for every 100*l.* value	15 0 0	15 0 0		
sails, for every 100*l.* value	15 0 0	15 0 0	104 9 2	45 0 0
in actual use of a British ship, and fit and necessary for such ship, and not otherwise disposed of	Free.	Free.		
sails, if, and when otherwise disposed of, for every 100*l.* value	15 0 0	15 0 0	104 9 2	45 0 0
manufactures of linen, or of linen mixed with cotton or with wool, not particularly enumerated or otherwise charged with duty, for every 100*l.* value	15 0 0	15 0 0	50 0 0	44 0 0
Linseed cake. *See* Oil cake, in Oils.				
Liquids, viz. —				
beer or mum, per barrel	2 0 0	2 0 0	1 1 2	0 5 8
spruce, per barrel	1 0 0	1 0 0	1 6 0	0 11 0
ale and beer of all sorts, per barrel	2 0 0	2 0 0	0 13 0	0 5 8
cider, per tun	10 10 0	10 10 0	14 5 0	7 7 10½
essence of spruce, for every 100*l.* value	10 0 0	10 0 0	20 0 0	27 10 0
Juice of lemons, limes, and oranges, per gallon	0 0 1½	0 0 0½	0 1 6	0 0 4
mead, per gallon	0 5 6	0 5 6	0 0 7	0 0 2
perry, per tun	10 10 0	10 10 0	20 9 2	10 1 7
vinegar, per tun	18 18 0	18 18 0	73 12 9	39 10 7 per cent.
Liquorice roots, per cwt.	1 0 0	0 10 0	3 3 4	1 8 10
paste, per cwt.	1 0 0	0 10 0	3 15 0	1 8 0
juice, per cwt.	1 7 6	0 10 0	3 15 0	1 8 0
powder	1 15 0	0 15 0	5 10 0	2 12 1
extract or preparation of. *See* Essences.				
Litharge, per ton	1 0 0	0 10 0		
Live creatures, illustrative of natural history	Free.	Free.	20 0 0 per cent.	39 10 7
Liverwort. *See* Lichen Islandicus, in Moss.				
Logwood. *See* Woods.				
Lupines, per cwt.	0 5 0	0 5 0	0 5 0	0 2 4
Lutestrings. *See* Catlings.				
[redacted] M.				
Macaroni and vermicelli, per lb.	0 0 1	0 0 1	0 0 8	0 0 2
Mace, per lb.	0 2 6	0 2 6	0 4 6	0 4 6
Madder, per cwt.	0 0 6	0 0 6	0 15 0 }	Free.
root, per cwt.	0 0 3	0 0 3	0 5 0 }	
Magna græcia ware, for every 100*l.* value	5 0 0	5 0 0	75 0 0 per cent.	27 10 0
Mahogany. *See* Woods.				
Manganese ore. *See* Ores.				
Mangoes. *See* Pickles.				
Manna, per lb.	0 0 1	0 0 1	0 1 3	0 0 6
Manures not otherwise enumerated or charged with duty, per ton	0 0 6	0 0 6		
Manuscripts, viz. —				
bound, per lb.	} 0 0 2	0 0 2	{ 6 10 0 per cwt.	0 19 3 per cwt.
unbound, per lb.			{ 5 0 0 per cwt.	0 8 10 per cwt.
Maps or charts, or parts thereof, plain or coloured, each	0 0 1	0 0 1	0 2 0	0 0 6
Marble. *See* Stones.				
Marbles for children. *See* Toys.				
Marmalade, per lb.	0 0 6	0 0 1	0 1 3	0 0 3
Mastic. *See* Gum.				
Mats and matting, for every 100*l.* value	5 0 0	2 10 0	50 0 0	27 10 0
Mattresses, for every 100*l.* value	10 0 0	10 0 0	50 0 0	27 10 0
Mead or metheglin. *See* Liquids.				
Medals of gold or silver	Free.	Free.	Free. }	27 10 0
of any other sorts, for every 100*l.* value	5 0 0	5 0 0	20 0 0 }	
Medlars, per bushel	0 1 0	0 0 6	0 5 0	0 2 4
Molasses. *See* Sugar.				
Melting pots for goldsmiths. *See* Pots.				
Mercury, prepared, for every 100*l.* value	10 0 0	10 0 0	50 0 0	27 10 0

Articles.	Rates of Duty in 1844. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.	Duty, 1787. £	s.	d.
Metal, viz. —												
bell, per ton	2	0	0	2	0	0	1	0	0 per cwt.	1	11	1 per cwt.
leaf, (except leaf gold,) the packet containing 250 leaves	0	0	1	0	0	1	0	0	8	0	0	2
Metheglin. *See* Mead, in Liquids.												
Mill boards, per cwt.	1	10	0	1	10	0	3	8	2	0	10	0
Minerals and fossils not enumerated, for every 100*l.* value	5	0	0	1	0	0	20	0	0	27	10	0
specimens of minerals, fossils, or ores, not enumerated, and not exceeding 14lbs. in weight, each specimen	Free.			Free.			0	0	2 per lb.	} 27	10	0
exceeding 14lbs. in weight, for every 100*l.* value	5	0	0	1	0	0	20	0	0			
Mirrors. *See* Toys.												
Models of cork or wood, for every 100*l.* value	5	0	0	5	0	0	50	0	0	27	10	0
Morphia and its salts, per lb.	0	5	0	0	5	0						
Moss, viz. —												
lichen Islandicus, per ton	0	5	0	0	5	0	0	0	8 per lb.	27	10	3 per cent.
rock, for dyers, per ton	0	5	0	0	5	0	1	15	0	0	5	0
not enumerated, for every 100*l.* value	1	0	0	1	0	0	20	0	0	27	10	0
Mother of pearl shells for every 100*l.* value	5	0	0	5	0	0	20	0	0	0	0	4 per lb.
Mules. *See* Animals.												
Mum. *See* Liquids.												
Musical instruments, for every 100*l.* value	15	0	0	15	0	0	50	0	0	27	10	0
Musk, per oz.	0	0	6	0	0	6	0	5	0	0	2	0
Mustard flour, per cwt.	0	12	0	0	12	0						
Myrrh, per cwt.	0	1	0	0	1	0	9	6	8	2	16	0
N.												
Natron. *See* Alkali.												
Needlework. *See* Embroidery.												
Nets, viz.—												
old fishing, fit only for making paper or pasteboard. *See* Rags.												
Nicaragua wood. *See* Woods.												
Nitre, viz. —												
cubic, per cwt.	0	0	6	0	0	6	50	0	0 per cent.	2	6	8 per cwt.
Nickle, ore of, for every 100*l.* value	1	0	0	1	0	0						
metallic, and oxide of, refined, for every 100*l.* value	10	0	0	10	0	0						
Nutmegs. *See* Spices.												
Nuts. *See* Fruits.												
See Nuts, in Essences for expressing Oil.												
Nux vomica, per cwt.	0	5	0	0	5	0	0	2	6 per lb.	0	0	1½ per lb.
extract or preparation of. *See* Essences.												
O.												
Oakum, per cwt.	0	0	1	0	0	1	0	4	9	0	2	3
Ochre, per cwt.	0	0	6	0	0	6	0	6	9	0	2	0 per bushel
Oil of almonds, per lb.	0	0	2	0	0	2	0	0	10	0	0	3
bays, per lb.	0	0	2	0	0	2	0	0	3	0	8	9 per cwt.
animal, raw, not otherwise enumerated, per cwt.	0	1	3	0	1	3						
castor, per cwt.	0	1	3	0	1	3	0	1	3 per lb.	0	2	5 per gallon.
chemical, essential, or perfumed, viz.—												
carraway, per lb.	0	2	0	0	2	0	0	2	6	0	0	7½
cloves, per lb.	0	4	0	0	4	0	1	12	0	0	0	7½
lavender, per lb.	0	2	0	0	2	0	0	4	0	0	1	6
mint, per lb.	0	2	0	0	2	0	0	4	0	0	0	7½
peppermint, per lb.	0	2	0	0	2	0	0	4	0	0	0	7½
spike, per lb.	0	2	0	0	2	0	0	4	0	0	0	4
cassia, per lb.	0	1	0	0	1	0	4	0	0	0	0	7½
bergamot, per lb.	0	1	0	0	1	0	0	4	0	0	1	6
lemon, per lb.	0	1	0	0	1	0	0	4	0	0	1	6
otto of roses, per lb.	0	1	0	0	1	0						
thyme, per lb.	0	1	0	0	1	0	0	4	0	0	1	3
all other sorts, per lb.	0	1	0	0	1	0						
cocoa nut, per cwt.	0	1	3	0	0	7½	0	2	6	27	10	0 per cent.
linseed, per tun	6	0	0	1	0	0	39	18	0	29	0	9½
hempseed, per tun	6	0	0	1	0	0	39	18	0	15	16	9½
rapeseed, per tun	6	0	0	1	0	0	39	18	0	29	0	9½
olive, per tun	2	0	0	1	0	0	18	15	7	8	8	10½
imported in a ship belonging to any of the subjects of the king of the Two Sicilies, per tun	4	0	0	-		-	18	15	7	8	8	10½
palm, per cwt.	0	0	6	0	0	6	0	2	6	0	7	0
paran, per tun	2	0	0	1	0	0	50	0	0 per cent.	27	10	0 per cent.
rock, per cwt.	0	6	0	0	3	0	0	0	10 per lb.	0	0	[illegible] per lb.
seed, not otherwise enumerated or described, per tun	6	0	0	1	0	0	39	18	0	15	16	9½
train, blubber, and spermaceti, the produce of fish or creatures living in the sea, taken and caught by the crews of British vessels, and imported direct from the fishery, or from any British possession, in a British vessel, per tun	-		-	0	1	0	0	9	11	Free.		
train and blubber, the produce of fish or creatures living in the sea, of foreign fishing, per tun	6	0	0	-		-	39	18	0	21	15	7
spermaceti of foreign fishing, per tun	15	0	0									
walnut, per cwt.	0	6	0	0	3	0	0	0	6 per lb.	27	10	0 per cent.
or spirit of turpentine, per cwt.	0	5	0	0	2	6	0	0	8 per lb.	0	0	1½ per lb.
not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20	0	0	10	0	0	50	0	0	27	10	0
Oil seed cakes, per ton	0	1	0	0	1	0	0	0	2 per cwt.	27	10	0 per cent.
Olibanum, per cwt.	0	1	0	0	1	0	2	7	6	1	1	0
Olives, per gallon	0	2	0	0	2	0	0	3	0	0	0	8
Olive wood. *See* Woods.												
Onions, per bushel	0	0	6	0	0	3	0	3	0	0	0	3
Opium, per lb.	0	1	0	0	1	0	0	9	0	0	1	6
extract or preparation of. *See* Essences.												
Orange flower water, per lb.	0	0	1	0	0	1	0	3	9 per gallon.	0	1	2½ per gallon.
Oranges and lemons. *See* Fruit.												
peel, per cwt.	0	1	0	0	1	0	0	0	6 per lb.	27	10	0 per cent.
Orchal, per cwt.	0	1	0	0	1	0	0	16	8	Free.		
Ores, minerals, metals, and manufactures thereof, viz.—												
antimony, ore of, per ton	0	1	0	0	1	0	20	0	0 per cent.	27	10	0 per cent.

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Ores, &c. — continued.				
crude, per cwt.	0 2 0	0 0 6	0 15 0	0 4 8
regulus, per cwt.	0 4 0	0 1 0	2 0 0	0 9 4
arsenic, per cwt.	0 1 0	0 0 6	0 14 3	0 4 8
brass, manufactures of, for every 100*l.* value	15 0 0	15 0 0	50 0 0	Prohibited.
powder of, per lb.	0 0 6	0 0 6	0 5 6	0 2 8
brimstone, per cwt.	0 0 6	0 0 3	0 15 0	0 6 8
refined, in rolls, per cwt.	0 2 0	0 1 0	1 0 0	0 6 8
in flour, per cwt.	0 2 0	0 1 0	1 3 9	0 6 8
bronze manufactures, all works of art of, per cwt.	1 0 0	1 0 0	50 0 0 per cent.	27 10 0 per cent
other manufactures of, for every 100*l.* value	15 0 0	15 0 0		
powder of, for every 100*l.* value	15 0 0	15 0 0	50 0 0 per cent.	27 10 0 per cent.
other manufactures of, for every 100*l.* value	15 0 0	15 0 0		
bullion and foreign coin of gold or silver, and ore of gold or silver, or of which the major part in value is gold and silver	Free.	Free.	Free.	Free.
buttons, for every 100*l.* in value	15 0 0	15 0 0	Prohibited.	Prohibited.
coals, culm, and cinders, per ton	0 1 0	0 0 6	2 0 0	0 16 10
cobalt ore, for every 100*l.* value	1 0 0	1 0 0	20 0 0	27 10 0
copper, ore of, viz. —				
containing not more than 15 parts of copper, in 100 parts of ore, per ton of metal	3 0 0	1 0 0		
containing not more than 20 parts of copper, in 100 parts of ore, per ton of metal	4 10 0	1 0 0	1 1 0 per cwt.	0 0 9 per cwt.
containing more than 20 parts of copper, in 100 parts of ore, per ton of metal	6 0 0	1 0 0		
old, fit only to be re-manufactured, per cwt.	0 7 6	0 3 6	1 9 2	27 10 0
unwrought, viz. in bricks or pigs, rose copper, and all cast copper, per cwt.	0 8 9	0 4 0	2 14 2	0 10 6
in part wrought, viz. bars, rods, or ingots, hammered or raised, per cwt.	0 10 0	0 5 0	3 15 6	2 2 0
in plates, and copper coin, per cwt.	0 10 0	0 5 0	3 0 0	0 16 0
manufactures of copper not otherwise enumerated or described, and copper plates engraved for every 100*l.* value	15 0 0	15 0 0	50 0 0	Prohibited.
or brass wire, for every 100*l.* value	12 10 0	12 10 0	5 14 0 per cwt.	2 12 3 per cwt.
copperas, blue, per ton	1 0 0	0 10 0	0 5 0 per cwt.	0 2 4 per cwt.
green, per ton	1 0 0	0 10 0	0 5 0 per cwt.	0 1 3 per cwt.
white, per ton	1 0 0	0 10 0	0 12 0 per cwt.	0 4 6 per cwt.
crystal, rough, for every 100*l.* value	5 0 0	2 10 0	20 0 0	
cut, or manufactured, except beads, for every 100*l.* value	15 0 0	15 0 0	60 0 0	27 10 0 per cent.
beads, per 1,000	0 5 0	0 2 6		
gold, leaves of, per 100	0 3 0	0 3 0	0 3 0	0 1 2
iron, ore of, per ton	0 2 0	0 0 6		
pig, per ton	0 5 0	0 1 0	0 17 6	27 10 0 per cent.
bars, unwrought, per ton	1 0 0	0 2 6	6 10 0	2 16 2
old broken and old cast, per ton	0 5 0	0 1 0		
and steel, wrought, not otherwise enumerated, for every 100*l.* value	15 0 0	15 0 0	50 0 0	Prohibited.
bloom, per ton	0 7 6	0 2 6		
chromate of, per ton	0 5 0	0 2 6	20 0 0 per cent.	27 10 0 per cent.
slit or hammered into rods, per ton	1 10 0	0 15 0	1 0 0 per ton	Prohibited
cast, per ton	1 10 0	0 15 0	20 0 0 per cent.	Prohibited.
hoops. *See* Hoops.				
lapis calaminaris, per ton	0 1 0	0 1 0	0 8 0 per cwt.	0 3 8 per cwt.
latten, per cwt.	0 1 0	0 0 6	1 8 0	0 13 3
shaven, per cwt.	0 1 0	0 0 6	2 10 0	1 2 0
wire, for every 100*l.* value	12 10 0	12 10 0	5 9 3 per cwt.	2 15 0 per cwt.
lead, ore of, per ton	0 10 0	0 2 0	1 16 0	0 17 8
black, per ton	1 0 0	0 5 0	0 4 0	0 6 8
pig and sheet, per ton	1 0 0	0 5 0	20 0 0 per cent.	27 10 0 per cent.
red, per ton	1 10 0	0 15 0	0 8 4	0 3 8
white, per ton	2 5 0	1 2 6	0 10 4	0 4 5
chromate of, per ton	5 0 0	2 10 0	20 0 0 per cent.	27 10 0 per cent.
manufactures of, not otherwise enumerated, for every 100*l.* value	15 0 0	15 0 0		
litharge, per ton	1 0 0	0 10 0	0 2 0 per cwt.	0 0 10 per cwt.
manganese ore, per ton	0 1 0	0 1 0	20 0 0 per cent.	27 10 0 per cent.
medals of gold and silver	Free.	Free.	Free.	27 10 0
of any other sort, for every 100*l.* value	5 0 0	5 0 0		
mercury, prepared, for every 100*l.* value	10 0 0	10 0 0	50 0 0	27 10 0
metal, viz. —				
bell metal, per ton	2 0 0	2 0 0	1 0 0	1 11 1
leaf (except gold), per packet of 250 leaves	0 0 1	0 0 1	0 0 8	0 0 2
minerals and fossils not enumerated, for every 100*l.* value	5 0 0	1 0 0	20 0 0	27 10 0
specimens of minerals, fossils, or ores not enumerated, and not exceeding 14 lbs. in weight each specimen	Free.	Free.	0 0 2	
exceeding 14 lbs. in weight, for every 100*l.* value	5 0 0	1 0 0	20 0 0	27 10 0
Illustrative of natural history	Free.	Free.		
nickel, ore of, for every 100*l.* value	1 0 0	1 0 0		
metallic, and oxide of, refined, for every 100*l.* value	10 0 0	10 0 0		
ore, not particularly charged with duty, for every 100*l.* value	2 0 0	0 10 0	20 0 0	27 10 0
orsedew, per cwt.	0 10 0	0 10 0	0 1 3 per lb.	0 0 6 per lb.
pewter, manufactures of, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
	10 0 0	10 0 0		
plate of gold, for every 100*l.* value	together with the	together with the	3 16 9 per oz.	Prohibited.
silver, gilt and ungilt, for every 100*l.* value	stamp duty.	stamp duty.	0 6 4 per oz.	Prohibited.
	Free.	Free.	Free.	Free.
plate, battered	12 10 0	12 10 0	50 0 0	Prohibited.
wire, gilt or plated, for every 100*l.* value	12 10 0	12 10 0	50 0 0	Prohibited.
silver, for every 100*l.* value.	0 10 0	0 10 0	5 0 0	27 10 0
platina, and ore of, for every 100*l.* value	0 0 1	0 0 1	0 1 8	0 0 9
quicksilver, per lb.				
spelter or zinc, viz. crude, in cakes, not rolled or otherwise manufactured, per ton	0 1 0	0 1 0	50 0 0 per cent.	27 10 0 per cent.
rolled, but not otherwise manufactured, per ton	2 10 0	2 10 0	1 8 6 per cwt.	0 13 9 per cwt.
manufactures of, for every 100*l.* value	10 0 0	10 0 0		
steel, manufactures of, for every 100*l.* value	15 0 0	15 0 0	50 0 0 per cent.	Prohibited.
unwrought, for every 100*l.* value	15 0 0	- - -	50 0 0 per cent.	27 10 0 per cent.
of and from British possessions, per ton	- - -	0 1 0		
talc, per cwt.	0 10 0	0 2 6	0 0 8 per lb.	0 0 2 per lb.
tin, ore and regulus of, per ton	2 10 0	0 10 0	20 0 0 per cent.	27 10 0 per cent.**

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Ores, &c. — *continued.*				
in blocks, ingots, bars or slabs, per cwt.	0 6 0	0 3 0		
manufactures of, not otherwise enumerated, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
foil, per lb.	0 0 6	0 0 6	50 0 0 per cent.	27 10 0 per cent.
Orpiment, per cwt.	0 1 0	0 1 0	1 8 6	0 8 9
Orris root, per cwt.	0 5 0	0 5 0	1 8 6	27 10 0 per cent.
Orsedew, per cwt.	0 10 0	0 10 0	0 1 3 per lb.	0 0 6 per lb.
Otto or attar or oil of roses. *See* Oil.				
Ox and bull. *See* Animals.				
P.				
Paddy. *See* Rice, in Grain.				
Painters' colours not particularly charged, viz. —				
unmanufactured, for every 100*l.* value	1 0 0	1 0 0	50 0 0	0 0 2 per lb.
manufactured, for every 100*l.* value	10 0 0	10 0 0		
Paintings on glass. *See* Glass.				
Palmetto thatch, per cwt.	- -	0 0 1		
manufactures of ditto, for every 100*l.* value	- -	5 0 0		
Paper, viz. —				
brown, made of old rope or cordage only without separating or extracting the pitch or tar therefrom, and without any mixture of other materials therewith, per lb.	0 0 3	0 0 3	0 0 10	0 2 11 per bundle.
printed, painted, or stained paper, or paper hangings, or flock paper, per square yard	0 1 0	0 1 0	0 1 7	75 0 0 per cent.
waste, unless printed on in the English language, or paper of any other sort not particularly enumerated or described, nor otherwise charged with duty, per lb.	0 0 4½	0 0 4½	0 1 7	
printed or in the English language	Prohibited.	Prohibited.		
Parchment, per dozen sheets	0 6 0	0 6 0	0 10 0	0 4 9
Pasteboards, per cwt.	1 10 0	1 10 0	3 8 2	0 10 0
Patterns, viz. patterns and samples of cotton, silk, woollen or other foreign manufactures, being fit for no other purpose than as patterns, Treasury Order, 16th February, 1819, 17th April, 1819, and 13th August, 1825	Free.	Free.	0 17 6	0 8 10
Pearl barley, per cwt.	0 5 0	0 2 6		
Pearls. *See* Jewels.				
Pears, raw, per bushel	0 0 6	0 0 3	0 7 6	0 1 5
dried, per bushel	0 2 0	0 2 0	0 10 0	0 0 9
Pencils, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
of slate, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Pens, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Pepper. *See* Spices.				
Percussion caps, per 1,000	0 0 4	0 0 4		
Perfumery, not otherwise charged, for every 100*l.* value	20 0 0	20 0 0	50 0 0	27 10 0
Perry. *See* Liquids.				
Pewter, manufactures of, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Phosphorus, for every 100*l.* value	10 0 0	10 0 0		
Pickles of all sorts, including the vinegar, and not otherwise enumerated, per gallon	0 1 6	0 0 9	0 6 0	0 0 10½
preserved in salt, per gallon	0 0 6	0 0 3		
Pictures, each	0 1 0	0 0 0		
and further, per square foot	0 1 0	0 1 0		
above 200 square feet, each	10 0 0	10 0 0	10 4 0	3 11 6
Pigs. *See* Animals.				
Pimento. *See* Spices.				
Pink root, per lb.	0 0 1	0 0 1	0 0 10	27 10 0 per cent.
Pipes of clay. *See* Tobacco pipes.				
Pitch, per cwt.	0 0 6	0 0 1	0 0 10	0 14 10½ per last.
Burgundy, per cwt.	0 2 0	0 2 0	0 14 3	0 6 4
Jews'. *See* Asphaltum, in Gum.				
Plantains, per cwt.	0 0 2	0 0 2		
Plants, shrubs, and trees, alive	Free.	Free.	Free.	
Plaster of Paris, per ton	1 0 0	1 0 0	0 2 6 per cwt.	0 1 2½ per cwt.
Plate. *See* Gold and Silver, in Ores.				
Platina, and ore of, for every 100*l.* value	0 10 0	0 10 0	5 0 0	27 10 0
Platting, or other manufactures to be used in, or proper for, making hats or bonnets, viz. —				
of bast, cane, or horse hair, per lb.	0 10 0	0 10 0	0 6 0	0 1 10
of chip, per lb.	0 2 6	0 2 6	0 6 0	0 1 10
of straw, per lb.	0 7 6	0 7 6	0 17 0	0 1 10
Plums, dried or preserved, per cwt.	1 7 6	1 7 6	7 0 0	1 8 0
commonly called French plums and prunelloes, per cwt.	1 0 0	1 0 0	7 0 0	1 8 0
Pomatum, for every 100*l.* value.	20 0 0	20 0 0	50 0 0	27 10 0
Pomegranates, per 1,000	0 5 0	0 5 0	1 10 0	0 8 10
peels of, per cwt.	0 1 0	0 1 0	0 15 0	0 4 8
Porcelain. *See* China.				
Pork, salted. *See* Provisions.				
Potatoes, per cwt.	0 0 2	0 0 1	0 2 0	0 3 8
Note — Potatoe flour (foreign), for every 100*l.* value, Treasury Order 18th August, 1834	20 0 0	20 0 0		
Pots, viz. —				
melting, for goldsmiths, per 100	0 3 2	0 3 2	0 3 2 per cwt.	0 0 7 per cwt.
of stone, for every 100*l.* value	20 0 0	20 0 0	50 0 0	27 10 0
Powder, viz. —				
hair, per cwt.	1 0 0	1 0 0	9 15 0	5 5 8
perfumed, per cwt.	1 0 0	1 0 0	13 13 0	5 5 8
not otherwise enumerated or described, that will serve for the same use as starch, per cwt.	0 10 0	1 10 0	9 10 0	27 10 0 per cent.
Poultry, for every 100*l.* value	5 0 0	2 10 0		
Precious stones. *See* Jewels.				
Prints and drawings, plain or coloured, single, each	0 0 1	0 0 1	- - -	0 0 6 each.
bound or sewn, per dozen	0 0 3	0 0 3	- - -	
Provisions, viz. —				
bacon, per cwt.	0 14 0	0 3 6	2 16 0	2 7 0
beef, salted (not being corned beef), per cwt.	0 8 0	0 2 0	Prohibited.	Prohibited.
fresh, or slightly salted, per cwt.	0 8 0	0 2 0		
butter, per cwt.	1 0 0	0 5 0	1 0 0	0 2 6
cheese, per cwt.	0 10 6	0 2 6	0 10 6	0 1 6
eggs, per 120	0 0 10	0 0 2½	0 0 10	0 0 5
hams of all kinds, per cwt.	0 14 0	0 3 6	2 16 0	2 7 0
lard, per cwt.	0 2 0	0 0 6	0 8 0	Free.
pork, salted (not hams or bacon), per cwt.	0 8 0	0 2 0	Prohibited.	Prohibited.
fresh, per cwt.	0 8 0	0 2 0		

TARIFF.

Articles.	Rates of Duty in 1844. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.		Duty, 1787. £	s.	d.	
Provisions — *continued.*														
pudding and sausages, per lb.	0	0	3	0	0	1	0	1	3		0	0	3½	
salted or fresh meat, not otherwise described, per cwt.	0	8	0	0	2	0								
sago, per cwt.	0	1	0	0	1	0	3	14	8		1	8	0	
succades and confectionary, including all fruit and vegetables preserved in sugar, per lb.	0	0	6	0	0	1	0	3	2		0	0	8	
tapioca, per cwt.	0	1	0	0	1	0	2	16	0		0	18	8	
tongues, per cwt.	0	10	0	0	2	6	0	3	0	per dozen.	0	1	0	per dozen.
truffles, per lb.	0	1	0	0	1	0	0	5	6		0	2	3	
vanelloes, per lb.	0	5	0	0	5	0	0	16	8		0	8	3	
Prunelloes. *See* Fruit.														
Prunes, per cwt.	0	7	0	0	7	0	1	7	6		0	12	5	
Q.														
Quassia, per cwt.	0	10	0	0	10	0	8	17	6		27	10	0	per cent.
extract, or preparation of. *See* Essences.														
Quicksilver, per lb.	0	0	1	0	0	1	0	1	8		0	0	9	
Quills, viz. —														
goose, per 1,000	0	0	6	0	0	3	0	2	6		0	0	6	
swan, per 1,000	0	3	0	0	1	6	0	12	0		0	2	0	
Quinces, per 1,000	0	1	0	0	1	0	2	0	0		0	18	4	
Quinine, sulphate of, per oz.	0	0	6	0	0	6	50	0	0	per cent.	27	10	0	per cent.
R.														
Radix, viz. —														
contrayervæ, per lb.	0	0	1	0	0	1	0	1	8		0	0	6	
enulæ campanæ, per cwt.	0	2	0	0	2	0	0	13	6		0	6	4	
eringii, per cwt.	0	2	0	0	2	0	0	0	6	per lb.	0	0	1½	per lb.
extract, or preparation of. *See* Essences.														
ipecacuanhæ, per lb.	0	1	0	0	1	0	0	4	0		0	1	8	
rhataniæ, per lb.	0	0	1	0	0	1	0	2	0		27	10	0	per cent.
senekæ, per lb.	0	0	1	0	0	1	0	1	9		0	0	2	
serpentariæ, or snake root, per lb.	0	0	2	0	0	2	0	1	9		0	0	9	
Rags, viz. —														
old rags, old junk, old ropes, or fishing nets, fit only for making paper or pasteboard, per ton.	0	0	6	0	0	6	1	6	0		Free.			
pulps of rags, per ton	0	5	0	0	5	0								
old woollen, per ton	0	0	6	0	0	6	0	13	0		27	10	0	per cent.
Raisins, per cwt.	0	15	0	0	7	6								
Rape cakes. *See* Oilseed, in Oil.														
Ratafia. *See* Spirits.														
Red wood, or Guinea wood. *See* Woods.														
Rhatany root. *See* Radix Rhataniæ.														
Rhubarb, per lb.	0	0	3	0	0	3	0	4	0		0	1	6	
Rice, viz. —														
not being rough and in the husk, per cwt.	0	6	0	0	0	6	0	15	0		0	7	4	per cwt.
rough, and in the husk, per quarter	0	7	0	0	0	1	0	10	0	per cwt.				
Ropes, new. *See* Cordage.														
old. *See* Rags.														
coir. *See* Coir.														
Rose wood. *See* Woods.														
Rosin, per cwt.	0	2	0	0	1	0	0	4	9		0	2	3	
Rubies. *See* Jewels.														
S.														
Saccharum Saturni	0	10	0	0	10	0	0	0	10	per lb.	0	0	3	per lb.
Safflower, per cwt.	0	1	0	0	1	0	0	8	9		Free.			
Saffron, per lb.	0	1	0	0	1	0	0	7	6		0	2	6	
Sago, per cwt.	0	1	0	0	1	0	3	14	8		1	8	0	
Sails. *See* Linen.														
Sal, viz. : —														
ammoniac, per cwt.	0	1	0	0	1	0	2	16	0		Free.			
limonum, per cwt.	0	1	0	0	1	0	0	4	9	per lb.	27	10	0	per cent.
prunelle, per cwt.	0	1	0	0	1	0	2	16	0		0	18	8	
Salep or [illegible]lop	0	1	0	0	1	0	7	0	0		1	8	0	
Salt	Free.			Free.										
Saltpetre, per cwt.	0	0	6	0	0	6	0	0	6		0	2	3	
Sanguis draconis, per cwt.	0	4	0	0	4	0	9	6	8		3	14	8	
Santa Maria wood. *See* Woods.														
Sapan wood. *See* Woods.														
Sarsaparilla, per lb.	0	0	1	0	0	1	0	1	3		0	0	8	
Sassafras, per cwt.	0	0	6	0	0	6	0	6	4		0	2	4	
Saunders, red. *See* Woods.														
Sausages or puddings, per lb.	0	0	3	0	0	1	0	1	3		0	0	3½	
Scaleboards, per cwt.	1	10	0	1	10	0	3	8	2		0	11	0	
Scammony, per lb.	0	0	6	0	0	6	0	6	4		0	2	6	
Seeds, viz. : —														
acorns, per bushel	0	1	0	0	0	6	20	0	0	per cent.	27	10	0	per cent.
aniseed, per cwt.	0	5	0	0	2	6	3	0	0		1	3	2	
canary, per bushel	0	4	0	0	2	0	3	0	0	per cwt.	0	16	6	per cwt.
carraway, per cwt.	0	10	0	0	5	0	1	0	0		0	5	0	
carrot, per cwt.	0	10	0	0	5	0	0	0	9	per lb.	0	0	1½	per lb.
clover, per cwt.	0	10	0	0	5	0	1	0	0		0	2	9	
cole, per quarter	0	0	1	0	0	1	1	0	0		0	13	8	
coriander, per cwt.	0	5	0	0	2	6	0	15	0		0	4	5	
cummin, per cwt.	0	5	0	0	2	6	1	0	0		0	7	4	
fenugreek, per cwt.	0	5	0	0	2	6	0	9	6		0	3	4	
flax, per quarter	0	0	1	0	0	1	0	3	4		27	10	0	per cent.
forest, per cwt.	0	10	0	0	5	0	25	0	0	per cent.	27	10	0	per cent.
garden, not particularly enumerated or described, nor otherwise charged with duty, per lb.	0	0	1	0	0	1	0	1	0		0	0	1½	
grass of all sorts, not particularly enumerated or otherwise charged with duty, per cwt.	0	5	0	0	2	6	50	0	0	per cent.	27	10	0	per cent.
hemp, per quarter	0	0	1	0	0	1	0	17	6		0	9	6½	
leek, per cwt.	1	0	0	0	10	0	0	1	0	per lb.	0	0	1½	per lb.
lettuce, per quarter	0	1	0	0	1	0	0	1	0	per lb.	0	0	1½	per lb.
linseed, per quarter	0	0	1	0	0	1	0	3	4		Free.			
lucerne, per cwt.	0	5	0	0	5	0	0	12	6		0	2	9	
lupines, per cwt.	0	5	0	0	5	0	0	5	0		0	2	4	
maw, per quarter	0	1	0	0	0	6	3	0	0	per cwt.	0	15	5	per cwt.
millet, per cwt.	0	5	0	0	2	6	0	11	6		0	4	5	
mustard, per bushel	0	1	3	0	0	6	0	9	4	per cwt.	0	2	3	per cwt.
onion, per cwt.	1	0	0	0	10	0	0	0	5½	per lb.	0	0	1½	per lb.
parsley, per cwt.	0	10	0	0	5	0	0	1	0	per lb.	0	0	1½	per lb.
poppy, per quarter	0	1	0	0	0	6								
quince, per cwt.	0	10	0	0	5	0	0	3	0	per lb.	0	0	1½	per lb.

Articles.	Rate of Duty in 1844. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.		Duty, 1787. £	s.	d.	
Seeds — *continued.*														
rape, per quarter	0	0	1	0	0	1	1	0	0		0	13	8	
sesamum, per quarter	0	0	1	0	0	1								
shrub or tree, per cwt.	0	10	0	0	5	0	50	0	0	per cent.	27	10	0	per cent.
tares, per quarter	0	5	0	0	2	6	20	0	0	per cent.	27	10	0	per cent.
trefoil, per cwt.	0	5	0	0	2	6	50	0	0	per cent.	27	10	0	per cent.
worm, per cwt.	0	5	0	0	2	6	8	8	0		2	16	0	
all seeds not particularly enumerated or described, nor otherwise charged with duty, commonly used for expressing oil therefrom, per quarter	0	0	1	0	0	1	0	0	4½		27	10	0	per cent.
all other seeds not particularly enumerated or described, not otherwise charged with duty, for every 100*l.* value	10	0	0	5	0	0	50	0	0		27	10	0	
Segars. *See* Tobacco, manufactured.														
Senna, per lb.	0	0	1	0	0	1	0	1	3		0	0	6	
Shaving for hats. *See* Platting.														
Sheep and lambs. *See* Animals.														
Shell lac. *See* Gum.														
Ships to be broken up with their tackle, apparel, and furniture (except sails), viz.: —														
foreign ships or vessels, for every 100*l.* value	25	0	0	25	0	0	50	0	0		5	10	0	
foreign ships broken up, for every 100*l.* value	10	0	0	10	0	0								
British ships, or vessels entitled to be registered as such, and not having been built in the U. Kingdom				Free.			Free.				Free.			
Shrubs. *See* Plants		Free.		Free.			Free.							
Shumac, per ton	0	1	0	0	1	0	1	11	8		Free.			
Silk, viz. —														
knubs, or husks of silk, and waste silk, per cwt.	0	1	0	0	0	6	22	8	0		1	17	4	
raw silk, per lb.	0	0	1	0	0	1	0	5	6		0	3	0	
thrown silk, not dyed, viz. —														
singles, per lb.	0	1	0	0	0	6	0	14	8		0	7	4	
tram, per lb.	0	1	0	0	0	6	0	14	8		0	7	4	
organzine and crape silk, per lb.	0	1	0	0	0	6	0	14	8		0	7	4	
thrown silk, dyed, viz. —														
singles or tram, per lb.	0	2	0	0	1	0	2	5	6		1	4	9	
organzine or crape silk, per lb.	0	2	0	0	1	0	2	5	6		1	4	9	
manufactures of silk, or of silk mixed with any other material, the produce of Europe, viz. —														
silk or satin, plain, per lb.	0	11	0											
or, and at the option of the officers of the customs, for every 100*l.* value	25	0	0											
silk, figured or brocaded, per lb.	0	15	0											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
gauze, plain, per lb.	0	17	0											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
gauze striped, figured, or brocaded, per lb.	1	7	6											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
crape, plain, per lb.	0	16	0											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
crape, figured	0	18	0											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
velvet, plain, per lb.	1	2	0											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
velvet, figured, per lb.	1	7	6											
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
ribbons, embossed, or figured with velvet, per lb.	0	17	0				Prohibited.				Prohibited.			
or, and at the option of the officers of the customs, for every 100*l.* value	30	0	0											
and further, if mixed with gold, silver, or other metal, in addition to the above rates, when the duty is not charged according to the value, per lb.	0	10	0											
fancy silk net, or tricot, per lb.	1	4	0											
plain silk lace or net, called tulle, the square yard	0	1	4											
manufactures of silk, or of silk mixed with any other material, not particularly enumerated or otherwise charged with duty, for every 100*l.* value	30	0	0	5	0	0								
millinery of silk, or of which the greater part of the materials is of silk, viz. —														
turbans or caps, each	0	15	0	0	15	0								
hats or bonnets, each	1	5	0	1	5	0								
dresses, each	2	10	0	2	10	0								
or, and at the option of the officers of the customs, for every 100*l.* value	40	0	0	40	0	0								
manufactures of silk, or of silk and any other material and articles of the same, wholly or in part made up, not particularly enumerated or otherwise charged with duty, for every 100*l.* value	30	0	0	30	0	0								
Silkworm gut, for every 100*l.* value	20	0	0	20	0	0	20	0	0		27	10	0	
Skins, furs, pelts, and tails, viz. —														
badger, undressed, the dozen skins	0	1	6	0	0	9	0	1	6	per skin.	0	0	7	per skin.
bear, per skin	0	3	0	0	2	0	0	4	6		0	5	6	
beaver, undressed, per skin	0	0	8	0	0	2	0	0	8		0	0	8½	
calf. *See* Hides.														
cat, undressed, per dozen skins	0	1	0	0	0	6	0	0	6	per skin.	0	0	1¼	per skin.
coney, undressed, per 100 skins	0	0	6	0	0	3	0	1	0		0	2	5	
chinchilla, undressed, per dozen skins	0	2	0	0	1	0	2	0	0	per cent.	27	10	0	per cent.
deer, undressed, per skin	0	0	1	0	0	0½	0	0	4		0	0	9	
Indian, half dressed, per skin	0	0	2	0	0	1	0	0	8		0	0	4½	per lb.
tanned, tawed, or in any way dressed, per skin	0	0	6	0	0	3								
dog, in the hair, not tanned, tawed, or in any way dressed, per dozen skins	0	0	2	0	0	1	0	0	10		0	2	6	
dog fish, undressed, per dozen skins	0	1	0	0	0	1	0	5	2		0	2	0	
elk, undressed, per skin	0	0	6	0	0	3	0	1	0		0	1	8	
ermine, undressed, per dozen skins	0	0	6	0	0	3	0	0	8	per skin.	0	0	3½	per skin.
dressed, per dozen skins	0	2	0	0	1	0	75	0	0	per cent.	77	0	0	per cent.

Articles.	Rates of Duty in 1841. From Foreign Countries. £	s.	d.	From British Possessions. £	s.	d.	Duty, 1819. £	s.	d.	Duty, 1787. £	s.	d.
Skins, &c. —*continued.*												
fisher, undressed, per dozen skins	0	4	0	0	2	0	0	1	0 per skin.	0	1	4½ per skin.
fitch, undressed, per dozen skins	0	1	0	0	0	6	0	3	2	0	1	0
fox, undressed, per skin	0	0	6	0	0	3	0	0	8	0	0	4½
tails, undressed, each	0	0	2	0	0	1	20	0	0 per cent.	27	10	0 per cent.
goat, raw, or undressed, per dozen skins	0	0	3	0	0	2	0	2	10	0	5	6
tanned, tawed, or in any way dressed, per dozen skins	0	5	0	0	2	6	2	0	0	1	0	0
goose, undressed, per dozen skins	0	1	0	0	0	6						
hare, undressed, per 100 skins	0	0	6	0	0	3	0	5	6	0	0	9½
husse, undressed, per dozen skins	0	3	0	0	1	6	0	0	6 per skin.	0	0	2 per skin.
kangaroo, undressed per dozen skins	0	0	2	0	0	1	20	0	0 per cent.	27	10	0 per cent.
kid, in the hair, undressed, per 100 skins	0	0	4	0	0	2	0	1	7	0	19	3
dressed, per 100 skins	0	5	0	0	2	6	2	0	0	1	4	9
ditto, and dyed or coloured, per 100 skins	0	10	0	0	5	0	2	0	0	1	4	9
kolinski, undressed, per dozen skins	0	1	0	0	0	6	20	0	0 per cent.	27	10	0 per cent.
lamb, undressed, in the wool, per 100 skins	0	0	4	0	0	2	20	0	0 per cent.	0	2	3½ per 100.
tanned or tawed, per 100 skins	0	5	0	0	2	6	2	0	0	77	0	0 per cent.
tanned or tawed, dyed, or coloured, per 100 skins	0	10	0	0	5	0	2	0	0	77	0	0 per cent.
dressed in oil, per 100 skins	2	0	0	1	0	0	4	0	0	2	0	4
leopard, undressed, per skin	0	1	6	0	0	9	0	9	6	0	6	11
lion, undressed, per skin	0	0	6	0	0	3	0	6	0	0	2	9
lynx, undressed, per skin	0	0	6	0	0	3	20	0	0 per cent.	27	10	0 per cent.
marten, undressed, per skin	0	0	4	0	0	2	0	0	6	0	1	4½
tails, undressed, per 100 tails	0	2	6	0	1	3	0	16	3	0	0	9½
mink, undressed, per dozen skins	0	1	0	0	0	6	0	0	4 per skin.	0	0	5 per skin.
dressed, per skin	0	0	6	0	0	3	0	2	0	0	0	6½
mole, undressed, per 100 skins	0	3	0	0	1	6	0	0	6 per dozen.	0	0	2 per dozen.
musquash, undressed, per 100 skins	0	1	0	0	0	6	0	12	6	0	13	9
nutria, undressed, per 100 skins	0	1	0	0	0	6	20	0	0 per cent.	27	10	0 per cent.
otter, undressed, per skin	0	1	0	0	0	6	0	1	6	0	1	5
ounce, undressed, per skin	0	0	2	0	0	1	0	7	6	0	3	6
panther, undressed, per skin	0	0	2	0	0	1	0	9	6	0	5	6
pelts of all sorts, undressed, per dozen pelts	0	0	1	0	0	6	0	17	0	0	8	3
tanned, tawed, or in any way dressed per dozen pelts	0	5	0	0	2	6						
racoon, undressed, per dozen skins	0	1	6	0	0	9	0	0	2 per skin.	0	13	9 per skin
sable, undressed, per skin	0	2	0	0	1	0	0	8	4	0	4	1½
tails or tips, undressed, per dozen	0	1	6	0	0	9	0	1	3	0	0	7
seal, in the hair, not tanned, tawed, or in any way dressed, per skin	0	0	4	0	0	4	0	0	3	0	0	6
of British taking, imported direct from the fishery or a British possession, per dozen skins	-		-	0	0	1	0	0	3	0	0	2
sheep, undressed, in the wool, per dozen skins	0	0	6	0	0	3	0	2	3	0	0	10
tanned or tawed, per 100 skins	0	12	0	0	6	0	2	0	0	0	9	10
dressed in oil, per 100 skins	1	0	0	0	10	0	4	0	0	1	19	7
squirrel or calabar, undressed, per 100 skins	0	3	0	0	1	6	0	11	6	0	4	7
tawed, per 100 skins	0	5	0	0	2	6	0	17	6	0	5	4½
tails, undressed, for every 100*l.* value	5	0	0	2	10	0	20	0	0	27	10	0
swan, undressed, per skin	0	0	3	0	0	2	0	2	3	0	0	11
tiger, undressed, per skin	0	1	6	0	0	9	0	9	6	0	2	9
weasel, undressed, per dozen skins	0	1	3	0	0	2	0	4	9 per 100	0	0	9½ per 100
wolf, undressed, per dozen skins	0	2	0	0	1	0	0	2	0 per skin.	0	6	4 per skin.
tawed, per skin	0	5	0	0	2	6	0	17	6	0	8	3
wolverines, undressed, the skin	0	0	3	0	0	2	0	1	0	0	3	6
skins and furs, or pieces of skins and furs, raw or undressed, not particularly enumerated or described, and not otherwise charged with duty, for every 100*l.* value	5	0	0	2	10	0	20	0	0	27	10	0
skins and furs, or pieces of skins and furs, tanned, curried, in any way dressed, not particularly enumerated or described, not otherwise charged with duty, for every 100*l.* value	10	0	0	5	0	0	75	0	0	77	0	0
articles manufactured of skins or furs, for every 100*l.* value	20	0	0	10	0	0	75	0	0	77	0	0
Slate. *See* Stones.												
Smalts, per lb.	0	0	2	0	0	2	0	0	9½	0	0	4
Snuff, per lb.	0	6	0	0	6	0						
Soap, hard, per cwt.	1	10	0	1	0	0	4	10	0	2	4	0
soft, per cwt.	1	0	0	0	15	0	3	11	3	1	17	5
Naples, per cwt.	2	16	0	2	16	0						
Soda. *See* Alkali.												
Spa ware, for every 100*l.* value	15	0	0	15	0	0	50	0	0	27	10	0
Specimens of minerals, or fossils, and all specimens, whether animal or vegetable, illustrative of natural history, duty free	Free.			Free.								
Speckled wood. *See* Woods.												
Spelter or zinc. *See* Spelter, in Ores.												
Spermaceti, fine, for every 100*l.* value	25	0	0	25	0	0	0	1	6 per lb.	0	0	8 per lb.
Spices, viz. —												
cassia lignea, per lb.	0	0	3	0	0	1	0	2	6	0	0	4
cassia buds, per lb.	0	0	6	0	0	3	0	2	6	0	0	4
cinnamon, per lb.	0	0	6	0	0	3	0	3	6	0	4	5
cloves, per lb.	0	0	6	0	0	6	0	3	0	0	2	8
ginger, per cwt.	0	10	0	0	5	0	2	13	0	1	8	0
preserved, per lb.	0	0	6	0	0	1	0	3	2	27	10	0 per cent.
mace, per lb.	0	2	6	0	2	6	0	4	6	0	4	6
nutmegs, per lb.	0	3	6	0	2	6	0	3	6	0	2	0
wild, in the shell, per lb.	0	0	3	0	0	3						
pimento, per cwt.	0	5	0	0	5	0	0	1	3 per lb.	0	0	6 per lb.
pepper of all sorts, per lb.	0	0	6	0	0	6				0	0	3
Spirits, or strong waters, of all sorts, viz. —												
for every gallon of such spirits or strong waters, of any strength not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater or less strength than the strength of proof, and for any greater or less quantity than a gallon, viz. —												
being spirits or strong waters, not the produce of any British possession, and not being sweetened spirits, or spirits mixed with any article, so that the degree of strength thereof cannot be exactly ascertained by such hydrometer, per gallon	1	2	6	-		-	0	2	2½	0	0	10½
spirits or strong waters, the produce of any British possession in America, not being sweetened spirits, or spirits so mixed as aforesaid, per gallon	-		-	0	9	0	0	1	6	0	0	6

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	Rates of Duty in 1844. From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Spirits — *continued.*				
rum, the produce of any British possession within the limits of the East India Company's charter, not being sweetened spirits, or spirits so mixed as aforesaid, in regard to which the conditions of the act 4 Vict. c. 8. have or shall have been fulfilled, per gallon	- - -	0 9 0	0 2 6	0 3 4½
rum shrub, however sweetened, the produce of and imported from such possessions, in regard to which the conditions of the act 4 Vict. c. 8. have or shall have been fulfilled, or the produce of and imported from any British possession in America, per gallon	- - -	0 9 0	0 6 7½	0 3 4½
spirits or strong waters, the produce of any British possession within the limits of the East India Company's charter, except rum, in regard to which the conditions of the act 4 Vict. c. 8. have or shall have been fulfilled, not being sweetened spirits, or spirits so mixed as aforesaid, per gallon	- - -	0 15 0		
spirits, cordials, or strong waters, not being the produce of any British possession in America, nor any British possession within the limits of the East India Company's charter, in regard to which the conditions of the act 4 Vict. c. 8. have or shall have been fulfilled, sweetened or mixed with any article, so that the degree of strength thereof cannot be exactly ascertained by Sykes's hydrometer, and perfumed spirits to be used as perfumery only, per gallon	1 10 0	1 10 0	0 6 7½	0 3 4½
cordials or strong waters, except rum shrub, being the produce of any British possession in America, or of any British possession qualified as aforesaid, sweetened or mixed with any article as aforesaid, per gallon	- - -	1 0 0	0 6 7½	0 3 4½
liqueurs, the produce of and imported from British possessions in America, or of and from any British possession qualified as aforesaid, not being of greater strength than the strength of proof by Sykes's hydrometer, per gallon	- - -	0 9 0		
being of greater strength by Sykes's hydrometer, except rum shrub, per gallon	- - -	0 13 6		
Sponge, per lb.	0 0 6	0 0 1	0 2 0	0 0 7
Squills, dried, per cwt.	0 1 0	0 1 0	1 0 0	0 2 6
not dried, per cwt.	0 0 6	0 0 6	0 5 0	0 2 6
Starch, per cwt.	0 10 0	0 5 0	9 10 0	5 5 8
gum of, torrified or calcined, commonly called British gum, per cwt.	0 15 0	0 15 0		
Staves ere, per cwt.	0 4 0	0 4 0	1 8 0	0 8 9
Steel, unwrought. *See* Steel, in Ores.				
Stones, bricks and tiles, viz. —				
bricks or clinkers, Dutch, per 1,000	0 10 0	0 5 0	1 2	0 7 2
other sorts, per 1,000	0 15 0	0 7 6		
chalk, unmanufactured, and not otherwise enumerated, for every 100*l.* value	5 0 0	2 10 0	20 0 0	27 10 0
prepared or manufactured, and not otherwise enumerated, for every 100*l.* value	10 0 0	5 0 0	40 0 0	27 10 0
gypsum, per ton	1 11 8	0 1 3	1 11 8	27 10 0 per cent.
plaster of Paris, per ton	1 0 0	1 0 0	0 2 6 per cwt.	0 1 2½ per cwt.
stones, viz. —				
stones, in lumps, not in any manner hewn: slate and marble, in rough blocks or slabs; limestone, flint stones, felspar and stones for potters' use; pebble stones, stones to be used for the purpose of lithography	Free.	Free.		
stone, in blocks, shaped or rough scalped, per ton	0 2 0	0 0 6		
stone and slate, hewn, per ton	0 10 0	0 1 0		
marble, sawn in slabs, or otherwise manufactured, per cwt.	0 3 0	0 1 6		
tiles, for every 100*l.* value	10 0 0	5 0 0	50 0 0	
Storax, or Styrax. *See* Gum.				
Straw or grass for platting, per cwt.	0 0 1	0 0 1	20 0 0 per cent.	27 10 0 per cent.
Succades and confectionary, including all fruits and vegetables preserved in sugar, per lb.	0 0 6	0 0 1	0 3 2	0 0 8
Sugar, until 5th July, 1844, viz. —				
brown or Muscovado, or clayed, not being refined, per cwt.	3 3 0	- -	4 6 8 clayed. 3 3 0 not clayed.	2 5 6 clayed. 1 7 2 not clayed.
the growth of any British possession in America, or Mauritius, and imported directly from thence, per cwt.	-	1 4 0	1 15 0 clayed. 1 10 0 not clayed.	1 9 0 clayed. 0 12 4 not clayed.
the growth of any British possession within the limits of the East India Company's charter, in regard to which the conditions of the act 4 & 5 Vict. c. 8. have or shall have been fulfilled, per cwt.	- -	1 4 0	2 0 0	
the growth of any other British possession within those limits, and imported from thence, per cwt.	- -	1 12 0		
refined, per cwt.	8 8 0	- -	8 8 0	4 18 8
candy, brown, per cwt.	5 12 0	- -	5 12 0	2 15 0
white, per cwt.	8 8 0	- -	8 8 0	4 2 6
molasses, per cwt.	1 3 9	0 2 0	1 3 9	0 11 9
maple, if accompanied with a certificate of its being the produce of a British possession, per cwt.	- -	1 4 0		
if not accompanied by such certificate, per cwt.	3 3 0			
Sulphur impressions, for every 100*l.* value	5 0 0	5 0 0	50 0 0	27 10 0
vivum. *See* Brimstone.				
Sweet wood. *See* Woods.				
Swine and hogs. *See* Animals.				

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	Rates of Duty in 1844. From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
T.				
Tails, viz. fox, marten, sables, squirrel or calabar. *See* Skins.				
Talc, per cwt.	0 10 0	0 2 6	0 0 8 per lb.	0 0 2 per lb.
Tallow, per cwt.	0 3 2	0 0 3	0 3 2	Free.
Tamarinds, pee lb.	0 0 3	0 0 1	0 0 8	0 0 2
Tapioca, per cwt.	0 1 0	0 1 0	2 16 0	0 18 8
Tar, per last, containing 12 barrels, each barrel not exceeding 31½ gallons	0 2 6	0 0 6	1 5 9½	0 14 10
Barbadoes, per cwt.	0 2 6	0 2 6	2 6 8	0 2 4
Tares, per qr.	0 5 0	0 2 6	20 0 0 per cent.	27 10 0 per cent.
Tarras, per bushel	0 1 3	0 1 3	0 1 3	0 0 6
Tartaric acid, per lb.	0 0 1	0 0 1	50 0 0 per cent.	27 10 0 per cent.
Tea of all sorts, per lb.	0 2 1	0 2 1	Excise.	Excise.
Teasles, per 1000	0 0 3	0 0 3	0 1 8	0 1 2
Teeth, viz. — elephant, sea cow, sea horse, or sea morse, per cwt.	0 1 0	0 1 0	3 4 0	3 14 8
Telescopes, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Terra Japonica, per ton	0 5 0	0 5 0	4 13 4 per cwt.	1 17 4 per cwt.
Sienna, per ton	0 10 0	0 10 0	1 11 8 per cwt.	27 10 0 per cent.
Umbra, per cwt.	0 4 0	0 4 0	0 12 0	0 4 5
Verde, per ton	0 5 0	0 5 0	0 16 0 per cwt.	27 10 0 per cent.
Thread not otherwise enumerated or described, for every 100*l.* value	10 0 0	5 0 0	50 0 0	27 10 0
Tiles. *See* Stones.				
Tin. *See* Tin, in Ores.				
Tincal, per ton	0 1 0	0 0 6	3 14 8 per cwt.	1 8 0 per cwt.
Tinfoil, per lb.	0 0 6	0 0 6	50 0 0 per cent.	27 10 0 per cent.
Tobacco, viz. — unmanufactured, per lb.	0 3 0	0 3 0	Excise.	0 3 6
snuff, per lb.	0 6 0	0 6 0	Excise.	
manufactured, or cigars, per lb.	0 9 0	0 9 0	0 6 0	
stalks and flour of	Prohibited.	Prohibited.		
Tobacco pipes of clay, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Tongues, per cwt.	0 10 0	0 2 6	0 3 0 per dozen.	0 1 0 per dozen.
Tornsal, per cwt.	0 1 0	0 1 0	0 10 0	0 4 3
Tortoiseshell or turtleshell, unmanufactured, per lb.	0 1 0	0 0 1	0 4 0	0 1 3
Tow. *See* Flax.				
Toys, excepting toy and hand mirrors, on which the plate-glass duty will be levied, for every 100*l.* value	10 0 0	10 0 0	50 0 0	33 0 0
Trees. *See* Plants.	Free.	Free.		
Truffles, per lb.	0 1 0	0 1 0	0 5 6	0 2 3
Tulip wood? *See* Woods.				
Turmeric, per ton	0 5 0	0 0 1	3 14 8 per cwt.	0 18 8
Turnery, not otherwise described, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Turnsole. *See* Tornsal.				
Turpentine, viz. — not being of greater value than 9*s.* per cwt., per cwt.	0 0 1	0 0 1	0 4 4	0 2 3
from 9*s* to 15*s.* per cwt., per cwt.	0 1 0	0 0 3	0 4 4	0 2 3
above 15*s.* value per cwt., per cwt.	0 5 0	0 2 6	0 4 4	0 2 3
of Venice, Scio, or Cyprus, per lb.	0 0 10	0 0 10	0 0 10	0 0 4
Twine, per cwt.	0 10 0	0 5 0	1 11 0	0 10 0
V.				
Valonia, per ton	0 5 0	0 5 0	0 2 6 per cwt.	Free.
Vanelloes, per lb.	0 5 0	0 5 0	0 16 8	0 8 3
Varnish, not otherwise described, for every 100*l.* value	15 0 0	15 0 0	50 0 0	0 8 9 per cwt.
Vases, ancient, not of stone or marble, for every 100*l.* value	1 0 0	1 0 0	50 0 0	27 10 0
Vegetables, viz. — lentiles, per bushel	0 0 3	0 0 1½	0 0 10	0 0 0½ per lb.
onions, per bushel	0 0 6	0 0 3	0 3 0	0 0 3
plantains, per cwt.	0 0 2	0 0 2		
potatoes, per cwt.	0 0 2	0 0 1	0 2 0	0 3 8
all vegetables not enumerated or described, for every 100 value	5 0 0	2 10 0		
Vellum, per skin	0 1 0	0 1 0	0 7 2	0 3 2
Verdegris, per lb.	0 0 1	0 0 1	0 3 4	0 0 3
Verjuice, per tun	10 0 0	10 0 0	73 12 9	27 10 0 per cent.
Vermicelli, per lb.	0 0 1	0 0 1	0 0 8	0 0 2
Vermilion, per lb.	0 0 3	0 0 3	0 2 0	0 0 7
Vinegar, or acetous acid, per tun	18 18 0	18 18 0	73 12 9	39 10 7
W.				
Wafers, per lb.	0 0 3	0 0 3	0 1 3	0 0 6
Washing balls, per lb.	0 0 6	0 0 6	0 1 8	27 10 0 per cent.
Watches of gold, silver, or other metal, for every 100*l.* value	10 0 0	10 0 0	50 0 0	27 10 0
Watches. *See* Clocks.				
Water, viz. — Cologne, the flask (thirty containing not more than one gallon)	0 1 0	0 1 0	0 6 7½ per gall.	0 3 4½ per gall.
mineral water, per gallon strong. *See* Spirits.	0 0 1	0 0 1	0 4 0 per dozen.	0 1 10 per dozen.
Wax, bees' wax, per cwt.	0 2 0	0 1 0	3 6 6	1 11 7
in any degree bleached, per cwt.	1 0 0	0 10 0	6 3 6	3 2 4
myrtle wax, per cwt.	0 2 0	0 1 0	0 1 0 per. lb.	0 0 4 per lb.
sealing wax, for every 100*l.* value	15 0 0	15 0 0	50 0 0	27 10 0
Weld, per ton	0 5 0	0 5 0	0 2 9 per cwt.	0 0 10 per cwt.
Whale fins, per ton	95 0 0	- -	95 0 0	97 18 0
Whale fins, British taking, and imported direct from the fishery, or from any British possession, in a British ship, per ton	- - -	1 0 0	2 7 6	2 15 0
otherwise taken, for every 100*l.* value	20 0 0	20 0 0		
Whipcord, per lb.	0 0 6	0 0 6	0 1 0	0 0 2
Wine, viz. — the produce of the Cape of Good Hope, or the territories or dependencies thereof, and imported directly from thence, per gallon	- - -	0 2 9	17 4 5 per tun.	23 10 5 per tun.
French, per gallon	0 5 -	- - -	79 7 7 per tun.	33 5 7 per tun.
Canary, per gallon	0 5 6		51 13 2 per tun.	23 10 5 per tun.

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	Rates of Duty in 1844. From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Wine — *continued.*				
Madeira, per gallon	0 5 6	- - -	52 18 5 per tun.	23 10 5 per tun.
Portugal, per gallon	0 5 6	- - -	51 13 2 per tun.	23 10 5 per tun.
Rhenish, per gallon	0 5 6	- - -	79 7 7 per tun.	40 6 5 per tun.
Spanish, per gallon	0 5 6		51 13 2 per tun.	23 10 5 per tun.
other sorts	0 5 6	- - -	51 13 2 per tun.	23 10 5 per tun.
Wire. See Wires, in Ores.				
Woad, per ton	0 5 0	0 5 0	0 6 6 per cwt.	0 1 7½ per cwt.
Woods, viz. —				
[illegible]boyna wood, per ton	1 0 0	0 5 0		
[illegible]wood, per ton	0 2 0	0 2 0	0 15 0	27 10 0 per cent.
beef wood, per ton	0 5 0	0 2 6	5 16 9 per cent.	33 0 0 per cent.
black wood, per ton	1 0 0	0 5 0		
box wood, per ton	0 10 0	0 2 6	7 18 6	2 13 0
Brazil wood, per ton	0 2 0	0 2 0	20 0 0 per cent.	Free.
braziletto wood, per ton	0 2 0	0 2 0	0 16 8	Free.
cam wood, per ton	0 2 0	0 2 0	0 15 0	33 0 0 per cent.
cedar, per ton	0 10 0	0 2 6	20 0 0 per cent.	33 0 0 per cent.
ebony, per ton	0 10 0	0 2 6	21 14 0	0 13 3
fustic, per ton	0 2 0	0 1 0	1 4 6	Free.
king wood, per ton	0 10 0	0 2 6		
lignum vitæ, per ton	0 5 0	0 2 6	4 12 8	2 5 0
logwood, per ton	0 2 0	0 2 0	0 9 2	Free.
mahogany, per ton	1 0 0	0 5 0	11 17 6	2 4 0
imported from the bay of Honduras, or the Mosquito shore, per ton	0 5 0	0 5 0	3 16 0	2 4 0
nicaragua wood, per ton	0 2 0	0 2 0	1 6 2	Free.
olive wood, per ton	0 10 0	0 2 6	8 9 6	3 6 0
red or guiana wood, per ton	0 2 0	0 2 0	0 15 0	Free.
rose wood, per ton	1 0 0	0 5 0		
imported from the bay of Honduras, or the Mosquito shore, per ton	0 5 0	0 5 0	1 0 0 per cwt.	33 0 0 per cent.
sapan wood, per ton	0 2 0	0 2 0	20 0 0 per cent.	33 0 0 per cent.
Santa Maria wood, per ton.	0 5 0	0 2 6	20 0 0 per cent.	33 0 0 per cent.
satin wood, per ton	0 10 0	0 2 6		
Saunders, red, per ton	0 2 0	0 2 0	0 15 0	Free.
yellow, per ton	0 5 0	0 2 6	4 13 4 per cwt.	1 8 0 per cwt.
speckled wood, per ton	0 5 0	0 2 6	8 11 2	4 8 4
sweet wood, per ton	0 5 0	0 2 6	10 13 0	5 10 0
tulip wood, per ton	0 10 0	0 2 6		
walnut wood, per ton	0 5 0	0 1 0		
zebra wood, per ton	0 5 0	0 2 6	20 0 0 per cent.	33 0 0 per cent.
Timber and woods, not otherwise charged.				
timber or woods, not being deals, battens, boards, staves, handspikes, oars, lathwood, or otherwise dressed, except hewn, and not being timber or wood otherwise charged with duty, the load of 50 cubic feet	1 5 0	0 1 0		
deals, battens, boards, or other timber or wood, sawn or split, and not otherwise charged with duty, the load of 50 cubic feet	1 12 0	0 2 0		

Or, in lieu of the duties herein-before imposed upon wood by the load, according to the cubic content, the importer may have the option, at the time of passing the first entry, of entering battens, batten ends, boards, deals, deal ends, and planks by tale, if of or from foreign countries, according to the following dimensions, viz. : —

	Not above 7 Inches in Width.	Not above 1¼ Inch in Thickness. £ s. d.	Above 1¼ Inch and not above 2½ in Thickness. £ s. d.
Battens and Batten Ends.			
Not above 6 feet in length, per 120	- -	1 10 10	3 1 7
Above 6 and not above 9 feet in length, per 120	- -	2 6 2	4 12 5
9 and not above 12 feet in length, per 120	- -	3 1 7	6 3 2
12 and not above 15 feet in length, per 120	- -	3 17 0	7 14 0
15 and not above 18 feet in length, per 120	- -	4 12 5	9 4 10
18 and not above 21 feet in length, per 120	- -	5 7 9	10 15 7
	Not above 9½ Inches in Width.	**Not above 1½ Inch in Thickness.**	**Above 1½ Inch and not above 3¼ in Thickness.**
Boards, Deals, Deal Ends, and Plank.			
Not above 6 feet in length, per 120	- -	2 9 5	4 18 10
Above 6 and not above 9 feet in length, per 120	- -	3 14 1	7 8 3
9 and not above 12 feet in length, per 120	- -	4 18 10	9 17 8
12 and not above 15 feet in length, per 120	- -	6 3 6	12 7 1
15 and not above 18 feet in length, per 120	- -	7 8 3	14 16 6
18 and not above 21 feet in length, per 120	- -	8 12 11	17 5 11
	Above 9½ Inches and not above 11½ in Width.		
Not above 6 feet in length, per 120	- -	2 19 10	5 19 7
Above 6 and not above 9 feet in length, per 120	- -	4 9 8	8 19 5
9 and not above 12 feet in length, per 120	- -	5 19 7	11 19 2
12 and not above 15 feet in length, per 120	- -	7 9 6	14 19 0
15 and not above 18 feet in length, per 120	- -	8 19 5	17 18 9
18 and not above 21 feet in length, per 120	- -	10 9 4	20 18 7

Articles.	Rates of Duty in 1844. From Foreign Countries. £ s. d.	Rates of Duty in 1844. From British Possessions. £ s. d.	Duty, 1819. £ s. d.	Duty, 1787. £ s. d.
Timber & woods not otherwise charged — *continued.*				
staves, per load of 50 cubic feet	1 8 0	0 2 0		
birch, hewn, not exceeding 3 feet in length, nor exceeding 8 inches square, imported for the sole purpose of making herring barrels for the use of the fisheries, per load of 50 feet	0 1 0	0 1 0		

Articles.	Rates of Duty in 1844. From Foreign Countries.	Rates of Duty in 1844. From British Possessions.	Duty, 1819.	Duty, 1787.
Wood — *continued.*	£ s. d.	£ s. d.	£ s. d.	£ s. d.
firewood, per fathom of 216 cubic feet	0 10 0	Free.	0 19 0	0 2 8
handspikes, not exceeding 7 feet in length, per 120	1 0 0	0 0 6	2 7 6	0 6 8
exceeding 7 feet in length, per 120	2 0 0	0 1 0	4 15 0	0 13 4
hoops, not exceeding 7½ feet in length per 1,000	0 2 0	0 0 4	0 15 0	0 5 11
not exceeding 9 feet in length, per 1,000	0 3 0	0 0 6	0 15 0	0 5 11
exceeding 9 feet in length, per 1,000	0 5 0	0 1 0	0 15 0	0 5 11
knees, under 5 inches square, per 120	0 10 0	0 0 3	0 12 0	0 3 4
5 inches, and under 8 inches square, per 120	2 0 0	0 1 0	4 17 6	1 13 0
lathwood, per fathom of 216 cubic feet	2 0 0	0 1 0		
oars, per 120	7 10 0	0 3 9	14 19 3	1 19 8
spars or poles, under 22 feet in length, and under 4 inches in diameter, per 120	1 0 0	0 0 6	2 16 3	0 6 8
22 feet in length and upwards, and under 4 inches in diameter, per 120	2 0 0	0 1 0	4 17 6	0 11 0
of all lengths, 4 inches, and under 6 inches in diameter, per 120	4 0 0	0 2 0	10 11 6	1 4 3
spokes for wheels, not exceeding 2 feet in length, per 1,000	2 0 0	0 1 0	3 7 4	0 19 10
exceeding 2 feet in length, per 1,000	4 0 0	0 2 0	6 14 8	0 19 10
teak, per load of 50 cubic feet	0 10 0	0 1 0	1 10 0	0 6 8
wastewood, viz. billetwood or brushwood, used for the purposes of stowage, for every 100*l.* value	5 0 0	0 5 0		
wood planed, or otherwise dressed or prepared for use, and not particularly enumerated, nor otherwise charged with duty	7½*d.* per ft. of cubic contents, and further for every 100*l.* value, 10 0 0	For every 100*l.* value, 5 0 0		
Wool, viz. —				
alpaca, and the llama tribe, per cwt.	0 2 6	0 2 6		
beaver, per lb.	0 0 6	0 0 3	0 1 7	Free.
cut and combed, per lb.	0 1 0	0 0 6	0 4 9	0 16 6
coney, per lb.	0 0 1	0 0 1	0 0 6	0 0 1½
cotton, or waste of cotton wool, per cwt.	0 2 11	0 0 4	0 9 7½	0 9 4
goats' or hair, per cwt.	0 2 6	Free.	0 0 6 per lb.	Free.
hares', per lb.	0 0 1	Free.	0 0 2½	0 0 1
sheep or lambs' wool, viz. not being of the value of 1*s.* the lb. thereof, per lb.	0 0 0½	Free.	0 0 6	Free.
being of the value of 1*s.* the lb. or upwards, per lb.	0 0 1	Free.	0 0 6	Free.
Woollens, viz. —				
manufactures of wool, not being goats' wool, or of wool mixed with cotton, not particularly enumerated or described, not otherwise charged with duty, for every 100*l.* value	15 0 0	5 0 0	50 0 0	Prohibited.
articles of manufactures of wool, not goats' wool, or of wool mixed with cotton, wholly or in part made up, not otherwise charged with duty, for every 100*l.* value	20 0 0	10 0 0	50 0 0	Prohibited.
Woollen gloves. *See* Linen.				
Y.				
Yarn, viz. —				
cable, per cwt.	0 6 0	0 3 0	1 1 6	0 8 6
camel or mohair, per lb.	0 0 1	0 0 1	0 1 7	0 0 7
raw linen, per cwt.	0 1 0	0 1 0	0 1 0	Free.
worsted, per lb.	0 0 6	0 0 6	0 1 7	0 0 10
Z.				
Zaffre, per cwt.	0 1 0	0 1 0	20 0 0 per cent.	27 10 0 per cent.
Zebra wood. *See* Woods.				
Goods, wares, and merchandise, being either in part or wholly manufactured, and not being enumerated or described, not otherwise charged with duty, and not prohibited to be imported into or used in Great Britain or Ireland, for every 100*l.* value	20 0 0	20 0 0	50 0 0	27 10 0
Goods, wares, and merchandise, not being either in part or wholly manufactured, and not being enumerated or described, not otherwise charged with duty, and not prohibited to be imported into or used in Great Britain or Ireland, for every 100*l.* value	5 0 0	5 0 0	20 0 0	27 10 0

Duties of Customs payable on Goods, Wares, and Merchandise, being the Growth, Produce, or Manufacture of the U. Kingdom, exported from the U. Kingdom to Foreign Countries.

	Rate of Duty. £ s. d.
Coal, culm, or cinders, in a foreign ship, per ton	0 4 0
Coal, in a British ship, viz. not being small coal, per ton	0 2 0
small coal, that is to say, coals which shall have been screened through a riddle or screen, the bars of which are not in any part thereof more than 5-8th parts of an inch asunder, and culm, per ton	0 1 0
Clay and China stone, per cwt.	0 0 3
Wools and skins, per cwt.	0 1 0
Manufactures, or pretended manufactures, slightly wrought up, so as that the same may be reduced to and made use of as wool again; mattresses or beds stuffed with combed wool, or wool fit for combing or carding, per cwt.	

The excise or inland duties are repaid, or, as it is termed, drawn back, on the goods being exported; and countervailing duties are imposed in the case of articles exempted from duty in Ireland, and charged with it in Great Britain, being imported from the former into the latter. The drawback on the malt used in brewing is computed at the rate of 5*s.* the barrel of 36 Imperial gallons.

Inland or Excise Duties in the U. Kingdom, on the 1st of January, 1844.

	Duties.					
	G. Britain.			Ireland.		
	£	s.	d.	£	s.	d.
Bricks, for every 1,000 of a size not exceeding 150 cubic inches	0	5	10			
Ditto, for every 1,000 exceeding 150 cubic inches	0	10	0			
Glass, bottle, per cwt.	0	7	0			
broad, crown, and German sheet, per cwt.	3	13	6			
plate, for material employed in making it, per cwt.	3	0	0			
flint, charged on fluxed material, per 100 lbs.	0	6	8			
Hops, per lb.	0	0	2			
Malt from barley, per bushel	0	2	7	0	2	7
from bear or bigg, per bushel	0	2	0			
Paper and pasteboard, per lb.	0	0	1½	0	0	1½
Soap, hard, per lb.	0	0	1½			
soft, per lb.	0	0	1			
Spirits, in England, per gallon	0	7	10			
in Scotland, per gallon	0	3	8			
in Ireland, per gallon	0	0	0	0	2	8
Sugar, from beet-root, &c., per cwt.	1	4	0	1	4	0
Vinegar, per gallon	0	0	2	0	0	2

TARTAR. See ARGAL.

TATTA, a town in the territory of Sinde, situated about 60 miles in a direct line from the sea, at a short distance from the western bank of the river Indus, in lat. 24° 44′ N., lon. 68° 17′ E. Population uncertain, probably about 8,000. The streets are narrow and dirty; but the houses, though built of mud, chopped straw, and timber, are superior to the low huts seen in the adjoining towns and villages.

Trade. — Being situated a little above the part where the Indus divides into the two great branches by which its waters are poured into the Indian Ocean, it might be supposed that Tatta would be a place of great trade. But, owing to the unwholesomeness of the climate, the barbarism of the tribes on its banks, and other causes, its commerce has never corresponded with what might have been anticipated, looking at its position on the map. It had probably attained the acmé of its prosperity in the beginning of the 16th century. In 1555, the Portuguese, by way, as they stated, of avenging the treachery of the king of Sinde, inhumanly massacred 8,000 of the inhabitants, and burned the town. — (*Conquêtes des Portugais*, tome iv. p. 183.) It is probable that Tatta never fully recovered from this dreadful blow; but Mr. Hamilton mentions, that in the 17th century it was extensive and populous, possessing much commerce, with manufactures of silk, wool, and cabinet ware. The decayed state in which we now find it, has been a consequence of the misgovernment and rapacity of its present rulers, the Ameers of Sinde, under whose sway it fell more than 50 years ago.

In 1635, the English established a factory at Tatta, in the view of facilitating the disposal of woollens and other goods in the countries traversed by the Indus; and the building occupied by the factory, though far from magnificent, was recently, if it be not still, the best, not in Tatta only, but in the whole country of Sinde.

The chief exports are rice, shawls from Cashmere, opium from Malwah, hides, ghee, cotton, goats' wool, carpets, drugs, &c. Putchock, an article largely consumed in China, is a peculiar export of Sinde. The imports comprise a variety of articles, but the quantities are trifling; they consist principally of spices, dye stuffs, hardware, tin, iron, &c., broad cloths, English cottons, silks, &c. But at present the trade is quite inconsiderable; and no one could believe, *à priori*, that the natural emporium of so great a river as the Indus, traversing many extensive countries, would cut so insignificant a figure in the trading world.

Navigation and Trade of the Indus. — The navigation of this magnificent river by the fleet of Alexander the Great, has conferred on it a classical celebrity not to be matched by any other river of the East. Its magnitude, too, is worthy of its fame. It may be navigated by flat-bottomed boats as far as Attock, and its tributary stream the Ravee is navigable to Lahore, both places being above 1,000 miles from the sea. But, unfortunately, its navigation is extremely difficult, and it may be doubted whether it will ever realise any considerable portion of the advantages which have of late years been anticipated from its being opened. The mouths of the river are ill-defined, shallow, and infested with moveable sand-banks, while the violence of the *bore*, or tide * makes their entrance at all times a matter of difficulty for vessels of the small draught of water suitable to their navigation, and during the period of the western monsoon they are all but impracticable. This, no doubt, is the reason that for centuries past the navigation from and to the sea through the delta of the Indus has been almost wholly abandoned; and that all products brought down the river and destined for exportation by sea are conveyed from Tatta overland to Curachee, a sea-port a little to the north of the most northerly mouth of the river, about 60 miles in a direct line from Tatta; and that all those coming from parts beyond sea and destined for countries on the Indus are conveyed from Curachee to Tatta by the same route.

Even after it has been entered, the navigation of the river is peculiarly difficult, partly from the strength of the current during the period of the inundation, and partly from shallows, and the sudden and constant shifting of the channel: what was a navigable passage one day is not unfrequently quite unnavigable a day or two after. The *doondees*, or native craft, by which the river is navigated, though of very small burden, frequently get aground.

If the Indus should ever become a considerable commercial highway, it will, most probably, be brought about by the intervention of suitable steamers; and it seems to

* Whatever other changes may have taken place in the river, the tides at its mouth would seem to have been nearly the same in antiquity as at present. Their violence created the greatest alarm in the fleet of Alexander; and occasioned, indeed, the loss of several vessels! — (*Arrian*, lib. vi. cap. 19.)

be the opinion of the best judges, that, provided the steamers employed be flat-bottomed, and do not draw more than 28 or 30 inches water, they might, with proper precautions, be navigated from the sea for nearly 1,000 miles inland. But, exclusive of the physical obstacles to the navigation of the river, the backward state of the country through which it flows, and the poverty and barbarism of the inhabitants, are formidable obstacles to its becoming of much importance as a commercial highway. The inhabitants along its banks have little taste for foreign commodities; and even if they had, they have few products suitable for export to exchange for them. No doubt, should regular government, industry, and civilisation be introduced into the Punjab, Caubul, and the contiguous countries, the case might be very different, and the trade of the Indus might become of very considerable importance. But this, if it be ever effected, must require a lengthened period to bring it about; so that those who look for any material addition being speedily made to our trade, or to that of India, by the opening of the Indus, will, there is too much reason to think, be entirely disappointed. (See, for farther particulars, the art. *Indus* in the *Geographical Dictionary*, and the authorities there referred to; see also Captain Postan's work on Sinde; and especially the memoir in the appendix (p. 361.) of Captain Carless, *On the Navigation of the Indus*.)

A very well-informed party, Dr. Buist, editor of the *Bombay Times*, has, in his work on the late expedition into Affghanistan, made the following observations on the trade of the Indus: —

"The glowing descriptions of Burnes appear to have given a very exaggerated idea of the value of the internal traffic of the countries beyond the Indus. It was forgotten that where there was no industry, no manufactures or mineral wealth, no sea-coast or rivers to permit exportation, there could be little or nothing to give in exchange for imports; and that the wants of a population purely nomade must at all times be simple and singularly few. The whole of our commerce with Persia has never exceeded two millions sterling a year, rarely above one; the total of our trade with Affghanistan certainly never exceeded a million annually, and has very rarely amounted to much more than the half of one. Besides this, the Indus in reality was never closed save by its own dangerous entrances and shallow depth of water. Lord Ellenborough has opened the Indus as far as Mithen Kote; and the Sutlej, in continuation of this, to the Markunda, where it ceases to be navigable for the smallest craft. Yet the gross value of the British goods consumed by the countries adjoining does not at present amount to a quarter of a million sterling, and will not in all likelihood be doubled for 10 years to come; the expense of maintaining troops betwixt Kurrachee and Bukkur, both stations included, exceeding 600,000*l.* a year; with a less force it would be unwise to think of keeping these stations at all. The great line of traffic was not along but across the Indus, by the Delhi frontier, or parallel to it at a distance of 100 miles, by Sonmeanee and Kelat. The countries beyond the Indus, besides, have always been open to the free admission of every variety of foreign imports on paying a moderate fixed duty. The chief obstructions in reaching these are irremediable by treaty; and arise from the attacks of the plundering tribes in the passes, which cannot be restrained save by the payment of a black mail or subsidy."

The delta of the Indus has little in common with the delta of the Nile, except its shape. Not a fourth part of it is cultivated, and its few inhabitants principally lead a pastoral life. It is overgrown with tamarisks and other wild shrubs; and though intersected by the numerous mouths of the river, its surface is dry and arid, and it is in a great degree destitute of fresh water.

Money, Weights, and Measures. — Accounts are kept in rupees, carivals, and pice: 12 pice = 1 carival; 50 carivals = 1 rupee. Cowries are current in Sinde, 48 cowries = 1 pice.

Small Weights. — 24 Moons = 1 Ruttee.
6 Ruttees = 1 Ma...
12 Massas = 1 Tolah.

Gross Weights. — 4 Pice = 1 Anna.
16 Annas = 1 Pucca se...
40 Seers = 1 Maund, or 74 lbs. 5 oz. 7 dwts. avoirdupois.

Long Measure. — 1 Garce = 2 inches.
16 Garces = 1 Guz; but 1 guz cloth = 34 inches at Tatta.

Grain Measure. — 4 Puttoes = 1 Twler.
4 Twiers = 1 Cossa.
60 Cossas = 1 Carval of wheat; or 22 Pucca maunds, or 21 Bombay parahs.

Diamonds and pearls are sold by hubbas and ruttees. — 8 hubbas = 1 ruttee, about 2 grs. Troy. — (*Milburn's Orient. Commerce.*)

TEA (in one Chinese dialect *Cha*, in another *Te*; Du. *Te*; Fr. *Thé*; It. *Te*; Rus. *Tchai*; Hind. *Cha*; Malay, *Teh*), the leaves of the tea tree or shrub (*Thea viridis* Lin.).

I. Description of the Tea Plant. — Tea Trade of China.
II. Rise and Progress of the British Tea Trade. — Consumption of Tea.
III. East India Company's Monopoly — Influence of, on the Price of Tea — Conditions under which it was held — Abolition of.
IV. Duties on Tea. — Consumption of, in the U. Kingdom, the Continent, the United States, etc.

I. Description of the Tea Plant. — Tea Trade of China.

Description of the Plant. — Places where it is cultivated. — The tea plant ordinarily grows to the height of from 3 to 6 feet, and has a general resemblance to the myrtle, as the latter is seen in congenial situations in the southern countries of Europe. It is a polyandrous plant, of the natural order *Columniferæ*, and has a white blossom, with yellow style and anthers, not unlike those of a small dog-rose. The stem is bushy, with numerous branches, and very leafy. The leaves are alternate, on short, thick, channelled footstalks, evergreen, of a longish elliptic form, with a blunt, notched point, and serrated except at the base. These leaves are the valuable part of the plant. The *Camellias*,

particularly the *Camellia Sasanqua*, of the same natural family as the tea tree, and very closely resembling it, are the only plants liable to be confounded with it by a careful observer. The leaves of the particular camellia just named are, indeed, often used in some parts of China, as a substitute for those of the tea tree.

The effects of tea on the human frame are those of a very mild narcotic; and, like those of many other narcotics taken in small quantities, — even of opium itself, — they are exhilarating. The green varieties of the plant possess this quality in a higher degree than the black; and a stronger infusion of the former will, in most constitutions, produce considerable excitement and wakefulness. Of all narcotics, however, tea is the least pernicious: if, indeed, it be so in any degree, which we very much doubt.

The tea shrub may be described as a very hardy evergreen, growing readily in the open air, from the equator to the 45th degree of latitude. For the last 60 years it has been reared in this country, without difficulty, in greenhouses; and thriving plants of it are to be seen in the gardens of Java, Singapore, Malacca, and Penang; all within 6 degrees of the equator. The climate most congenial to it, however, seems to be that between the 25th and 23d degrees of latitude, judging from the success of its cultivation in China. For the general purposes of commerce, the growth of good tea is confined to China; and is there restricted to 5 provinces, or rather parts of provinces, viz. Fokien and Canton, but more particularly the first, for black tea; and Kiang-nan, Kiang-si, and Che-kiang, but chiefly the first of these, for green. The tea districts all lie between the latitudes just mentioned, and the 115th and 122d degrees of East longitude. However, almost every province of China produces more or less tea, but generally of an inferior quality, and for local consumption only; or when of a superior quality, like some of the fine wines of France, losing its flavour when exported. The plant is also extensively cultivated in Japan, Tonquin, and Cochin-China; and in some of the mountainous parts of Ava; the people of which country use it largely as a kind *of pickle preserved in oil!*

Botanically considered, the tea tree is a single species; the green and black, with all the diversities of each, being mere varieties, like the varieties of the grape, produced by difference of climate, soil, locality, age of the crop when taken, and modes of preparation for the market. Considered as an object of agricultural produce, the tea plant bears a close resemblance to the vine. In the husbandry of China, it may be said to take the same place which the vine occupies in the southern countries of Europe. Like the latter, its growth is chiefly confined to hilly tracts, not suited to the growth of corn. The soils capable of producing the finest kinds are within given districts, limited, and partial. Skill and care, both in husbandry and preparation, are quite as necessary to the production of good tea, as to that of good wine.

The best wine is produced only in particular latitudes, as is the best tea; although, perhaps, the latter is not restricted to an equal degree. Only the most civilised nations of Europe have as yet succeeded in producing good wines; which is also the case in the East with tea; for the agricultural and manufacturing skill and industry of the Chinese are there unquestionably pre-eminent. These circumstances deserve to be attended to, in estimating the difficulties which must be encountered in any attempt to propagate the tea plant in colonial or other possessions. These difficulties are obviously very great; and, perhaps, all but insuperable. Most of the attempts hitherto made to raise it in foreign countries were not, indeed, of a sort from which much was to be expected. Within the last few years, however, considerable efforts have been made by the Dutch government of Java, to produce tea on the hills of that island; and having the assistance of Chinese cultivators from Fokien, who form a considerable part of the emigrants to Java, a degree of success has attended them, beyond what might have been expected in so warm a climate. The Brazilians have made similar efforts; having also, with the assistance of Chinese labourers, attempted to propagate the tea shrub near Rio de Janeiro; and a small quantity of tolerably good tea has been produced. But owing to the high price of labour in America, and the quantity required in the cultivation and manipulation of tea, there is no probability, even were the soil suitable to the plant, that its culture can be profitably carried on in that country.

It may, perhaps, succeed in Assam, where its culture is now being attempted; for labour is there comparatively cheap, and the hilly and table lands are said to bear a close resemblance to those of the tea districts of China; but we are not sanguine in our expectations as to the result.

Species of Tea. — Manner in which they are manufactured. — The *black* teas usually exported by Europeans from Canton are as follows, beginning with the lowest qualities: — Bohea, Congou, Souchong, and Pekoe. The *green* teas are Twankay, Hyson skin, young Hyson, Hyson, Imperial, and Gunpowder. All the black teas exported (with the exception of a part of the bohea, grown in Woping, a district of Canton) are grown in Fokien — a hilly, maritime, populous, and industrious province, bordering to the north-east on Canton. Owing to the peculiar nature of the Chinese laws as to inheritance,

and probably, also, in some degree, to the despotic genius of the government, landed property is much subdivided throughout the empire; so that tea is generally grown in gardens or plantations of no great extent. The plant comes to maturity and yields a crop in from 2 to 3 years. The leaves are picked by the cultivator's family, and immediately conveyed to market; where a class of persons, who make it their particular business, purchase and collect them in quantities, and manufacture them in part; that is, expose them to be dried under a shed. A second class of persons, commonly known in the Canton market as "the tea merchants," repair to the districts where the tea is produced, and purchase it in its half-prepared state from the first class, and complete the manufacture by garbling the different qualities; in which operation, women and children are chiefly employed. A final drying is then given, and the tea packed in chests, and divided, according to quality, into parcels of from 100 to 600 chests each. These parcels are stamped with the name of the district, grower, or manufacturer, exactly as is practised with the wines of Bordeaux and Burgundy, the indigo of Bengal, and many other commodities; and, from this circumstance, get the name of *chops*, the Chinese term for a seal or signet. Some of the leaf-buds of the finest black tea plants are picked early in the spring, before they expand. These constitute pekoe, or black tea of the highest quality; sometimes called "white-blossom" tea, from there being intermixed with it, to give it a higher perfume, a few blossoms of a species of olive (*Olea fragrans*), a native of China. A second crop is taken from the same plants in the beginning of May, a third about the middle of June, and a fourth in August; which last, consisting of large and old leaves, is of very inferior flavour and value. The younger the leaf, the more high flavoured, and consequently the more valuable, is the tea. With some of the congous and souchongs are occasionally mixed a little pekoe, to enhance their flavour; and hence the distinction, among the London tea dealers, of these sorts of tea, into the ordinary kinds and those of "Pekoe flavour." Bohea, or the lowest black tea, is partly composed of the lower grades; that is, of the fourth crop of the teas of Fokien, left unsold in the market of Canton after the season of exportation has passed; and partly of the teas of the district of Woping in Canton. The green teas are grown and selected in the same manner as the black, to which the description now given more particularly refers; and the different qualities arise from the same causes. The gunpowder here stands in the place of the pekoe; being composed of the unopened buds of the spring crop. Imperial, hyson, and young hyson, consist of the second and third crops. The light and inferior leaves, separated from the hyson by a winnowing machine, constitute hyson skin, an article in considerable demand amongst the Americans. The process of drying the green teas differs from that of the black; the first being dried in iron pots or vases over a fire, the operator continually stirring the leaves with his naked hand. The operation is one of considerable nicety, particularly with the finer teas; and is performed by persons who make it their exclusive business.

Tea Trade in China. — The tea merchants commonly receive advances from the principal merchants and other capitalists of Canton; but, with this exception, are altogether independent of them; nor have the latter any exclusive privilege or claim of pre-emption. They are very numerous; those connected with the green tea districts alone being about 400 in number. The black tea merchants are less numerous but more wealthy. The greater part of the tea is brought to Canton by land carriage or inland navigation, but chiefly by the first: it is conveyed by porters; the roads of China, in the southern provinces not generally admitting of wheel carriages, and beasts of burden being very rare. A small quantity of black tea is brought by sea, but probably smuggled; for this cheaper mode of transportation is discouraged by government, which it deprives of the transit duties levied on inland carriage. The length of land carriage from the principal districts where the green teas are grown to Canton is probably not less than 700 miles; nor that of the black tea, over a mountainous country, less than 200 miles. The tea merchants begin to arrive in Canton about the middle of October, and the busy season continues until the beginning of March; being briskest in November, December, and January. Tea, for the most part, could, previously to the late changes, only be bought from the Hong or licensed merchants; but some of these, the least prosperous in their circumstances, were supported by wealthy *outside* merchants, as they are called; and thus the trade was considerably extended. The prices in the Canton market vary from year to year with the crop, the stock on hand, and the external demand, as in any other article, and in any other market. After the season is over, or when the westerly monsoon sets in, during the month of March, and impedes the regular intercourse of foreigners with China, there is a fall in the price of tea, not only arising from this circumstance, but from a certain depreciation in quality, from the age of the tea; which, like most other vegetable productions, is injured by keeping, particularly in a hot and damp climate.

Foreign Trade in Tea — There seems to be little mystery in the selection and purchase of teas; for the business is both safely and effectively accomplished, not only by

the supercargoes of the American ships, but frequently by the masters; and it was ascertained by the sales at the East India House, that there was no difference between the qualities of the teas purchased by the commanders and officers of the Company's ships, without any assistance from the officers of the factory, and those purchased for the Company by the latter. An unusual degree of good faith, indeed, appears to be observed, on the part of the Chinese merchants, with respect to this commodity; for it was proved before the select committee of the House of Commons, in 1830, that it was the regular practice of the Hong merchants to receive back, and return good tea for, any chest or parcel upon which any fraud might have been practised, which sometimes happens in the conveyance of the teas from Canton on board ship. Such restitution has occasionally been made even at the distance of 1 or 2 years. The Company enjoyed no advantage over other purchasers in the Canton market, except that which the largest purchaser has in every market, viz. a selection of the teas, on the payment of the same prices as others; and this advantage they enjoyed only as respects the black teas; the Americans being the largest purchasers of green teas.

We subjoin a Table for calculating the cost of tea: —

Comparison of the Cost of Tea per Picul (133⅓ lbs. Avoirdupois), with the Rate per Pound and Ton, of 9 Cwt. or 1,008 Pounds per Ton.

Per Picul.	Exchange 4s. per Dol.		Exch. 4s. 3d. per Dol.		Exch. 4s. 4d. per Dol.		Exch. 4s. 5d. per Dol.		Exch. 4s. 6d. per Dol.	
	Per Lb.	Per Ton.	Per Lb.	Per Ton.	Per Lb.	Per Ton.	Per Lb.	Per Ton.	Per Lb.	Per Ton.
Taels.	*d.*	£ s. d.	*d.*	£ s. d.	*d.*	£ s. d.	*d.*	£ s. d.	*d.*	£ s. d.
20 equal	10	42 0 0	10·625	44 12 6	10·833	45 10 0	11·042	46 7 6	11·250	47 5 0
21 —	10½	44 2 0	11·156	46 17 1½	11·375	47 15 6	11·594	48 13 10½	11·813	49 12 3
22 —	11	46 4 0	11·687	49 1 9	11·916	50 1 0	12·146	51 0 3	12·375	51 19 6
23 —	11½	48 6 0	12·219	51 6 4½	12·458	52 6 6	12·698	53 6 7½	12·936	54 6 0
24 —	12	50 8 0	12·750	53 11 0	13·000	54 12 0	13·250	55 13 0	13·500	56 14 0
25 —	12½	52 10 0	13·281	55 15 7½	13·541	56 17 6	13·802	57 19 4½	14·063	59 1 3
26 —	13	54 12 0	13·812	58 0 3	14·083	59 3 0	14·354	60 5 9	14·625	61 8 6
27 —	13½	56 14 0	14·344	60 4 10½	14·625	61 8 6	14·906	62 12 1½	15·188	63 15 9
28 —	14	58 16 0	14·875	62 9 6	15·166	63 14 0	15·458	64 18 6	15·750	66 3 0
29 —	14½	60 18 0	15·406	64 14 1½	15·708	65 19 6	16·010	67 4 10½	16·313	68 10 3
30 —	15	63 0 0	15·937	66 18 9	16·250	68 5 0	16·562	69 11 3	16·875	70 17 6
31 —	15½	65 2 0	16·469	69 3 4½	16·791	70 10 6	17·114	71 17 7½	17·438	73 4 9
32 —	16	67 4 0	17·000	71 8 0	17·333	72 16 0	17·666	74 4 0	18·000	75 12 0
33 —	16½	69 6 0	17·531	73 12 7½	17·875	75 1 6	18·218	76 10 4½	18·563	77 19 3
34 —	17	71 8 0	18·062	75 17 3	18·416	77 7 0	18·770	78 16 9	19·125	80 6 6
35 —	17½	73 10 0	18·594	78 1 10½	18·958	79 12 6	19·323	81 3 1½	19·688	82 13 9
36 —	18	75 12 0	19·125	80 6 6	19·500	81 18 0	19·875	83 9 6½	20·250	85 1 0
37 —	18½	77 14 0	19·656	82 11 1½	20·041	84 3 6	20·427	85 15 10½	20·813	87 8 3
38 —	19	79 16 0	20·187	84 15 9	20·583	86 9 0	20·979	88 2 3	21·375	89 15 6
39 —	19½	81 18 0	20·719	87 0 4½	21·125	88 14 6	21·531	90 8 7½	21·938	92 2 9
40 —	20	84 0 0	21·250	89 5 0	21·666	91 0 0	22·083	92 15 0	22·500	94 10 0

Thus, 4*s.* 3*d.* per dollar, one tael per picul is equal to ¼*d.* per pound.

Usual Nett Weight and Measurement of a Chest of different Descriptions of Tea.

	Weight.	*Sol. Meas.*		*Weight.*	*Meas.*
Bohea, whole chests -	cattles 138 -	feet 8·956	Hyson - - -	cattles 48 to 50 -	feet 4
½ do. - -	— 84 -	— 5·416	Hyson skin - -	— 48 - 50 -	— 4·125
¼ do. - -	— 46 -	— 3·374	Twankay, long chests -	— 62 - 65 -	— 4·864
Congou chests - -	— 63 to 64 -	— 4·065	Gunpowder - -	— 80 - 84 -	— 4·100
Souchong - -	— 60 - 62 -	— 4·025	Imperial - -	— 70 - 74 -	— 4·074
Pekoe - - -	— 49 - 50 -	— 4·333	Young Hyson - -	— 70 - 72 -	— 4·220

II. Rise and Progress of the British Tea Trade. — Consumption of Tea.

The late rise and present magnitude of the British tea trade are among the most extraordinary phenomena in the history of commerce. Tea was wholly unknown to the Greeks and Romans, and even to our ancestors previously to the end of the 16th or the beginning of the 17th century. It seems to have been originally imported in small quantities by the Dutch; but was hardly known in this country till after 1650. In 1660, however, it began to be used in coffee houses; for, in an act passed in that year, a duty of 8*d.* is laid on every gallon of "coffee, chocolate, sherbet, and tea," made and sold. But it is abundantly evident that it was then only beginning to be introduced. The following entry appears in the Diary of Mr. Pepys, secretary to the Admiralty: — "September 25. 1661. I sent for a cup of tea (a China drink), of which I had never drunk before." In 1664, the East India Company bought 2 lbs. 2 oz. of tea as a present for his Majesty. In 1667, they issued the first order to import tea, directed to their agent at Bantam, to the effect that he should send home 100 lbs. of the best tea he could get. — (See the reference in *Milburn's Orient. Com.* ii. 530.; *Macpherson's Hist. of Com. with India*, pp. 130—132.) Since then, the consumption seems to have gone on regularly though slowly increasing. In 1689, instead of charging a duty on the decoction made from the leaves, an excise duty of 5*s.* per lb. was laid on the tea itself. The importation of tea from 1710 downwards is exhibited in the following Tables.

The great increase that took place in the consumption of duty-paid tea in 1784 and 1785, over its consumption in the preceding years, is to be ascribed to the reduction that was then effected in the duties. During the *nine* years preceding 1780, above 180,000,000 lbs. of tea were exported from China to Europe, in ships belonging to the Continent, and about 50,000,000 lbs. in ships belonging to England. But from the best information

attainable, it appears that the real consumption was almost exactly the reverse of the quantities imported; and that, while the consumption of the British dominions amounted to above 13,000,000 lbs., the consumption of the Continent did not exceed 5,500,000 lbs. If this statement be nearly correct, it follows that an annual supply of above 8,000,000 lbs. was clandestinely imported. It was well known, indeed, that smuggling was carried on to an enormous extent; and after every other means of checking it had been tried to no purpose, Mr. Pitt proposed, in 1784, to reduce the duties from 119 to 12½ per cent. This measure was signally successful. Smuggling and the practice of adulteration were immediately put an end to, and the legal imports of tea were about trebled. In 1795, however, the duty was raised to 25 per cent.; and after successive augmentations in 1797, 1800, and 1803, it was raised, in 1806, to 96 per cent. *ad valorem*, at which it continued till 1819, when it was raised to 100 per cent. on all teas that brought above 2*s.* per lb. at the Company's sales.

The following statements show the progress of the consumption of tea in this country from a very remote epoch down to the present time: —

Account of the Quantity of Tea retained for Home Consumption in Great Britain from 1789 to 1833, and of the Quantity that paid Duty for Home Consumption in Ireland from 1789 to 1827; specifying the Nett Produce of the Duties in each Country, and the Rates of Duty.

Great Britain.				Ireland.			
Years.	Quantities retained for Home Consumption.	Nett Amount of Duty.	Rates of Duty.	Quantity charged with Duty for Home Consumption.	Nett Amount of Duty. (*British Currency.*)	Rates of Duty.	
	Lbs.	£ *s.* *d.*		*Lbs.*	£ *s.* *d.*	*Black:*	*Green:*
1789	14,534,601	562,038 14 5	12*l.* 10*s.* per cent.	1,970,898	38,058 14 5	4*d.* per lb.	6*d.* per lb.
1790	14,693,299	547,250 4 8	—	1,736,796	33,132 12 2	ditto	ditto
1791	15,096,840	607,430 8 4	—	1,994,787	43,295 12 4	4¼*d.* per lb.	6½*d.* per lb.
1792	15,822,045	616,775 6 9	—	1,844,598	35,110 0 8	ditto	ditto
1793	15,214,931	609,816 5 6	—	2,118,753	39,274 9 6	ditto	ditto
1794	16,647,993	628,081 6 5	—	2,011,290	43,892 6 2	ditto	ditto
1795	18,594,232	695,108 5 9	20*l.* per cent.	2,970,701	64,093 16 10	ditto	ditto
1796	18,009,992	877,042 13 0	—	2,326,506	48,653 14 9	ditto	ditto
1797	16,368,041	1,028,060 9 7	At or above 2*s.* 6*d.* per lb. 30*l.* per cent. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,492,254	60,817 6 5	ditto	ditto
1798	19,566,931	1,111,898 9 1	At or above 2*s.* 6*d.* per lb. 55*l.* per cent. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,955,240	103,016 5 5	ditto	ditto
1799	19,906,510	1,176,861 9 9	—	2,873,717	101,727 11 0	5½*d.* per lb.	7*d.* per lb.
1800	20,858,702	1,152,262 0 0	At or above 2*s.* 6*d.* per lb. 40*l.* per cent. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,926,166	69,521 17 7	ditto	ditto
						All Sorts:	
						Sold at or above 2*s.* 6*d.* per lb.	Sold under 2*s.* 6*d.* per lb.
1801	20,237,753	1,287,808 2 6	At or above 2*s.* 6*d.* per lb. 50*l.* per cent. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	3,499,801	135,852 3 4	35*l.* per cent. ad val.	20*l.* per cent. ad val.
1802	21,148,245	1,450,252 7 9	—	3,576,775	182,214 17 7	58*l.* 10*s.* —	25*l.* 10*s.* —
1803	21,647,922	1,757,257 18 4	At or above 2*s.* 6*d.* per lb. 95*l.* per cent. Under 2*s.* 6*d.* per lb. 65*l.* per ditto.	3,239,937	172,355 15 6	ditto	ditto
1804	18,501,904	2,348,004 4 8	—	3,337,122	251,731 8 9	81*l.* 11*s.* —	51*l.* 14*s.* —
1805	21,025,380	2,925,298 17 9	At or above 2*s.* 6*d.* per lb. 95*l.* 2*s.* 6*d.* per cent. Under 2*s.* 6*d.* per lb. 2*s.* 6*d.* per ditto.	3,267,712	411,225 1 4	ditto	ditto
1806	20,355,038	3,098,428 13 2	On all teas 96*l.* per cent.	2,611,458	348,212 7 2	ditto	71*l.* 14*s.* —
1807	19,239,512	3,043,221 11 3	—	3,555,129	476,949 4 3	ditto	ditto
1808	20,859,929	3,370,610 0 10	—	3,706,771	534,685 1 7	ditto	ditto
1809	19,869,134	3,130,616 14 9	—	3,391,663	462,088 12 3	ditto	ditto
						On all Teas:	
1810	19,093,241	3,212,430 1 1	—	2,922,568	435,307 10 2	95*l.* per cent. ad val.	
1811	20,702,803	3,249,294 0 9	—	3,517,384	502,816 16 11	ditto	
1812	20,018,251	3,258,793 2 9	—	3,758,499	567,186 11 6	ditto	
1813	20,443,226	Customs records destroyed.	—	3,352,294	521,299 12 3	ditto	
1814	19,224,154	3,428,236 8 4	—	3,387,012	529,818 7 11	96*l.* per cent. ad valorem, and henceforth the same as in Great Britain.	
1815	22,378,345	3,526,590 18 3	—	3,462,776	531,500 15 2		
1816	20,446,144	3,956,719 0 5	—	2,990,580	405,777 16 3		
1817	20,822,956	3,903,650 18 7	—	3,141,035	427,713 7 3		
1818	22,660,177	3,562,588 10 1	—	3,569,431	510,105 6 6		
1819	22,631,467	3,256,433 12 10	At or under 2*s.* per lb. 96*l.* per cent. Above 2*s.* per lb. 100*l.* per ditto.	3,238,498	433,371 11 6		
1820	22,452,050	3,128,449 17 0	—	3,150,344	398,742 5 4		
1821	22,892,913	3,275,642 17 6	—	3,493,960	462,819 16 3		
1822	23,911,884	3,434,292 19 10	—	3,816,966	511,299 5 2		
1823	23,762,470	3,407,983 1 8	—	3,567,710	440,139 4 11		
1824	23,784,838	3,420,205 11 11	—	3,387,510	445,971 15 11		
1825	24,830,015	3,527,944 4 11	—	3,889,658	503,074 13 4		
1826	25,258,067	3,293,813 19 5	—	3,807,785	446,229 5 1		
1827	26,043,243	3,963,806 19 3	—	3,887,955	442,382 14 10		
1828	26,790,481	3,177,179 8 0	—				
1829	29,495,199	3,321,722 2 6	—				
1830	34,047,079	3,387,097 18 9	—				
1831	29,997,100	3,344,918 12 9	—				
1832	31,548,409	3,509,854 13 7	—				

* This amount includes all tea shipped to Ireland for consumption in that country subsequently to the passing of the act 9 Geo. 4. c. 44.

Irish Currency. British Currency.

An Account of the Quantities of Tea imported into the United Kingdom during each of the Ten Years ending with 1842; specifying the Quantities re-exported, the Quantities annually entered for Home Consumption, the Rates of Duty, and the annual Produce of the Duties.

	Quantities imported into the United Kingdom.	Quantities re-exported from the United Kingdom.	Quantities retained for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty.
		Lbs.	*Lbs.*	£	
		254,460	31,829,620	3,444,102	If sold at or under 2*s.* per lb., 96*l.* per centum ad valorem. At or above 2*s.* per lb., 100*l.* ditto.
	33,643,980	1,181,005	34,969,651	3,589,361	Bohea, 1*s.* 6*d.* per lb.; Congou, Twankay, Hyson Skin, Orange Pekoe, and Campoi, 2*s.* 2*d.* per lb.: all other sorts, 3*s.* per lb. (from 22d April).
1835	44,360,550	2,358,029	36,571,004	3,832,127	
1836	49,307,701	4,269,863	49,142,236	4,674,535	All sorts, 2*s.* 1*d.* per lb. (from 1st July).
1837	36,973,981	4,716,248	30,625,206	3,223,840	
1838	40,113,714	2,577,877	32,351,593	3,362,035	
1839	38,158,008	3,318,912	35,127,287	3,658,803	
1840	28,021,882	2,583,384	32,252,628	3,472,864	5*l.* per cent. additional thereon from 15th May.
	50,787,796	4,490,363	36,675,667	5,073,668	
	40,742,128	5,710,127	37,355,912	4,088,957	

Account of the Quantity of Tea remaining for Home Consumption in Great Britain from 1711 to 1786, obtained by deducting the Quantity exported from the Quantity sold at the Company's Sales.

	Lbs.		*Lbs.*		*Lbs.*		*Lbs.*
1711	141,995	1740	1,302,519	1765	4,906,546	1782	4,166,854
1715	140,659	1745	2,209,185	1770	7,723,558	1783	3,087,616
1720	237,904	1750	2,114,922	1775	5,175,498	1784	8,608,473
1725	286,494	1755	2,738,136	1780	5,588,315	1785	13,165,715
1730	537,016	1760	2,293,613	1781	3,578,499	1786	15,985,506
1735	1,380,199						

N. B. — We have extracted this account from that given from the Company's records in *Milburn's Oriental Commerce* (vol. ii. p. 534.). * There is an account, furnished by the Excise, of the quantities of tea retained for home consumption from 1725 to 1832, in the *Appendix to the First Report of the Commissioners of Excise Inquiry*. It appears, however, to involve some very material errors. Thus, it represents the consumption from 1768 to 1772, both inclusive, as under 200,000 lbs. a year, at the same time that it makes the consumption, in the immediately preceding and subsequent years, above 4,000,000 lbs.; A statement of this sort is obviously inaccurate; and yet it is not accompanied by a single remark or explanation of any sort.

A Return of the Quantities and Prices of the several Sorts of Tea sold by the East India Company, in each Year during the present Charter (1st of May to 1st of May).

Years.	Bohea.		Congou.		Campoi.		Souchong.		Pekoe.	
	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.
	Lbs.	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*
1814-15	597,909	2 10·20	21,283,519	3 2·55	1,002,000	3 4·67	1,520,035	3 7·51	22,625	6 10·62
1815-16	339,198	2 1·57	17,008,827	2 11·02	823,507	3 4·94	982,816	3 6·55	30,700	5 8·95
1816-17	1,207,276	2 5·66	14,595,681	2 10·39	925,550	3 1·73	1,862,135	3 0·47	98,562	4 2·53
1817-18	1,772,736	2 5·73	15,736,003	2 11·82	866,304	3 3·12	2,018,058	3 2·88	76,302	4 4·36
1818-19	1,441,636	2 4·78	18,141,066	2 11·22	533,821	3 4·19	1,183,051	3 3·11	69,760	4 4·37
1819-20	1,197,592	1 9·25	17,664,435	2 7·91	479,081	3 4·61	1,168,666	3 2·01	27,809	4 2·11
1820-21	2,522,927	2 1·88	15,959,795	2 7·31	510,775	3 6·04	1,248,196	3 2·96	135,964	4 2·53
1821-22	2,285,186	2 5·28	17,219,082	2 8·59	121,293	3 7·00	1,597,931	3 1·25	92,957	3 10·69
1822-23	1,873,881	2 5·43	18,822,848	2 7·82	323,063	3 6·30	1,591,668	2 10·62	44,757	4 4·73
1823-24	1,855,594	2 4·92	19,006,591	2 8·06	242,562	3 6·36	1,322,526	2 11·82	46,005	5 0·71
1824-25	2,093,276	2 4·59	20,598,958	2 7·90	227,742	3 0·88	1,475,476	3 4·74	86,051	4 3·26
1825-26	2,713,011	2 0·50	21,034,635	2 6·75	207,971	3 1·77	547,128	3 1·28	118,038	4 0·81
1826-27	2,588,124	1 7·02	20,172,625	2 4·73	166,701	2 9·01	475,796	3 2·17	165,842	3 6·01
1827-28	3,759,199	1 7·44	19,580,392	2 3·95	227,346	2 9·31	448,163	3 0·53	280,508	3 6·61
1828-29	3,778,012	1 6·65	20,142,073	2 3·88	284,187	2 9·14	601,739	2 10·38	131,281	3 9·23
1829-30	4,845,926	1 6·32	18,402,118	2 3·26	474,735	2 2·24	598,819	3 3·60	129,554	3 9·25
1830-31	6,096,153	1 10·03	17,857,208	2 3·15	431,455	2 3·17	277,067	3 0·76	253,101	3 9·92
1831-32	6,474,833	1 10·65	17,734,257	2 2·77	273,289	2 1·92	447,799	2 10·68	545,775	2 10·23

Years.	Twankay.		Hyson Skin.		Young Hyson.		Hyson.		Gunpowder.	
	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.
	Lbs.	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*
1814-15	3,646,048	3 6·11	795,907	3 9·57	-	- -	1,009,948	5 9·15	9,189	7 6·50
1815-16	3,784,864	3 3·06	708,280	3 5·22	-	- -	1,059,225	5 5·75		
1816-17	4,554,210	3 11·22	554,470	3 6·76	-	- -	882,820	4 11·61	15,425	5 0·93
1817-18	3,765,123	3 0·69	451,904	3 1·97	-	- -	992,439	4 10·34		
1818-19	4,730,297	2 11·87	193,852	3 2·78	-	- -	909,637	4 11·83		
1819-20	4,288,345	2 10·83	161,919	3 4·38	-	- -	700,312	5 3·66		
1820-21	4,900,764	3 0·33	343,995	3 0·84	-	- -	782,482	5 6·04		
1821-22	4,401,778	3 1·48	225,636	3 1·89	-	- -	1,044,256	4 8·53		
1822-23	4,165,896	3 4·77	205,658	3 3·99	-	- -	816,872	4 3·24		
1823-24	3,967,993	3 5·71	259,209	3 4·72	-	- -	980,753	4 3·23		
1824-25	3,754,120	3 5·17	324,947	3 5·29	9,055	4 3·68	985,566	4 2·71		
1825-26	3,768,406	3 4·88	229,961	3 4·57	-	- -	932,099	4 5·38		
1826-27	4,424,262	3 1·94	208,960	3 2·26	51,421	4 0·75	801,724	4 8·72		
1827-28	4,537,672	2 7·04	242,313	2 7·19	-	- -	1,013,771	4 5·58		
1828-29	4,401,845	2 5·72	213,993	2 3·84	-	- -	1,011,923	4 1·75	645	6 6·51
1829-30	3,852,143	2 4·04	228,010	2 4·60	-	- -	1,071,278	4 1·40		
1830-31	4,560,962	2 2·72	196,791	2 6·59	-	- -	1,017,748	4 1·56		
1831-32	4,463,552	2 3·02	169,909	2 6·78	1,065	2 6·87	1,213,758	3 10·31		

III. East India Company's Monopoly — Influence of, on the Price of Tea — Conditions under which it was held — Abolition of.

From its origin down to 1834, the trade in tea was monopolised by the East India Company. Considerable quantities of tea were, indeed, at different times, smuggled into the country; but no British subject, not authorised by the Company, was ever allowed openly to import tea. Being thus the *only sellers*, they had it in their power, by limiting the quantity brought to market, to raise its price above its natural elevation, and to realise immense profits at the expense of the public. They might, no doubt, have declined availing themselves of this power; but no such forbearance could be rationally expected from the Company, or from any other body of men. All individuals and associations exert themselves to obtain the highest price for whatever they have to sell: and it is found that those who are protected from the competition of others, or who have obtained a monopoly of any market, invariably raise the price of their commodities to a very high pitch. The East India Company did this, probably, to a less extent than most other bodies that have enjoyed such exclusive privileges. Still, however, it is an undoubted fact, that the teas sold by them during the last years of the monopoly cost the people of Britain upwards of 1,500,000*l.* a year more than they would have cost had they been sold at the price at which teas of equal quality were sold, under a system of free competition, in New York, Hamburg, Amsterdam, &c.! — (For proofs of this statement, see 1st edition of this *Dictionary*, p. 1031.)

The legislature endeavoured, at different periods, to prevent the Company from abusing their monopoly, by enacting regulations as to the sale of tea; and though no longer of any practical importance, it may be worth while briefly to notice some of the more important, and the means by which they were defeated. In 1745, for example, a very great deduction was made from the amount of the tea duties; and by a statute passed in that year (18 Geo. 2. c. 26.), it was enacted, in order to prevent the Company from depriving the public of the benefit of this reduction, that in case the tea imported by the East India Company shall not always be sufficient to answer the consumption thereof in Great Britain, and to *keep the price of tea in this country upon an equality with the price thereof in the neighbouring Continent of Europe*, it shall be lawful for the said Company, and their successors, to import into Great Britain such quantities of tea as they shall think necessary from any part of Europe: and by another section of the same statute, it is enacted, that if the East India Company shall, at any time, neglect to keep the British market supplied with a *sufficient quantity of tea at reasonable prices*, it shall be lawful for the Lords of the Treasury to *grant licences to any other person or persons*, body politic or corporate, to import tea into Great Britain from any part of Europe.

Had this statute been enforced, it would certainly have restrained the demands of the Company within reasonable limits; but it was very soon forgotten, and the Company continued, as before, to sell their teas at an enormous advance as compared with their prices in Hamburg and Amsterdam.

The same well-founded jealousy, which dictated the act of 1745, was again displayed in the proceedings at the reduction of the duties in 1784. It was then enacted (24 Geo. 3. c. 38.), that the East India Company should make 4 sales of tea every year, as near as conveniently may be at equal distances of time from each other, and should put up at such sales such quantities of tea as may be judged sufficient to supply the demand; and at each sale the tea to be put up shall be sold without reserve to the highest bidders, provided an advance of 1*d.* per pound be bid upon the price at which the same is put up. By another clause it was enacted, that it should not be lawful for the East India Company "to put up their teas for sale at any price which shall, upon the whole of the teas so put up at any sale, exceed the prime cost thereof, with the freight and charges of importation, together with lawful interest from the time of arrival of such teas in Great Britain, and the common premium of insurance as a compensation for the sea risk incurred thereon." The Company were further ordered to keep a stock, equal to at least 1 year's consumption, according to the sales of the preceding year, always beforehand. And they were bound to lay before the Lords of the Treasury, copies of the accounts and estimates upon which their orders for importation, prices for sale, and quantities put up to sale, should be grounded.

The object of these conditions is obvious. They were intended to secure a plentiful supply of tea to the public, and to prevent its being sold at an oppressive increase of price. But monopoly and low prices are altogether incompatible. The conditions now referred to were, as to all practicable purposes at least, quite inoperative.

1. In the first place, the Company made various additions to the prime cost, and consequently to the putting up price of their tea, which they ought not to have made, but which the Lords of the Treasury, had they been so disposed, could hardly disallow. They always, for example, charged the cost of the factory at Canton to the price of tea. This establishment consisted of about 20 persons, and cost at an average about 100,000*l.*

a year! We do not presume to say that it was altogether useless. Undoubtedly, however, it might have been conducted at half the expense. It is a fact, that the whole American business at Canton has been transacted by the captains of the ships; and every one knows that they have had fewer disturbances with the natives than the English.

2. In the second place, it was established by the evidence taken before the select committee of 1830, that the Company had for many years thrown the whole losses arising from their outward investment upon tea, by estimating the value of the tael, or Chinese money in which the accounts are kept, at the price which it cost for the purpose of being vested in tea. This was a complete evasion of the provisions of the statute; but it was one which it was very difficult, if not impossible, to defeat.

3. In the third place, the obligation imposed on the Company, of keeping a year's supply of tea in their warehouses, contributed both to raise its price, and deteriorate its quality. From a return made to an order of the select committee of the House of Commons in 1830 (*First Report*, App. p. 23.), it appears that the shortest time any tea sold by the Company had been in store was 14 months; and that, at an average, all the teas sold during the 3 years ending with 1829 had been 17 months in store. But, according to the evidence of the most respectable American witnesses, the black and coarser kinds of tea are depreciated at least 5 per cent. by being kept a twelvemonth, and are, indeed, hardly saleable after the arrival of fresh teas from China. Adding, therefore, warehouse rent, interest of capital, and insurance for 17 months, to the deterioration in point of quality, we may estimate the loss to the public, by this well-meant but most injudicious interference of the legislature, at 15 per cent. upon the price of all the teas sold.

4. In the fourth place, it is obvious, even supposing the prime cost of the Company's teas had not been improperly enhanced, that the regulation obliging them to be sold at an advance of 1*d.* per lb. if offered, on the putting-up price, could not be otherwise than nugatory. Had the trade been open, private merchants would have undersold each other, until the price of tea, like that of sugar or coffee, had been reduced to the very lowest point that would yield the sellers the customary rate of profit. But the Company was in an entirely different situation. Being the *only sellers*, they invariably *understocked* the market. Instead of bringing forward such quantities of tea as might have occasioned its sale at a small advance upon the upset price, they adjusted the supply so that the price was raised to a much higher elevation. Now, it will be observed, that all that this system of management put into the Company's coffers consisted of *extra profit*; for the putting-up price embraced every item that could fairly enter into the cost of the tea, including both *interest* on capital and insurance, and including also, as we have seen, several items that had but little to do with it. To show the extent to which this source of profit was cultivated, we may mention, that at the June sale in 1830, the Company put up congou at 1*s.* 8*d.* and 2*s.* 1*d.* per lb.; the lowest sort, or that put up at 1*s.* 8*d.*, being sold partly at 2*s.* 1½*d.*, being an advance of *twenty-two and half* per cent., and partly at 2*s.* 5*d.*, being an advance of FORTY-FIVE per cent.; while the highest sort, or that put up at 2*s.* 1*d.*, was sold partly at 2*s.* 2*d.*, being an advance of *four* per cent., and partly at 3*s.* 7*d.*, being an advance of no less than SEVENTY-TWO per cent. above the upset price; that is, above a price calculated to yield *ordinary profits*. Mr. Mills, an intelligent tea merchant, in a paper laid before the committee of the House of Lords on East India affairs, showed, that the advance on teas sold at the Company's June sale in 1830, above the putting-up price, amounted to 122,177*l.* 18*s.* 1*d.*; and as there are 4 such sales in the year, the total advance must have been about 500,000*l.*; and this was considerably under what it had been a few years previously.

These statements show generally how the Company defeated the provisions of the act of 1784, and, indeed, turned them to its own advantage. But, as already observed, nothing else could be expected. It is nugatory to attempt to combine monopoly with low prices and good qualities. They never have existed, and it is not possible they ever should exist, together. Monopoly is the parent of dearness and scarcity; freedom, of cheapness and plenty.

Great, however, as was the sacrifice entailed on the people of Britain by the Company's monopoly, it is doubtful whether it yielded any considerable amount of revenue to the Company. Every one, indeed, must be satisfied, on general grounds, that it was impossible for the Company to make anything like the same profits by the privileges conceded to them, that would have been made by private individuals enjoying similar advantages. "The spirit of monopolists," to borrow the just and expressive language of Gibbon, "is narrow, lazy, and oppressive. Their work is more costly and less productive than that of independent artists; and the new improvements so eagerly grasped by the competition of freedom, are admitted with slow and sullen reluctance, in those proud corporations above the fear of a rival, and below the confession of an error." We have no doubt that the directors of the East India Company were disposed to extend

its commerce, and to manage it according to the most approved principles, but they were wholly without the means of giving effect to their wishes. They had to operate through servants; and is it to be imagined that the *employés* of such bodies will ever display that watchful attention to their interests, or conduct the business intrusted to their care with the unsparing economy practised by private merchants trading on their own account, superintending their own concerns, and responsible in their own private fortunes for every error they may commit? The affairs of the Company, notwithstanding the efforts of the directors to introduce activity and economy, have always been managed according to a system of routine. Their captains and mercantile agents were, we doubt not, "all honourable men;" but it were an insult to common sense to suppose that they may be compared for a moment with individuals trading on their own account, in the great requisites of zeal, conduct, and skill.

Several gentlemen of great knowledge and experience, who carefully inquired into the state of the Company's affairs in 1830, expressed their decided conviction that they made nothing by the tea trade! — the increased price at which they sold the article not being more than sufficient to balance the immense expenses incident to the monopoly! Perhaps this statement may be somewhat exaggerated, though we incline to think it is not far from the mark. Taking, however, the accounts laid by the Company before the late committee on Indian affairs, as they stand, it would appear that the profits realised by them during the 3 years ending with 1827-28 amounted to 2,542,569*l.*, being at the rate of 847,523*l.* a year. — (*Appen. to Second Report of Select Committee of* 1830, p. 95.) But we have already seen that the excess of price received by the Company for their teas, over the price of similar teas sold at New York and Hamburg, has been above 1,500,000*l.* a year; so that, according to the Company's own showing, their monopoly occasioned an *absolute loss* of 652,477*l.*, exclusive of its mischievous influence in lessening the consumption of tea, and in confining our trade with China to less than a third of what it will probably amount to under a system giving free scope to the energies of individual enterprise.

The renewal of a monopoly productive of such results was, therefore, wholly out of the question. There was hardly, indeed, in 1833, an individual in the empire out of the pale of the Company who was not anxious for the opening of the trade to China; and the act 3 & 4 Will. 4. c. 85. — (see *antè*, p. 529.) — abolishing the Company's monopoly, and making it lawful for all individuals to import tea, was passed with almost no opposition.

IV. Duties on Tea. — Consumption of Tea in the United Kingdom, the Continent, the United States, etc.

Down to the 22d of April, 1834, the duty on tea was an *ad valorem* one of 96 per cent. on all teas sold under 2*s.* a pound, and of 100 per cent. on all that were sold at or above 2*s.* charged on the prices which they brought at the Company's sales. This was, certainly, a high duty; though, as a large amount of revenue must be raised, we do not know, had the trade been free, that it could have been fairly objected to on that ground. But under the monopoly system, the duty was, in fact, about 200 per cent. *ad valorem!* For, the price of the tea sold by the Company being forced up to nearly double what it would have been under a free system, it followed, inasmuch as the duty varied directly as the price, that it also was doubled when the latter was doubled. The price of congou in Hamburg, for example, varied, during the latter years of the monopoly, from 1*s.* 2*d.* to 1*s.* 4*d.* per lb.; and had the Company supplied our markets with congou at the same rate, it would have cost us, duty included, nearly 2*s.* 4*d.* and 2*s.* 8*d.* per lb. But instead of this, the congou sold by the Company was, at an average, a good deal above 2*s.* per lb.; and, the duty being as much, it invariably cost from 4*s.* to 5*s.* per lb. Hence, though the duty was only 100 per cent. on the Company's price, it was really above 200 per cent. on the price of tea in an open market! The mischief of the monopoly was thus greatly aggravated; inasmuch as every addition made by it to the cost of the article, made an equal addition to the duty on it.

The *ad valorem* duties ceased on the 22d of April, 1834; and, under the act 3 & 4 Will. 4. c. 101. all tea imported into the U. Kingdom for home consumption was charged with a customs duty as follows: —

Bohea	1*s.* 6*d.* per lb.
Congou, twankay, hyson skin, orange pekoe, and campoi	2*s.* 2*d.*
Souchong, flowery pekoe, hyson, young hyson, gunpowder, imperial, and other teas not enumerated	3*s.* 0*d.*

If we compare these duties with the wholesale prices of tea, they will be seen to have been exceedingly heavy, particularly on bohea and congou. Bohea may be sold, exclusive of duty, at or under 1*s.* per lb.; so that the fixed duty was equivalent to an *ad valorem* duty of 150 per cent.! But to impose such a duty on an article fitted to enter largely into the consumption of the lower classes, seems to be in the last degree oppres-

sive, and, indeed, absurd. It went far to neutralise the beneficial effects that would otherwise have resulted from the abolition of the monopoly; and by confining the consumption of the article within comparatively narrow bounds, rendered the duty less productive than it would have been had it been lower. Nothing can be more injurious, both in a commercial and financial point of view, than the imposition of oppressive duties on articles, the consumption of which would be materially extended by a fall of price; and that such is the case with bohea, is beyond all question. The Company, by reducing its sale price from about 2*s.* 6*d.* to 1*s.* 10½*d.* per lb. (which was, of course, accompanied by a corresponding reduction of duty) increased the consumption from 1,873,881 lbs. in 1822-23, to 6,474,838 lbs. in 1831-32. Here we have the consumption more than trebled by a fall of about 1*s.* 3*d.* per lb. And there can be no doubt that a still further fall, by bringing the article fairly within the command of a greater number of consumers, would have extended the demand for it in a still greater degree.

We regret, however, to have to state that in consequence of the complaints of the importers of tea that the discriminating duties were not fairly assessed, and that teas were sometimes charged at 2*s.* 2*d.* or 3*s.* per lb. that should only have paid 1*s.* 6*d.*, the duty was repealed in about two years, by the act 5 & 6 Will. 4. c. 32., which enacted that an equal duty of 2*s.* 1*d.* per lb. should be charged, after the 1st of July 1836, on all teas entered for consumption in the U. Kingdom.

We incline to think that this is the most objectionable duty in the English tariff. We do not, indeed, deny that the impossibility of fairly assessing a discriminating duty may justify its abandonment in this or any other case. But, seeing that the quality and price of small beer do not differ more from those of strong ale than the quality and price of some sorts of teas differ from those of others, the impossibility of levying discriminating duties must be clearly established to justify a measure so obviously oppressive as the imposing of the same duty on articles which differ so very widely. It is probably true that the statements as to the unfair operation of the discriminating duty were, to a considerable extent, well-founded; and every reasonable person might have anticipated that difficulties would have to be encountered at the outset of the new system. We believe, however, that these were grossly exaggerated; and it is all but certain that a little change in the arrangement of the duties, and additional experience, would have gone far to obviate the inconveniences in question. But government, influenced partly by a wish to get rid of the clamour and outcry raised by the importers, and partly, perhaps, by a doubt whether the duties could ever be fairly collected, unfortunately consented to their abolition, and imposed in their stead the equal duty of 2*s.* 1*d.* per lb. specified above.

There can, however, be no manner of doubt that the act 5 & 6 Will. 4. c. 32., repealing the *ad valorem*, and imposing the equal duty, was introduced without due consideration, and that it has been and is most hostile to the public interests. The only considerable difficulty that had to be incurred in assessing the discriminating duties consisted in distinguishing between boheas and congous. But, to obviate this difficulty, it was not necessary to interfere with the duties on other teas; and had the duty on bohea and congou been fixed at the same reasonable amount of 10*d.* or 1*s.* per lb., and the duties on other descriptions of teas been allowed to remain as before, the grievance complained of by the importers would have been sufficiently redressed, at the same time that a vast boon would have been conferred on the public.

Tea, in this country, is not a luxury, but a necessary of life, which is decidedly more indispensable to the poor than the rich. Bohea and the lower congous may also be said to be the teas of the former; and, even under the old monopoly system, as many as from 6,000,000 to 7,000,000 lbs. bohea have been sold for consumption in a single year. If we take the average price of bohea in bond in London at 10*d.* or 1*s.* per lb., it will be seen that the duty we have ventured to suggest would be equivalent to an *ad valorem* duty of 100 per cent., which is as high, certainly, as any duty on a necessary consumed by the poor should be. But, even with a duty of this amount, bohea might be retailed for 2*s.* or 2*s.* 4*d.* per lb.; and, at this price, there can be no question the consumption would amount to several millions of pounds. The reduction of the duty on congou to 1*s.* per lb. would, also, be of the greatest importance to the lower and middle classes; and the stimulus it would give to consumption makes it all but certain that in no very lengthened period the revenue would lose little, if anything, by the change.

In proof of what has now been stated, we may mention that in 1836, when the quantity of tea entered for consumption amounted to no fewer than 40,490,667 lbs. (exclusive of 8,651,569 lbs. bohea entered to escape the increase of duty), the prices of lower congous, the great article of consumption, amounted, duty paid, to about 3*s.* per lb., and those of superior congous to about 5*s.* per do. But, in 1840, when the price of lower congous, duty paid, was about 4*s.* per lb., and superior congous about 5*s.* 6*d.*, the consumption fell off to no more than 32,252,628 lbs.; showing clearly that a rise of 1*s.* per lb. in the price of the teas most generally consumed, and of 6*d.* in those of the next higher

class, reduced the consumption about 20 per cent.! In like manner, in 1842, when prices were about 12½ per cent. lower than in 1840, the consumption rose, notwithstanding the depression that then prevailed, to 37,355,912 lbs.; and a farther fall having taken place in the course of last year (1843), the consumption is understood to have amounted to about 38,000,000 lbs. These facts demonstrate the vast influence of a low price of tea over consumption; and supposing the prices of bohea and congou had, during the last half dozen years, been 35 per cent. lower than the prices which they have actually brought, as would have been the case had the duty on them been fixed at 10*d.* or 1*s.* per lb., there can hardly be a doubt that the consumption of tea would at present (1844) have amounted to from 50,000,000 to 60,000,000 lbs.!—(See, for the further proof of what has now been stated, the valuable Circulars of Messrs. Lloyd, Stewart, and Brodrib, 3d of January, 1843, and 2d of January, 1844.)

But, supposing the revenue were to lose, at the outset, some 300,000*l.* or 400,000*l.* a year by the proposed change; is the getting rid of the injustice of the present tax, and the effectual encouragement of the trade with China, not worth a considerably greater sacrifice? Taking the price of Bohea and low congou in bond in London at 1*s.* per lb. (and it is frequently less), the duty of 2*s.*, with which they are at present charged, is equivalent to an *ad valorem* one of more than *two hundred* per cent.; whereas, taking the price of the hyson and other superior teas consumed by the rich at from 3*s.* to 4*s.* per lb., the duty on them does not exceed from 50 to 66 per cent. *ad valorem*, that is, it does not amount to more than from ¼ to ⅓ part of the duty laid on the teas consumed by the poor! Surely, however, this is neither an age nor a country in which an anomaly of this sort can be safely maintained. The public necessities require that the tea, sugar, and other necessaries of the poor should be taxed; but the most obvious principles of justice require that the duties on them should, if not lower, be, at all events, no higher than those laid on the necessaries or luxuries of the rich. The existing tea duties contradict this plain principle, and are at once unjust, exorbitant, and oppressive. The duty on bohea and the lower congous should not, in fact, exceed 6*d.* per lb.; and we trust that at no distant period means may be found of reducing it to that amount.

We have already endeavoured to show (see art. CANTON) that, without an effectual reduction of the duties on tea, the anticipations so generally entertained of an immense increase of the trade with China, will, most likely, be wholly disappointed. Except tea, the Chinese possess few articles suitable for our markets that we may not import at a cheaper rate from others; and, unless we reduce the oppressive duty now laid on tea in some such way as has been previously suggested, it is idle to look for any considerable increase of its consumption.

We are glad to have to state that these views have been approved by the highest mercantile authorities. Among others, they have been ably set forth by the East India Association of Glasgow, in a memorial which we take leave to subjoin: —

To the Right Hon. Sir Robert Peel, Bart., First Lord of Her Majesty's Treasury, &c.

The memorial of the East India Association of Glasgow showeth —

That your memorialists, being deeply interested in the trade with the East, beg to submit to your lordship the following considerations, arising from the treaty just formed with the emperor of China, and the excitement caused thereby in our markets, in expectation of a very enlarged trade with the Chinese empire.

Your memorialists, in common with all Her Majesty's subjects, heartily rejoice in the treaty thus made, but have many misgivings as to the immediate beneficial effects so generally and ardently anticipated, for the following reasons: —

1st. The direct trade of this country to China has seldom exceeded 1,200,000*l.* per annum.

2d. The annual trade from China has seldom exceeded 4,000,000*l.*, both sums being exclusive of what passes through the medium of America and Australia.

3d. The difference between these has hitherto been made good chiefly by the opium and cotton exported from British India, the former to the annual value of 3,000,000*l.*, and the latter of upwards of 1,000,000*l.*, while the balance of trade against China has been paid in bullion.

4th. The supply of opium and cotton is not likely to be materially reduced under the new arrangements.

5th. The silk of China is constantly losing ground in competition with that of Italy; the miscellaneous articles admit of little increase; and tea, the great staple of China, is already imported to as great an extent as the consumption, limited by high price, requires.

6th. Great Britain, therefore, already exports about as much to China, direct, and from India, as she receives, or can receive, of the produce of the latter.

7th. It is accordingly evident that as yet there is no room for an additional export trade to any considerable extent; because, although there be such an immense territory, and such an almost boundless population in China, and admitting also their entire willingness to accept our productions, yet they have not produce to give which we can at present take in return, as is clearly proved by the large quantity of bullion required from China in order to adjust the balance of trade.

8th. The duty charged by our tariff on tea is equal to 200 per cent. on the shipping cost, viz., 2*s.* 1*d.* per lb. on an article which, at an average, costs on board about 1*s.*; and while a tariff is negotiating in China for the admission of our productions, it is but reasonable to expect that the Chinese will keep in view the monstrous duty charged in England on their staple.

9th. The duty so charged in England falls chiefly on the poor, who are the largest consumers, and it falls the more heavily that they use the low-priced teas.

From these premises your memorialists draw the following inferences: —

1st. That the present high duty on tea restricts very materially the consumption, and by thus limiting the quantity which can be imported, limits also the amount of our exports, which can scarcely, therefore, under existing circumstances, be extended beyond the point already attained; and shows the existing excitement to be founded in delusion, and certain to produce the most ruinous results.

2d. That our high duties are sure to have a corresponding effect in China, not only in the duty chargeable on our manufactures, but probably also in an increased export duty on tea, besides the chance of future troubles arising from such an unnatural position of affairs.

3d. That the intercourse with China having heretofore been confined to a single inconvenient port, and even thereto only to a few Hong merchants, could not be so extended as to increase the quantity of tea taken in return so much as might enable Her Majesty's government to reduce the duty and yet maintain the revenue; but, seeing that these hindrances are removed, that the article can probably be supplied to a very large extent, and that we are now to have access to Fuchow, the nearest port to the principal place of growth, it is evident that the period has arrived when such a reduction is imperatively called for; and that, unless it be made, there is little prospect of commercial advantage to Great Britain from her late achievements.

4th. That a reduction of the duty on black teas by one half would not only facilitate the formation of a fair tariff with China and increase the amount of our exports, but would greatly add to the comfort, especially, of the poorer class of British subjects; would not (at least it would only partially, and for a time) injure the revenue; and would, moreover, materially increase the consumption of sugar, another article of vast importance to the exchequer.

Your memorialists do therefore humbly, but earnestly commend this subject to your lordship's most serious consideration; and further entreat that Her Majesty's Government will instruct the plenipotentiary to pay most particular attention to the subject of inland or transit duties, as provided for by the treaty, seeing that this has hitherto been one great hindrance to our trade, and that, without a well-arranged system of transit duties, any system of direct import duties (however excellent in itself) will avail but little.

May it therefore please your lordship to consider this subject, with a view to a material reduction in the duty on tea, and the establishment of a fair reciprocity between this country and China; and your memorialists will ever pray.

And the Association have since followed up this memorial by another addressed to Mr. Goulburn, in which they truly state —

"That a trifling reduction of duty would be a mere throwing away of revenue, because, unless it be to such an extent as sensibly to affect the price of the small quantities bought by the poor, it would not accomplish the object of greatly increasing the consumption; but your memorialists are humbly of opinion that if the duty were reduced to 1s. per pound, it would materially increase the consumption, and thereby help to redeem the proportion of revenue given up; which effect would be further aided by the increased consumption of sugar, inasmuch as from four to five pounds of that article are used with every pound of tea.

"When, in addition, therefore, to the increased quantity of manufactures that would be exported, with all the relative benefits attached thereto, your memorialists consider the increase which must necessarily take place in the carrying trade, and all others dependent on it, together with the moral welfare and physical comfort of the people consequent on such a change of habits as would substitute tea for spirits, they cannot but feel that this is a subject of no ordinary importance, and that it ought not to be hastily dismissed on account of a financial difficulty, which may after all be more apparent than real."

And memorials to the same effect have also been laid before government by the East India Association of Liverpool and other important trading bodies.

The reader will perceive that the East India Association of Glasgow do not limit the desired reduction of the duty to boheas and congous, but propose to extend it to all black teas, without exception. And provided there be any considerable difficulty in discriminating between bohea and congou and other teas, we should approve of the proposal. It is of great importance to deprive the importers of all pretence for setting up a fresh clamour. And though we believe there would be little difficulty in distinguishing bohea and congou from other black teas, there can plainly be none in distinguishing between the latter and green teas, at the same time that the revenue will lose but little by the indiscriminate reduction of the duty on black teas.

Imports, Deliveries, and Stocks of the Various Descriptions of Teas in London in 1842 and 1843.

	Imports.		Deliveries.		Stocks. 1st January.	
	1842.	1843.	1842.	1843.	1842.	1843.
Bohea, Canton	568,369	112,008	226,235	135,032	416,619	373,015
Ditto, Fokien	40,080	—	18,720	25,680	95,360	79,280
Congou	20,115,183	25,416,714	23,062,898	24,504,406	18,856,388	19,066,001
Pouchong	1,610,310	2,530,580	1,259,362	1,591,138	950,794	1,907,984
Caper	251,586	238,300	416,172	260,732	203,174	187,334
Campoi	—	—	366	864	146	922
Souchong	710,702	844,930	774,364	900,066	757,014	704,546
Flowery and black leaf Pek	781,208	640,982	632,794	674,632	486,520	458,928
Orange Pekoe	602,060	647,508	629,740	933,596	632,994	343,072
Twankay	3,175,092	2,912,640	3,271,050	2,722,086	2,036,644	2,226,150
Hyson skin	317,739	292,992	254,751	193,320	160,419	260,598
Hyson	1,916,287	1,343,427	1,791,598	2,102,945	1,151,952	687,111
Young Hyson	1,059,552	734,090	884,198	940,198	737,944	535,688
Imperial and gunpowder	1,641,176	974,634	1,568,580	1,620,186	954,532	518,191
Other sorts and for exportation	563,280	280,740	160,740	139,580	345,360	343,560
Total	33,332,670	36,989,575	34,952,538	36,547,261	28,105,180	28,390,298
Black	24,912,624	30,571,422	27,098,721	28,898,736	22,629,259	24,192,465
Green	8,520,046	6,118,153	7,853,917	7,648,525	5,475,921	4,197,835

Deliveries of Tea at the Port of Liverpool, from the opening of the Trade to the 31st December, 1843; ith the Stocks in the Warehouses at the End of each Year.

	Imported.	Received Coastwise.	Duty paid.	Sent Coastwise.	Exported.	Remaining in Bond.	
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	
1834 and 1835	7,099,207	817,133	2,935,613	1,091,166	941,580	2,452,896	1st Jan. 1836
1836	7,336,389	841,518	4,353,234	1,006,283	639,693	4,365,141	— 1837
1837	7,120,551	665,965	2,840,148	1,223,574	505,853	6,881,702	— 1838
1838	4,168,507	572,601	3,551,769	1,547,849	1,123,272	5,396,013	— 1839
1839	4,629,337	2,030,486	3,596,956	1,910,477	984,675	5,563,774	— 1840
1840	4,612,837	342,094	3,129,111	2,209,486	1,233,897	3,972,939	— 1841
1841	3,992,255	1,422,187	3,611,778	1,719,844	588,242	3,267,517	— 1842
1842	7,433,948	891,213	3,339,210	2,256,534	1,212,510	4,707,694	— 1843
1843	4,995,036	850,244	3,704,179	2,505,914	480,582	3,849,952	— 1844

Prices Current of the Various Descriptions of Teas in Bond in London on the 2nd of January, 1844, 1843, and 1842.

	1844.		1843.		1842.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bohea	0 3 to	0 8	0 10 to	1 0	1 6	
Congou, ordinary, unclean	0 9 —	0 10	0 10 —	1 0	1 5 to	1 6
coarse and new kind	0 10½ —	0 11½	1 2 —	1 2½	1 7½ —	1 8
mixed leaf, do.	1 0 —	1 1½	1 3 —	1 4	1 9½ —	1 10½
blackish leaf do., rather strong to strong	1 2 —	1 4½	1 4½ —	1 8	1 10½ —	1 11½
do. strong and Pekoe flavour	1 5 —	2 0	1 9 —	2 2	2 0 —	2 7
a few choice	2 1 —	2 5				
Caper, chests	0 9 —	1 0	1 2½ —	1 3	1 9 —	1 9½
boxes	1 0 —	1 6	1 6 —	1 8	1 10 —	2 0
Pouchong	0 3 —	0 9	0 4 —	1 9	1 1 —	1 10½
Souchong, common	1 0 —	1 5	1 2 —	1 6	1 8 —	1 9½
good to fine	1 10 —	3 0	1 11 —	2 10	2 7 —	3 4
Hung Muney and black leaf Pekoe, common good to fine	1 0 —	1 5	1 4 —	1 9	none.	
Flowery Pekoe, common	1 2 —	1 9	1 6 —	2 8	3 6 —	4 0
good to fine	2 3 —	3 6	3 0 —	3 6		
Orange Pekoe, common	1 3 —	1 4½	1 5 —	1 10½	2 2 —	2 4
good						
fine scented	1 6 —	2 8	2 2 —	2 4	2 6 —	3 0
Twankay, common	1 1 —	1 1½	1 3½ —	1 4	1 8½ —	1 9
good to fine	1 1½ —	2 0	1 4½ —	1 10	1 9½ —	2 2
Hyson skin, common to good	0 6 —	1 7	1 0 —	1 8	1 6 —	2 1
Hyson, common	1 8 —	1 11	1 10 —	2 2	2 1 —	2 3
good to fine	2 0 —	4 6	2 3 —	4 6	2 4 —	5 0
Young Hyson, Canton	0 5 —	1 4	0 8 —	1 10	1 7 —	1 9
common to good and fine	1 10 —	3 1	2 0 —	3 3	2 3 —	3 2
Imperial, Canton	1 6 —	1 10	1 0 —	1 2	2 1 —	2 2
	2 4 —	3 3	1 11 —	3 3	2 6 —	3 6
Gunpowder, Canton	1 0 —	2 0	1 2 —	2 3	2 0½ —	2 2
	2 10 —	4 6	2 5 —	4 6	2 6 —	4 9

Capacity of China to furnish additional Supplies of Tea. — It has been sometimes contended, that were the duties on tea materially reduced, the increased demand of this country could not be supplied, and that the reduction of the duty would not really benefit the British consumer, but the Chinese. Our readers will hardly expect that we should enter at any length into the refutation of so absurd a notion. At the commencement of last century, the entire annual consumption of tea in this country, the Continent, and America, did not certainly amount to 500,000 lbs.; whereas the consumption of Great Britain, the Continent, the U. States, and Australia, amounts at present to about 70,000,000 lbs.; and yet every one acquainted with the history of the trade is aware that, though the consumption has increased more than *a hundred and forty times*, the prices in all open markets have, with few exceptions, been regularly declining. We may, therefore, rest quite easy upon this point. The production of tea is rapidly extending in China; and the vast extent of that empire, its capacities for raising unlimited quantities of tea, and the extent to which it is there used, negative the idea that any conceivable increase of the consumption of this country should have any perceptible or permanent influence on its cost price.

Retail Dealers in Tea. — Retailers of tea are obliged to take out a licence, which costs 11s. a year. In 1842 their numbers were, in England 82,895, in Scotland 13,368, in Ireland 8,837; making, for the U. Kingdom, a grand total of 105,150.

ADULTERATION OF TEA. — It might have been fairly enough anticipated, from the high price of, and the high duty on tea, and the facility with which it may be mixed up with foreign substances, that it would not escape adulteration; and the records of the courts of justice show that such is the case; several dealers having been convicted of this pernicious practice. The adulteration is usually effected either by the intermixture of sloe or ash leaves with fresh teas; or by mixing the latter with tea that has been already used. The penalties on such offences are stated below; but the best, or rather the only, security on which any reliance can be placed, is to be found in the character and respectability of the parties dealing in tea. Even were he influenced by nothing else, it would be extreme folly in any person carrying on an extensive business, to engage in such dishonest practices; for they can hardly fail of being detected; and the ruin of his business, that would follow such exposure, would far more than balance whatever gains he could hope to make by his fraudulent schemes.

Penalties on Adulteration. — If any dealer in or seller of tea dye or fabricate any sloe or other leaves in imitation of tea, or mix or colour leaves of tea with terra Japonica or other ingredient, or vend or expose to sale, or have in possession the same, he shall forfeit for every pound of such adulteration, 10*l.* — (4 *Geo.* 2. c. 14. s. 11.)

Every person, whether a dealer in or seller of tea, or not, who shall dye or fabricate any sloe leaves, liquorice leaves, or the leaves of tea that have been used, or the leaves of the ash, elder, or other tree, shrub, or plant, in imitation of tea, or who shall mix or colour such leaves with terra Japonica, copperas, sugar, molasses, clay, logwood, or other ingredient, or who shall sell or expose to sale, or have in custody, any such adulterations in imitation of tea, shall for every pound forfeit, on conviction, by the oath of 1 witness, before 1 justice, 5*l.*; or on nonpayment, be committed to the house of correction for not more than 12 nor less than 6 months. — (17 *Geo.* 3. c. 29. s. 1.)

Any person having in possession any quantity exceeding 6 pounds of sloe, ash, or elder leaves, or the leaves of any other tree, plant, or shrub, green or manufactured, and shall not prove to the satisfaction of the justice hearing the matter that the same were gathered with the consent of the owner of the trees, &c., and that they were gathered for some other purpose than that of being fabricated in imitation of tea, shall forfeit 5*l.* for every pound in his possession, or, on nonpayment, be committed to prison. — Sect. 2.

If an officer of excise, or other person, make oath that he suspects herbs dyed, or otherwise prepared in imitation of tea, are hid or lodged in any place, a justice may issue a warrant for seizing the same by day or night, (in the night, in presence of a constable,) together with all wagons, tubs, and packages in which they may be contained; the herbs may be directed to be burnt, and the wagons, &c. sold, and after deducting expenses the proceeds to be shared, ⅓ to informer, and ⅓ to poor of the parish. Obstructing such seizure subjects the offender to a penalty of 50*l.*, or not less than 6 nor more than 12 months imprisonment. — Sect. 3.

Herbs not to be burnt, if owner can prove, within 24 hours, that they were gathered with consent of proprietor of trees, plants, or shrubs, and that they were not intended to be fabricated in imitation of tea. — Sect. 4.

Occupier of premises where herbs are found, liable to the penalties, unless he can prove they were lodged without his consent. — Sect. 5.

Consumption of Tea on the Continent and in the U. States. — Of the Continental states, Russia and Holland are the only ones in which the consumption of tea is considerable. In 1841, the imports of tea into Russia amounted to 173,540 poods, or 6,247,440 lbs., in chests, and 76,104 poods in bricks. The former consists almost entirely of the

finest varieties of black tea. The consumption of tea in Holland amounts to about 3,000,000 lbs. a year; the duty on which varies from 1½*d.* to 4½*d.* per lb. The consumption of France does not exceed 350,000 lbs. The importations into Hamburg vary between 1,500,000 and 2,000,000 lbs., the greater part of which is forwarded to the interior of Germany. The imports into Venice and Trieste do not exceed a few cwt. a year.

The consumption of the U. States amounts to from 15,000,000 to 16,000,000 lbs. a year. Duties on tea used to form one of the largest items of American revenue, having in some years produced 650,000*l.* Their magnitude, however, was justly complained of; and it is probably owing to this circumstance that, while the consumption of tea was for several years pretty stationary in the U. States, that of coffee increased with even greater rapidity than in England. The secretary of the treasury of the U. States, in his Report for 1827, observed, — "The use of tea has become so general throughout the U. States, as to rank almost as a necessary of life. When to this we add that there is no rival production at home to be fostered by lessening the amount of its importation, the duty upon it may safely be regarded as too high. Upon some of the varieties of the article it considerably exceeds 100 per cent., and is believed to be generally above the level which a true policy points out. A moderate reduction of the duty will lead to an increased consumption of the article, to an extent that, in all probability, would, in the end, rather benefit than injure the revenue. Its tendency would be to enlarge our trade and exports to China; a trade of progressive value, as our cottons and other articles of home production (aside from specie) are more and more entering into it. It would cause more of the trade in teas to centre in our ports; the present rate of duty driving our tea ships, not unfrequently, to seek their markets in Europe, not in the form of re-exportation, but in the direct voyage from China. It would also serve to diminish the risk of the U. States losing any portion of a trade so valuable, through the policy and regulations of other nations." These judicious suggestions could not fail to command attention; and the flourishing state of the revenue in subsequent years having admitted of a very great reduction of duties, those on tea were wholly repealed. As was to be expected, the consumption has since rapidly increased.

TEAK WOOD, OR INDIAN OAK, the produce of the *Tectona grandis*, a large forest tree, that grows in dry and elevated districts in the south of India, the Burman empire, Pegu, Ava, Siam, Java, &c. Teak timber is by far the best in the East; it works easily, and, though porous, is strong and durable; it is easily seasoned, and shrinks very little; it is of an oily nature, and, therefore, does not injure iron. Mr. Crawfurd says, that in comparing teak and oak together, the useful qualities of the former will be found to preponderate. "It is equally strong, and somewhat more buoyant. Its durability is more uniform and decided; and to insure that durability, it demands less care and preparation; for it may be put in use almost green from the forest, without danger of dry or wet rot. It is fit to endure all climates and alternations of climate."— (See *Tredgold's Principles of Carpentry*, p. 206.; *Crawfurd's East. Archip.*, vol. i. p. 451.; *Rees's Cyclopædia, &c.*)

The teak of Malabar, produced on the high table land of the south of India, is deemed the best of any. It is the closest in its fibre, and contains the largest quantity of oil, being at once the heaviest and the most durable. This species of teak is used for the keel, timbers, and such parts of a ship as are under water: owing to its great weight, it is less suitable for the upper works, and is not at all fit for spars. The teak of Java ranks next to that of Malabar, and is especially suitable for planking. The Rangoon or Burman teak, and that of Siam, is not so close grained or durable as the others. It is, however, the most buoyant, and is, therefore, best fitted for masts and spars. Malabar teak is extensively used in the building-yards of Bombay. Ships built wholly of it are almost indestructible by ordinary wear and tear; and instances are not rare of their having lasted from 80 to 100 years; they are said to sail indifferently; but this is probably owing as much to some defect in their construction, as to the weight of the timber. Calcutta ships are never wholly built of teak; the timbers and framework are always of native wood, and the planking and deck only of teak. The teak of Burma, being conveyed with comparatively little difficulty to the ports of Rangoon and Maulmain, is the cheapest and most abundant of any, and it is mainly owing to the facility with which supplies of it are obtained that ship-building is now carried on so very extensively at Maulmain It is largely exported to Calcutta and Madras. — (See RANGOON.) — (*Private information.*)

A species of timber called African teak is pretty largely imported into England, from the west coast of Africa. But, in point of fact, it is not teak, and it is destitute of several of its most valuable properties. It is, however, for some purposes, a useful species of timber.

TEASEL, OR FULLERS' THISTLE (Ger. *Weberdistel, Kratzdistel;* Fr. *Chardon à carder;* It. *Cardo da cardare;* Sp. *Cardencha, Cardo peinador*). This plant, which is cultivated in the north and west of England, is an article of considerable importance to clothiers, who employ the crooked awns of the heads for raising the nap on woollen cloths; for this purpose they are fixed round the periphery of a large broad wheel, against which the cloth is held while the machine is turned. In choosing teasels, the preference should be given to those with the largest bur, and most pointed, which are generally called *male teasels.* They are mostly used in preparing and dressing stockings and coverlets; the smaller kind, commonly called the fullers' or drapers', and sometimes the *female teasels,* are used in the preparation of the finer stuffs, as cloths, rateens, &c.

THREAD (Ger. *Zwirn*; Du. *Garen*; Fr. *Fil*; It. *Refe*; Sp. *Hilo, Torzal*; Rus. *Nitki*), a small line made up of a number of fibres of some vegetable or animal substance, such as flax, cotton, or silk; whence its names of linen, cotton, or silk thread.

TILES (Ger. *Dachziegel*; Fr. *Tuiles*; It. *Tegole, Embrici*; Sp. *Tejas*; Rus. *Tscherepiza*), a sort of thin bricks, dried in kilns, and used in covering and paving different kinds of buildings. The best brick earth only should be made into tiles. — (See BRICKS AND TILES.)

TIMBER (Ger. *Bauholz, Zimmer*; Du. *Timmerhout*; Fr. *Bois de charpente, Bois à bâtir*; It. *Legname da fabbricare*; Sp. *Madera de construccion*; Rus. *Ströewoi Gess*; Pol. *Cembrowina*), the term used to express every large tree squared, or capable of being squared, and fit for being employed in house or ship building. In the language of the customs, when a tree is sawn into thin pieces, not above 7 inches broad, it is called batten; when above that breadth, such thin pieces are called deal. Wood is the general term, comprehending under it timber, dye woods, fire wood, &c.

Timber is generally sold by the load.

The following are the contents of the loads of different species of timber, hewn and unhewn: —

A load of timber unhewn	- - 40 cubic feet.	A load of $2\frac{1}{2}$ inch plank	- - 240 square feet.
squared timber	- - 50 —	3 inch plank	- - 200 —
1 inch plank	- - 600 square feet.	$3\frac{1}{2}$ inch plank	- - 170 —
$1\frac{1}{2}$ inch plank	- - 400 —	4 inch plank	- - 150 —
2 inch plank	- - 300 —		

$36\frac{1}{3}$	Russian stand. deals	12 ft.	long.	$1\frac{1}{2}$	inch thick,	11 inch.	broad, make	1 load timber
$58\frac{10}{33}$	Christiana ditto	11	—	$1\frac{1}{4}$	—	9	—	1 —
$53\frac{1}{3}$	Dram ditto	10	—	$1\frac{1}{2}$	—	9	—	1 —
3	Riga logs	-	-	-	-	-	-	1 —

The price of timber has, owing to the reduction of freight and the greater facility of importation, fallen very materially since the peace of 1815. We subjoin an account of the wholesale prices of the principal species of timber in Liverpool on the 1st of February, 1843: the duties are given in the Tariff.

Articles.		Prices.			
From British America.					
Pine timber —					
Quebec, yellow - -	cubic ft.	1s.	2½d. to	1s.	4d.
St. John, N. B. -	—	1	4	1	8½
Miramichi and Bay Chaleur	—	1	2	1	6
St. Andrew's, N. B. -	—	1	2	1	4½
Richibucto - - -	—	1	1	1	2½
N. Scotia and P. Ed.'s Island	—	1	1	1	3
Quebec, red - -	—	1	7½	2	0
S. Bruns. and N. Scotia, red	—	0	11½	1	4
Ditto, spruce - -	—	0	11½	0	12½
Oak - - - -	—	1	6	2	3
Elm - - - -	—	1	2	1	9
Ash - - - -	—	1	4	1	8
Birch, St. John, &c. N. B. -	—	1	3	1	6
N.Scotia and P. Ed.'s Island	—	1	1	1	5
Masts, yellow pine, calliper -	—	2	0	3	3
red, ditto -	—	2	0	3	3
Poles or spars, N. B. and N. S. spruce		1	3	1	7
Deals or planks —					
Quebec yellow pine, 1st qual.	st. hd.	None.			
Ditto, 2d quality - -	—	10l.	10s.	11l.	10s.
Ditto, 3d quality - -	—	9	0	10	0
Ditto, spruce - - -	—	9	0	10	0
N.B. and N.S. pine and sprc.	ft. of 2 in.	0s.	2½d.	0s.	2½d.
Hardwood planks —		None.			
Boards - - - -	ft. of 1 in.	0	1½	0	1½
Staves, Quebec standard —					
1st quality - -	stnd. m.	50l.	0	60l.	0
mid. and inferior -	—	30	0	45	0
ditto, W. O. pun.,					
1st quality -	—	17	0	18	0
mid. and inferior -	—	9	0	16	0
ditto, R. O. pun.,					
1st quality - -	—	12	0	13	0
mid. and inferior -	—	8	10	11	0
ditto, W. O. barrel -	—	7	0	9	0
U. S. W. O. barrel -	—	7	0	10	0
N. B. and N. S., red—					
oak and ash, hhd. -	—	4	10	7	10
Lathwood - - -	4 ft. per fa.	4	0	6	0
Handspikes, hickory - -	doz.	1s.	0d.	15s.	0d.
ash and birch -	—	5	0	7	0
Oars, ash - -	run. foot.	0	1½	0	2½
fir - - -	—	0	1	0	1½
Fancy and Hardwoods					
Mahogany, St. Domingo -	ft. 1 in.	0	7	1	8
Cuba - -	—	0	6½	0	9½
Honduras - -	—	0	5½	0	8½
African - -	—	None.			
Satinwood, St. Domingo -	—	0	10	1	3
Bahama - -	ton	4l.	10s.	6l.	10s.
Cedar, Havannah - -	ft. 1 in.	0s.	6d.	0s.	7d.
N. S. Wales -	—	0	4½	0	5½
pencil - -	cubic ft.	2	6	5	0
Maple, bird-eyed -	ft. 1 in.	0	4	0	7
Rosewood, Rio de Janeiro -	ton	11l.	10s.	18l.	0s.
Bahia - -	—	10	0	13	0
Zebrawood - - -	—	10	0	13	0

Articles		Prices.			
Lignumvitæ, City St. Domingo	ton	7l.	0s. to	8l.	0s.
Cuba, P. Cabello, &c.	—	4	0 —	5	10
Bahama - -	—	3	0 —	4	0
Boxwood - - -	—	6	0 —	12	0
Cocuswood - - -	—	5	0 —	7	0
Partridge - -	—	4	0 —	6	10
Ebony, black, African	—	5	10 —	7	10
ditto, Ceylon - -	—	5	0 —	6	10
green - - -	—	5	0 —	6	10
Lancewood, spars - -	each	5s.	0d. —	8s.	0d.
From the Baltic.					
Fir timber —					
Riga, red - - -	cubic ft.	2	1 —	2	3
Danzic and Memel crown -	—	2	1 —	2	3
Ditto, middling - -	—	1	9 —	1	11
Stettin - - -	—	1	9 —	1	11
Pillau - - -	—	1	9 —	1	11
Swedish - - -	—	1	9 —	1	11
Norway - - -	—	None.			
Oak timber, Bremen, &c. -	—	1	9 —	2	6
Wainscot logs —					
Riga, 11 feet long - -	piece	4l.	0s. —	7l.	0s.
Ditto, 7 feet long - -	—	2	5 —	1	10
Masts, Danzig, calliper -	—	None.			
Poles or spars - - -	—	1	1 —	1	4
Deals, Arch. and Onega -	st. hun				
1st quality, red - -	—	17	10 —	18	0
2d quality, — - -	—	15	10 —	16	10
St. Petersburg,					
1st quality, — - -	—	16	10 —	17	10
2d quality, &c. - -	—	14	10 —	15	10
Wyburg, — - -	—	14	0 —	15	0
Pernau,					
1st quality, — - -	—	15	0 —	16	0
Riga - - -	—	11	10 —	15	10
Memel - - -	—	14	10 —	15	10
Danzig - - -	—	13	0 —	14	0
Gottenburg - -	—	14	0 —	15	0
Bjornesburg - -	—	13	10 —	14	10
Russia, white - -	—	13	0 —	14	0
Swedish - - -	—	12	0 —	13	0
Battens, Arch. and St. Petersbg.					
1st quality, red -	—	17	10 —	18	10
2d quality, - -	—	15	0 —	16	0
Swedish and Norway	—	13	0 —	14	0
N.B. — Deal ends and batten ends are generally sold at two-thirds the price of deals and battens respectively.					
Deck planks, crown - -	ft. 2 ins.	0s.	3½d. —	0s.	3½d.
middling - -	—	0	3¼ —	0	3¼
Beech clap-boards, 5 feet long		25l. per 120.			
Staves, Danzig and Memel, crown					
Pipe - -	1200 pieces	170l.	0s. —	180l.	0s.
Ditto, brand pipe -	—	None.			
Ditto, hhd. - -	—	None.			
Ditto, barrel - -	—	None.			
Stettin, crown pipe -	—	None.			
Odessa - - -	—	None.			

Articles.		Prices.				Articles.		Prices.			
Lathwood, Danz. and M. 6 ft.	fa.	12l.	0s.	to 13l.	0s.	Oak logs	cubic ft	None.			
Ditto, 4 ft.	—	7	0	— 8	0	planks	ft. 2 in.	None.			
Stettin, 8 ft.	—	13	0	— 14	0	Teak logs, African	cubic ft.	4s.	0d.	to 5s.	0d.
Ditto, 4 ft.	—	6	10	— 7	0	East Indian	—	4	3	— 5	3
Riga and St. Pg. 8ft.	—	10	10	— 11	10	planks	ft. 2 in.	0	8	— 0	9
Ditto, 4 ft.	—	5	10	— 6	10	Greenheart logs	cubic ft.	3	3	— 3	9
Handspikes, birch	dozen	5s.	0d.	— 7s.	0d.	planks	ft. 2 in.	None.			
From the U. States, East and West Indies, and Africa.						Black mora	cubic ft.	2	9	— 3	3
Pitch pine logs	cubic ft.	1	8	— 2	1	Bully tree	—	3	6	— 4	0
planks	ft. 2 in.	0	3½	— 0	3½	Staves, W. O. pipe	M. pcs.	None.			
						W. O. hhd.	—	None.			

Account of the Importation, Consumption, and Stock of Timber, &c., during the 20 Years ending 1st of February, 1843.—(*From the valuable Circular of Messrs. Chaloner, Houghton, & Co., Liverpool.*)

Articles.	Import, ending 1st February.			Consumption, ending 1st Feb.			Stock, on 1st February.		
	Average of the 18 years, 1825 to 1841.	1842.	1843.	Average of the 18 years, 1825 to 1841.	1842.	1843.	Average of the 18 years, 1825 to 1841.	1842.	1843.
British America.									
Pine, cubic feet	5,064,300	6,343,000	3,301,000	4,970,500	4,654,000	4,939,000	2,233,750	4,248,000	2,610,000
Quebec deals, standard	2,500	2,912	1,688	2,177	2,154	1,858	1,066	1,166	1,295
oak, cubic feet	194,900	364,000	58,500	185,302	193,000	215,500	125,000	369,000	212,000
elm and ash { Elm	93,550	181,000	38,500	78,355	143,500	87,300	45,500	108,000	50,000
elm and ash { Ash		11,100	2,900		14,750	14,950	5,368	18,750	6,500
Staves, mille	842	110	139	848	333	313	643	302	128
		1,121	438		670	841		1,275	872
Pine, &c. planks, ft. of 2 in.	4,087,100	8,770,000	5,723,000	3,811,677	8,197,000	7,528,000	1,882,812	5,160,000	3,352,000
Hardwood, (birch), cubic feet	190,000	364,000	160,000	243,908	270,000	260,000	64,266	167,000	67,000
Lathwood, fathoms	1,191	1,563	683	1,216	1,130	911	320	477	249
Baltic.									
Timber, Dantzig, Memel, Riga, &c., cubic feet	509,900	532,000	159,000	512,729	218,000	300,000	256,390	215,000	74,000
Deals, standard	3,713	1,649	2,415	3,086	2,091	1,624	1,815	1,514	1,095
Wainscot logs { whole	502	585	-	579	438	390	430	465	75
Wainscot logs { half	66	-	-	42	70	60	115	270	210
Deck planks, pieces	8,595	3,741	3,141	7,819	5,996	4,951	3,607	2,910	1,100
Staves, pipe M	68	30	9	70	25	22	28	13	2
Lathwood, fathoms	554	320	270	548	305	308	159	188	150
Mahogany, Honduras, logs	1,776	1,786	907	1,736	1,638	1,690	798	1,151	368
St. Domingo	3,901	4,563	6,505	4,013	3,945	5,289	1,595	2,121	3,337
Cuba	1,243	451	377	1,263	646	827	507	568	118
Cedar, Havannah, logs	1,100	779	959	1,080	1,581	684	452	66	326
pencil, cubic feet	9,524	8,300	5,150	10,150	17,200	6,950	13,011	11,300	12,800
Pitch pine	57,900	272,000	164,700	38,517	127,800	175,200	21,300	152,500	114,000
African and E.I. teak	113,500	85,500	78,200	111,290	51,000	74,100	43,000	40,500	41,500

Cargoes of Timber, &c. from British America and the Baltic, for the last 10 Years.

Year ending 1st Feb.	British America.		Baltic.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
1834	247	89,304	64	20,209
1835	335	117,996	94	27,394
1836	429	165,284	102	29,515
1837	328	113,181	66	18,900
1838	275	135,072	63	19,000
1839	302	160,294	72	23,116
1840	339	170,591	58	17,415
1841	230	133,400	48	14,100
1842	318	174,918	40	11,923
1843	165	91,179	32	11,239

TIMBER TRADE. Having, in separate articles, described those species of timber most in demand in this country, we mean to confine ourselves in this article to a few remarks on the policy of the regulations under which the trade in timber is conducted.

1. *Importance of a cheap Supply of Timber.* — It is surely unnecessary to enter into any lengthened statements on this head. If there be one article more than another with which it is of primary importance that a great commercial and manufacturing nation like England should be abundantly supplied on the lowest possible terms, that article is timber. Owing to the deficiency of our home supplies, most part of the timber, with the exception of oak, required for building ships and houses; and most part, also, of that employed in the construction of machinery; is imported from abroad. Any individual acquainted with the purposes to which timber is applied, but ignorant of our peculiar policy with respect to it, would never, certainly, imagine that such an article could be made the subject of oppressive duties, and of still more oppressive preferences. Timber is not to be looked at in the same light as most other commodities. It is against all principle to impose duties on materials intended to be subsequently manufactured; but timber is the raw material of the most important of all manufactures — that of the instruments of production. Suppose it were proposed to lay a heavy tax on ships, waggons, looms, or workshops when completed; would not such a monstrous proposal be universally scouted? And yet this is what is really done. The finished articles are not, indeed, directly taxed; but the principal material of which they are made, and without which they could not be constructed, is burdened with an exorbitant duty! To dwell on the impolicy of such a tax would be worse than useless. Of all things essential to the prosperity of manufacturing industry, improved and cheap machinery is the most indispensable.

Most individuals amongst us are ready enough to ridicule the contradictory conduct of the French government, who, at the very moment that they are endeavouring to bolster up a manufacturing interest, lay enormous duties on foreign iron, and thus double or treble the price of some of the most important manufacturing implements. Timber is, however, of quite as much importance in this respect as iron; and our conduct in having burdened it with exorbitant duties partakes as largely of the *felo-de-se* character as that of our neighbours! Indeed, as will be immediately seen, it is decidedly less defensible. Some plausible, though inconclusive, reasonings might be urged in defence of duties on iron and timber, were they imposed for the sake of revenue: but even this poor apology for financial ignorance and rapacity cannot be set up in defence of the iron duties of France or the timber duties of England. The former, however, are the least objectionable; they were imposed, and are still kept up, to encourage the production of iron in France: whereas the duties on timber in England have been imposed for the sake, principally, of promoting the lumber trade of Canada, and of forcing the employment of a few thousand additional tons of shipping! We do not sacrifice the goose for the sake of the golden eggs, but for the sake of the offal she has picked up.

2. *Origin and Operation of the discriminating Duty in favour of American Timber.* — The practice of encouraging the importation of the timber of Canada and our other possessions in North America in preference to that of foreign countries, is but of recent growth. It took its rise during the administration of Mr. Vansittart, and bears in every part the impress of his favourite policy. The events that took place in 1808 having seriously affected our previous relations with the Baltic powers, a deficiency in the accustomed supply of timber began to be apprehended; and the ship owners and Canada merchants naturally enough availed themselves of this circumstance, to excite the fears of the ministry, and to induce them to change the fair and liberal system on which the trade in timber had been conducted down to that time, by granting extraordinary encouragement to its importation from Canada. Even as a temporary expedient, applicable to a peculiar emergency, the policy of giving any such encouragement is extremely doubtful. Supposing timber not to have been any longer obtainable from the north of Europe, its price would have risen, and it would, of course, have been imported from Canada, the U. States, or wherever it could be had, without any interference on the part of government. But, in 1809, a large addition was made to the duties previously charged on timber from the north of Europe, at the same time that those previously charged on timber from Canada and our other possessions in America were almost entirely repealed; and in the very next year (1810), the duties thus imposed on Baltic timber were *doubled!* Nor did the increase of duties on such timber stop even here. In 1813, after Napoleon's disastrous campaign in Russia, and when the free navigation of the Baltic had been restored, 25 per cent. was added to the duties on European timber! The expediency of increasing the revenue was, no doubt, pleaded in justification of this measure; but we believe it was really intended to augment the preference in favour of Canada timber; for how could it be supposed that an increase of the duties on an article imported from a particular quarter of the world, that was already taxed up to the very highest point, could add any thing considerable to the revenue, when a convertible article might be imported from another quarter duty free? The various duties laid on European timber amounted, when consolidated by the act 59 Geo. 3. c. 52., to 3*l.* 5*s.* per load.

Admitting, for the moment, that the peculiar and unprecedented aspect of things in 1808 and 1809 warranted the giving of some preference to the importation of timber from Canada, such preference should plainly have ceased in 1813. So long as the communication with the bridge is interrupted, we may be forced to use a boat to cross the river; but when the communication is again opened, and when there is not the remotest chance of its future interruption, it would be a singular absurdity to refuse to resume the use of the bridge, and to continue the costly and inconvenient practice of being ferried over! This, however, is exactly what we did in the case of the Canada trade. Because a fortuitous combination of circumstances obliged us, upon one occasion, to import inferior timber at a comparatively high price, we resolved to continue the practice in all time to come! The history of commerce affords few such displays of gratuitous folly.

The absurdity of this conduct will appear still more striking, if we reflect for a moment on the peculiar situation of the countries in the north of Europe. The nations round the Baltic have made little progress in manufacturing industry. They abound in valuable raw products; but they are wholly destitute of the finer species of manufactured commodities, and of colonies. Nor have they any real inducement to attempt supplying themselves directly with the former, or to establish the latter. Their iron and copper mines, their vast forests, and their immense tracts of fertile and hitherto unoccupied land, afford far more ready and advantageous investments for their deficient capital, than could be found in manufactures or foreign trade. Russia and Prussia have,

indeed, been tempted, by our corn and timber laws, to exclude some species of manufactured goods; but it is not possible that they should succeed in materially limiting our exports to them, provided we did not second their efforts by refusing to admit their products.

Of all the countries in the world, there is obviously none which has so many facilities for carrying on an advantageous trade with the North as Great Britain. We have a surplus of all those products of which Russia, Prussia, Sweden, Denmark, and Norway stand most in need; and, on the other hand, they have a surplus of many of those of which we are comparatively destitute. The immense traffic we carry on with the Baltic does not, therefore, depend, in any considerable degree, on artificial or accidental circumstances. It does not rest on the wretched foundation of Custom-house regulations or discriminating duties, but on the gratification of mutual wants and desires. It has been justly remarked by the Marquis Garnier, the excellent translator of the "Wealth of Nations," that no inconsiderable portion of the increased power and wealth of England may be traced to the growing opulence of Russia. But the Russian empire is yet only in the infancy of civilisation; she must continue for a very long period to advance in the career of improvement; and it will be our own fault if we do not reap still greater advantages from her progress.

Such is the nature of that commerce against which the discriminating duties on timber from the north of Europe aimed a severe blow! In 1809, when this system began, 428,000 tons of British shipping entered inwards from the Baltic. In 1814, the year after the 25 per cent. of additional duty had been imposed on Baltic timber, and when all the ports of that sea were open to our ships, only 242,000 tons of British shipping entered inwards, being little more than the half of what it amounted to when the system began. And notwithstanding the vast increase, in the interval, of population and wealth in the countries round the Baltic, our trade with the different ports on that sea has not even now (1843) recovered from the blows inflicted on it in 1809 and 1813! It is seen from the statements previously laid before the reader (see art. Elsineur), that in 1842 only 295,435 tons of British shipping left the Baltic for the U. Kingdom.

The following extract from the evidence of Mr. Edward Patzcker, a merchant of Memel, given before the committee of the House of Commons on the foreign trade of the country, in 1821, shows the effect that the increased duties on timber had on the commerce with Prussia:—

"Has there been a great alteration in the timber trade between Memel and this country of late years?"—"Since the war, a great alteration; before the war we used to have 950 to 1,000 English ships in a year, and since the war we have had from 200 to 300 only."

"When you talk of 900 ships, do you mean 900 ships trading between Great Britain and Memel?"—"Yes."

"Do you mean that number of cargoes were loaded in the year for England?"—"Yes."

"How many cargoes were loaded for Great Britain during the last year (1820)?"—"About 270 or 280 cargoes; there have not been more."

"To what cause do you attribute that diminution in the trade?"—"*To the high duties in England*; for formerly the duties were only 16*s.* and some pence; now they are 3*l.* 5*s.* in a British, and 3*l.* 8*s.* in a foreign ship."

"Has that diminished trade in timber produced a great alteration in the circumstances of the people of Prussia?"—"Yes: for it is the only trade which we can carry on; wheat and all the rest of our articles cannot be brought here; *timber* is the only one that can be brought, and the trade from Poland has very much ceased in consequence of the diminished demand for it; the people cannot sell their goods, and we cannot take such quantities of timber as we used to do; and, therefore, they cannot take English goods from us."

"If such an alteration was to take place in the duties on timber in this country, as to give the Prussians a larger share of the trade than they at present enjoy, do you think that would produce increased friendly feelings on the part of the people of your country to the people of this country?"—"It would. *They would certainly take far more goods from hence*, as they could get better rid of them. The Poles, also, would take more of them.—(*Report*, 9th of March, 1821, p. 107.)

The effect that the increased duties had on the trade with Norway and Sweden, aggravated as they in some degree were by the method of charging the duty on deals, was still more striking and extraordinary. These countries had few products, except timber and iron, to exchange for our commodities; and as neither of these could be advantageously imported into England under the new system, the trade with them almost entirely ceased; and they were reluctantly compelled to resort to the markets of France and Holland for the articles they had formerly imported from us. In proof of this, we may mention, that the exports to Sweden, which amounted in 1814 to 511,818*l.*, declined in 1819 to 46,656*l.*, and even in 1842 were only 199,313*l.*; while the exports to Norway, which had, in 1815, amounted to 199,902*l.*, fell in 1819 to 64,741*l.*, and in 1842 had only increased to 134,704*l.*

This extraordinary falling off in so very important a branch of our commerce having been established beyond all question by evidence taken before the committees of Lords and Commons on the foreign trade of the country in 1820, an approach to a better system was made in 1821, when the duty on timber from the north of Europe was reduced from 3*l.* 5*s.* to 2*l.* 15*s.* per load, at the same time that a duty of 10*s.* per load was laid on timber from British America. This, however, was a comparatively inefficient measure. It was stated, to be sure, at the time, that the

2*l.* 5*s.* per load of excess of duty that was thus continued on Baltic timber over that laid on timber imported from Canada, was not more than enough to balance the higher prime cost, the greater freight, and other charges consequent upon the importation of the latter; and that it would, therefore, be in future indifferent to a merchant whether he imported timber from Memel or Miramichi! In point of fact, however, the discriminating duty continued in favour of Canada timber was far too high to allow of this equalisation being effected. So much so has this been the case, that there have been instances of ships loading with timber in the north of Europe, carrying that timber to Canada, and then bringing it to England as Canada timber; the difference of duty having been about sufficient to indemnify the enormous expense of this round-about voyage! We do not mean to say that this has been a common practice; but what are we to think of a commercial regulation that admitted of such an adventure being undertaken with any prospect of success? Admitting, however, that the duty had been adjusted so as to have had the anticipated effect, could any thing be more preposterous and absurd than to impose it on such a principle? There are mines of coal in New Holland; but what should we think, were an attempt made to impose such duties on coals from Newcastle as should render it indifferent to a London merchant whether he imported a cargo of coal from the Tyne or Botany Bay? Now, the case of the timber duties is, in point of principle, precisely the same. We may obtain timber from countries so near at hand that our ships may make 3, 4, 5, and even 6 voyages a year to them*; and we refused to admit it unless loaded with a duty that raised its price to a level with what was brought from the other side of the Atlantic — a voyage which our ships cannot, at most, perform above twice a year!

3. *Comparative Quality of Baltic and Canada Timber.* — Had the timber of Canada been decidedly superior to that of the north of Europe, something might have been found to say in favour of the discriminating duty; for it might have been contended, with some show of reason, that it was of the utmost consequence, considering the application of timber to ship and house building, and other important purposes, to prevent the importation of an inferior species, even though it might be cheaper. But the system we adopted is of a totally different character. We did not attempt to shut out an article which, though cheap, was inferior; but committed the twofold absurdity of shutting out one that was at once *cheap and superior!*

The committee of the House of Lords observe, in their *First Report on the Foreign Trade of the Country*, that "the North American timber is more soft, less durable, and every description of it more liable, though in different degrees, to the dry rot, than timber of the north of Europe. The red pine, however, which bears a small proportion to the other descriptions of timber, and the greater part of which, though imported from Canada, *is the produce of the U. States*, is distinguished from the white pine by its greater durability. On the whole, it is stated by one of the commissioners of his Majesty's navy, most distinguished for practical knowledge, experience, and skill, that the timber of Canada, both oak and fir, *does not possess, for the purpose of ship building, more than half the durability of wood of the same description, the produce of the north of Europe.* The result of its application to other purposes of building is described by timber merchants and carpenters to be nearly similar."—(p. 4.)

We subjoin the following extracts from the evidence of Sir Robert Seppings, the commissioner alluded to by the committee, whose great intelligence and experience render his opinion of the highest authority: —

"Can you state to the committee the result of any observations that you or others in his Majesty's service have made, on the durability of timber, the produce of the North American colonies, or timber imported from the north of Europe, applied to the same purposes?" — "About the year 1796, there were a certain number of frigates built of the fir of the Baltic, and *their average durability was about* EIGHT *years*. About the year 1812, there were a considerable number of frigates built, also of fir of the growth of North America, and their *average durability was not* HALF *that time*."

"You have stated that Canada timber is peculiarly subject to the dry rot, and the dry rot is known to have prevailed lately to a great degree in the navy; has that prevailed principally since the application of Canada timber to the uses of the navy?" — "I believe *the navy has suffered very considerably from the introduction of Canada timber*, or timber of the growth of North America; and in consequence, from experience, we have *entirely discontinued the use of it*, except for deals and masts." — (p. 56.)

Mr. Copland, an extensive builder and timber merchant, being asked by the committee what was his opinion with respect to the comparative qualities of American and Baltic timber, answered, — "The timber of the Baltic in general, speaking of Norway, Russian, Prussian, and Swedish timber, is of a very superior quality to that imported from America; the bulk of the latter *is very inferior in quality, much softer in its nature, not so durable, and very liable to dry rot*; indeed, it is not allowed by any professional man under government to be used, nor is it ever used in the best buildings in London; it is only speculators that are induced to use it, from the price of it being much lower (in

* According to the evidence of Mr. J. D. Powles, secretary to the London Dock Company, ships can make *six* voyages from Norway, 3 or 4 from Prussia, and 2 from Russia, in a season. —(*Commons' Report*, p. 89.)

consequence of its exemption from duty) than the Baltic timber; if you were to lay two planks of American timber upon each other, in the course of a twelvemonth they would have the dry rot, almost invariably, to a certain extent."—(p. 56.) And many passages to the same effect might be produced, from the evidence of persons of the greatest experience in building.

Now, we would beg leave to ask whether any thing could be more monstrous, than to force, by means of a system of discriminating duties, a large proportion of the public to use that very timber in the construction of their ships and houses, which government would not use for either of these purposes, and which the most experienced engineers and builders pronounce to be utterly unfit for them? This was not imposing duties on a fair and equal principle for the sake of revenue, but for the sake of securing a preference to a worthless article: it was not imposing them in the way in which they might be least, but in which they were certain to be *most injurious* to those who had to pay them.

It appears from accounts that have been repeatedly published, that, previously to the late alterations, the revenue would have gained considerably more than 1,500,000*l.* a year, had the same duty been laid on Canada timber that was laid on timber from the north of Europe; and this, therefore, may be considered as the amount of the pecuniary sacrifice we consented to make, in order that our ships and houses might be inoculated with dry rot!

4. *Apologies for the discriminating Duty.*—If any thing ought, more than another, to make legislators pause before enacting a restrictive regulation, it is the difficulty of receding from it. After it has been enforced for a while, a variety of interests usually grow up under its protection, which may be materially injured by its repeal. *All*, however, that the persons so interested can justly claim, is, that sufficient time, and every possible facility, should be afforded them to prepare for a change of system. Because the interests of a comparatively small portion of the community may be injuriously affected by the abolition of a regulation ascertained to be in the last degree inimical to the public, is it, therefore, to be contended that we should, at all hazards, continue to enforce the regulation we have so unwisely enacted? To maintain the affirmative, would be to give perpetuity to the worst errors and absurdities; and would be an effectual bar to every sort of improvement. No change, even from a bad to a good system, should be rashly set about: but when once the expediency of an alteration has been clearly established, it ought to be resolutely carried into effect.

It has been objected to the abolition of the discriminating duties on timber, that it would be injurious to Canada and the shipping interest. We believe, however, that the injury would not be nearly so great as has been represented; that it would, in fact, be quite inconsiderable. So far from the *lumber trade*—or the trade of felling wood, squaring it, and floating it down the rivers to the shipping ports—being advantageous to a colony, it is distinctly and completely the reverse. The habits which it generates are quite subversive of that sober, steady spirit of industry, so essential to a settler in a rude country: to such a degree, indeed, is this the case, that lumberers have been described as the pests of a colony, "made and kept vicious by the very trade by which they live."—But, abstracting altogether from the circumstances now alluded to, it has been shown, over and over again, that the abolition of the lumber trade would materially benefit the real interests of the colonies. It is ludicrous, indeed, seeing that not one tree in a hundred is fit for the purposes of being squared for timber, to suppose that the discontinuance of the trade could be any serious loss. But the fact is, that when trees are cut down by lumberers, for export as timber, instead of being burnt down, so great a growth of brushwood takes place, that it actually costs more to clear the ground where the lumberers have been, than where they have not been. Mr. Richards, who was sent out by government to report on the influence of the lumber trade, represented it as most unfavourable; and observed, that, "when time or chance shall induce or compel the inhabitants to desist from this employment, agriculture will begin to raise its head." The statements of Captain Moorsom, in his *Letters from Nova Scotia*, are exactly similar. He considers the depression of the timber market, although a severe loss to many individuals, a "decided gain to the colony," from the check it has given to the "lumbering mania."—(p. 53.)

The statements that have been made as to the amount of capital expended on saw mills, and other fixed works for carrying on the lumber trade, have been singularly exaggerated. Mr. P. Thomson (afterward Lord Sydenham), who had the best means of acquiring accurate information on this point, made the following statement with respect to it in his speech on the 18th of March, 1831:—"From the means I have had of calculating the amount of capital embarked in these saw mills, I believe it is about 300,000*l.*: I am sure I may say that if 500,000*l.* were taken as the amount, it would be a great deal above rather than under the real value; but after all, this description of property is not to be sacrificed by the arrangements proposed, even if they were

carried to the fullest extent. I am ready at once to admit that the consequence of the proposed alteration may be, that it will diminish the exports of timber from Canada to England, and affect the productiveness of the capital vested in the mills to which I have referred; but the committee ought not to lose sight of the fact, that though in this one branch of industry there will be a great falling off, yet the same amount of labour might be applied to much greater advantage on land in the colonies; and the mills, which will be rendered useless for their original purposes, may be converted into useful auxiliaries to the agricultural and other pursuits of the colonists; so that the enormous losses that have been placed in so frightful a point of view, will, as I have shown, be absolutely next to nothing."

The fact is, that in so far as the interests of the colonies are concerned, it is plain they would not really lose, but gain, by a repeal of the discriminating duties on foreign timber. They would still continue to possess a respectable share of the trade; for their timber, though unfit for many important purposes, is well suited, by its freedom from knots, for the finishing of rooms and cabins, the manufacture of boxes, &c.; and in the mast trade, it is believed, that they would be able to maintain a successful competition with Riga.

The ship owners would undoubtedly have more cause to complain of injury from the equalisation of the duties; but even as respects them, it would not be nearly so great as is commonly supposed. From a half to a third part of the timber now brought from Canada would most probably continue to be brought from it were the duties equalised; and a large proportion of the ships thrown out of the Canada trade would be turned into the trade with the north of Europe, whence a much larger quantity of timber would henceforth be brought. It is material, too, to observe, that whatever temporary inconvenience the shipping interest might sustain from the change, its future consequences would be singularly advantageous to it. The high price of timber employed in the building of ships is at present the heaviest drawback on the British ship owners; but the equalisation of the duties would materially reduce this price; and we have the authority of the best practical judges for affirming, that, were the duty repealed, ships might be built decidedly cheaper in England than in any part of the world.

Changes proposed in the Timber Duties in 1831 *and* 1835, *and effected in* 1842. — Considering the vicious principle on which the duties on timber have been imposed, and their pernicious influence, the tenacity with which they have been supported, and the little opposition made to them, may well excite surprise. In 1831, Lord Althorp (now Earl Spencer) moved that the duties on foreign timber should be reduced 6*s.* a load on the 1st of January 1832; 6*s.* more on the 1st of January 1833; and 3*s.* on the 1st of January 1834; making the whole reduction 15*s.* a load, and leaving a protection in favour of Canada timber of 30*s.* a load. The only real objection to this proposal is that it did not go far enough, that it "scotched the snake without killing it." But, moderate as it was, it was rejected by a large majority, and the project fell to the ground.

In 1835 a committee of the House of Commons, appointed to inquire into the operation of the duties on timber, agreed to the following resolutions: —

1. That it is the opinion of this committee, that the present mode of taking the duties on deals is susceptible of improvement, and that this committee would recommend that a mode be adopted which shall approach more nearly to a payment according to the contents of the deals.
2. That it is the opinion of this committee, that the difference of duty of 45*s.*, now imposed by law upon timber the produce of Europe, as compared with timber the produce of our North American colonies, is too great, and may be reduced.
3. That it is the opinion of this committee, that, having a due regard to the interests which have been created in the British North American colonies by the system hitherto pursued, and to the representations of the shipping interest, a reduction of the protective duty, not exceeding 15*s.* per load, appears to them to be a fair arrangement.
4. That it is the opinion of this committee, that such reduction be made, so far as may be consistent with the interest of the revenue, without any augmentation on the duty on colonial timber.
5. That it is the opinion of this committee, that, in any alteration made, such alteration should not affect the shipments made in the year 1836.
6. That it is the opinion of this committee, that there should be a uniform mode of taking the duty on deals throughout the U. Kingdom.

But no step was taken to give effect to these resolutions. No private member, unless supported by government, could have expected to succeed in an attempt to accomplish any material modification of the timber duties; and government, influenced perhaps, by a dread of the difficulties in the way of such an attempt, and not, perhaps, having any strong feeling on the subject, did nothing; so that the trade continued on its old footing down to 1842!

Happily, however, the differential duty of 45*s.* a load in favour of Canada timber has been reduced, by the Tariff Act of the above year, from the 10th of October 1843, to 24*s.* a load on timber properly so called, and to 30*s.* on deals. But, though this be a signal improvement on the previous system, it leaves much to be desired; and we do not know that the way in which the change was effected was the best that might have been selected. It was brought about by reducing the previous duties on foreign timber

from 55*s.* to 25*s.* and 32*s.* the load, and the previous duty on British colonial timber from 10*s.* to 1*s.* and 2*s.* per load. While, however, every one must admit that the reduction of the duty on foreign timber was most proper, it is not easy to see why any reduction should have been made in the duty on Canada timber. Had it been allowed to remain as it was, or at 10*s.* a load, the discriminating duty in favour of colonial timber would still have amounted to 15*s.* and 22*s.* a load; and admitting (though we have yet to learn how the principle is in this case to be maintained) that it may be sound policy to give a preference to the timber of our colonies, surely the amount now specified would have been more than ample. And it is material to observe, that, had the duties been arranged in the way pointed out, it is all but certain there would have been little or no loss of revenue, whereas the scheme that has been adopted will, most probably, occasion the loss of 500,000*l.* a year. However, we are grateful for what has been done; and we have little doubt that in no very lengthened period the precedent set in 1842 will be fully carried out, and an end put to the practice of laying high differential duties on a most important article for the sake of colonial possessions that have never been of the smallest advantage to this country.

TIN (Ger. *Blech*, *Weissblech*; Fr. *Fer blanc*; It. *Latta*, *Banda stagnata*; Sp. *Hoja de lata*; Rus. *Blächa*, *Shest*; Arab. *Resas*; Sans. *Trapu* and *Ranga*), a metal which has a fine white colour like silver; and when fresh, its brilliancy is very great. It has a slightly disagreeable taste, and emits a peculiar smell when rubbed. Its hardness is between that of gold and lead. Its specific gravity is 7·29. It is very malleable; *tin-foil*, or tin leaf, is about $\frac{1}{1000}$th part of an inch thick; and it might be beat out into leaves as thin again, if such were required for the purposes of art. In ductility and tenacity it is very inferior. A tin wire 0·078 inch in diameter is capable of supporting a weight of 34·7 pounds only without breaking. Tin is very flexible, and produces a crackling noise when bent. It may be readily alloyed with copper, zinc, &c., forming very valuable compounds. — (*Thomson's Chemistry.*)

The ores of this metal are found in comparatively few places; the principal, and perhaps the only, ones are Cornwall, Galicia, Erzgebirge in Saxony, Bohemia, the Malay countries, China, and Banca in Asia. They are peculiar to primitive rocks, generally in granite, either in veins or beds, and are often associated with copper and iron pyrites.

Tin is much used as a covering to several other metals: iron is tinned, to prevent its rapid oxidation when exposed to air and moisture; and the same process is applied to copper, to avoid the injurious effects to which those who are in the habit of employing cooking utensils made of this metal are always liable. The solutions of tin in the nitric, muriatic, nitro-sulphuric, and tartaric acids, are much used in dyeing, as giving a degree of permanency and brilliance to several colours, to be obtained by the use of no other mordants with which we are at present acquainted: tin forms the basis of pewter, in the composition of which it is alloyed with lead; when rolled into thin sheets, it is called tin-foil, and is applied, with the addition of mercury, to cover the surface of glass, thus forming looking-glasses, mirrors, &c.; and in combination with sulphur, it constitutes what is called mosaic gold. — (*Joyce's Chem. Min.*)

Tin Plates, known in Scotland by the name of *white iron*, are applicable to a great variety of purposes, and are in very extensive demand. They are formed of thin plates of iron dipped into molten tin. The tin not only covers the surface of the iron, but penetrates it completely, and gives the whole a white colour. It is usual to add about 1-10th of copper to the tin, to prevent it from forming too thick a coat upon the iron. — (*Thomson's Chemistry.*)

Historical Notices of the British Tin Trade. — The tin mines of Cornwall have been worked from a very remote æra. The voyages of the Phœnicians to the Cassiterides, or tin islands, are mentioned by Herodotus (lib. iii. c. 115.), Diodorus Siculus (lib. iv. p. 301. ed. 1604), and Strabo (*Geog.* lib. iii.). Some difference of opinion has, indeed, been entertained as to the particular islands to which the Phœnicians applied the term Cassiterides; but Borlase (*Account of the Scilly Islands*, p. 72.), Larcher (*Herodote*, tome iii. p. 384. ed. 1802), and the ablest critics, agree that they are the Scilly Islands, and the western extremity of Cornwall. After the destruction of Carthage, the British tin trade, which was always reckoned of peculiar importance, was carried on by the merchants of Marseilles, and subsequently by the Romans. Besides Britain, Spain furnished the ancients with considerable quantities of tin. We have no very precise information as to the purposes to which they applied this metal. It has been supposed that the Phœnicians, so famous for their purple dyes, were acquainted with the use of the solution of tin in nitro-muriatic acid in fixing that colour. The best of the ancient mirrors, or *specula*, were also made of a mixture of copper and tin; and tin was used in the coating of copper vessels. — (*Watson's Chemical Essays*, vol. iv.)

In modern times, the tin mines of Cornwall and Devon have been wrought with various degrees of energy and success. Queen Elizabeth brought over some German miners, by whom some of the processes were improved. During the civil wars, the mines were much neglected. At the commencement of last century, however, the business of mining was carried on with renewed vigour; and from 1720 to 1740 the annual produce was about 2,100 tons. The produce went on gradually increasing, till it amounted, in the 10 years from 1790 to 1800, to 3,254 tons a year. During the next 15 years the produce fell off; and for the 5 years ending with 1815 it was always considerably under 3,000 tons a year. But in the last-mentioned year, a considerable increase took place; and since 1816, the produce has been, with the exception of 1820, always above 3,000

tons a year. The present (1843) average produce of the mines may be estimated at above 5,000 tons a year.

The price of British tin, at an average, from 1811 to 1815, inclusive, was about 7*l.* a cwt. Its fall from 1815 to 1820, and its comparative low price since, have been owing to a variety of causes; partly to improvements in the art of working the mines, partly to the increased supply of metal obtained from them, and partly and principally to the competition of the tin of Banca and of the Malay countries. Previously to 1814, we had in some measure a monopoly of the market of the world. But since then the Banca mines have been wrought with unusual spirit; and their produce has been so much increased, as not only fully to supply the market of China, to which we formerly exported from 600 to 1,000 tons, but to meet us in every European market. Malay tin is now very extensively imported, for warehousing, into England, at the same time that large quantities are carried direct to Holland, where there are refining houses; but, notwithstanding these circumstances, our exports of tin have increased considerably of late years.

Duty on British Tin. — All tin produced in Cornwall was subject, from a very remote period down to 1837, to a coinage duty of 4*l.* a ton, payable to the Duke of Cornwall: the tin raised in Devonshire was subject to a similar duty of 1*l.* 13*s.* 4*d.* a ton. This duty produced from 16,000*l.* to 20,000*l.* a year; and was felt to be a serious grievance, not only from its amount, but from the vexatious regulations under which it was collected. Luckily, however, the duty on tin, and all regulations with respect to its coinage, were abolished by 1 & 2 Vict. c. 120. Compensation was made to the duchy of Cornwall for the loss arising from this abolition, by settling on its possessors a perpetual annuity equal to the nett average amount of the duties during the 10 years ending with 1837.

Tin, Oriental (Malay, *Timá*; Hind. *Kalai*; Siamese, *Dibuk*; Burmese, *Kye-p'kyu*, white copper) is in commercial language usually called Banca tin. It is found in several provinces of China; but the most extensive and, probably, richest tin district in the world, exists in the Malay countries. This comprehends the whole of the peninsula, from the extreme cape to the latitude of 14° on its western side, and to 11° on its eastern, and comprehends several of the small islands lying in the route between the peninsula and Java, as far as the latitude of 3° south; so that the whole of this tin district has an extreme length of near 1,200 miles. By far the greater number of the mines within these limits are as yet unwrought and unexplored. It was only in the beginning of last century that the mines of Banca, the most productive at present worked, were accidentally discovered. The whole tin of the Malay countries is the produce of alluvial ores, or what is called, in Cornwall, "Stream-work;" and from the abundance in which the mineral has been found by the mere washing of the soil, no attempt has hitherto been made at regular mining, or obtaining the ore from its rocky matrix. Malay tin, consequently, is grain tin, or tin in a very pure state; that being the species which alluvial ore uniformly produces. The mines, or rather excavations, are perpendicular pits of from 15 to 25 feet deep; and when the soil and a superstratum of common clay are removed, the bed containing the ore, consisting of quartz and granitic gravel, is reached. The sand and gravel are separated from the ore by passing a stream of water through the whole materials. The ore so obtained is preserved in heaps, and smelted periodically with charcoal in a blast furnace. The mine or pit is kept clear of water by the Chinese wheel. No cattle are used in any part of the process; human labour being had recourse to throughout the whole of its stages. The most imperfect part of the process is the smelting. The stream ores of Cornwall, which are generally poor, afford from 65 to 75 per cent. of grain tin; whereas, owing to the imperfection of the process, from those of Banca not more than 55 or 60 are usually obtained. The difference in the produce suggested, a few years ago, the practicability of sending the ore to England for the purpose of being smelted; and the experiment was tried; but our customs regulations not allowing the produce to be bonded and re-exported without duty, rendered the scheme abortive.

With very trifling exceptions, the whole tin of the Malay islands is mined and smelted by Chinese settlers; and before their skill and enterprise were applied to its production, the metal seems to have been obtained by the inhabitants of the countries which produced it, by processes hardly more skilful than those by which the precious metals were procured by the native inhabitants of America, prior to the introduction of European skill and machinery. The following estimate has been given of the annual produce of the principal states and places producing tin: —

East coast of the Malay peninsula —	Piculs.	West coast of the Malay peninsula and islands —	Piculs.
Junk Ceylon	5,000	Sungora and Patani	5,000
Queda	2,000	Tringanu	7,000
Pera	3,000	Pahang	3,000
Salangore	3,000	Singkep	5,000
Malacca	4,000	Banca	35,000
Total	Piculs 17,000	Total	Piculs 53,000

This can be considered only as a rough estimate; but we believe it is not far wide of the truth. The most considerable port of exportation is Batavia; from which there is sent annually, either directly or through orders from the Dutch government or the authorities at Banca, 2,000 tons. From Prince of Wales Island there is also a considerable quantity exported; and a smaller one direct to China in junks, from several of the native ports on the eastern shore of the Malay peninsula. The great marts for the consumption of tin are China, Hindostan, and the continent of Europe. The quality of the different descriptions of Malay tin, although there may be some inconsiderable difference in the quality of the original ores, seems to be decided chiefly from the greater or less skill with which the process of smelting is conducted; and this, again, necessarily depends upon the extent of capital and goodness of the machinery employed. The mining operations of Banca have long been conducted upon a larger scale, and with more skill, than in any other of the Malay countries; and, consequently, the metal produced in this island is superior by from 10 to 12 per cent.: in the market of Canton it is called "old tin," in contradistinction to "new tin," the produce of the other Malay countries. Next, in point of quality, to the produce of Banca, are those of Tringanu and Singkep, which are not more than 5 per cent. inferior to it. The tin of the state of Pera, a considerable part of which is produced by the natives themselves, without Chinese assistance, is the worst, and usually about 15 per cent. below that of Banca. The native tin of China is 10 per cent. inferior to that of Banca, and is probably block tin, like the greater part of that of Cornwall; and, like it, the produce of regular mining operations, and not alluvial. The produce of the Chinese mines is said of late years to have greatly decreased; probably owing to the great increase which has recently taken place in the produce of the Malay countries, and the cheapness and abundance with which it finds its way to China. It should be added, that of late years, and chiefly owing to the very low price and abundance of German spelter (zinc) in the Indian market, this commodity has occasionally been fraudulently mixed with tin. The Chinese brokers of Canton, however, are sufficiently expert to detect the adulteration; and it is believed that this discreditable practice has lately ceased.

The price of tin, taking the market of Singapore as the standard, has fluctuated of late years from 14 to 20 Spanish dollars per picul; equal, at the exchange of 4*s.* per dollar, to 47*s.* and 67*s.* per cwt. At an average of these prices, the annual value of the whole Malay tin will be about 240,000*l.* per annum. — (*Crawfurd's History of the Indian Archipelago; Dr. Horsfield's MS. Statistical View of the Island of Banca; Singapore Chronicle; Canton Register*, &c.)

TOBACCO (Da. *Tobak*; Du. *Tabak*; Fr. *Tabac*; Ger. *Taback*; It. *Tabacco*; Pol. *Tobaka*; Rus. *Tabak*; Sp. *Tabaco*; Arab. *Bujjerbhang*; Hind. *Tumbākū*; Malay,

Tambrācoo), the dried leaves of the *Nicotiana Tabacum*, a plant indigenous to America, but which succeeds very well, and is extensively cultivated, in most parts of the Old World. The recent leaves possess very little odour or taste; but when dried, their odour is strong, narcotic, and somewhat fœtid; their taste bitter and extremely acrid. When well cured, they are of a yellowish green colour. When distilled, they yield an essential oil, on which their virtue depends, and which is said to be a virulent poison. The leaves are used in various ways; being chewed, smoked, and ground and manufactured into snuff. It is in the last mentioned form that tobacco is principally used in Great Britain; and, though the contrary has been often asserted, its use does not seem to be productive of any perceptible bad consequence.

1. *Historical Sketch of Tobacco.* — The taste for tobacco, though apparently administering only to a frivolous gratification, has given birth to a most extensive commerce, and been a powerful spur to industry. Being a native of the New World, its introduction into Europe dates only from the early part of the 16th century. Seeds of the plant were sent, in 1560, from Portugal, to Catherine de' Medici, by Jean Nicot, the French ambassador in that country, from whom it has received its botanical name. The notion, at one time so general, that the specific appellation tobacco was derived from its having been imported from Tobago, is now universally admitted to be without foundation. Humboldt has shown, that tobacco was the term used in the Haytian language to designate the pipe, or instrument made use of by the natives in smoking the herb; and the term, having been transferred by the Spaniards from the pipe to the herb itself, has been adopted by the other nations of the ancient world. — (*Essai Politique sur la Nouvelle Espagne*, vol. iii. p. 50. 2d. edit.) Tobacco is believed to have been first introduced into England by the settlers who returned, in 1586, from the colony which it had been attempted to found in Virginia, under the auspices of Sir Walter Raleigh, in the preceding year. Harriott, who accompanied this expedition, gives, in his description of Virginia, an account of the tobacco plant, and of the manner in which it was used by the natives; adding, that the English, during the time they were in Virginia, and since their return home, were accustomed to smoke it after the fashion of the Indians, "and found many rare and wonderful experiments of the virtue thereof." — (*Hakluyt*, vol. i. p. 75.)

Raleigh, and other young men of fashion, having adopted the practice of smoking, it spread amongst the English; as it had previously spread amongst the Spaniards, Portuguese, French, and other Continental nations. But it made its greatest progress in this country after the foundation of the colony at James Town in Virginia, in 1607. The soil of the colony being found particularly well fitted for the culture of tobacco, considerable quantities were raised and sent home; and the numerous individuals interested in the colony contributed to introduce that taste for it which was diffused amongst all classes with astonishing rapidity.

James I. attempted, by repeated proclamations and publications, some of them couched in very strong terms, to restrain the use of tobacco. But his efforts had very little effect; and the settlers in Virginia continued to experience a more rapidly increasing and better demand for tobacco than for any other product of the colony.

During the earlier part of the reign of Charles I., the trade in tobacco was monopolised by the Crown. This monopoly was not, however, of long continuance, and totally ceased at the breaking out of the civil war.

Tobacco plants had been early introduced into England, and were found to answer remarkably well. Their cultivation was, indeed, prohibited by James, and afterwards by Charles, but apparently without effect. At length, however, the growing consumption of tobacco having excited the attention of the government financiers, it was seen that, by imposing a duty on its importation, a considerable revenue might be raised; but that, were it allowed to be freely cultivated at home, it would be very difficult to collect a duty upon it. In 1643, the Lords and Commons imposed a moderate duty, for the sake of revenue, on plantation tobacco; but instead of directly prohibiting the use of native tobacco, they burdened it with such a duty as, it was supposed, would occasion its culture to be abandoned. The facility, however, with which the duty was evaded, soon satisfied the republican leaders that more vigorous measures were required to stop its cultivation, and consequently to render its importation a source of revenue. Hence, in 1652, an act was passed, prohibiting the growth of tobacco in England, and appointing commissioners to see its provisions carried into effect. This act was confirmed at the Restoration, by the act Charles 2. c. 34., which ordered that all tobacco plantations should be destroyed. These measures were believed, at the time, to have been principally brought about by the solicitations of the planters; but their real intention was not so much to conciliate or benefit the latter, as to facilitate the collection of a revenue from tobacco; and, considered in this point of view, their policy seems quite unexceptionable.

This act did not, however, extend to Ireland; and of late years, the cultivation of

tobacco made considerable progress in that country. Had this been allowed to continue, there can be no question that, in a few years, the revenue from tobacco, amounting to about 3,000,000*l.* a year, would have been materially diminished; for it would be quite visionary to suppose that any plan could have been devised for collecting a duty even of 100 per cent. upon tobacco — (see *post*) — supposing it to have been generally cultivated in Ireland. No one, therefore, can question the wisdom of the act prohibiting its growth in that country, and the rigorous enforcement of its provisions. Any advantage Ireland might have gained by its cultivation, would have been but a poor compensation for the sacrifice of revenue it must have occasioned.

In some countries, as England, tobacco is principally used in the form of snuff; in others it is principally chewed; but, in one form or other, it is every where made use of. So early as 1624, Pope Urban VIII. issued a bull, excommunicating those who smoked in churches! The practice of smoking was at one time exceedingly prevalent in this country; but during the reign of George III. it was well nigh superseded, at least amongst the higher and middle classes, by the practice of snuff-taking. Latterly, however, smoking has been in some measure revived, though it is still very far from being so extensively practised as formerly.

We quote the following statement as to the universality of the use of tobacco from a learned paper on its "Introduction and Use," in the 22d volume (p. 142.) of the *Asiatic Journal*: — "In Spain, France, and Germany, in Holland, Sweden, Denmark, and Russia, the practice of smoking tobacco prevails amongst the rich and poor, the learned and the gay. In the United States of America, smoking is often carried to an excess. It is not uncommon for boys to have a pipe or cigar in the mouth during the greatest part of the day. The death of a child is not unfrequently recorded in American newspapers, with the following remark subjoined: —'supposed to be occasioned by excessive smoking.' If we pass to the East we shall find the practice almost universal. In Turkey, the pipe is perpetually in the mouth; and the most solemn conferences are generally concluded with a friendly pipe, employed like the *calumet of peace* amongst the Indians. In the East Indies, not merely all classes, but both sexes, inhale the fragrant steam; the only distinction among them consisting in the shape of the instrument employed, and the species of the herb smoked. In China, the habit equally prevails; and a modern traveller in that country (Barrow) states, that every Chinese female, from the age of 8 or 9 years, wears, as an appendage to her dress, a small silken purse or pocket to hold tobacco, and a pipe, with the use of which many of them are not unacquainted at this tender age. This prevalence of the practice, at an early period, amongst the Chinese, is appealed to by M. Pallas as an evidence that 'in Asia, and especially in China, the use of tobacco for smoking is more ancient than the discovery of the New World.' He adds — 'Among the Chinese, and amongst the Mongol tribes who had the most intercourse with them, the custom of smoking is so general, so frequent, and has become so indispensable a luxury; the tobacco purse affixed to their belt so necessary an article of dress; the form of the pipes, from which the Dutch seem to have taken the model of theirs, so original; and, lastly, the preparation of the yellow leaves, which are merely rubbed to pieces and then put into the pipe, so peculiar; that they could not possibly derive all this from America by way of Europe; especially as India, where the practice of smoking is not so general, intervenes between Persia and China.'"

This, however, is a very doubtful proposition. It seems sufficiently established that the tobacco plant was first brought from Brazil to India about the year 1617; and it is most probable that it was thence carried to Siam, China, and other Eastern countries. The names given to it in all the languages of the East are obviously of European, or rather American, origin; a fact which seems completely to negative the idea of its being indigenous to the East.

Sources of Supply. Importation into Great Britain. — Tobacco is now very extensively cultivated in France and other European countries, in the Levant, and in India; but the tobacco of the U. States is still very generally admitted to be decidedly superior to most others. It is much higher flavoured than the tobacco of Europe; a superiority attributable in some degree, perhaps, to a different mode of treatment; but far more, it is believed, to differences of soil and climate.

Previously to the American war, our supplies of tobacco were almost entirely derived from Virginia and Maryland; and they are still principally imported from these states: of 36,680,887 lbs. of unmanufactured tobacco imported in 1840, no fewer than 34,628,886 lbs. came from the U. States. Mr. Jefferson, in his *Notes on Virginia*, has given a very unfavourable view of the effects of the tobacco culture. It was, indeed, well known to be a crop that speedily exhausted all but the very best lands; and in addition to this, Mr. J. says that "it is a culture productive of infinite wretchedness Those employed in it are in a continued state of exertion, beyond the powers of nature to support. Little food of any kind is raised by them; so that the men and

animals on these farms are badly fed, and the earth is rapidly impoverished."— (English ed. p. 278.)

Tobacco is extensively cultivated in Mexico, but only for home consumption. It might probably, however, were it not for the restrictions under which it is placed, form a considerable article of export from that country. Under the Spanish government, the tobacco monopoly was one of the principal sources of revenue; yielding from 4,000,000 to 4,500,000 dollars, exclusive of the expenses of administration, amounting to about 800,000 dollars. No tobacco was allowed to be cultivated, except in a few specified places. Commissioners, or *guardas de tabaco*, were appointed, whose duty it was to take care that all tobacco plantations without the privileged districts should be destroyed. The government fixed the price at which the cultivators of tobacco were obliged to sell it to its agents. The sale of the manufactured tobacco was farmed out; and *cigars* were not allowed to be sold, except at the royal *estancos*. No one was allowed to use cigars of his own manufacture. This most oppressive monopoly was established in 1764. It has been continued, from the difficulty of supplying the revenue which it produces, by the present government. — (*Humboldt, Nouvelle Espagne*, iii. 49.; *Poinsett's Notes on Mexico*, note 116. Lond. ed.)

Cuba is celebrated for its tobacco, particularly its cigars. These consist of the leaves, formed into small rolls, for the purpose of smoking. Formerly their importation into this country was prohibited; but they may now be imported on paying the exorbitant duty of 9*s.* per lb. Havannah cigars are usually reckoned the best. Previously to 1820, the cultivation and sale of tobacco were subjected to the same sort of monopoly in Cuba as in Mexico; but, at the period referred to, the trade was thrown open. In consequence of the freedom thus given to the business, the production and exportation of tobacco are both rapidly increasing, though hardly, perhaps, so much as might have been expected; the culture of sugar and coffee being reckoned more profitable. In 1842, the declared value of the tobacco and cigars exported from Cuba amounted to 2,211,572 dollars; but there is good reason to think that its real value considerably exceeded this sum.

Consumption of Duty-paid Tobacco in the U. Kingdom. — It appears from the following official account, that the consumption of duty-paid tobacco in Great Britain has increased from about 8,000,000 lbs. in 1789, to 16,976,000 lbs. in 1842; the duty having fluctuated during the same period from 1*s.* 3*d.* to 4*s.* and 3*s.* per lb. There are, however, sufficient grounds for thinking that the consumption would have been at least doubled had the duty continued at 1*s.* 3*d.* per lb. But, whatever difference of opinion may exist as to the influence of the duty in Great Britain, there can be none as to its influence in Ireland. The subjoined Table shows that during the 5 years ending with 1798, when the duty was 8*d.* per lb., the annual average consumption of duty-paid tobacco was 7,337,217 lbs. Since 1798, the population of Ireland has been a good deal more than *doubled*; and yet, during the 5 years ending with 1842, when the duty was 3*s.* per lb., the annual average consumption has been only 5,312,020 lbs.; which, making allowance for the increase of population, shows that the consumption has sunk to little more than a *fourth part* of what it amounted to at the former period! This statement warrants the conclusion, that were the duty on tobacco in Ireland reduced to 1*s.* per lb., the consumption would be so much increased, that the revenue would gain, and not lose, by the reduction.

Smuggling. — The price of tobacco in bond varies from 3*d.* to 6*d.* per lb.; so that the duty of 3*s.* amounts to 1,200 per cent. on the inferior, and to 600 per cent. on the superior qualities. Now, though the use of tobacco be a frivolous, it is, at the same time, an innocent gratification; and we do not really see any reason whatever for loading it with such oppressive duties, even supposing it were possible to collect them. The more the wants and desires of men are multiplied, the more inventive and industrious they become; and so far from preventing luxurious indulgences, a wise government should exert itself to increase their number, and to diffuse a taste for them as widely as possible. But supposing it to be otherwise, still the magnitude of the tobacco duty is altogether indefensible: it is neither calculated to produce the largest amount of revenue, nor to eradicate the taste for the article. Its exorbitancy is advantageous to the smuggler, and to him only. If, as one might be half inclined to suspect, the duty were intended to give life and activity to the nefarious practices of the illicit traders, it has completely answered its object; but in every other point of view, its failure has been signal and complete. "According," said Mr. Poulett Thomson (afterwards Lord Sydenham), in his speech on the taxation of the empire, on the 26th of March, 1830, "according to all accounts laid before the house on this subject, smuggling in this article, in England, Ireland, and Scotland, is carried on to the greatest possible extent. I have heard it stated, and I have the fact upon the best authority, that numbers of vessels are constantly leaving the ports of Flushing, Ostend, &c., carrying contraband tobacco to this country. It is a fact which was established in evidence before a committee of this house, that *seventy* cargoes of tobacco, containing 3,644,000 lbs., were

smuggled in 1 year, on the coast of Ireland, from the port of Waterford to the Giant's Causeway alone! In Scotland, smuggling in this article is also carried on to a great extent. There is no doubt," he added, "that the only mode of meeting this system of smuggling consists *in fairly reducing the duty upon the article.* I believe that, were the duty upon it reduced to 1*s.* or 1*s.* 6*d.* per lb., the public would be greatly served, and smuggling put down."

We question, indeed, whether, allowing for the clandestine importation, the consumption be relatively less at this moment, in Ireland, than at any former period. Under the present system, government collects an exorbitant duty upon about a *half* of the tobacco consumed in Ireland, the other *half* being supplied by the smuggler; the duty being at once an incentive to his energies, and a premium to indemnify him for his risks! A *third part* of the demand of Great Britain is, probably, supplied in the same way. The smuggler is, in fact, at this moment (1844), able to supply tobacco, in any part of the U. Kingdom, for from 2*s.* 6*d.* to 2*s.* 9*d.* per lb., whereas the duty on tobacco legitimately imported is no less than 3*s.*

Account of the Number of Pounds Weight of Leaf Tobacco, manufactured Cigars, and Snuff, that paid Duty in the U. Kingdom, for the Year ending the 5th of January, 1842; with the Gross Amount of Duty received therefrom.

	Quantities entered for Home Consumption in the U. Kingdom.				Gross Amount of Duty received thereon.			
	Leaf Tobacco.	Manufactured Tobacco and Cigars.	Snuff.	Total.	Leaf Tobacco.	Manufactured Tobacco and Cigars.	Snuff.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	£.	£	£	£
Year ended 5th Jan. 1842.	22,095,588	213,615	157	22,309,360	3,479,182	100,933	49	3,580,164

Account of the Quantities of Tobacco retained for Home Consumption, the Rates of Duty thereon, and the Total Nett Produce of the Duties in Great Britain and Ireland, from 1789 to 1842, both inclusive.

	Great Britain.				Ireland.		
Years.	Quantities retained for Home Consumption.	Nett Revenue of Customs and Excise.	Total Rates of Duty per Lb. on unmanufactured Tobacco. American.	Total Rates of Duty per Lb. on unmanufactured Tobacco. Of the Dominions of Spain and Portugal.	Quantities entered for Home Consumption.	Nett Revenue of Customs and Excise.	Total Rates of Duty per Lb. on unmanufactured Tobacco.
	Lbs.	£ *s.* *d.*			*Lbs.*	£ *s.* *d.*	
1789	8,152,185	408,037 4 1	1*s.* 3*d.*	3*s.*	2,765,441	128,704 8 4	1*s.* Irish currency.
1790	8,960,224	512,383 7 1	- -	3*s.* 6*d.*	2,900,437	133,195 18 10	
1791	9,340,875	585,966 9 1	- -	- -	2,549,043	117,420 0 2	
1792	8,979,321	582,096 7 7	- -	- -	1,767,581	80,693 4 5	
1793	8,617,967	547,217 14 4	- -	- -	5,568,857	125,834 17 1	6*d.* ditto.
1794	9,783,345	606,269 12 10	- -	- -	9,426,211	193,158 10 7	
1795	10,973,368	659,089 3 4	- -	- -	7,874,409	215,719 9 0	8*d.* ditto.
1796	10,017,843	755,451 15 1	1*s.* 7*d.*	4*s.* 6*d.*	6,045,790	186,759 19 0	
1797	9,822,439	813,027 16 2	1*s.* 7*d.* 6-20ths.	4*s.* 6*d.* 13-20ths.	8,445,555	267,721 16 4	
1798	10,986,741	867,302 14 0	1*s.* 7*d.* 12-20ths.	4*s.* 7*d.* 4-20ths.	4,894,121	215,317 12 7	1*s.* ditto.
1799	10,993,113	799,569 14 2	- -	- -	5,876,172	288,028 4 9	1*s.* 7-10ths ditto.
1800	11,796,415	987,110 8 8	- -	- -	6,737,275	327,016 9 0	
1801	10,514,998	993,855 3 5	1*s.* 7*d.* 6-20ths.	4*s.* 6*d.* 18 20ths.	6,589,754	285,482 6 4	
1802	12,121,278	928,678 9 1	1*s.* 7*d.* 33-50ths.	4*s.* 7*d.* 13-50ths.	6,327,542	309,738 9 2	1*s.* 7-10ths per lb. and 3*s.* per 100 lbs.
1803	12,589,570	1,028,563 16 1	1*s.* 7¾*d.*	4*s.* 8¼*d.*	5,278,511	265,944 3 4	
1804	12,254,494	1,060,319 18 0	1*s.* 8¼*d.*	4*s.* 10¾*d.*	5,783,487	314,007 5 8	1*s.* 5*d.* Brit. currency.
1805	12,656,471	1,088,821 4 5	1*s.* 8*d.* 13-20ths.	4*s.* 10*d.* 19-20ths.	4,158,794	309,316 8 1	
1806	12,435,033	1,185,830 14 1	2*s.* 2*d.* 13-20ths.	5*s.* 4*d.* 19 20ths.	6,082,188	359,867 6 4	
1807	12,432,994	1,336,542 17 9	- -	- -	4,531,049	315,417 4 3	1*s.* 5*d.* ditto.
1808	12,876,119	1,448,296 3 7	- -	- -	5,817,416	403,973 3 8	
1809	13,054,870	1,325,154 5 7	- -	1*s.* 1*d.* 13-20ths.	6,497,662	451,278 19 11	
1810	14,108,193	1,599,376 18 9	- -	- -	6,221,646	444,198 5 0	
1811	14,923,243	1,701,848 8 2	- -	- -	6,455,024	552,082 9 9	2*s.* 2*d.* 13-20ths ditto.
1812	15,043,533	1,679,912 2 2	2*s.* 4*d* 13-20ths.	4*s.* 5*d.* 18-20ths.	5,896,702	697,897 9 11	
1813	13,618,245	Customs records destroyed	2*s.* 8*d.* 3-16ths.	4*s.* 11*d.* 11-16ths	5,944,817	746,006 5 2	2*s.* 8*d.* 3-16ths ditto.
1814	10,503,917	1,581,684 12 9	- -	- -	4,869,304	653,708 12 11	
1815	13,307,192	1,764,487 7 10	3*s.* 2*d.*	5*s.* 5½*d.*	4,748,205	740,279 13 1	3*s.* 2*d.* ditto.
1816	12,815,808	2,053,109 2 8	- -	- -	4,732,085	750,510 7 6	
1817	13,593,089	2,158,500 3 11	- -	- -	4,778,469	757,316 8 3	
1818	13,688,457	2,173,866 19 2	- -	- -	4,194,041	664,183 9 1	
1819	12,911,285	2,085,045 2 10	4*s.*	6*s.*	3,466,852	614,980 5 7	4*s.* ditto.
1820	13,016,562	2,610,972 7 9	- -	- -	2,582,498	516,4[illegible] 2 6	
1821	12,983,198	2,600,415 7 8	- -	- -	2,614,954	522,168 6 9	
1822	12,970,566	2,599,155 15 1	- -	- -	3,309,072	664,016 7 4	
1823	13,418,534	2,693,009 15 0	- -	- -	3,516,126	730,307 12 8	
1824	13,083,094	2,627,253 12 6	- -	- -	3,749,732	750,589 5 4	
1825	14,510,555	2,530,617 6 3	3*s.*	5*s.*	4,160,049	728,288 13 11	3*s.* ditto.
1826	13,783,370	2,077,875 14 7	- -	3*s.*	3,898,647	580,893 11 0	
1827	14,704,655	2,223,540 18 4	- -	- -	4,041,172	603,037 18 9	
1828	14,540,368	2,198,142 18 2	- -	- -	4,013,915	595,683 4 3	
1829	14,760,468	2,236,366 0 0	- -	- -	4,195,897	613,541 0 0	
1830	14,170,719	2,309,287 0 0	3*s.*	3*s.*	4,124,782	614,978 0 0	3*s.*
1831	15,350,018	2,338,107 0 0	- -	- -	4,183,823	626,485 0 0	
1832	15,892,792	2,428,532 0 0	- -	- -	4,342,676	652,566 0 0	
1833	16,214,159	2,474,115 0 0	- -	- -	4,556,647	681,435 0 0	
1834	16,616,607½	2,533,868 0 0	- -	- -	4,722,700	708,117 0 0	
1835	17,237,040	2,626,816 0 0	- -	- -	4,879,719	727,642 0 0	
1836	17,121,345	2,658,189 0 0	- -	- -	5,046,902	758,030 0 0	
1837	17,566,022	2,677,162 0 0	- -	- -	5,083,281½	765,145 0 0	
1838	18,436,480	2,820,995 0 0	- -	- -	5,109,907	766,668 0 0	
1839	17,959,714	2,737,581 0 0	- -	- -	5,207,996	782,788 0 0	
1840	17,734,928	2,784,740 0 0	*3*s.* & 5 per ct.	*3*s.* & 5 per ct.	5,361,383	830,345 0 0	
1841	16,850,893	2,716,217 0 0	- -	- -	5,478,767	863,946 0 0	
1842	16,076,012	2,742,893 0 0	- -	- -	5,409,051	852,543 0 0	

* From 15th May, 1840.

Prices of Tobacco, in Bond, in the London Market, on the 1st of January, 1844, and 1843.

	1844.		1843.	
	£. s. d.	£. s. d.	£. s. d.	£. s. d.
Virginia leaf, ordinary and faded - per lb.	0 2½ to 0	3½	0 2½ to 0	3½
part dark and sweet	- 0 3½ — 0	4½	0 3½ — 0	4½
fine dark and sweet	- 0 4½ — 0	5½	0 4½ — 0	5½
long and leafy	- 0 5½ — 0	5½	0 5½ — 0	5½
common Irish	- 0 4 — 0	4½	0 3½ — 0	4
middling	- 0 4½ — 0	5	0 4½ — 0	4½
fine	- 0 5½ — 0	6	0 5½ — 0	6
ordinary sound	- 0 3½ — 0	3½	0 3½ — 0	3½
middling	- 0 4½ — 0	4½	0 4½ — 0	4½
fine and spinning	- 0 5½ — 0	6½	0 5½ — 0	6
York River	- 0 4½ — 0	6	0 4½ — 0	6
Virginia leaf, stemmed, ordinary faded	-	None.		None.
dark and faded	-	None.		None.
fine black and sweet	- 0 6 — 0	6½	0 6 — 0	6½
common (short)	- 0 4½ — 0	5	4 4½ — 0	5
middling	- 0 5½ — 0	6½	0 5½ — 0	6½
fine and spinning	- 0 7 — 0	7½	0 7 — 0	7½
Kentucky leaf, ordinary	- 0 2 — 0	3	0 2 — 0	3
middling	- 0 3½ — 0	4	0 3½ — 0	4½
fine	- 0 4½ — 0	4½	0 4½ — 0	5
Kentucky leaf, stemmed, ordinary faded	- 0 3½ — 0	4½	0 3½ — 0	3

	1844.		1843.	
	£. s. d.	£. s. d.	£. s. d.	£. s. d.
Kentucky leaf, stemmed — common per lb.	0 4½ to 0	4½	0 4 to 0	4½
middling	- 0 5½ — 0	5½	0 4½ — 0	5½
fine	- 0 5½ — 0	6	0 5½ — 0	6
Maryland leaf, scrubs, brown	- 0 3½ — 0	4	0 3½ — 0	4
ditto, colour	- 0 4½ — 0	4½	0 4½ — 0	4½
leafy brown	- 0 5½ — 0	6	0 5½ — 0	6
colour and leafy	- 0 6½ — 0	7	0 6½ — 0	7
good colour	- 0 7½ — 0	8	0 7½ — 0	8
yellow	- 0 8½ — 0	9	0 8½ — 0	9
Varinas	- 1 6 — 2	0	1 6 — 2	0
St. Domingo	- 0 5 — 0	8	0 8 — 1	6
Columbian	- 0 10 — 0	10	0 10 — 1	6
Amerasfoort	- 0 3 — 0	8	0 4 — 0	10
Turkey	- 0 6 — 0	9	0 6 — 0	9
Canadian	- 0 2 — 0	4	0 2 — 0	4
Negro Head	- 0 3 — 0	8½	0 4 — 0	10
Havannah	- 1 0 — 3	6	0 9 — 4	6
Cuba	- 0 8 — 1	6	0 10 — 1	8
Havannah cigars	- 4 6 — 14	0	4 6 — 14	0
Manilla cheroots	- 5 6 — 6	6	5 6 — 6	0
Stalks, duty paid	- 2 9 — 3	4	2 7 — 3	2
Smalls, duty paid	- 3 0 — 3	2	3 0 — 3	2

Regulations as to Importation.—Tobacco is not to be imported in a vessel of less than 120 tons burden; nor unless in hogsheads, casks, chests, or cases, containing at least 100 lbs. nett weight, if from the East Indies; or 450 lbs. weight, if from any other place; or 100 lbs. weight, if cigars; except tobacco from Turkey, which may be packed in separate bags or packages, provided the outward package be a hogshead, cask, chest, or case, containing 450 lbs. nett at least; and except Colombian tobacco, which may be imported in packages made up in rolls of not less than 320 lbs. Tobacco is not allowed to be imported, unless into the following ports; viz. London, Liverpool, Bristol, Lancaster, Cowes, Falmouth, Whitehaven, Hull, Glasgow, Port Glasgow, Greenock, Leith, Newcastle, Plymouth, Belfast, Cork, Drogheda, Dublin, Galway, Limerick, Londonderry, Newry, Sligo, Waterford, and Wexford. A rent of *four* shillings is charged upon every hogshead, cask, chest, or case of tobacco, warehoused in every warehouse provided by the Crown; 2*s.* being paid immediately upon depositing the tobacco in the warehouse, and 2*s.* more before the tobacco is taken out for home consumption, or exportation: it may remain for *five* years in the warehouse without any additional charge for rent. No abatement is made from the tobacco duties on account of damage; but the merchant may, if he choose, abandon the tobacco, which is to be destroyed. The allowance of duty-free tobacco for each sailor on board his Majesty's navy, and for each soldier on foreign service, is fixed at 2 lbs. per lunar month. Tobacco that has been exported, cannot be re-imported without being subject to the same duty as if it were imported for the first time. Tobacco cannot be entered for exportation in any vessel of less than 70 tons burden. When tobacco is re-shipped for exportation, an allowance is made for shrinkage, from the seller to the buyer, of 30 lbs. per hhd. on Virginia and Kentucky, and 15 lbs. per hhd. on Maryland, on the landing weights; the draft of the former 8 lbs. and of the latter 4 lbs., with a tret on all sorts of 4 lbs. per 104 lbs.

TON, an English weight containing 20 cwt.

TONNAGE, in commercial navigation, the number of tons burden that a ship will carry.

The mode in which the tonnage of British ships was formerly ascertained may be seen in the Registry Act, 3 & 4 Will. 4. c. 55. §§ 16. and 17. This mode, however, led to very inaccurate conclusions; and as most shipping charges depend on the tonnage, it occasioned the building of ships of an improper form for the purposes of navigation, in order that, by measuring less than their real burden, they might evade part of the duties. It was, therefore, long felt to be desirable that some change should be made in the plan of measuring ships; but the practical obstacles in the way of the change were greater than might have been supposed. The accurate estimation of the tonnage of a ship is a difficult problem; and it is indispensable that any system to be adopted in practice be not very complex; for if so, it will either be wholly inapplicable, or it will be sure to be incorrectly applied. At best, therefore, only an approximative measurement can be obtained. A committee of scientific and practical gentlemen having been appointed in 1834 to consider the subject, a bill was introduced into parliament, at their recommendation, embodying a plan for the more correct measurement of ships, and was subsequently passed into a law, the 5 & 6 Will. 4. c. 56. This statute came into operation on the 1st of January, 1836. The rules it lays down are not so simple or easily applied as those that were previously used; but they give the tonnage of all ships, however built, with tolerable accuracy, and consequently take away the temptation, that till then existed, to build ships of such a form that they might measure less than their true burden.

Repeal of former Regulations. — The rules laid down in the act 3 & 4 Will. 4. c. 55. relating to the admeasurement of ships, are hereby repealed, so far as relates to the merchant ships to be hereafter registered. — [illegible].

Rule by which Tonnage of Vessels is to be ascertained. — From and after the commencement of this act the tonnage of every ship or vessel shall, previous to her being registered, be measured and ascertained while her hold is clear, and according to the following rule; viz.: divide the length of the upper deck between the afterpart of the stem and the forepart of the sternpost into 6 equal parts. Depths: at the foremost, the middle, and the aftermost of those points of division, measure in feet and decimal parts of a foot the depths from the under side of the upper deck to the ceiling at the limber strake. In the case of a break in the upper deck, the depths are to be measured from a line stretched in a continuation of the deck. Breadths: divide each of those 3 depths into 5 equal parts, and measure the inside breadths at the following points; viz. at 1-5th and 4-5ths from the upper deck of the foremost and aftermost depths, and at 2-5ths and 4-5ths from the upper deck of the midship depth. Length: at half the midship depth measure the length of the vessel from the afterpart of the stem to the forepart of the sternpost; then to twice the midship depth add the foremost and the aftermost depths for the sum of the depths; add together the upper and lower breadths at the foremost division, 3 times the upper breadth, and the

lower breadth at the midship division, and the upper and twice the lower breadth at the after division, for the sum of the breadths; then multiply the sum of the depths by the sum of the breadths, and this product by the length, and divide the final product by 3,500, which will give the number of tons for register. If the vessel have a poop, or half deck, or a break in the upper deck, measure the inside mean length, breadth, and height of such part thereof as may be included within the bulk-head; multiply these 3 measurements together, and, dividing the product by 92·4, the quotient will be the number of tons to be added to the result as above found. In order to ascertain the tonnage of open vessels, the depths are to be measured from the upper edge of the upper strake. — § 2.

Tonnage to be entered on Register. — The tonnage or burden of every ship belonging to the U. Kingdom, ascertained in the manner before directed, shall, in respect of any ship registered after the commencement of this act (except as herein excepted), be inserted in the certificate of the registry thereof, and be taken and be deemed to be the tonnage or burden thereof for all the purposes of the said act. — § 3.

Tonnage of Steam Vessels. — In each of the rules before prescribed, when applied to ascertain the tonnage of any ship or vessel propelled by steam, the tonnage due to the cubical contents of the engine room shall be deducted from the total tonnage of the vessel as determined by either of the rules aforesaid, and the remainder shall be deemed the true register tonnage of said ship or vessel. The tonnage due to the cubical contents of the engine room shall be determined in the following manner; viz.: measure the inside length of the engine room in feet and decimal parts of a foot from the foremost to the aftermost bulk-head, then multiply the said length by the depth of the ship or vessel at the midship division as aforesaid, and the product by the inside breadth at the same division at 2-5ths of the depth from the deck taken as aforesaid, and divide the last product by 92·4, and the quotient shall be deemed the tonnage due to the cubical contents of the engine room. — § 4.

Length and Contents of Engine Room to be set forth in Description of Steam Vessel. — The tonnage due to the cubical contents of the engine room, and also the length of the engine room, shall be set forth in the certificate of registry as part of the description of the ship or vessel; and any alteration of such tonnage due to the cubical contents of the engine room, or of such length of the engine room, after registry, shall be deemed to be an alteration requiring registry *de novo* within the meaning of the said act for the registering of ships or vessels. — § 5.

For ascertaining Tonnage of Vessels when laden. — The tonnage of all ships, whether belonging to the U. Kingdom or otherwise, as there shall be occasion to measure while their cargoes are on board, the following rule shall be observed; viz.: measure, first, the length on the upper deck between the afterpart of the stem and the forepart of the sternpost; secondly, the inside breadth on the underside of the upper deck at the middle point of the length; and, thirdly, the depth from the underside of the upper deck down the pumpwell to the skin; multiply these 3 dimensions together, and divide the product by 130, and the quotient will be the amount of the register tonnage of such ships. — § 6.

Amount of Register Tonnage to be carved on Main Beam. — The true amount of the register tonnage of every merchant ship or vessel belonging to the U. Kingdom, ascertained according to the rule by this act established in respect of such ships, shall be deeply carved or cut in figures of at least 3 inches in length on the main beam of every such ship or vessel, prior to her being registered. — § 7.

Not to alter Tonnage of Vessels already registered. — Nothing herein contained shall extend to alter the present measure of tonnage of any ship or vessel which registered prior to the commencement of this act, unless in cases where the owners of such ships shall require to have their tonnage established according to the rule before provided, or unless there be occasion to have such ship admeasured again on account of any alteration made in the form or burden of the same, in which cases only such ships shall be re-admeasured according to the said rule, and their tonnage registered accordingly. — § 8.

Commencement of Act. — This act shall commence and take effect upon and from the first day of January, 1836. — § 9.

TOOLS AND MACHINES. Under this designation are comprised all sorts of instruments employed to assist in the performance of any undertaking, from the rudest and simplest to the most improved and complex. But we only mention them here for the purpose of making one or two remarks on the restrictions to which the trade in them has been subjected.

Importation and Exportation of Tools and Machines. — Tools and machines being instruments of production, it is obviously of the utmost importance that they should be as much improved as possible; and hence the expediency of allowing their free importation. Their exclusion, or the exclusion of the articles of which they are made, would obviously lay every branch of industry carried on in a nation less advanced than others in their manufacture, under the most serious disadvantages. And supposing the implements it employed to be superior to those of other countries when the exclusion took place, the absence of foreign competition, and of the emulation which it inspires, would most probably, in a very short time, occasion the loss of this superiority. The injury arising from the prohibition of most other articles is comparatively limited, affecting only the producers and consumers of those that are prohibited. But a prohibition of machines strikes at the root of every species of industry: it is not injurious to one, or a few branches, but to all.

The question, whether the exportation of machinery ought to be free, is not so easy of solution. It is the duty of a nation to avail itself of every fair means for its own aggrandisement; and supposing the machinery belonging to any particular people were decidedly superior to that employed by their neighbours, and that they had it in their power to preserve this advantage, their generosity would certainly outrun their sense, were they to communicate their improved machinery to others. We do not, however, believe that it is possible, whatever measures may be adopted in that view, for one country to monopolise, for any considerable period, any material improvement in machinery or the arts: and on this ground we think that the late restraints on the exportation of machinery have been wisely abolished. Drawings and models of all sorts of machines used in Manchester, Glasgow, and Birmingham, are to be found in most parts of the Continent; and at Rouen, Paris, &c. numbers of the best English workmen are employed in the manufacture of prohibited ma-

chines. Now, it does certainly appear not a little preposterous to prevent the exportation of a machine, at the same time that we allow (it could not, indeed, be prevented) the free egress of the workmen by whom it is made! The effect of this policy has not been to secure a monopoly of improved machines for the manufacturers of England, but to occasion the emigration of English artisans to the Continent, and the establishment there of machine manufactories under their superintendence. The prejudice that arose from this state of things to the interests of England, is too obvious to require being pointed out. It is plain, therefore, that sound policy would dictate that the exportation of all sorts of machinery, on payment of a moderate duty, should be allowed. A policy of this sort will afford a much more efficient protection to our manufacturers than they have hitherto enjoyed; at the same time that it will tend to keep our artisans at home, and make England the grand seat of the tool as well as of the cotton manufacture; and we are glad to have to announce that this policy has been at length adopted, the act 6 & 7 Victoria, c. 84. having repealed the restraints previously imposed on the exportation of machinery. The total declared value of the machinery and mill-work exported in 1842 amounted to *554,653l.*

TOPAZ (Ger. *Topas*; Fr. *Topase*; It. *Topazio*; Sp. *Topacio*; Rus. *Topas*). The name topaz has been restricted by M. Haüy to the stones called by mineralogists Occidental ruby, topaz, and sapphire; which, agreeing in their crystallisation and most of their properties, were arranged under one species by M. Romé de Lisle. The word topaz, derived from an island in the Red Sea, where the ancients used to find topazes, was applied by them to a mineral very different from ours. One variety of our topaz they denominated Chrysolite. Colour, wine yellow. From pale wine yellow it passes into yellowish white, greenish white, mountain green, sky blue: from deep wine yellow into flesh red and crimson red. Specific gravity from 3·464 to 3·641. — (*Thomson's Chemistry.*)

"*Yellow Topaz.* — In speaking of the topaz, a gem of a beautiful yellow colour is always understood: it is wine yellow of different degrees of intensity; and the fuller and deeper the tinge, the more the stone is esteemed. In hardness it yields to the spinelle.

"There are few gems more universal favourites than the yellow topaz, when perfect: the rich warm tone of its colour, the vivacity of its lustre (which it retains even by the side of the diamond), and its large size, compared with many others, are characters which deservedly entitle it to distinction; it bears accordingly a high price when of good quality.

"It is chiefly employed for necklaces, ear-drops, bracelets, &c. in suit. No little skill and taste are required in cutting and duly proportioning this gem; the table should be perfectly symmetrical, and not too large; the bizel of sufficient depth, and the collet side should be formed in delicate steps. It works easily on the mill, and the lapidaries are in general tolerably well acquainted with it; yet it is uncommon to meet with one well cut.

"The yellow topaz varies in price according to its beauty and perfection. A superlatively fine stone, perfect in colour and workmanship, sufficiently large for an armlet, or any other ornament, and weighing nearly 80 carats, was sold for 100*l.*

"Topazes have become more common since our intercourse with Brazil; consequently they are less in demand, and lower in price. A fine stone of 60 carats may be purchased at from 20*l.* to 35*l.*; and smaller, calculated for ring stones, at from 2*l.* to 5*l.*: but it is not usual to sell them by weight.

"*Pink Topaz.* — This is made from the yellow, which, when of intense colour, is put into the bowl of a tobacco pipe or small crucible, covered with ashes or sand: on the application of a low degree of heat, it changes its colour from a yellow to a beautiful pink. This is performed with little hazard; and if the colour produced happens to be fine, the price is much augmented.

"*Red Topaz.* — This beautiful gem, which very seldom occurs naturally, is of a fine crimson colour, tinged with a rich brown; it is extremely rare, and generally taken to be a variety of ruby, for which I have seen it offered for sale. Its price, from its scarcity, is quite capricious; it has an exquisite pleasing colour, very different from the glare of the artificial pink topaz.

"*Blue Topaz* — is also a beautiful gem, of a fine celestial blue colour. It has occurred of considerable magnitude; the finest specimen known, I brought in the rough from Brazil; when cut and polished, it weighed about 1¼ oz. Smaller specimens are not uncommon, and when light-coloured, are often taken for aqua-marinas, from which they may always be distinguished by their greater weight and hardness, &c.

"*White Topaz* — is familiarly called *Minas Nova.* It is a beautiful pellucid gem, and is used for bracelets, necklaces, &c. It possesses greater brilliancy than crystal; and, from its hardness, has been used to cover paste, &c., and to form doublets." — (*Mawe on Diamonds, &c.* 2d ed. p. 108—112.)

TORTOISESHELL (Fr. *Ecaille de Tortue*; It. *Scaglia de Tartaruga*; Ger. *Schilpad*; Malay, *Sisik kurakura*), the brown and yellow scales of the *Testudo imbricata*, or tortoise, a native of the tropical seas. It is extensively used in the manufacture of combs, snuff-boxes, &c., and in inlaying and other ornamental work. The best tortoiseshell is that of the Indian Archipelago; and the finest of this quarter is obtained on the shores of the Spice Islands and New Guinea. When the finest West Indian tortoiseshell is worth, in the London market, 46*s.*, the finest East Indian is worth 60*s.* per lb. Under the latter name, however, a great deal of inferior shell is imported, brought from various parts of the East Indies. The goodness of tortoiseshell depends mainly on the thickness and size of the scales, and in a smaller degree on the clearness and brilliancy of the colours. Before the opening of the British intercourse with India, the greater part of the tortoiseshell which eventually found its way to Europe, was first carried to Canton, which then formed the principal mart for the commodity. It is still an article of trade from that city; but the imports and exports are inconsiderable, Singapore being now the chief mart for this article. Its price at

the latter varies from 750 and 900 to from 1,000 to 1,600 dollars per picul, according to quality. — (*Crawfurd's Indian Archipelago; Singapore Chronicle; Canton Register.*)

The imports of tortoiseshell into Great Britain from all places eastward of the Cape of Good Hope amount to about 40,000 lbs. a year. The duty was reduced in 1842 to 1*s.* per lb.

TOYS (Ger. *Spielzeug, Speilsachen;* Du. *Speelgöed;* Fr. *Jouets, Bimbelots;* It. *Trastulli*; Sp. *Dijes, Juguetes de ninnos;* Rus. *Igrushki*), include every trifling article made expressly for the amusement of children. How frivolous soever these articles may appear in the estimation of superficial observers, their manufacture employs hundreds of hands, and gives bread to many families, in London, Birmingham, &c. The greatness of the demand for them may be inferred, from the fact, that a manufacturer of glass beads, and articles of that description, has received a single order for 500*l.* worth of dolls' eyes! — (*Fourth Report, Artisans and Machinery*, p. 314.) Considerable quantities are also imported from Holland; which supplies us with several sorts of wooden toys on more reasonable terms than we can afford to produce them. But of late years, these have been made in greater abundance in England than formerly. The duty on toys, which down to 1842 was an *ad valorem* one of 20 per cent., produced, in 1840, 4,630*l.*, showing that the value of the toys imported for home use amounted to 23,153*l.* In 1842, the duty was reduced to 10 per cent. *ad valorem*.

TRAGACANTH, a species of gum, the produce of the *Astragalus Tragacantha*, a thorny shrub growing in Persia, Crete, and the islands of the Levant. It exudes about the end of June from the stem and larger branches, and soon dries in the sun. It is inodorous; impressing a very slightly bitter taste as it softens in the mouth. It has a whitish colour; is semitransparent; and in very thin, wrinkled, vermiform pieces; it is brittle, but not easily pulverised, except in frosty weather, or in a warmed mortar. It should be chosen in long twisted pieces, white, very clear, and free from all other colours; the brown, and particularly the black pieces, should be wholly rejected. — (*Thomson's Chemistry; Dr. A. T. Thomson's Dispensatory; Milburn's Orient. Com.*)

The entries of tragacanth for home consumption in 1840 and 1841, were at the rate of 29,435 lbs. a year.

TREATIES (COMMERCIAL). By a commercial treaty is meant a treaty between two independent nations, for facilitating, and most commonly, also, regulating the commerce carried on between them.

Origin, Objects, and Policy of modern Commercial Treaties. — During the middle ages, and down, indeed, to a comparatively recent period, foreigners resident in a country, whether for commercial or other purposes, were, for the most part, subject to very harsh treatment. At one time, it was usual in England to make aliens liable for the debts and crimes of each other; and the practice, formerly so common, of laying heavier duties on the goods imported and exported by aliens than by British subjects, is not even yet, we grieve to say, altogether abandoned. In France, and some other countries, during the 14th and 15th centuries, a stranger was incapable of bequeathing property by will; and the whole of his personal as well as real estate, fell, at his death, to the king or the lord of the barony. This barbarous law was known by the name of *Droit d'Aubaine*, and was not completely abolished in France till a very late period. — (*Robertson's Charles V.* vol. i. note 29.) Previously to last century, the laws with respect to shipwreck, though infinitely more humane than they had been at a more remote period, were calculated rather to promote the interest of the sovereign of the country, or the feudal lords on whose territories shipwrecked vessels might be thrown, than those of the unfortunate owners or survivors. — (See WRECK.*) The most serious obstacles were then, also, opposed, by the prevalent insecurity, and the arbitrary nature of the tolls which the lords were in the habit of exacting, to the transit of commodities through the territories of one state to those of another.

Under such circumstances, it became of much importance for commercial states to endeavour to obtain, by means of treaties, that protection and security for the persons and properties of their subjects, when abroad, against unjust treatment and vexatious exactions, which they could not have obtained from the laws of the countries in which they might happen to reside. Thus, it was stipulated by Edward II., in 1325, that the merchants and mariners of Venice should have power to come to England for 10 years, with liberty to sell their merchandise and to return home in safety, "*without having either their persons or goods stopped on account of other people's crimes or debts.*" — (*Anderson, anno* 1325.) The commercial treaties negotiated during the 15th, 16th, and 17th centuries, are full of similar conditions; and there can be no doubt that by

* The practice of confiscating shipwrecked property continued in France till 1681, when it was abolished by an edict of Louis XIV. It was at one time common in Germany, to use the words of M. Bouchaud, "pour les prédicateurs de prier Dieu en chaire, *qu'il se fasse bien des naufrages sur leurs côtes!*" — (*Théorie des Traités de Commerce*, p. 118.) And the fact, that the celebrated jurist Thomasius wrote a dissertation in defence of such prayers, affords, if possible, a still more striking proof of the spirit of the period.

providing for the security of merchants and seamen when abroad, and suspending, with respect to them, the barbarous laws and practices then in force, they contributed materially to accelerate the progress of commerce and civilisation.

Commercial treaties were also negotiated at a very early period for the regulation of neutral commerce during war; and for defining the articles that should be deemed contraband, or which it should not be lawful for neutral ships to convey or carry to either belligerent. These are obviously points that can only be decided by express stipulations.*

Instead, however, of confining commercial treaties to their legitimate and proper purposes — the security of merchants and navigators, and the facility of commercial transactions — they very soon began to be employed as engines for promoting the commerce of one country at the expense of another. For more than 2 centuries, those engaged in framing commercial treaties have principally applied themselves to secure, either by force or address, some exclusive advantage in favour of the ships and products of their particular countries. Hence these compacts are full of regulations as to the duties to be charged on certain articles, and the privileges to be enjoyed by certain ships, according as they were either produced by or belonged to particular countries. It was in the adjustment of these duties and regulations that the skill of the negotiator was chiefly put to the test. It was expected that he should be thoroughly acquainted with the state of every branch of industry, both in his own country and in the country with which he was negotiating; and he was to endeavour so to adjust the tariff of duties, that those branches in which his own country was deficient might be benefited, and those in which the other was superior might be depressed! The idea of conducting a negotiation of this sort on a fair principle of reciprocity is of very late origin: success in circumventing, in over-reaching, or in extorting from fear or ignorance some oppressive, but at the same time worthless privilege, was long esteemed the only proof of superior talent in negotiators.

In an able tract, attributed to Mr. Eden, afterwards Lord Auckland, published in 1787 (*Historical and Political Remarks on the Tariff of the French Treaty*), there is the following outline of the qualifications necessary to the negotiator of a commercial treaty: — "Besides a general knowledge of the trade and reciprocal interests of the contracting parties, he ought to be precisely acquainted with their several kinds of industry and skill; to discover their wants, to calculate their resources, and to weigh with nicety the state of their finances, and the proportionate interest of their money: nay, further, he should be able to ascertain the comparative population and strength of each country, together with the price and quality both of first materials, and also of the labour bestowed upon them: for this purpose he should inquire into the operations of every class of merchants and manufacturers concerned in the trade; should consult their expectations on each of its several branches; and collect their hopes and fears on the effect of such a commercial revolution, on the competition of rival nations. A good treaty of commerce, independent of the art of negotiation, is pronounced, by one who well knew the extent and difficulty of the subject, to be a '*masterpiece of skill.*'" — (p. 10.)

Had Mr. Eden concluded by stating, that no individual, or number of individuals, ever possessed, or ever would possess, the various qualifications which in his estimation were required in negotiating a "good commercial treaty," he would only have affirmed what is most certainly true. We believe, however, that he had formed a totally false estimate, not only of the qualifications of a negotiator, but of the objects he ought to have in view. It was the opinion of the Abbé Mably — (*Droit Publique de l'Europe*, tome ii. p. 561.), — an opinion in which we are disposed, with very little modification, to concur, — that when a few general rules are agreed upon for the effectual security of trade and navigation, including the importation and exportation of all commodities not prohibited by law; the speedy adjustment of disputes; the regulations of pilotage, harbour and light-house duties; the protection of the property and effects of merchants in the event of a rupture, &c.; all is done that ought to be attempted in a commercial treaty. It may, indeed, be properly stipulated that the goods of the contracting powers shall be admitted into each other's ports on the same terms as "those of the most favoured nations," — that is, that no higher duties shall be charged upon them than on those of others. But here stipulation ought to cease. It is an abuse and a perversion of commercial treaties, to make them instruments for regulating duties or prescribing Custom-house regulations.

We admit, indeed, that occasions may occur, in which it may be expedient to stipulate for a reduction of duties or an abolition of prohibitions on the one side, in return for similar concessions on the other. But all arrangements of this sort should be determined by a convention limited to that particular object; and a fixed and not very distant term should be specified, when the obligation in the convention should expire, and

* There is a good collection of treaties as to this point, in the Appendix to the excellent work of Lampredi, *Del Commercio de' Popoli Neutrali*. — (See CONTRABAND.)

both parties be at liberty to continue or abandon the regulations agreed upon. Generally speaking, all treaties which determine what the duties on importation or exportation shall be, or which stipulate for preferences, are radically objectionable. Nations ought to regulate their tariffs in whatever mode they judge best for the promotion of their own interests, without being shackled by engagements with others. If foreign powers be all treated alike, none of them has just grounds of complaint; and it can rarely be for the interest of any people to show preferences to one over another. Those, for example, by whom *we* may be most advantageously supplied with foreign products, require no preferences; and if we exclude them, or give a preference to others, we incontestably injure ourselves: and yet 19 out of 20 of the regulations as to duties in commercial treaties have been founded on this preposterous principle. They have been employed to divert trade into channels, where it would not naturally flow; that is, to render it less secure and less profitable than it would otherwise have been.

A great deal of stress has usually been laid upon the advantages supposed to be derived from the privileges sometimes conceded in commercial treaties. But we believe that those who inquire into the subject will find that such concessions have, in every case, been not only injurious to the party making them, but also to the party in whose favour they have been made. The famous commercial treaty with Portugal, negotiated by Mr. Methuen in 1703, was almost universally regarded, for a very long period, as admirably calculated to promote the interests of this country; but it is now generally admitted, by every one who has reflected upon such subjects, that few transactions have taken place by which these interests have been more deeply injured. It stipulated for the free admission of British woollens into Portugal, from which they happened, at the time, to be excluded; but in return for this concession — a concession far more advantageous to the Portuguese than to us — we bound ourselves "for ever hereafter" to admit wines of the growth of Portugal into Great Britain at ⅔ds of the duty payable on the wines of France! Thus, in order to open an access for our woollens to the limited market of Portugal, we consented, in all time to come, to drink inferior wine, bought at a comparatively high price!—(See WINE.) This, however, was not all: by excluding one of the principal equivalents the French had to offer for our commodities, we necessarily lessened their ability to deal with us; at the same time that we provoked them to adopt retaliatory measures against our trade. It is owing more to the stipulations in the Methuen treaty than to any thing else, that the trade between England and France — a trade that would naturally be of vast extent and importance — has so long been confined within comparatively narrow limits.

It is visionary to imagine that any nation will ever continue to grant to another any exclusive advantage in her markets, unless she obtain what she reckons an equivalent advantage in the markets of the other. And if a commercial treaty stipulating for an exclusive privilege be really and *bonâ fide* observed by the country granting the privilege, we may be sure that the concessions made by the country in whose favour it is granted are sufficient fully to countervail it. Those who grasp at exclusive privileges in matters of this sort, or who attempt to extort valuable concessions from the weakness or ignorance of their neighbours, are uniformly defeated in their object. All really beneficial commercial transactions are bottomed on a fair principal of reciprocity; and that nation will always flourish most, and have the foundations of her prosperity best secured, who is a universal merchant, and deals with all the world on the same fair and liberal principles.

The justness of these principles, we are glad to observe, is now beginning to be very generally admitted. Stipulations as to duties and Custom-house regulations are disappearing from commercial treaties; and it is to be hoped that, at no distant period, every trace of them may have vanished.

A good work on the principles, style, and history of commercial treaties is a desideratum. The best we have seen are Mascovius *De Fœderibus Commerciorum*, 4to. Leipsic, 1735; and Bouchaud, *Théorie des Traités de Commerce*, 12mo. Paris, 1777. But these are principally works of erudition, and were written before the sound principles of commercial policy had been unfolded. There is no good collection of commercial treaties in the English language; but Mr. Hertslet's work is valuable, as containing the recent treaties in an accessible form.

We subjoin copies of the principal commercial treaties and conventions existing at this moment (January 1844) between Great Britain and other powers.

AUSTRIA.

Treaty of Commerce and Navigation between her Britannic Majesty and the Emperor of Austria, signed at Vienna, July 3. 1838.

Article 1. From the date of the ratification of this present treaty, British vessels arriving in or departing from the ports of his Majesty the Emperor of Austria, and Austrian vessels arriving in or departing from the ports of the United Kingdom of Great Britain and Ireland, and those of all the possessions of her Britannic Majesty, shall be subject to no other or higher duties or charges, of whatsoever nature they may be, than those which are actually or may hereafter be imposed on national vessels, on their entering into or departing from such ports respectively.

2. All productions of the soil, industry, and art of the states and possessions of his Majesty, the Emperor of Austria, including the said productions which may be exported through the northern outlet of the

Elbe, and the eastern outlet of the Danube, and which may be imported into the ports of the United Kingdom and the possessions of her Britannic Majesty; and also all the productions of the soil, industry, and art of the United Kingdom and possessions of her Britannic Majesty, which may be imported into the ports of his Majesty the Emperor of Austria, shall enjoy reciprocally, in all respects, the same privileges and immunities, and may be imported and exported exactly in the same manner, in vessels of the one as in vessels of the other of the high contracting parties.

3. All commodities which are not the productions of the soil, industry, and art of the two respective states or their possessions, and which may be legally imported from the ports of Austria, including those of the Danube, into the ports of the United Kingdom of Great Britain and Ireland, of Malta, and Gibraltar, and other possessions of her Britannic Majesty, in Austrian vessels, shall be subject to the same duties only which would be paid on the same articles, if they were imported in British vessels.

Her Britannic Majesty extends by this treaty to Austrian navigation and trade, the full benefits of the two British acts of parliament passed on the 28th of August, 1833, regulating the trade and navigation of the United Kingdom and British possessions, as well as all other privileges of commerce and navigation now enjoyed, or to be hereafter granted, by existing laws, by orders in council, or by treaties, to the most favoured nations.

4. All Austrian vessels arriving from the ports of the Danube, as far as Galacz inclusively, shall, together with their cargoes, be admitted into the ports of the United Kingdom of Great Britain and Ireland and of all the possessions of her Britannic Majesty, exactly in the same manner as if such vessels came direct from Austrian ports, with all the privileges and immunities stipulated by the present treaty of navigation and commerce. In like manner, all British vessels, with their cargoes, shall continue to be placed upon the same footing as Austrian vessels, whenever such British vessels shall enter into or depart from the same ports.

5. In consideration of British vessels, arriving direct from other countries than those belonging to the high contracting parties, being admitted with their cargoes into Austrian ports, without paying any other duties whatever than those paid by Austrian vessels, so also the productions of the soil and industry of the parts of Asia or Africa situated within the Straits of Gibraltar, which shall have been brought into the ports of Austria, may be re-exported from thence in Austrian vessels directly into British ports, in the same manner, and with the same privileges, as to all manner of duties and immunities, as if these productions were imported from Austrian ports in British vessels.

6. All commodities and articles of commerce which, according to the stipulations of the present treaty, or by the existing laws and ordinances of the respective states, may be legally imported into or exported from the states and possessions of the two high contracting parties, whether under the British or the Austrian flag, shall in like manner be subject to the same duties, whether imported by national vessels or by those of the other state; and upon all commodities and articles of commerce which may be legally exported from ports of either state, the same premiums, drawbacks, and advantages shall be accorded, whether they are exported by the vessels of the one or by those of the other state.

7. All commodities and articles of commerce, which shall be imported, placed in depôt, or warehoused in the ports of the states and possessions of the two high contracting parties, so long as they shall remain in depot or warehouse, and shall not be used for internal consumption, shall be subject, upon re-exportation to the same treatment and duties, whether that re-exportation shall be made in the vessels of the one or in those of the other state.

8. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company or corporation, or agent acting on its behalf or under its authority, in the purchase of any article the production of the soil, industry, or art of either of the two states and their possessions, imported into the ports of the other, on account of the nationality of the vessel in which such articles may be imported; it being the true intent and meaning of the high contracting parties, that no difference or distinction whatever shall be made in this respect.

9. In regard to the commerce to be carried on in Austrian vessels with the British possessions in the East Indies, her Britannic Majesty consents to grant the same facilities and privileges to the subjects of his Imperial and Royal Apostolic Majesty, as are or may be enjoyed under any treaty or act of parliament, by the subjects or citizens of the most favoured nations; subject to the laws, rules, regulations, and restrictions, which are or may become applicable to the vessels and subjects of any other foreign country enjoying the like advantages and privileges of trading with the said possessions.

10. The present treaty does not include the navigation and carrying trade between one port and another, situated in the dominions of one contracting party, by the vessels of the other, as far as regards the carrying of passengers, commodities, and articles of commerce; this navigation and transport being reserved to national vessels.

11. The vessels and subjects of the high contracting parties shall, by the present treaty, enjoy reciprocally all the advantages, immunities, and privileges, within the ports of their respective states and possessions, which are now enjoyed by the navigation and commerce of the most favoured nations: the effect hereof being to secure, in the United Kingdom and British possessions, to Austrian vessels and subjects, the full and entire advantages of navigation and commerce allowed by the Navigation Act passed in London on the 28th of August, 1833, and by another act of the same date, regulating the trade of the British possessions abroad; or which may be accorded by orders in council or by treaty to other powers: and in like manner British vessels and subjects shall enjoy, in the ports of the states and possessions of his Imperial and Royal Apostolic Majesty, the full and entire advantages of navigation and commerce granted by existing laws, regulations, and ordinances, or by treaty, to foreign powers: and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and his Imperial and Royal Apostolic Majesty, engage reciprocally not to grant any favours, privileges, or immunities whatsoever, in matters of commerce and navigation, to the subjects of any other state, which shall not be also at the same time extended to the subjects of the one or of the other of the high contracting parties, gratuitously, if the concession in favour of the other state shall have been gratuitous, or upon giving as nearly as possible the same compensation or equivalent, in case the concession shall have been conditional.

12. The clause of Article VII. of the convention concluded at Paris the 5th November, 1815, between the courts of Great Britain, Austria, Prussia, and Russia, relative to the commerce between the states of his Imperial and Royal Apostolic Majesty and the United States of the Ionian Islands, shall remain in force.

13. The present treaty, after being signed and ratified, shall replace the convention of navigation and commerce concluded the 21st December, 1829, in London, between the governments of his Britannic Majesty and of his Imperial and Royal Apostolic Majesty; and shall continue in force until the 31st of December, 1848; and further, until the expiration of 12 months after one of the high contracting parties shall have notified to the other the intention to terminate its duration. It is further agreed, that in 12 months after one of the high contracting parties has received from the other such notification, this treaty, and all the stipulations it contains, shall cease to be obligatory upon either party.

14. The present treaty shall be ratified, and the ratifications exchanged at Vienna, in the space of one month, or sooner if possible.

In witness whereof, &c. plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at Vienna the 3d day of July, in the year of our Lord 1838.

FREDERIC JAMES LAMB.
METTERNICH.

Declaration signed by the respective Plenipotentiaries on the conclusion of the preceding Treaty.

With a view to prevent beforehand all doubt which might hereafter arise with regard to the true sense of the expressions contained in the treaty of commerce and navigation, signed this day between the plenipotentiaries of her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and of his Majesty the Emperor of Austria, King of Hungary and Bohemia, the high contracting parties have agreed, by common consent, that the French text of the said treaty shall be considered by the Austrian government as the original text.

In witness whereof, the present declaration has been done in duplicate, and signed by the respective plenipotentiaries.

Vienna, 3d July, 1838.

FREDERIC JAMES LAMB.
METTERNICH.

Declaration made by the Plenipotentiary of her Britannic Majesty, on the Exchange of the Ratifications of the preceding Treaty.

In proceeding to the exchange of the ratifications of the treaty of commerce and navigation, between her Majesty the Queen of the United Kingdom of Great Britain and Ireland and his Majesty the Emperor of Austria, King of Hungary and Bohemia, concluded and signed at Vienna on the 3d of July, 1838, the undersigned plenipotentiary of her Britannic Majesty is commanded by her Majesty to explain and declare: —

1. That in the preamble of the said treaty, the words "the commercial relations of their respective states and possessions" shall be understood to mean "the commercial relations between their respective states and possessions," the latter form of words being that adopted in the preamble of the convention of commerce between Great Britain and Austria, signed at London, December 21. 1829.

2. That the stipulations of the third article of the aforesaid treaty of the 3d of July, 1838, relating to goods not the produce of the respective states, shall be understood to be mutual.

3. That by the seventh article of the aforesaid treaty of the 3d of July, 1838, it is understood that goods placed in warehouse shall not be liable to duty unless entered for consumption; and may be exported on the same terms in the ships of the one as in those of the other country.

Her Britannic Majesty's ratification of the aforesaid treaty of commerce and navigation is exchange under the explicit declarations and understandings above mentioned.

Done at Milan, the 14th day of September, 1838.

FREDERIC JAMES LAMB.

Counter Declaration made by the Austrian Plenipotentiary.

In consequence of the declaration presented this day by his Excellency, Sir Frederic Lamb, Ambassador of her Britannic Majesty to his Imperial and Royal Apostolic Majesty, on the occasion of the exchange of the ratifications of the treaty of commerce and navigation, concluded and signed at Vienna on the 3d of July, between the plenipotentiaries of his Imperial and Royal Apostolic Majesty, and of her Britannic Majesty, which declaration is conceived in the following terms: —

1. That in the preamble of the said treaty the words "the commercial relations of their respective states and possessions" shall be understood to mean "the commercial relations between their respective states and possessions," the latter form of words being that adopted in the preamble of the convention of commerce signed at London on the 21st of December, 1829, between Austria and Great Britain.

2. That the stipulations of the 3d article of the aforesaid treaty of the 3d of July, 1838, relating to goods not the produce of the respective states, shall be understood to be mutual.

3. That by the 7th article of the treaty of the 3d of July, 1838, it is understood that goods placed in warehouse, shall not be liable to duty, unless entered for consumption; and may be exported on the same terms in the ships of the one as in those of the other country.

The undersigned, chancellor of court and state, is authorised by his Majesty the Emperor, his august master, to accede, in every particular, to this declaration presented by his Excellency the Ambassador of her Britannic Majesty.

Done at Milan, the 14th of September, 1838.

METTERNICH.

CHINA.

Treaty between Her Majesty and the Emperor of China, signed, in the English and Chinese Languages, at Nanking, August 29. 1842. Ratifications exchanged at Hong-Kong, 26th June, 1843.

Article 1. There shall henceforward be peace and friendship between her Majesty the Queen of the United Kingdom of Great Britain and Ireland and his Majesty the Emperor of China, and between their respective subjects, who shall enjoy full security and protection for their persons and property within the dominions of the other.

2. His Majesty the Emperor of China agrees, that British subjects, with their families and establishments, shall be allowed to reside, for the purpose of carrying on their mercantile pursuits, without molestation or restraint, at the cities and towns of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai; and her Majesty the Queen of Great Britain, &c. will appoint superintendents, or consular officers, to reside at each of the above-named cities or towns, to be the medium of communication between the Chinese authorities and the said merchants, and to see that the just duties and other dues of the Chinese government, as hereafter provided for, are duly discharged by her Britannic Majesty's subjects.

3. It being obviously necessary and desirable that British subjects should have some port whereat they may careen and refit their ships when required, and keep stores for that purpose, his Majesty the Emperor of China cedes to her Majesty the Queen of Great Britain, &c. the island of Hong-Kong, to be possessed in perpetuity by her Britannic Majesty, her heirs and successors, and to be governed by such laws and regulations as her Majesty the Queen of Great Britain, &c. shall see fit to direct.

4. The Emperor of China agrees to pay the sum of six millions of dollars, as the value of the opium which was delivered up at Canton in the month of March, 1839, as a ransom for the lives of her Britannic Majesty's superintendent and subjects who had been imprisoned and threatened with death by the Chinese high officers.

5. The government of China having compelled the British merchants trading at Canton to deal exclusively with certain Chinese merchants, called Hong merchants (or Co-Hong), who had been licensed by the Chinese government for that purpose, the Emperor of China agrees to abolish that practice in future at all ports where British merchants may reside, and to permit them to carry on their mercantile transactions with whatever persons they please; and his Imperial Majesty further agrees to pay to the British government the sum of three millions of dollars, on account of debts due to British subjects by some of the said Hong merchants, or Co-Hong, who have become insolvent, and who owe very large sums of money to subjects of her Britannic Majesty.

6. The government of her Britannic Majesty having been obliged to send out an expedition to demand and obtain redress for the violent and unjust proceedings of the Chinese high authorities towards her Britannic Majesty's officer and subjects, the Emperor of China agrees to pay the sum of twelve millions of dollars, on account of the expenses incurred; and her Britannic Majesty's plenipotentiary voluntarily agrees, on behalf of her Majesty, to deduct from the said amount of twelve millions of dollars, any sums which may have been received by her Majesty's combined forces, as ransom for cities and towns in China, subsequent to the 1st day of August, 1841.

7. It is agreed, that the total amount of twenty-one millions of dollars, described in the three preceding articles, shall be paid as follows:—

Six millions immediately.

Six millions in 1843; that is, three millions on or before the 30th of the month of June, and three millions on or before the 31st of December.

Five millions in 1844; that is, two millions and a half on or before the 30th of June, and two millions and a half on or before the 31st of December.

Four millions in 1845; that is, two millions on or before the 30th of June, and two millions on or before the 31st of December.

And it is further stipulated, that interest, at the rate of 5 per cent. per annum, shall be paid by the government of China on any portion of the above sums that are not punctually discharged at the periods fixed.

8. The Emperor of China agrees to release, unconditionally, all subjects of her Britannic Majesty (whether natives of Europe or India), who may be in confinement at this moment in any part of the Chinese empire.

9. The Emperor of China agrees to publish and promulgate, under his imperial sign manual and seal, a full and entire amnesty and act of indemnity to all subjects of China, on account of their having resided under, or having had dealings and intercourse with, or having entered the service of, her Britannic Majesty, or of her Majesty's officers; and his Imperial Majesty further engages to release all Chinese subjects who may be at this moment in confinement for similar reasons.

10. The Emperor of China agrees to establish at all the ports which are, by the second article of this treaty, to be thrown open for the resort of British merchants, a fair and regular tariff of export and import customs and other dues, which tariff shall be publicly notified and promulgated for general information; and the Emperor further engages, that, when British merchandise shall have once paid at any of the said ports the regulated customs and dues, agreeable to the tariff to be hereafter fixed, such merchandise may be conveyed by Chinese merchants to any province or city in the interior of the empire of China, on paying a further amount as transit duties, which shall not exceed per cent. on the tariff value of such goods. — (See, for Tariff, art. CANTON.)

11. It is agreed that her Britannic Majesty's chief high officer in China shall correspond with the Chinese high officers, both at the capital and in the provinces, under the term "communication;" the subordinate British officers and Chinese high officers in the provinces, under the term "statement," on the part of the former, and on the part of the latter, "declaration;" and the subordinates of both countries on a footing of perfect equality; merchants and others not holding official situations, and therefore not included in the above, on both sides, to use the term "representation" in all papers addressed to, or intended for the notice of, the respective governments.

12. On the assent of the Emperor of China to this treaty being received, and the discharge of the first instalment of money, her Britannic Majesty's forces will retire from Nanking and the Grand Canal, and will no longer molest or stop the trade of China. The military post at Chinhae will also be withdrawn; but the islands of Koolangsoo, and that of Chusan, will continue to be held by her Majesty's forces until the money payments, and the arrangements for opening the ports to British merchants, be completed.

13. The ratification of this treaty by her Majesty the Queen of Great Britain, &c. and his Majesty the Emperor of China, shall be exchanged as soon as the great distance which separates England from China will admit; but, in the meantime, counterpart copies of it, signed and sealed by the plenipotentiaries on behalf of their respective sovereigns, shall be mutually delivered, and all its provisions and arrangements shall take effect.

Done at Nanking, and signed and sealed by the plenipotentiaries on board her Britannic Majesty's ship "Cornwallis," this 29th day of August, 1842; corresponding with the Chinese date, twenty-fourth day of the seventh month, in the twenty-second year of Taoukwang.

HENRY POTTINGER,
Her Majesty's Plenipotentiary,

And signed by the seals of four Chinese commissioners.

DENMARK.

Convention of Commerce between Great Britain and Denmark, signed at London, the 16th of June, 1824.

Article 1. From and after the 1st day of July next, Danish vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, and British vessels entering or departing from the ports of his Danish Majesty's dominions, shall not be subject to any other or higher duties or charges whatever, than are or shall be levied on national vessels entering or departing from such ports respectively.

1. All articles of the growth, produce, or manufacture of any of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom and of Denmark respectively, in vessels of the one country, shall, in like manner, be imported into and exported from those ports in vessels of the other.

3. All articles not of the growth, produce, or manufacture of the dominions of his Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland into the ports and dominions of the King of Denmark, in British ships, shall be subject only to the same duties as are payable upon the like articles, if imported in Danish ships; and the same reciprocity shall be observed with regard to Danish vessels in the ports of the said United Kingdom of Great Britain and Ireland, in respect to all articles not the growth, produce, or manufacture of the dominions of his Danish Majesty, which can legally be imported into the ports of the United Kingdom in Danish ships.

4. All goods which can legally be imported into the ports of either country, shall be admitted at the same rate of duty, whether imported in vessels of the other country, or in national vessels; and all goods which can be legally exported from the ports of either country, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the other country, or in national vessels.

5. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company, corporation, or agent, acting on its behalf or under its authority, in the purchase of any article the growth, produce, or manufacture of either country imported into the other, on account of or in reference to the character of the vessel in which such article was imported: it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. The high contracting parties having mutually determined not to include in the present convention their respective colonies, in which are comprehended, on the part of Denmark, Greenland, Iceland, and the islands of Ferroe; it is expressly agreed that the intercourse which may at present legally be carried on by the subjects or ships of either of the said high contracting parties with the colonies of the other, shall remain upon the same footing as if this convention had never been concluded.

7. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years; and it is hereby agreed between them, that at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

8. The present convention shall be ratified, and the ratifications shall be exchanged at London, within one month from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 16th of June, 1824,

GEORGE CANNING.
W. HUSKISSON.
C. E. MOLTKE.

Separate Article.

The high contracting parties reserve to themselves to enter upon additional stipulations for the purpose of facilitating and extending, even beyond what is comprehended in the convention of this date, the commercial regulations of their respective subjects and dominions, upon the principle either of reciprocal or equivalent advantages, as the case may be. And in the event of any articles or article being concluded between the said high contracting parties, for giving effect to such stipulations, it is hereby agreed, that the article or articles which may hereafter be so concluded shall be considered as forming part of the aforesaid convention.

Additional Article.

Their Britannic and Danish Majesties mutually agree, that no higher or other duties shall be levied in either of their dominions (their respective colonies being excepted from the convention of this date), upon any personal property of their respective subjects, on the removal of same from the dominions of their said Majesties reciprocally, either upon the inheritance of such property, or otherwise, than are or shall be payable in each state, upon the like property, when removed by a subject of such state respectively.

FRANCE.

Convention of Commerce between His Britannic Majesty and the Most Christian King, together with two additional Articles thereunto annexed, signed at London, January 26, 1826.

Article 1. French vessels coming from or departing for the ports of France, or, if in ballast, coming from or departing for any place, shall not be subject, in the ports of the United Kingdom, either on entering into or departing from the same, to any higher duties of tonnage, harbour, light-house, pilotage, quarantine, or other similar or corresponding duties, of whatever nature, or under whatever denomination, than those to which British vessels, in respect of the same voyages, are or may be subject, on entering into or departing from such ports; and, reciprocally, from and after the same period, British vessels coming from or departing for the ports of the U. Kingdom, or, if in ballast, coming from or departing for any place, shall not be subject, in the ports of France, either in entering into or departing from the same, to any higher duties of tonnage, harbour, light-house, pilotage, quarantine, or other similar or corresponding duties, of whatever nature, or under whatever denomination, than those to which French vessels, in respect of the same voyages, are or may be subject, on entering into or departing from such ports; whether such duties are collected separately, or are consolidated in one and the same duty; — his Most Christian Majesty reserving to himself to regulate the amount of such duty or duties in France, according to the rate at which they are or may be established in the U. Kingdom: at the same time, with a view of diminishing the burdens imposed upon the navigation of the two countries, his Most Christian Majesty will always be disposed to reduce the amount of the said burdens in France, in proportion to any reduction which may hereafter be made of those now levied in the ports of the U. Kingdom.

2. Goods which can or may be legally imported into the ports of the U. Kingdom, from the ports of France, if so imported in French vessels, shall be subject to no higher duties than if imported in British vessels; and, reciprocally, goods which can or may be legally imported into the ports of France, from the ports of the U. Kingdom, if so imported in British vessels, shall be subject to no higher duties than if imported in French vessels. The produce of Asia, Africa, and America, not being allowed to be imported from the said countries, nor from any other, in French vessels, nor from France in French, British, or any other vessels, into the ports of the U. Kingdom, for home consumption, but only for warehousing and re-exportation, his Most Christian Majesty reserves to himself to direct that, in like manner, the produce of Asia, Africa, and America, shall not be imported from the said countries, nor from any other, in British vessels, nor from the United Kingdom in British, French, or any other vessels, into the ports of France, for the consumption of that kingdom, but only for warehousing, and re-exportation.

With regard to the productions of the countries of Europe, it is understood between the high contracting parties, that such productions shall not be imported, in British ships, into France, for the consumption of that kingdom, unless such ships shall have been laden therewith in some port of the United Kingdom; and that his Britannic Majesty may adopt, if he shall think fit, some corresponding restrictive measure, with regard to the productions of the countries of Europe imported into the ports of the United Kingdom in French vessels: the high contracting parties reserving, however, to themselves the power of making, by mutual consent, such relaxations in the strict execution of the present article, as they may think useful to the respective interests of the 2 countries, upon the principal of mutual concessions, affording each to the other reciprocal or equivalent advantages.

3. All goods which can or may be legally exported from the ports of either of the 2 countries, shall, on their export, pay the same duties of exportation, whether the exportation of such goods be made in British or in French vessels, provided the said vessels proceed, respectively, direct from the ports of the one country to those of the other. And all the said goods so exported in British or French vessels, shall be reciprocally entitled to the same bounties, drawbacks, and other allowances of the same nature, which are granted by the regulations of each country, respectively.

4. It is mutually agreed between the high contracting parties, that in the intercourse of navigation between their 2 countries, the vessels of any third power shall in no case obtain more favourable conditions than those stipulated, in the present convention, in favour of British and French vessels.

5. The fishing-boats of either of the 2 countries, which may be forced by stress of weather to seek shelter in the ports or on the coast of the other country, shall not be subject to any duties or port charges of any description whatsoever; provided the said boats, when so driven in by stress of weather, shall not discharge or receive on board any cargo, or portion of cargo, in the ports or on the parts of the coast where they shall have sought shelter.

6. It is agreed that the provisions of the present convention between the high contracting parties shall be reciprocally extended and in force, in all the possessions subject to their respective dominions in Europe.

7. The present convention shall be in force for the term of 10 years, from the 5th of April of the present year; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate its operation; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years; and it is agreed between them, that at the end of 12 months' extension agreed to on both sides, this convention, and all the stipulations thereof, shall altogether cease and determine.

8. The present convention shall be ratified, and the ratifications shall be exchanged in London within the space of 1 month, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 26th day of January, in the year of our Lord 1826.

GEORGE CANNING.
WILLIAM HUSKISSON.

LE PRINCE DE POLIGNAC.

Additional Articles.

Article 1. French vessels shall be allowed to sail from any port whatever of the countries under the dominion of his Most Christian Majesty, to all the colonies of the United Kingdom (except those possessed by the East India Company), and to import into the said colonies all kinds of merchandise (being productions the growth or manufacture of France, or of any country under the dominion of France), with the exception of such as are prohibited to be imported into the said colonies, or are permitted to be imported only from countries under the British dominion; and the said French vessels, as well as the merchandise imported in the same, shall not be subject, in the colonies of the United Kingdom, to other or higher duties than those to which British vessels may be subject, on importing the same merchandise from any foreign country, or which are imposed upon the merchandise itself.

The same facilities shall be granted, reciprocally, in the colonies of France, with regard to the importation in British vessels of all kinds of merchandise, (being productions the growth and manufacture of the United Kingdom, or any country under the British dominion,) with the exception of such as are prohibited to be imported into the said colonies, or are permitted to be imported only from countries under the dominion of France. And whereas all goods, the produce of any foreign country, may now be imported into the colonies of the United Kingdom, in the ships of that country, with the exception of a limited list of specified articles, which can only be imported into the said colonies in British ships, his Majesty the King of the United Kingdom reserves to himself the power of adding to the said list of excepted articles any other, the produce of the French dominions, the addition whereof may appear to his Majesty to be necessary for placing the commerce and navigation to be permitted to the subjects of each of the high contracting parties with the colonies of the other, upon a footing of fair reciprocity.

2 French vessels shall be allowed to export from all the colonies of the United Kingdom (except those possessed by the East India Company) all kinds of merchandise which are not prohibited to be exported from such colonies in vessels other than those of Great Britain; and the said vessels, as well as the merchandise exported in the same, shall not be subject to other or higher duties than those to which British vessels may be subject, on exporting the said merchandise, or which are imposed upon the merchandise itself; and they shall be entitled to the same bounties, drawbacks, and other allowances of the same nature, to which British vessels would be entitled, on such exportation.

The same facilities and privileges shall be granted, reciprocally, in all the colonies of France, for the exportation in British vessels, of all kinds of merchandise, which are not prohibited to be exported from such colonies in vessels other than those of France.

These 2 additional articles shall have the same force and validity as if they were inserted, word for word, in the convention signed this day. They shall be ratified, and the ratifications shall be exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, Jan. 26, 1826.

GEORGE CANNING. LE PRINCE DE POLIGNAC.
WILLIAM HUSKISSON.

A Treasury letter, dated 28th of March, 1826, directs that French vessels, and their cargoes legally imported or exported on board the same, according to the terms of the convention in the preceding pages, are, from the 5th of April, 1826, to be charged with such and the like duties only, of whatever kind they may be, that are charged on British vessels, and similar cargoes laden on board thereof; and in like manner the same bounties, drawbacks, and allowances are to be paid on articles exported in French vessels, that are paid, granted, or allowed on similar articles exported in British vessels. And the necessary instructions are to be transmitted to the officers in the colonies for carrying into effect the stipulations contained in the 2 additional articles of the said convention, respecting French vessels and their cargoes, from the 1st of October, 1826.

A convention regulating the respective limits of the British and French oyster and other fisheries was signed at Paris, on the 2nd of August, 1839.

HANSE TOWNS.

Convention of Commerce between His Britannic Majesty, and the Free Hanseatic Republics of Lubeck, Bremen, and Hamburg, signed at London, Sept. 29, 1825.

Article 1. From and after the date hereof, British vessels entering or departing from the ports of the free Hanseatic republics of Lubeck, Bremen, or Hamburg; and Lubeck, Bremen, or Hamburg vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, shall not be subject to any other or higher ship duties or charges than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All goods, whether the production of the territories of the free Hanseatic republics of Lubeck, Bremen, or Hamburg, or of any other country, which may be legally imported from any of the ports of the said republics into the United Kingdom of Great Britain and Ireland in British vessels, shall, in like manner, be permitted to be imported in Lubeck, Bremen, or Hamburg vessels; and all goods, whether the productions of any of the dominions of his Britannic Majesty, or of any other country, which may be legally exported from the ports of the United Kingdom in British vessels, shall, in like manner, be permitted to be exported from the said ports in Lubeck, Bremen, or Hamburg vessels. And all goods, which may be legally imported into or exported from the ports of Lubeck, Bremen, or Hamburg, in national vessels, shall, in like manner, be permitted to be imported into or exported from the ports of Lubeck, Bremen, or Hamburg, in British vessels.

3. All goods which can be legally imported into the ports of the United Kingdom directly from the ports of Lubeck, Bremen, or Hamburg, or either of them, shall be admitted at the same rate of duty, whether imported in British vessels, or in vessels belonging to either of the said republics; and all goods which can be legally exported from the United Kingdom, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in British or Hanseatic vessels. And the like reciprocity shall be observed, in the ports of the said republics, in respect to all goods which can be legally imported into or exported from any or either of the said ports in vessels belonging to the United Kingdom.

4. No priority or preference shall be given, directly or indirectly, by any or either of the contracting parties, nor by any company, corporation, or agent, acting on their behalf or under their authority, in the purchase of any article, the growth, produce, or manufacture of their states respectively, imported into the other, on account of or in reference to the character of the vessel in which such article was imported; it being the true intent and meaning of the high contracting parties that no distinction or difference whatever shall be made in this respect.

5. In consideration of the limited extent of the territories belonging to the republics of Lubeck, Bremen, and Hamburg, and the intimate connection of trade and navigation subsisting between these republics, it is hereby stipulated and agreed, that any vessel which shall have been built in any or either of the ports of the said republics, and which shall be owned exclusively by a citizen or citizens of any or either of them, and of which the master shall also be a citizen of either of them, and provided 3-4ths of the crew shall be subjects or citizens of any or either of the said republics, or of any or either of the states comprised in the Germanic Confederation, such vessel, so built, owned, and navigated, shall, for all the purposes of this convention, be taken to be and be considered as a vessel belonging to Lubeck, Bremen, or Hamburg.

6. Any vessel, together with her cargo, belonging to either of the three free Hanseatic republics of Lubeck, Bremen, or Hamburg, and coming from either of the said ports to the United Kingdom, shall,

for all the purposes of this convention, be deemed to come from the country to which such vessel belongs; and any British vessel and her cargo trading to the ports of Lubeck, Bremen, or Hamburg, directly or in succession, shall, for the like purposes, be on the footing of a Hanseatic vessel and her cargo making the same voyage.

7. It is further mutually agreed that no higher or other duties shall be levied, in any or either of the states of the high contracting parties, upon any personal property of the subjects and citizens of each respectively, on the removal of the same from the dominions or territory of such states, (either upon inheritance of such property, or otherwise,) than are or shall be payable, in each state, upon the like property when removed by a subject or citizen of such state respectively.

8. The high contracting parties reserve to themselves to enter upon additional stipulations for the purpose of facilitating and extending, even beyond what is comprehended in the convention of this date, the commercial relations of their respective subjects and dominions, citizens and territories, upon the principle either of reciprocal or equivalent advantages, as the case may be; and, in the event of any article or articles being concluded between the said high contracting parties, for giving effect to such stipulations, it is hereby agreed that the article or articles which may hereafter be so concluded shall be considered as forming part of the present convention.

9. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after the King of the United Kingdom of Great Britain and Ireland, on the one part, or the governments of the free Hanseatic republics of Lubeck, Bremen, or Hamburg, or either of them, on the other part, shall have given notice of their intention to terminate the same; each of the said high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years; and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either of the parties from the other, this convention, and all the provisions thereof, shall altogether cease and determine, as far as regards the states giving and receiving such notice; it being always understood and agreed, that, if one or more of the Hanseatic republics aforesaid shall, at the expiration of 10 years from the date hereof, give or receive notice of the proposed termination of this convention, such convention shall, nevertheless, remain in full force and operation as far as regards the remaining Hanseatic republics or republic which may not have given or received such notice.

10. The present convention shall be ratified, and the ratifications shall be exchanged at London, within one month from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms..

Done at London, Sept. 29. 1825.

GEORGE CANNING.
W. HUSKISSON.
JAMES COLQUHOUN.

Supplementary Convention to the Treaty of Commerce and Navigation of the 29th of September, 1825, between the Senates of the Free Hanseatic Cities of Lubeck, Bremen, and Hamburg, and her Majesty the Queen of Great Britain and Ireland; signed at London, the 3d of August, 1841.

Art. 1. The senate of the free Hanseatic cities of Lubeck, Bremen, and Hamburg, hereby agree that British vessels coming from countries not being part of the dominions of her Britannic Majesty, shall henceforward, together with their cargoes, be admitted into the ports of Lubeck, Bremen, and Hamburg, and all vessels shall on their admission pay dues not higher nor other than those which shall be paid in similar circumstances by vessels belonging to Lubeck, Bremen, or Hamburg, and the duties to be paid upon the cargoes of such British vessels shall not be higher nor other than if such cargoes had been imported in vessels belonging to Lubeck, Bremen, or Hamburg. And in consideration thereof, her Britannic Majesty agrees that from and after the date of the exchange of the ratification of this present convention, the vessels of the said free Hanseatic republics of Lubeck, Bremen, and Hamburg, when coming from Hanseatic ports, shall, together with their cargoes, be admitted into the ports of all her Britannic Majesty's possessions; and such vessels shall, on their admission, pay dues not higher nor other than those which shall be paid in similar circumstances by British vessels; and the duties to be paid upon the cargoes of such Hanseatic vessels shall not be higher nor other than if such cargoes had been imported in British vessels.

2. In consideration of the privileges extended to British trade and navigation by the first article of the present convention, her Britannic Majesty further agrees that all goods, being the produce of the states of the free Hanseatic cities of Lubeck, Bremen, and Hamburg, or of the other states of the Germanic Confederation, or of the states comprised in the Germanic Union of Customs, and which may be imported in any foreign vessels from the ports of Lubeck, Bremen, and Hamburg, or from any port situated on the Elbe or Weser, into the ports of the British possessions abroad, including Gibraltar and Malta, shall also be permitted to be imported from the said ports of the free cities of Lubeck, Bremen, and Hamburg, into the ports of the said British possessions abroad, including Gibraltar and Malta, in vessels belonging to Lubeck, Bremen, and Hamburg, built, owned, and navigated as stipulated in the fifth article of the convention of commerce and navigation, concluded on the 29th of September, 1825, between Great Britain on the one part, and the free Hanseatic cities of Lubeck, Bremen, and Hamburg on the other part; and such goods, wares, and merchandise being the produce of the free Hanseatic republics, or of the other states of the German Confederation, or of the states of the Germanic Union of Customs, and so imported in Hanseatic vessels into the ports of the said British possessions abroad, including Gibraltar and Malta; and all goods, wares, and merchandise exported in Hanseatic vessels, built, owned, and navigated as aforesaid, from the ports of the British possessions abroad, including Gibraltar and Malta, to any foreign country whatever, shall pay no other or higher duties than if the same were imported or exported in British vessels.

3. The present convention, which shall be considered as supplementary to the convention concluded between Great Britain and the free Hanseatic republics on the 29th of September, 1825, shall be ratified, and the ratifications shall be exchanged at London as soon as possible within the space of six weeks.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed the seals of their arms.

Done at London, on the 3d day of August, in the year of our Lord 1841.

PALMERSTON.
BANKS.

By an order in council dated September 14. 1841, her Majesty is pleased to order that all goods being the produce of the states of the free Hanseatic cities of Lubeck, Bremen, and Hamburg, or of the other states of the Germanic Confederation, or of the states comprised in the Germanic Union of Customs, and which may be imported in any foreign vessels from the ports of Lubeck, Bremen, and Hamburg, or from any port situated on the Elbe or Weser into the ports of the British possessions abroad, including Gibraltar and Malta, shall also be permitted to be imported from the said ports of the free cities of Lubeck, Bremen, and Hamburg, into the ports of the said British possessions abroad (including Gibraltar and Malta) in vessels belonging to Lubeck, Bremen, and Hamburg, built, owned, and navigated as stipulated in the fifth article of the convention of commerce and navigation, concluded on the 29th of September, 1825, between Great Britain on the one part, and the free Hanseatic cities of Lubeck, Bremen, and Hamburg on the other part; and such goods, being the produce of the free Hanseatic republics, or of the other states of the Germanic Confederation, or of the states of the Germanic Union of Customs, and so imported in Hanseatic vessels into the ports of the said British possessions abroad

(including Gibraltar and Malta), and all goods exported in Hanseatic vessels, built, owned, and navigated as aforesaid, from the ports of the British possessions abroad (including Gibraltar and Malta) to any foreign country whatever, shall pay no other or higher duties than if the same were imported or exported in British vessels.

GREECE.

Convention of Commerce and Navigation between her Britannic Majesty and the King of Greece, signed at London, October 4th, 1837.

Art. 1. From and after the exchange of the ratifications of the present convention, Greek vessels entering into or departing from the ports of the United Kingdom of Great Britain and Ireland, and British vessels entering into or departing from the ports of the kingdom of Greece, shall not be subject to any other or higher duties or charges whatever, than are or shall be levied on national vessels entering into or departing from such ports, respectively.

2. All articles, the growth, produce, or manufacture of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom of Great Britain and Ireland, and of the kingdom of Greece, respectively, in vessels of the one country, shall, in like manner, be permitted to be imported into and exported from those ports, in vessels of the other country.

3. All articles not the growth, produce, or manufacture of the dominions of her Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland into the ports of the kingdom of Greece in British ships, shall be subject only to the same duties as are payable upon the like articles if imported in Greek vessels. And, reciprocally, a similar rule shall be observed in the ports of the United Kingdom, in respect of all articles not the growth, produce, or manufacture of the dominions of his Majesty the King of Greece, which can legally be imported into the ports of the United Kingdom in Greek vessels.

4. All goods, wares, and merchandise, which can legally be imported into the ports of either country, shall be admitted at the same rate of duty, whether imported in national vessels or in vessels of the other country; and all goods, wares, and merchandise which can legally be exported from the ports of either country, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the one country or in those of the other.

5. Neither of the two governments, and no company, corporation, or agent, acting on behalf of or under the authority of either government, shall, in the purchase of any article which is the growth, produce, or manufacture of one country, and is imported into the other, give, either directly or indirectly, any priority or preference on account of or in reference to the national character of the vessel in which such article may be imported; it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. In order to avoid any misunderstanding with regard to the regulations which may determine the conditions which constitute a British or Greek vessel, it is hereby agreed that all vessels built in the dominions of her Britannic Majesty, and all vessels which, having been captured from an enemy by her Majesty's ships of war, or by the subjects of her said Majesty, furnished with letters of marque by the lords commissioners of the Admiralty, shall have been regularly condemned in one of her said Majesty's prize courts as lawful prize; and all vessels which shall have been condemned in any competent court for a breach of the laws made for the prevention of the slave trade; and which shall be owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels: and that all vessels built in the territories of Greece, or which shall have been captured from an enemy by the ships of war of the Greek government, or by Greek subjects furnished with letters of marque, and shall have been regularly condemned in one of the prize courts of the kingdom of Greece as a lawful prize, and which shall be wholly owned by any subject or subjects of Greece, and whereof the master and three-fourths of the crew are subjects of Greece, shall be considered as Greek vessels.

7. If any ships of war or merchantmen of the one nation should be wrecked on the coasts of the other, all such parts of the said ships of war or merchantmen, or of the furniture or appurtenances thereof, as also all goods and merchandise which shall be saved, or the produce thereof, and likewise the papers found on board the vessel, shall be carefully preserved until they are claimed by the proprietors, or their agents duly authorised, or by the respective consuls in whose district such wreck may have taken place, if such claim be preferred within the period fixed by the laws in force in the states of the high contracting parties; and such consul, proprietor, or agent shall pay only the expenses incurred in the preservation of the property, and the rate of salvage which would have been payable, in the like case, upon a national vessel; and the said goods and merchandise saved from the wreck shall not be liable to pay duties, unless cleared for local consumption.

8. Her Britannic Majesty and his Majesty the King of Greece have agreed, that each of the high contracting parties shall have the right to nominate and appoint consuls-general, consuls, and vice-consuls, in all the ports of the dominions of the other contracting party wherein such consular officers are or may be necessary for the advancement of commerce and for the protection of the trade of the subjects of either crown; and it is expressly stipulated that such consuls, of whatever class, shall, in the country in which they are stationed, be placed upon the footing of the consuls of the most favoured nation.

9. Her Britannic Majesty consents to grant to the subjects of his Majesty the King of Greece, the same facilities and privileges, with respect to the commerce to be carried on in Greek vessels with the British dominions in the East Indies, as are or may be enjoyed under any treaty or act of parliament by the subjects or citizens of the most favoured nation; it being always understood that the laws, rules, regulations, and restrictions, which are or may be applicable to the ships and subjects of any other foreign country, enjoying the like facilities and privileges of trading with the said dominions, shall be equally applicable to the subjects of the king of Greece.

10. All subjects of her Britannic Majesty shall, within the dominions of the King of Greece, be as free as native Greeks to manage their own affairs themselves, or to commit the management of those affairs to any other person whom they may please to appoint as broker, factor, agent, or interpreter; nor shall British subjects be restrained in their choice of persons to act in such capacities, nor be called upon to pay any salary or remuneration to any person whom they shall not choose to employ. Absolute freedom shall also be allowed, in all cases, to the buyer and seller to bargain together, and to fix as to them may seem meet, the price of any goods, wares, or merchandise imported into, or to be exported from, the dominions of the King of Greece, observing the laws and established customs of the country. The same privileges shall be enjoyed in the dominions of her Britannic Majesty by the subjects of his Majesty the King of Greece, under the same conditions.

11. In all that relates to the police of ports, to the lading and unlading of vessels, and to the safety of merchandise, goods, and effects, the local laws and police regulations of each country shall be applied to the subjects of both, without discrimination or distinction; and, throughout the whole extent of the territories of each contracting party, the subjects of both shall enjoy full and entire protection for their persons and property. They shall have free and easy access to the courts of justice in the prosecution and defence of their rights, and shall be at liberty to employ the lawyers, attorneys, or agents, of whatever denomination, whom they may deem the best qualified to maintain and defend their interests: it being understood that they shall conform, in this respect, to the obligations imposed upon native subjects by the laws of the country. In all that concerns the administration of justice, they shall enjoy the same privileges, rights, and franchises, that belong to natives; and in none of these respects shall they be subject to any other duty or tax than is imposed upon natives. They shall be exempted from all com-

pulsory military service, either by sea or by land; no forced loan shall be imposed upon them; and their property shall be subject to no other charge, requisition, or tax, than those to which the property of natives shall be liable.

12. Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and his Majesty the King of Greece, agree that the subjects of the respective countries shall enjoy, within the dominions of the other, the full benefit of the complete toleration and protection for the professors of all religious opinions, which at present exists in both countries by law.

13. It shall be free for the subjects of her Britannic Majesty residing in the dominions of the King of Greece, and for the subjects of his Majesty the King of Greece residing in the dominions of her Britannic Majesty, to dispose of their property, of every description, by will or testament, as they may judge fit; and if any British subject shall die in the territories of the King of Greece, or any Greek subject shall die in the territories of the Queen of Great Britain, without will or testament, the respective consuls or vice-consuls shall exercise the right of administering to the property of subjects of their nation so dying intestate, for the benefit of the legitimate heirs to such property, and of the creditors upon the estate, so far as the laws of the respective countries shall admit.

14. The high contracting parties agree that the stipulations of the present convention shall be applicable to Gibraltar and to the island of Malta.

15. The present convention shall be in force for 10 years from the date of the exchange of the ratifications thereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other at the end of the 10 years above-mentioned, or at any other period after that time; and it is hereby agreed between them, that at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

16. The present convention shall be ratified, and the ratifications shall be exchanged at London, within 3 months from the date hereof.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 4th day of October, in the year of our Lord 1837.

PALMERSTON.
TRICOUPI.

An order in council, dated July 5th, 1838, directs that Greek vessels, entering or departing from the ports of the United Kingdom of Great Britain and Ireland, together with the cargoes on board the same (such cargoes consisting of articles which may be legally imported or exported), shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports, or on similar articles, when imported into or exported from such ports in such vessels; and also, such articles, when exported from the said ports in Greek vessels, shall be entitled to the same bounties, drawbacks, and allowances that are granted on similar articles when exported in British vessels.

MEXICO.

Treaty of Amity, Commerce, and Navigation, between Great Britain and Mexico, signed at London, December 26. 1826.

Article 1. There shall be perpetual amity between the dominions and subjects of his Majesty the King of the United Kingdom of Great Britain and Ireland, and the United States of Mexico, and their citizens.

2. There shall be, between all the territories of his Britannic Majesty in Europe and the territories of Mexico, a reciprocal freedom of commerce. The inhabitants of the two countries, respectively, shall have liberty freely and securely to come, with their ships and cargoes, to all places and rivers in the territories aforesaid, saving only such particular ports to which other foreigners shall not be permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and, generally, the merchants and traders of each nation, respectively, shall enjoy the most complete protection and security for their commerce.

In like manner, the respective ships of war and post-office packets of the 2 countries shall have liberty freely and securely to come to all harbours, rivers, and places, saving only such particular ports (if any) to which other foreign ships of war and packets shall not be permitted to come, to enter into the same, to anchor, and to remain there and refit; subject always to the laws and statutes of the two countries respectively.

By the right of entering the places, ports, and rivers, mentioned in this article, the privilege of carrying on the coasting trade is not understood, in which national vessels only are permitted to engage.

3. His Majesty the King of the United Kingdom of Great Britain and Ireland engages further, that the inhabitants of Mexico shall have the like liberty of commerce and navigation stipulated for in the preceding article, in all his dominions situated out of Europe, to the full extent in which the same is permitted at present, or shall be permitted hereafter, to any other nation.

4. No higher or other duties shall be imposed on the importation into the dominions of his Britannic Majesty, of any article of the growth, produce, or manufacture of Mexico, and no higher or other duties shall be imposed on the importation into the territories of Mexico, of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any other or higher duties or charges be imposed in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation of any articles, the growth, produce, or manufacture of his Britannic Majesty's dominions, or of the said territories of Mexico, to or from the said dominions of his Britannic Majesty, or to or from the said territories of Mexico, which shall not equally extend to all other nations.

5. No higher or other duties or charges on account of tonnage, light or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed, in any of the ports of Mexico, on British vessels, than those payable in the same ports by Mexican vessels *; nor, in the ports of his Britannic Majesty's territories, on Mexican vessels, than shall be payable, in the same ports, on British vessels.

6. The same duties shall be paid on the importation into the territories of Mexico, of any article the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such importation shall be in Mexican * or in British vessels; and the same duties shall be paid on the importation into the dominions of his Britannic Majesty, of any article the growth, produce, or manufacture of Mexico, whether such importation shall be in British or in Mexican vessels. The same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation to Mexico of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such exportation shall be in Mexican or in British vessels; and the same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation of any articles the growth, produce, or manufacture of Mexico, to his Britannic Majesty's dominions, whether such exportation shall be in British or in Mexican vessels.

* See additional articles at the end of this treaty.

7. *In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British or Mexican vessel, it is hereby agreed that all vessels built in the dominions of his* Britannic Majesty, or vessels which shall have been captured from an enemy by his Britannic Majesty's ships of war, or by subjects of his said Majesty furnished with letters of marque by the Lords Commissioners of the Admiralty and regularly condemned in one of his said Majesty's prize courts as a lawful prize, or which shall have been condemned in any competent court for the breach of the laws made for the prevention of the slave trade, and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the territories of Mexico, or captured from the enemy by the ships of Mexico, and condemned under similar circumstances, and which shall be owned by any citizen or citizens thereof, and whereof the master and 3-4ths of the mariners are citizens of Mexico, excepting where the laws provide for any extreme cases, shall be considered as Mexican vessels.

And it is further agreed, that every vessel, qualified to trade as above described under the provisions of this treaty, shall be furnished with a register, passport, or sea letter, under the signature of the proper person authorised to grant the same, according to the laws of the respective countries (the form of which shall be communicated), certifying the name, occupation, and residence of the owner or owners, in the dominions of his Britannic Majesty, or in the territories of Mexico, as the case may be; and that he or they is or are the sole owner or owners, in the proportion to be specified: together with the name, burden, and description of the vessel as to build and measurement, and the several particulars constituting the national character of the vessel, as the case may be.

8. All merchants, commanders of ships, and others, the subjects of his Britannic Majesty, shall have full liberty, in all the territories of Mexico, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes than those employed by Mexicans, nor to pay them any other salary or remuneration than such as is paid, in like cases, by Mexican citizens; and absolute freedom shall be allowed, in all cases, to the buyer and seller, to bargain and fix the price of any goods, imported into or exported from Mexico, as they shall see good, observing the laws and established customs of the country. The same privileges shall be enjoyed in the dominions of his Britannic Majesty, by the citizens of Mexico, under the same conditions.

The citizens and subjects of the contracting parties, in the territories of each other, shall receive and enjoy full and perfect protection for their persons and property, and shall have free and open access to the courts of justice in the said countries, respectively, for the prosecution and defence of their just rights; and they shall be at liberty to employ, in all causes, the advocates, attorneys, or agents of whatever description, whom they may think proper; and they shall enjoy, in this respect, the same rights and privileges therein as native citizens.

9. In whatever relates to the succession to personal estates, by will or otherwise, and the disposal of personal property of every sort and denomination, by sale, donation, exchange, or testament, or in any other manner whatsoever as also the administration of justice, the subjects and citizens of the 2 contracting parties shall enjoy, in their respective dominions and territories, the same privileges, liberties, and rights, as native subjects; and shall not be charged, in any of these respects, with any higher imposts or duties than those which are paid, or may be paid, by the native subjects or citizens of the power in whose dominions or territories they may be resident.

10. In all that relates to the police of the ports, the lading and unlading of ships, the safety of merchandise, goods, and effects, the subjects of his Britannic Majesty, and the citizens of Mexico, respectively, shall be subject to the local laws and regulations of the dominions and territories in which they may reside. They shall be exempted from all compulsory military service, whether by sea or land. No forced loans shall be levied upon them; nor shall their property be subject to any other charges, requisitions, or taxes, than such as are paid by the native subjects or citizens of the contracting parties in their respective dominions.

11. It shall be free for each of the 2 contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but, before any consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of consuls such particular places as either of them may judge fit to be excepted. The Mexican diplomatic agents and consuls shall enjoy, in the dominions of his Britannic Majesty, whatever privileges, exceptions, and immunities are or shall be granted to agents of the same rank belonging to the most favoured nation; and, in like manner, the diplomatic agents and consuls of his Britannic Majesty in the Mexican territories shall enjoy, according to the strictest reciprocity, whatever privileges, exceptions, and immunities are or may be granted to the Mexican diplomatic agents and consuls in the dominions of his Britannic Majesty.

12. For the better security of commerce between the subjects of his Britannic Majesty and the citizens of the Mexican States, it is agreed that if, at any time, any interruption of friendly intercourse, or any rupture, should unfortunately take place between the 2 contracting parties, the merchants residing upon the coasts shall be allowed 6 months, and those of the interior a whole year, to wind up their accounts, and dispose of their property: and a safe-conduct shall be given them to embark at the port which they shall themselves select. All those who are established in the respective dominions and territories of the 2 contracting parties, in the exercise of any trade or special employment, shall have the privilege of remaining and continuing such trade and employment therein, without any manner of interruption, in full enjoyment of their liberty and property, as long as they behave peaceably, and commit no offence against the laws: and their goods and effects, of whatever description they may be, shall not be liable to seizure or sequestration, or to any other charges or demands than those which may be made upon the like effects or property belonging to the native subjects or citizens of the respective dominions or territories in which such subjects or citizens may reside. In the same case, debts between individuals, public funds, and the shares of companies shall never be confiscated, sequestrated, or detained.

13. The subjects of his Britannic Majesty residing in the Mexican territories shall enjoy, in their houses, persons, and properties, the protection of the government; and continuing in possession of what they now enjoy, they shall not be disturbed, molested, or annoyed, in any manner, on account of their religion, provided they respect that of the nation in which they reside, as well as the constitution, laws, and customs of the country. They shall continue to enjoy, to the full, the privilege already granted to them of burying, in the places already assigned for that purpose, such subjects of his Britannic Majesty as may die within the Mexican territories; nor shall the funerals and sepulchres of the dead be disturbed in any way, or upon any account. The citizens of Mexico shall enjoy, in all the dominions of his Britannic Majesty, the same protection, and shall be allowed the free exercise of their religion, in public or private, either within their own houses, or in the chapels and places of worship set apart for that purpose.

14. The subjects of his Britannic Majesty shall on no account or pretext whatsoever be disturbed or molested in the peaceable possession and exercise of whatever rights, privileges, and immunities they have at any time enjoyed within the limits described and laid down in a convention signed between his said Majesty and the King of Spain, on the 14th of July, 1786; whether such rights, privileges, and immunities shall be derived from the stipulations of the said convention, or from any other concession which may at any time have been made by the King of Spain, or his predecessors, to British subjects and settlers residing and following their lawful occupations within the limits aforesaid: the 2 contracting parties reserving, however, for some more fitting opportunity, the further arrangements on this article.

15. The government of Mexico engages to co-operate with his Britannic Majesty for the total abolition

of the slave trade, and to prohibit all persons inhabiting within the territories of Mexico, in the most effectual manner, from taking any share in such trade.

16. The 2 contracting parties reserve to themselves the right of treating and agreeing hereafter, from time to time, upon such other articles as may appear to them to contribute still further to the improvement of their mutual intercourse, and the advancement of the general interests of their respective subjects and citizens; and such articles as may be so agreed upon, shall, when duly ratified, be regarded as forming a part of the present treaty, and shall have the same force as those now contained in it.

17. The present treaty shall be ratified, and the ratifications shall be exchanged at London within the space of 6 months, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of December, in the year of our Lord 1826.

WILLIAM HUSKISSON. SEBASTIAN CAMACHO.
JAMES J. MORIER.

Additional Articles.

1. Whereas, in the present state of Mexican shipping, it would not be possible for Mexico to receive the full advantage of the reciprocity established by the articles 5, 6, 7. of the treaty signed this day, if that part of the 7th article which stipulates that, in order to be considered as a Mexican ship, a ship shall actually have been *built* in Mexico, should be strictly and literally observed, and immediately brought into operation; it is agreed that, for the space of 10 years, to be reckoned from the date of the exchange of the ratifications of this treaty, any ships, *wheresoever built*, being *bonâ fide* the property of and wholly owned by one or more citizens of Mexico, and whereof the master and 3-4ths of the mariners, at least, are also natural-born citizens of Mexico, or persons domiciliated in Mexico, by act of the government, as lawful subjects of Mexico, to be certified according to the laws of that country, shall be considered as Mexican ships; his Majesty the King of the United Kingdom of Great Britain and Ireland reserving to himself the right, at the end of the said term of 10 years, to claim the principle of reciprocal restriction stipulated for in the article 7. above referred to, if the interests of British navigation shall be found to be prejudiced by the present exception to that reciprocity, in favour of Mexican shipping.

2. It is further agreed that, for the like term of 10 years, the stipulations contained in articles 5. and 6. of the present treaty shall be suspended; and in lieu thereof, it is hereby agreed that, until the expiration of the said term of 10 years, British ships entering into the ports of Mexico from the United Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, and all articles the growth, produce, or manufacture of the United Kingdom, or of any of the said dominions, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable, in the said ports, by the ships, and the like goods, the growth, produce, or manufacture of the most favoured nation; and, reciprocally, it is agreed, that Mexican ships entering into the ports of the United Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, from any port of the States of Mexico, and all articles the growth, produce, or manufacture of the said States, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable in the said ports, by the ships, and the like goods, the growth, produce, or manufacture of the most favoured nation; and that no higher duties shall be paid, or bounties or drawbacks allowed, on the exportation of any article the growth, produce, or manufacture of the dominions of either country, in the ships of the other, than upon the exportation of the like articles in the ships of any other foreign country.

It being understood that, at the end of the said term of 10 years, the stipulations of the said 5th and 6th articles shall, from thenceforward, be in full force between the two countries.

The present additional articles shall have the same force and validity as if they were inserted, word for word, in the treaty signed this day. They shall be ratified, and the ratifications shall be exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of December, in the year of our Lord 1826.

WILLIAM HUSKISSON. SEBASTIAN CAMACHO.
JAMES J. MORIER.

An order in council, dated September 3. 1827, orders, that vessels of the United States of Mexico, entering the ports of the United Kingdom of Great Britain and Ireland in ballast, or laden direct from any of the ports of Mexico, or departing from the ports of the said United Kingdom, together with the cargoes on board the same, such cargoes consisting of articles which may be legally imported or exported, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports, or on similar articles when imported into or exported from such ports in British vessels: and also such articles, when exported from the said ports in vessels of the United States of Mexico respectively, shall be entitled to the same bounties, drawbacks, and allowances that are granted on similar articles when exported in British vessels.

N.B.—Treaties similar to the above have been negotiated with Colombia, Buenos Ayres, &c.

NETHERLANDS.

Treaty of Commerce and Navigation between her Majesty and the King of the Netherlands, signed at the Hague, October 27th, 1837.

Article 1. There shall be reciprocal liberty of commerce and navigation between and amongst the subjects of the two high contracting parties; and the subjects of the two sovereigns respectively shall not pay in the ports, harbours, roads, cities, towns, or places whatsoever in either kingdom, any other or higher duties, taxes, or imposts, under whatsoever names designated or included, than those which are there paid by the subjects of the most favoured nation: and the subjects of each of the high contracting parties shall enjoy the same rights, privileges, liberties, favours, immunities, and exemptions, in matters of commerce and navigation, that are granted, or may hereafter be granted, in either kingdom, to the subjects of the most favoured nation. No duty of customs or other impost shall be charged upon any goods the produce of one country, upon importation, by sea or by land, from such country into the other, higher than the duty or impost charged upon goods of the same kind, the produce of or imported from any other country; and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and his Majesty the King of the Netherlands, do hereby bind and engage themselves, not to grant any favour, privilege, or immunity, in matters of commerce and navigation, to the subjects of any other state, which shall not be also, and at the same time, extended to the subjects of the other high contracting party, gratuitously, if the concession in favour of that other state shall have been gratuitous; and on giving as nearly as possible the same compensation or equivalent, in case the concession shall have been conditional.

2. No duties of tonnage, harbour, lighthouses, pilotage, quarantine, or other similar or corresponding duties, of whatever nature or under whatever denomination, shall be imposed in either country upon the vessels of the other, in respect of voyages between the two countries, if laden, or in respect of any voyage if in ballast, which shall not be equally imposed, in the like cases, on national vessels; and in neither country shall any duty, charge, restriction, or prohibition be imposed upon, nor any drawback, bounty, or allowance be withheld from, any goods imported from or exported to the other country, in

the vessel of that other country, which shall not be equally imposed upon or withheld from such goods, when so imported or exported in national vessels.

3. In order to avoid any misunderstanding with regard to the regulations that determine the conditions which constitute a British or a Dutch vessel, it is hereby agreed, that all vessels built in the dominions of her Britannic Majesty, and all vessels which, having been captured from an enemy by her Majesty's ships of war, or by the subjects of her said Majesty, furnished by the lords commissioners of the Admiralty with letters of marque, shall have been regularly condemned in one of her said Majesty's prize courts as a lawful prize; and all vessels which shall have been condemned in any competent court, for a breach of the laws made for the prevention of the slave trade; shall, provided they are owned, navigated, and registered according to the laws of Great Britain, be considered as British vessels; and that all vessels built in the territories of the King of the Netherlands, or which, having been captured from an enemy by his Majesty's ships of war, or by the subjects of his said Majesty furnished with letters of marque, shall have been regularly condemned in one of the prize courts of the kingdom of the Netherlands as a lawful prize; and all vessels which shall have been condemned in any competent court, for a breach of the laws made for the prevention of the slave trade, shall, provided they are wholly owned by any subject or subjects of the King of the Netherlands, and provided that the master and three-fourths of the crew are Netherlands subjects, be considered as Netherland vessels.

4. It is further agreed, that in all cases where, in either kingdom, the duty to be levied upon any goods imported, shall be, not a fixed rate, but a proportion of the value of the goods, such *ad valorem* duty shall be ascertained and secured in the following manner; that is to say, the importer shall, on making his entry for the payment of duty at the custom-house of either country, sign a declaration, stating the value of the goods at such amount as he shall deem proper; and in case the officers of customs should be of opinion that such valuation is insufficient, he or they shall be at liberty to take the goods, on paying to the importer the value according to his declaration, together with the addition of 10 per cent., and on returning the duty paid.

The amount of these sums to be paid by the officers on the delivery of the goods to them, which must be within 15 days from the first detention of the goods.

5. Forasmuch as all merchandise, of whatever origin, whether admissible for home consumption or not, may be received and warehoused in all the ports of the United Kingdom of Great Britain and Ireland, which are by law appointed to be warehousing ports for such articles, pending the entry of the same either for home consumption or for re-exportation, as the case may be, under the regulations appointed for this purpose, and without such articles being liable, in the meantime, to the payment of any of the duties with which they would be charged, if upon arrival they were entered for consumption within the United Kingdom; in like manner, the King of the Netherlands consents and agrees, that all the ports of his Netherland Majesty's dominions, which are now or which shall hereafter become warehousing ports by law, shall be free ports for the reception and warehousing of all merchandise imported in British ships, and of all articles whatever, the produce or manufacture of the British dominions, in whatever ships imported, either for home consumption or for re-exportation, as the case may be; and the articles thus received and warehoused, subject to due regulations, shall not be liable, in the meantime, to any of the duties with which they would be charged, if they were entered for consumption on their arrival in the Netherlands.

6. If any ships of war or merchant vessels should be wrecked on the coasts of either of the high contracting parties, such ships or vessels, or all parts thereof, and all furniture and appurtenances belonging thereunto, and all goods and merchandise which shall be saved therefrom, or the produce thereof, if sold, shall be faithfully restored to the proprietors, upon being claimed by them or by their duly authorised factors; and if there are no such proprietors or factors on the spot, then the said goods and merchandise, or the proceeds thereof, as well as all the papers found on board such wrecked vessels, shall be delivered to the British or Netherland consul in whose district the wreck may have taken place; and such consul, proprietors, or factors shall pay only the expenses incurred in the preservation of the property, together with the rate of salvage which would have been payable in the like case of a wreck of a national vessel; and the goods and merchandise saved from the wreck shall not be subject to duties, unless cleared for home consumption.

7. The present treaty shall be in force for the term of 10 years from the date hereof, and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years.

And it is hereby agreed between them, that at the expiration of 12 months after such notice shall have been received by either party from the other, this treaty, and all the provisions thereof, shall altogether cease and determine.

8. The present treaty shall be ratified, and the ratifications shall be exchanged at the Hague within one month from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at the Hague, this 27th day of October, in the year of our Lord 1837.

VERSTOLK DE SOELEN. EDWARD CROMWELL DISBROWE.

Declaration made by the Plenipotentiary of her Britannic Majesty, on the exchange of the Ratification of the preceding Treaty.

In proceeding to the exchange of the ratifications of the treaty of commerce and navigation between her Majesty the Queen of the United Kingdom of Great Britain and Ireland and his Majesty the King of the Netherlands, concluded and signed at the Hague on the 27th of October, 1837, the undersigned, plenipotentiary of her Britannic Majesty, is commanded by her Majesty to explain and declare that her Majesty has ratified the said treaty, notwithstanding that the preamble contains the words "in Europe," which her Majesty's government had objected to as redundant; but that her Majesty considers those words to be without meaning, so far as her Majesty's dominions are concerned; because those words appear to establish a distinction between a kingdom in Europe and a kingdom out of Europe, whereas, by the word "kingdom," in the said treaty, her Majesty, as far as regards her own territories, means only the United Kingdom of Great Britain and Ireland, which is well known to be in Europe, and does not mean any of the possessions of her Majesty's crown beyond sea. Her Majesty's ratification of the said treaty is exchanged under the explicit declaration and understanding above-mentioned.

Done at the Hague, the 22d day of November, 1837.

EDWARD CROMWELL DISBROWE.

Counter-Declaration of the Plenipotentiary of his Majesty the King of the Netherlands.

The plenipotentiary of her Britannic Majesty having, previously to the exchange of the ratifications of the treaty of commerce and navigation, concluded on the 27th of October 1837, between his Majesty the King of the Netherlands and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, delivered to the undersigned, plenipotentiary of his Majesty the King of the Netherlands, a declaration stating that her Britannic Majesty had not in view in the said treaty the possessions of her crown beyond sea; the undersigned is charged by his Majesty the King of the Netherlands to declare that his said Majesty accepts the above-mentioned declaration, and that he likewise, on his part, has not meant to comprise in the said treaty the possessions of his crown beyond sea.

With regard to the observations made as to the use of the words "in Europe," the cabinet of the

Hague is of opinion, that their interpretation is to be found in the circumstance, that the phrase "in Europe" applies to the word "ports," and not to the word "kingdom."

The Hague, the 22d of November, 1837.

VERSTOLK DE SOELEN.

Treaty between his Britannic Majesty and the King of the Netherlands, respecting Territories and Commerce in the East Indies, signed at London, March 17. 1824.

Article 1. The high contracting parties engage to admit the subjects of each other to trade with their respective possessions in the Eastern Archipelago, and on the continent of India and in Ceylon, upon the footing of the most favoured nation; their respective subjects conforming themselves to the local regulations of each settlement.

2. The subjects and vessels of one nation shall not pay, upon importation or exportation, at the ports of the other in the Eastern seas, any duty at a rate beyond the double of that at which the subjects and vessels of the nation to which the port belongs are charged.

The duties paid on exports or imports at a British port, on the continent of India, or in Ceylon, on Dutch bottoms, shall be arranged so as in no case to be charged at more than double the amount of the duties paid by British subjects, and on British bottoms.

In regard to any article upon which no duty is imposed, when imported or exported by the subjects or on the vessels of the nation to which the port belongs, the duty charged upon the subjects or vessels of the other shall in no case exceed 6 per cent.

3. The high contracting parties engage, that no treaty hereafter made by either, with any native power in the Eastern seas, shall contain any article tending, either expressly, or by the imposition of unequal duties, to exclude the trade of the other party from the ports of such native power; and that if, in any treaty now existing on either part, any article to that effect has been admitted, such article shall be abrogated upon the conclusion of the present treaty.

It is understood that, before the conclusion of the present treaty, communication has been made by each of the contracting parties to the other, of all treaties or engagements subsisting between each of them, respectively, and any native powers in the Eastern seas; and that the like communication shall be made of all such treaties concluded by them, respectively, hereafter.

4. Their Britannic and Netherland Majesties engage to give strict orders, as well to their civil and military authorities, as to their ships of war, to respect the freedom of trade, established by articles 1, 2, and 3.; and in no case to impede a free communication of the natives in the Eastern Archipelago, with the ports of the 2 governments, respectively, or of the subjects of the 2 governments with the ports belonging to native powers.

5. Their Britannic and Netherland Majesties, in like manner, engage to concur effectually in repressing piracy in those seas: they will not grant either asylum or protection to vessels engaged in piracy, and they will in no case permit the ships or merchandise captured by such vessels, to be introduced, deposited, or sold, in any of their possessions.

6. It is agreed that orders shall be given by the 2 governments, to their officers and agents in the East, not to form any new settlement on any of the islands in the Eastern seas, without previous authority from their respective governments in Europe.

7. The Moluccа Islands, and especially Amboyna, Banda, Ternate, and their immediate dependencies, are excepted from the operation of the 1st, 2d, 3d, and 4th articles, until the Netherland government shall think fit to abandon the monopoly of spices; but if the said government shall, at any time previous to such abandonment of the monopoly, allow the subjects of any power, other than the Asiatic native power, to carry on any commercial intercourse with the said islands, the subjects of his Britannic Majesty shall be admitted to such intercourse, upon a footing precisely similar.

8. His Netherland Majesty cedes to his Britannic Majesty all his establishment on the continent of India; and renounces all privileges and exemptions enjoyed or claimed in virtue of those establishments.

9. The factory of Fort Marlborough, and all the English possessions on the island of Sumatra, are hereby ceded to his Netherland Majesty: and his Britannic Majesty further engages that no British settlement shall be formed on that island, nor any treaty concluded by British authority, with any native prince, chief, or state therein.

10. The town and fort of **Malacca, and its dependencies**, are hereby ceded to his Britannic Majesty; and his Netherland Majesty engages, for himself and his subjects, never to form any establishment on any part of the peninsula of Malacca, or to conclude any treaty with any native prince, chief, or state therein.

13. All the colonies, possessions, and establishments which are ceded by the preceding articles, shall be delivered up to the officers of the respective sovereigns on the 1st of March, 1825. The fortifications shall remain in the state in which they shall be at the period of the notification of this treaty in India; but no claim shall be made, on either side, for ordnance, or stores of any description, either left or removed by the ceding power, nor for any arrears of revenue, or any charge of administration whatever.

16. It is agreed that all accounts and reclamations, arising out of the restoration of Java, and other possessions, to the officers of his Netherland Majesty in the East Indies,—as well those which were the subject of a convention made at Java on the 24th of June, 1817, between the commissioners of the 2 nations, as all others,—shall be finally and completely closed and satisfied, on the payment of the sum of 100,000*l.*, sterling money, to be made in London on the part of the Netherlands, before the expiration of the year 1825.

17. The present treaty shall be ratified, and the ratifications exchanged at London, within 3 months from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and affixed thereunto the seals of their arms.

Done at London, the 17th day of March, in the year of our Lord 1824.

GEORGE CANNING. CHARLES WATKINS WILLIAMS WYNN. H. FAGEL. A. R. FALCK.

PERSIA.

Treaty of Commerce between Her Majesty and the Shah of Persia, signed at Tehran, October 28. 1841.

Article 1. The merchants of the two mighty states are reciprocally permitted and allowed to carry into each other's territories their goods and manufactures of every description, and to sell or exchange them in any part of their respective countries; and on the goods which they import or export, custom duties shall be levied; that is to say, on entering the country the same amount of custom duties shall be levied, once for all, that is levied on merchandise imported by the merchants of the most favoured European nations; and at the time of going out of the country, the same amount of custom duties which is levied on the merchandise of merchants of the most favoured European nations shall be levied from the merchants, subjects of the high contracting parties; and except this, no claim shall be made upon the merchants of the two states in each other's dominions on any pretext or under any denomination; and the merchants or persons connected with or dependent upon the high contracting parties in each other's dominions, mutually, shall receive the same aid and support, and the same respect, which are received by the subjects of the most favoured nations.

2. As it is necessary, for the purpose of attending to the affairs of the merchants of the two parties respectively, that from both governments commercial agents should be appointed to reside in stated places; it is therefore arranged that two commercial agents on the part of the British government shall reside, one

in the capital, and one in Tabreez, and in those places only, and on this condition, that he who shall reside at Tabreez, and he alone, shall be honoured with the privileges of consul-general; and as for a series of years a resident of the British government has resided at Bushire, the Persian government grants permission that the said resident shall reside there as heretofore. And, in like manner, two commercial agents shall reside on the part of the Persian government, one in the capital of London, and one in the port of Bombay, and shall enjoy the same rank and privileges which the commercial agents of the British government shall enjoy in Persia.

3. This commercial treaty, we, the plenipotentiaries of the high contracting parties, have agreed to; and in witness thereof, have set thereunto our hands and seals, at the capital city of Tehran, this twenty-eighth day of October, in the year of our Lord 1841, corresponding to the 12th day of the month Ramazan, in the year of the Hejjira 1257.

JOHN M'NEILL.
MEERZA ABUL HASSAN KHAN.

PERU-BOLIVIAN CONFEDERATION.

Treaty of Amity, Commerce, and Navigation between His Majesty and the Peru-Bolivian Confederation, together with 2 additional Articles thereunto annexed.

Article 1. There shall be perpetual amity between the dominions and subjects of his Majesty the King of the United Kingdom of Great Britain and Ireland, his heirs and successors, and the Peru-Bolivian confederation and its citizens.

2. There shall be, between all the territories of his Britannic Majesty in Europe, and the territories of the Peru-Bolivian confederation, a reciprocal freedom of commerce. The subjects and citizens of the two countries respectively shall have liberty freely and securely to come with their ships and cargoes to all places, ports, and rivers in the territories aforesaid, to which other foreigners are or may be permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purpose of their commerce; and, generally, the merchants and traders of each nation, respectively, shall enjoy the most complete protection and security for their commerce; subject always to the laws and statutes of the two countries respectively.

In like manner, the respective ships of war and post-office packets of the 2 countries shall have liberty freely and securely to come to all harbours, rivers, and places to which other foreign ships of war and packets are or may be permitted to come, to enter into the same, to anchor, and to remain there and refit; subject always to the laws and statutes of the two countries respectively.

By the right of entering the places, ports, and rivers mentioned in this article, the privilege of carrying on the coasting trade is not understood, in which national vessels only are permitted to engage.

3. His Majesty the King of the United Kingdom of Great Britain and Ireland engages further, that the inhabitants of the Peru-Bolivian confederation shall have the like liberty of commerce and navigation stipulated for in the preceding article, in all his dominions situated out of Europe, to the full extent in which the same is permitted at present, or may be permitted hereafter, to any other nation.

4. No higher or other duties shall be imposed on the importation into the dominions of His Britannic Majesty of any article of the growth, produce, or manufacture of the Peru-Bolivian confederation, and no higher or other duties shall be imposed on the importation into the territories of the Peru-Bolivian confederation of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any other or higher duties or charges be imposed in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories or dominions of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation or importation of any article, the growth, produce, or manufacture of his Britannic Majesty's dominions, or of the said territories of the Peru-Bolivian confederation, to or from the said dominions of his Britannic Majesty, or to or from the said territories of the Peru-Bolivian confederation, which shall not equally extend to all other nations.

5. No higher or other duties or charges on account of tonnage, light or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed in any of the ports of the Peru-Bolivian confederation, on British vessels, than those payable, in the same ports, by Peru-Bolivian vessels; nor in the ports of his Britannic Majesty's territories, on Peru-Bolivian vessels, than shall be payable in the same ports on British vessels.

6. The same duties shall be paid on the importation into the territories of the Peru-Bolivian confederation of any article the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such importation shall be in Peru-Bolivian or in British vessels; and the same duties shall be paid on the importation into the dominions of his Britannic Majesty, of any article the growth, produce, or manufacture of the territories of the Peru-Bolivian confederation, whether such importation shall be in British or in Peru-Bolivian vessels. The same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation to the ports of the Peru-Bolivian confederation of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such exportation shall be in Peru-Bolivian or British vessels; and the same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation of any articles the growth, produce, or manufacture of the Peru-Bolivian confederation, to his Britannic Majesty's dominions, whether such exportation shall be in British or in Peru-Bolivian vessels.

7. In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British or Peru-Bolivian vessel, it is hereby agreed that no ship shall be admitted to be a ship of either country, unless she shall be of the built of such country, or have been made prize of war to such country, and condemned as such; or have been forfeited to such country under any law of the same made for the prevention of the slave trade, and condemned in any competent court as forfeiture for a breach of such law; nor unless she be navigated by a master who is a subject of such country, and by a crew of whom ¾ at least are subjects of such country; nor unless she be wholly owned by subjects of such country, usually residing therein, or under the dominion thereof; excepting where the laws provide for any extreme cases. And it is further agreed, that no ship, admitted to be a ship of either country, shall be qualified to trade as above described, under the provisions of this treaty, unless furnished with a register, passport, or sea-letter, under the signature of the proper person authorised to grant the same, according to the laws of the respective countries, (the form of which shall be communicated), certifying the name, occupation, and residence of the owner or owners, in the dominions of his Britannic Majesty, or in the territories of the Peru-Bolivian confederation, as the case may be; and that he or they is or are the sole owner or owners, in the proportion to be specified; together with the name, burden, and description of the vessel, as to built and measurement, and the several particulars constituting the national character of the vessel, as the case may be.

8. All merchants, commanders of ships, and others, the subjects of his Britannic Majesty, shall have full liberty, in all the territories of the Peru-Bolivian confederation, to manage their own affairs, themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes than those employed by Peru-Bolivians, nor to pay them any other salary or remuneration than such as is paid, in like cases, by Peru-Bolivian citizens; and absolute freedom shall be allowed, in all cases, to the buyer and seller to bargain and fix the price of any goods, wares, or merchandise imported into or exported from, the Peru-Bolivian confederation, as they shall see good, observing the laws and established customs of the country.

The same privileges shall be enjoyed in the dominions of his Britannic Majesty, by the citizens of the Peru-Bolivian confederation, under the same conditions.

The citizens and subjects of the contracting parties, in the territories of each other, shall receive and enjoy full and perfect protection for their persons and property, and shall have free and open access to the courts of justice in the said countries respectively, for the prosecution and defence of their just rights; and they shall be at liberty to employ, in all causes, the advocates, attorneys, or agents, of whatever description, whom they may think proper; and they shall enjoy, in this respect, the same rights and privileges therein as native citizens.

9. In whatever relates to the police of the ports, the lading and unlading of ships, the safety of merchandise, goods, and effects, the succession to personal estates by will or otherwise, and the disposal of personal property of every sort and denomination, by sale, donation, exchange, or testament, or in any other manner whatsoever, as also the administration of justice, the subjects and citizens of the two contracting parties shall enjoy, in their respective dominions and territories, the same privileges, liberties, and rights, as native subjects; and shall not be charged, in any of these respects, with any higher imposts or duties than those which are paid, or may be paid, by the native subjects or citizens of the power in whose dominions or territories they may be resident, subject of course to the local laws and regulations of such dominions or territories. In the event of any subject or citizen of either of the two contracting parties dying without will or testament, in the dominions or territories of the said contracting parties, the consul-general or consul of the said nation, or, in his absence, his representative, shall have the right to nominate curators, to take charge of the property of the deceased, so far as the laws of each country will permit, for the benefit of his lawful heirs and creditors, without interference, giving convenient notice thereof to the authorities of the country.

10. The subjects of his Britannic Majesty residing in the Peru-Bolivian confederation, and the natives and citizens of the confederation residing in the dominions of his Britannic Majesty, shall be exempted from all compulsory military service whatsoever, whether by sea or land; and from all forced loans or military exactions or requisitions; neither shall they be compelled, under any pretext whatsoever, to pay any other ordinary charges, requisitions, or taxes, greater than those that are paid by native subjects or citizens of the territories of the contracting parties, respectively.

11. It shall be free for each of the two contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but before any consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of consuls such particular places as either of them may judge fit to be excepted. The diplomatic agents and consuls of the Peru-Bolivian confederation shall enjoy, in the dominions of his Britannic Majesty, whatever privileges, exceptions, and immunities are or shall be granted to agents of the same rank belonging to the most favoured nation; and in like manner, the diplomatic agents and consuls of his Britannic Majesty in the territories of the Peru-Bolivian confederation shall enjoy, according to the strictest reciprocity, whatever privileges, exceptions, and immunities are or may be granted to the diplomatic agents and consuls of the most favoured nation in the territories of the Peru-Bolivian confederation.

12. For the better security of commerce between the subjects of his Britannic Majesty and the citizens of the Peru-Bolivian confederation, it is agreed that if, at any time, any interruption of friendly intercourse or any rupture should unfortunately take place between the two contracting parties, the subjects or citizens of either of the two contracting parties residing upon the coasts shall be allowed six months, and those residing in the interior a whole year, to wind up their accounts and dispose of their property; and a safe conduct shall be given them to embark at the port which they shall themselves select. All such subjects or citizens of either of the two contracting parties, who are established in the dominions or territories of the other in the exercise of any trade or special employment, shall have the privilege of remaining and continuing such trade and employment therein without any manner of interruption, in full enjoyment of their liberty and property, as long as they behave peaceably, and commit no offence against the laws; and their goods and effects, of whatever description they may be, whether in their own custody, or intrusted to individuals or to the state, shall not be liable to seizure or sequestration, or to any other charges or demands, than those which may be made upon the like effects or property belonging to the native subjects or citizens of the dominions or territories in which such subjects or citizens may reside. In the same case, debts between individuals, public funds, and the shares of companies, shall never be confiscated, sequestrated, or detained.

13. The subjects of his Britannic Majesty, and the citizens of the Peru-Bolivian confederation, respectively, shall enjoy, in their houses, persons, and properties, the protection of the government; and continue in possession of the privileges which they now enjoy. And the subjects of his Britannic Majesty residing in the territories of the Peru-Bolivian confederation shall furthermore enjoy the most perfect and entire security of conscience, without being annoyed, prevented, or disturbed on account of their religious belief. Neither shall they be annoyed, molested, or disturbed in the proper exercise of their religion, provided that this take place in private houses, and with the decorum due to divine worship, with due respect to the laws, usages, and customs of the country. In the like manner the citizens of the Peru-Bolivian confederation shall enjoy, within all the dominions of his Britannic Majesty, a perfect and unrestrained liberty of conscience, and of exercising their religion publicly or privately, within their own dwelling-houses, or in the chapels and places of worship appointed for that purpose, agreeably to the system of toleration established in the dominions of his said Majesty. Liberty shall also be granted to bury the subjects or citizens of either of the two contracting parties, who may die in the dominions or territories of the other, in burial-places of their own, which, in the same manner, they may freely establish and maintain; nor shall the funerals or sepulchres of the dead be disturbed in any way or upon any account.

14. The government of the Peru-Bolivian confederation engages to co-operate with his Britannic Majesty for the total abolition of the slave trade, and to prohibit all persons inhabiting within the territories of the Peru-Bolivian confederation, or subject to their jurisdiction, in the most effectual manner, and by the most solemn laws, from taking any share in such trade.

15. The two contracting parties reserve to themselves the right of treating and of agreeing hereafter, from time to time, upon such other articles as may appear to them to contribute still further to the improvement of their mutual intercourse, and to the advancement of the general interests of their respective subjects and citizens; and such articles as may be so agreed upon shall, when duly ratified, be regarded as forming a part of the present treaty, and shall have the same force as those now contained in it.

16. The present treaty shall be ratified, and the ratification shall be exchanged in London or at Lima, within the space of twenty months or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at Lima this 5th day of June, in the year of our Lord 1837.

BELFORD HINTON WILSON.
LORENZO BAZO.

Additional Articles.

Article 1. Whereas, in the present state of Peru-Bolivian shipping, it would not be possible for the said confederation to receive the full advantage of the reciprocity established by the articles 5, 6, and 7. of the treaty signed this day, if that part of the 7th article which stipulates that, in order to be considered as a Peru-Bolivian ship, a ship shall actually have been built in the Peru-Bolivian confederation,

should be strictly and literally observed, and immediately brought into operation; it is agreed that, for the space of 15 years, to be reckoned from the date of the exchange of the ratifications of this treaty, any ships, wheresoever built, being *bonâ fide* the property of and wholly owned by one or more citizens of the Peru-Bolivian confederation, and whereof the masters and three-fourths of the mariners, at least, are also natural-born citizens of the Peru-Bolivian confederation, or persons domiciliated in the Peru-Bolivian confederation by act of the government, as lawful subjects of the Peru-Bolivian confederation, to be certified according to the laws of that country, shall be considered as Peru-Bolivian ships; his Majesty the King of the United Kingdom of Great Britain and Ireland reserving to himself the right, at the end of the said term of 15 years, to claim the principle of reciprocal restriction stipulated for in the article 7. above referred to, if the interests of British navigation shall be found to be prejudiced by the present exception to that reciprocity in favour of Peru-Bolivian shipping.

2. It is further agreed that, for the like term of 15 years, the stipulations contained in the articles 5. and 6. of the present treaty shall be suspended: and, in lieu thereof, it is hereby agreed that, until the expiration of the said term of fifteen years, British ships entering into the ports of the Peru-Bolivian confederation, from the U. Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, and all articles, the growth, produce, or manufacture of the U. Kingdom, or of any of the said dominions, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable, in the said ports, by the ships, and the like goods the growth, produce, or manufacture of the most favoured nation; and reciprocally, it is agreed that Peru-Bolivian ships entering into the ports of the U. Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, from any port of the Peru-Bolivian confederation, and all articles, the growth, produce, or manufacture of the said confederation, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable, in the said ports, by the ships, and the like goods, the growth, produce, or manufacture of the most favoured nation; and that no higher duties shall be paid, or bounties or drawbacks allowed, on the exportation of any article, the growth, produce, or manufacture of the dominions of either country, in the ships of the other, than upon the exportation of the like articles in the ships of any other foreign country.

It being understood that, at the end of the said term of 15 years, the stipulations of the said 5th and 6th articles shall from thenceforward be in full force between the two countries.

The present additional articles shall have the same force and validity as if they were inserted, word for word, in the treaty signed this day. They shall be ratified, and the ratification shall be exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at Lima, 5th June, 1837.

BELFORD HINTON WILSON.
LORENZO BAZO.

PORTUGAL.

Treaty of Commerce between Great Britain and Portugal, signed at Lisbon, December 27. 1703.

Article 1. His Sacred Royal Majesty of Portugal promises, both in his own name and that of his successors, to admit, for ever hereafter, into Portugal, the woollen cloths, and the rest of the woollen manufactures of the Britons, as was accustomed till they were prohibited by the laws; nevertheless, upon this condition;

2. That is to say, that her Sacred Royal Majesty of Great Britain shall, in her own name and that of her successors, be obliged for ever hereafter to admit the wines of the growth of Portugal into Britain; so that at no time, whether there shall be peace or war between the kingdoms of Britain and France, any thing more shall be demanded for these wines, by the name of custom or duty, or by whatsoever other title, directly or indirectly, whether they shall be imported into Great Britain in pipes or hogsheads, or other casks, than what shall be demanded from the like quantity or measure of French wine, deducting or abating a third part of the custom or duty: but if at any time this deduction or abatement of customs which is to be made as aforesaid, shall in any manner be attempted and prejudiced, it shall be just and lawful for his Sacred Royal Majesty of Portugal again to prohibit the woollen cloths, and the rest of the British woollen manufactures.

3. The most excellent Lords the plenipotentiaries promise, and take upon themselves, that their above named masters shall ratify this treaty, and that within the space of 2 months the ratifications shall be exchanged.

Given at Lisbon, the 27th of December, 1703.

JOHN METHUEN. MARCHIS ALEGRETENSIS.

Treaty of Commerce and Navigation between her Majesty and the Queen of Portugal, signed at Lisbon, July 3. 1842.

Article 1. The subjects of each of the high contracting parties shall, in the dominions of the other, enjoy all the privileges, immunities, and protection enjoyed by the subjects of the most favoured nation. They shall be entitled to travel, to reside, to occupy dwellings and warehouses, and to dispose of their personal, leasehold, and all other property lawfully held by them, by sale, gift, exchange, or will, or in any other way whatever, without the smallest let, and without any hindrance whatever.

They shall be exempt from forced loans, or any other extraordinary contributions not general, or not by law established, and from all military service by sea or by land. Their dwellings, warehouses, and every thing belonging thereto, shall be respected, and shall not be subjected to any arbitrary visit or search. No examination or inspection shall be made of their books, papers, or accounts, without the legal sentence of a competent court or judge.

The assessment of the amount to be paid by the British subjects in Portugal and its dominions for *mancio* or *decima industrial*, and from which they have hitherto enjoyed special exemption, shall in all cases in future be made, if so claimed by them, according to the rate to be given by *informadores*, of whom two shall be Portuguese and two British merchants, to be named by the *Concelho de Districto*; and in case any objection should be made by the parties assessed to the amount of the said assessment (which shall in all cases bear a just proportion to the rate at which the native subjects of Portugal are assessed), they shall have a right to appeal to the tribunal of the treasury, and to appear in person, or to be heard by counsel, before the said tribunal; and in the meantime no execution shall be made on their property, until an ultimate decision shall have been pronounced by the said tribunal.

It is, however, understood that British subjects resident in Portugal and its dominions, not carrying on trade, or exercising any branch of industry therein, but deriving their incomes from other sources, shall, in like manner with Portuguese subjects, be wholly exempt from the operation of the said *mancio* or *decima industrial* tax.

The subjects of each of the high contracting parties shall also, within the dominions of the other, be allowed the free use and exercise of their religion, without being in any manner disturbed on account of their religious opinions: they shall be allowed to assemble together for the purposes of public worship, and to celebrate the rites of their religion in their own dwelling-houses, or in the chapels or places of worship appointed for that purpose, without any the smallest hindrance or interruption whatever, either now or hereafter; and her Most Faithful Majesty does now and for ever graciously grant to the subjects of her Britannic Majesty permission to build and maintain such chapels and places of worship within her dominions. It being always understood that the said chapels and places of worship are not to have steeples and bells.

Her Britannic Majesty's subjects shall likewise have full liberty to bury their dead, after the manner

and with the ceremonies usual in their respective countries, and in the grounds and cemeteries which they shall have purchased and prepared for that purpose; and the sepulchres of the dead, in conformity to ancient and existing practice, shall in no way or on any account be disturbed.

2. The subjects of either of the contracting parties may freely dispose by will of the personal effects which they shall possess in the territories of the other; and their heirs, though subjects of the other contracting party, may succeed to their personal effects, either by will or *ab intestato*, and may obtain possession of the same in due course of law, either in person, or by other persons appointed by them to act on their behalf. In the event of the absence of heirs, or of persons duly appointed to act for them, the consul may be authorised to take charge, in due course of law, of the said effects, until the owner shall have made the necessary arrangements for obtaining possession of the property. If disputes shall arise between several claimants with respect to the title which each may have to the property, such disputes shall be decided by the courts of the country in which the property is situated; and if hereafter any favour as regards the possession or inheritance of landed or funded property (*biens fonds*) shall be granted, in the dominions of either of the high contracting parties, to the subjects of any other nation, the same favour shall extend reciprocally to their respective subjects, as the case may be, either in Portugal or Great Britain.

3. The subjects of either contracting party residing within the dominions of the other, shall be free to manage their own affairs themselves, or to commit those affairs to the management of any persons whom they may appoint as their broker, factor, agent, or interpreter; nor shall any such British subjects be restrained in their choice of persons to act in such capacities, nor shall they be called upon to pay any salary or remuneration to any person whom they shall not choose to employ. Absolute freedom shall be given, in all cases, to the buyer and seller to bargain together, and to fix the price of any goods, wares, or merchandise, imported into, or to be exported from, the dominions of either contracting party, the laws and established customs of the country being duly observed.

The subjects of either of the high contracting parties residing within the dominions of the other shall be at liberty to open retail stores and shops, under the same municipal and police regulations as native subjects; and they shall not, in this respect, be liable to any other or higher taxes or imposts than those which are or may be paid by native subjects.

4. There shall be reciprocal liberty of commerce and navigation between the subjects of the two high contracting parties; and the subjects of the two sovereigns respectively shall not pay, in the ports, harbours, roads, cities, towns, or places whatsoever in either kingdom, any other or higher duties, taxes, rates, or imposts, under whatsoever names designated or included, than those which are there paid by the subjects or citizens of the most favoured nation.

No duty of customs or other impost shall be charged upon any goods, the produce of the one country, upon importation by sea or by land from that country into the other, higher than the duty or impost charged upon goods of the same kind, the produce of and imported from any other country; and no duty, restriction, or prohibition shall be imposed upon the importation and exportation from one country to the other, of the goods and produce of each, which shall not be imposed upon goods of the same kind, when imported from or exported to any other country; and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and her Majesty the Queen of Portugal, do hereby bind and engage themselves, their heirs and successors, not to grant any favour, privilege, or immunity, in matters of commerce and navigation, to the subjects or citizens of any other state, which shall not also and at the same time be extended to the subjects of the other high contracting party, gratuitously, if the concession in favour of that other state shall have been gratuitous; and on giving, as nearly as possible, the same compensation or equivalent, if the concession shall have been conditional.

5. No duties of tonnage, and no harbour, light-house, pilotage, quarantine, or other similar or corresponding duties, of whatever nature, or under whatever denomination, shall be imposed in either country upon the vessels of the other, in respect of voyages between the two countries, if laden; or in respect of any voyage, if in ballast, which shall not be equally imposed, in the like cases, on national vessels.

6. All goods, the growth, produce, or manufacture of their respective possessions, which can legally be imported into either country from the other, in ships of that other country, shall, when so imported, be subject to the same duties, whether they be imported in ships of the one country or in ships of the other; and in like manner, all goods which can legally be exported from either country to the other, in ships of that other country, shall, when so exported, be subject to the same duties, and be entitled to the same drawbacks, bounties, and allowances, whether they be exported in ships of the one country or in ships of the other.

7. In order to promote and encourage the commercial intercourse between the dominions of the high contracting parties, for the mutual benefit of their respective subjects, her Britannic Majesty and her Most Faithful Majesty agree to take into consideration the duties now levied upon articles the produce or manufacture of either country, with a view to make such reductions in those duties as may be consistent with the interest of the high contracting parties respectively.

This matter shall without delay be made the subject of a special negotiation between the two governments.

8. British ships shall be allowed to proceed direct from any port of her Britannic Majesty's dominions to any colony of her Most Faithful Majesty, and to import into such colony any goods the growth, produce, or manufacture of the United Kingdom, or of any of the British dominions, except such goods as are prohibited to be imported into such colony, or which are admitted into it only from the dominions of her Most Faithful Majesty; and such British ships, and such goods so imported in them, shall be liable in such colony of her Most Faithful Majesty to no higher or other duties and charges, than would be there payable on Portuguese ships importing the like sort of goods, or on the like goods, the growth, produce, or manufacture of any foreign country, and allowed to be imported into the said colony in Portuguese ships.

In like manner, Portuguese ships shall be allowed to proceed direct from any port of her Most Faithful Majesty's dominions to any colony of her Britannic Majesty, and to import into such colony any goods the growth, produce, or manufacture of Portugal, or of any of the Portuguese dominions, except such goods as are prohibited to be imported into such colony, or which are admitted into it only from the dominions of her Britannic Majesty; and such Portuguese ships, and such goods so imported in them, shall be liable, in such colony of her Britannic Majesty, to no higher or other duties and charges, than would be there payable on British ships importing the like sort of goods, or on the like goods, the growth, produce, or manufacture of any foreign country, and allowed to be imported into the said colony in British ships.

9. British ships shall be allowed to export from any colony of her Most Faithful Majesty to any place not under the dominion of her said Majesty, any goods not generally prohibited to be exported from such colony; and such British ships, and such goods so exported in them, shall be liable, in such colony, to no other or higher charges than would be payable by, and shall be entitled to the same drawbacks or bounties as would be there allowable on, Portuguese ships exporting such goods, or on such goods exported in Portuguese ships.

In like manner Portuguese ships shall be allowed to export from any colony of her Britannic Majesty to any place not under the dominion of her said Majesty, any goods not generally prohibited to be exported from such colony; and such Portuguese ships, and such goods so exported in them, shall be liable in such colony to no other or higher charges than would be payable by, and shall be entitled to the same drawbacks or bounties as would be there allowable on, British ships exporting such goods, or on such goods exported in British ships.

10. It is hereby declared that the stipulations of the present treaty are not to be understood as applying

to the navigation and carrying trade between one port and another, situated in the dominions of either contracting party, if such navigation and trade should in those dominions be reserved by law exclusively to national vessels. Vessels of either country shall, however, be permitted to discharge part of their cargoes at one port in the dominions of either of the high contracting parties, and then to proceed, with the remainder of their cargo, to any other port or ports in the same dominions, without paying any higher or other duties in such cases, than national vessels would pay in like circumstances; and they shall be permitted to lade, in like manner, at different ports in the same voyage outwards.

11. The reciprocal liberty of commerce and navigation declared and stipulated for by the present treaty, shall not extend to contraband of war, or to articles the property of the enemies of either party.

The power granted by former treaties to carry, in the ships of either country, goods and merchandise of any description whatever, the property of the enemies of the other country, is now mutually renounced.

12. In all cases in which, in either kingdom, the duty to be levied upon any goods imported from the other kingdom shall be not a fixed rate, but a proportion of the value of the goods, such *ad valorem* duty shall be ascertained and secured in the following manner; that is to say, the importer shall, on making his entry for the payment of duty at the custom-house, sign a declaration, stating the description and value of the goods at such amount as he shall deem proper; and in case the officer or officers of the customs shall be of opinion that such valuation is insufficient, he or they shall be at liberty to take the goods, on paying to the importer the value thereof according to the declaration of the importer, together with an addition of 10 per cent.; and the custom-house officer shall, at the same time, return to the importer any duty which the importer may have paid upon such goods; and the amount of these sums shall be paid to the importer on the delivery of the goods to the said officer or officers, which must not be later than 15 days from the first detention of the goods.

13. Inasmuch as all merchandise, of whatever origin, whether admissible for home consumption or not, may be received and warehoused in all those ports of the United Kingdom of Great Britain and Ireland which are by law appointed to be warehousing ports for such articles, pending the entry of the same, either for home consumption or for re-exportation, as the case may be, under the regulations appointed for this purpose, and without such articles being liable, in the meantime, to the payment of any of the duties with which they would be charged, if upon arrival they were entered for consumption within the United Kingdom;—in like manner the Queen of Portugal consents and agrees that the ports of Her Most Faithful Majesty's dominions, which now are, or which shall hereafter become by law, warehousing ports, shall be free ports for receiving and warehousing, either for home consumption or for re-exportation, as the case may be, all merchandise imported in British ships, and all articles whatever, the produce or manufacture of the British dominions, imported by Portuguese ships; and the articles thus received and warehoused, subject to due regulations, shall not be liable, in the meantime, to any of the duties with which they would be charged, if they were entered for consumption on their arrival in the dominions of Her Most Faithful Majesty.

14. All goods or merchandise found on board of, or which shall have formed the cargo or part of the cargo of a vessel of the one country, which shall be wrecked, or left derelict, on or near the coast of the other country, unless the importation of such goods or merchandise shall be absolutely prohibited by law, shall be admitted for home consumption in the country on or near the coast of which such vessel shall be wrecked, or left derelict, or such goods or merchandise may be found, on payment of the same duty, as if the said goods or merchandise had been imported in a national vessel, even though such goods or merchandise could not by law be imported into the said country in any other than national vessels; and in fixing the amount of duty to be paid on such goods or merchandise, regard shall be had to any damage which the said goods or merchandise may have sustained.

To prevent frauds, the Board of Customs of each nation shall exercise their judgment as to the causes of wrecks; and when they are satisfied that the said wrecks were the result of accident or misfortune, and free from suspicion of collusion, they shall authorise, at the option of the proprietor or agent, if present, or otherwise of the consul, the transhipment, or the sale for home consumption, of the goods or merchandise, provided that such goods and merchandise could have been legally imported by the ships of the one country into the ports of the other country.

If any ships of war or merchant vessels should be wrecked on the coasts of either of the high contracting parties, such ships or vessels, or any parts thereof, and all furniture and appurtenances belonging thereunto, and all goods or merchandise which shall be saved therefrom, or the produce thereof if sold, shall be faithfully restored to the proprietors, upon being duly claimed by them, or by their agents duly authorised; or if there are no such proprietors or agents on the spot, by the respective consuls of the nation to which the proprietors of the said ships, vessels, or goods may belong, and in whose district such wreck may have taken place, provided such claim be preferred within a year and a day from the time of such wreck; and such consul, proprietor, or agent shall pay only the expenses incurred in the preservation of the property, together with the rate of salvage which would have been payable in the like case of a wreck of a national vessel; and the goods and merchandise saved from the wreck shall not be subject to duties, unless cleared for local consumption.

15. If any merchant vessel of either country should be driven into the ports of the other by stress of weather, for the purpose of effecting necessary repairs, every facility shall be afforded to such vessel for obtaining the assistance it may be in need of.

The strictest reciprocity shall be observed, in the most favourable sense, as to the relief to be afforded to such vessel from the duties, charges, and expenses in the ports of either nation, to which vessels, entering solely for the purposes of trade, are subjected. Sufficient time shall be allowed for the completion of repairs; and while the vessel shall be undergoing repair, its cargo shall not unnecessarily be required to be landed, either in whole or in part; and any difference of opinion which may arise between the custom-house authorities and the masters of the said vessels, as to the necessity of landing all or any part of the cargo, shall be referred to two sworn or public surveyors, one to be named by the chief custom-house authority of the port, and the other by the consul of the nation to which the vessel belongs.

Her Majesty the Queen of Portugal engages that the commerce of British subjects within the Portuguese dominions shall not be restrained, interrupted, or otherwise affected by the operation of any monopoly, contract, or exclusive privilege of sale or purchase whatsoever; but that the subjects of the United Kingdom shall have free and unrestrained permission to buy from and sell to whomsoever they please, and in whatever form and manner may be agreed upon between the purchaser and seller, without being obliged to give any preference or favour in consequence of any such monopoly, contract, or exclusive privilege of sale and purchase. And her Britannic Majesty engages that a like exemption from restraint, in respect to purchases or sales, shall be enjoyed by the subjects of her Most Faithful Majesty trading to or residing in the United Kingdom. But it is distinctly to be understood, that the present article shall not be interpreted as affecting the special regulations now in force, or which may hereafter be enacted, with a view solely to the encouragement and amelioration of the Douro wine trade, (it being always understood that British subjects shall in respect of the said trade be placed on the same footing as Portuguese subjects,) or with regard to the exportation of the salt of St. Ubes.

This article does not invalidate the exclusive right possessed by the crown of Portugal, within its own dominions, to the farm for the sale of ivory, urzela, gold dust, soap, gunpowder, and tobacco for home consumption: provided, however, that should the above-mentioned articles, generally or separately, ever become articles of free commerce within the dominions of her Most Faithful Majesty, the subjects of her Britannic Majesty shall be permitted to traffic in them as freely and on the same footing as the subjects or citizens of the most favoured nation.

16. It is agreed and covenanted that neither of the high contracting parties shall knowingly receive nto, or retain in its service, any subjects of the other party who have deserted from the naval or military service of that other party; but that, on the contrary, each of the contracting parties shall respectively discharge from its service any such deserters, upon being required by the other party to do so.

It is further agreed and declared, that if either of the high contracting parties shall grant to any state any new favour or facility, with respect to the recovery of deserters, such favour or facility shall be considered as granted also to the other contracting party, in the same manner as if the said favour or facility had been expressly stipulated by the present treaty.

And it is further agreed, that if any apprentices or sailors shall desert from vessels belonging to the subjects of either of the high contracting parties, while such vessels are within any port in the territory of the other party, the magistrates of such port and territory shall be bound to give every assistance in their power for the apprehension of such deserters, on application to that effect being made by the consul of the party concerned, or by the deputy or representative of the consul; and no public body, civil or religious, shall protect or harbour such deserters.

17. Her Britannic Majesty, on the representation of her Most Faithful Majesty, and in contemplation of the improving system of law and justice in Portugal, hereby consents to give up the exercise of the rights connected witht he Conservatorial Court, so soon and so long as British subjects are admitted in Portugal to the benefit of securities similar or equivalent to those enjoyed by the subjects of her Most Faithful Majesty in Great Britain, as regards trial by jury, protection from arrest without a warrant from a magistrate, and examination within 24 hours after apprehension *in flagrante delicto*, and admission to bail. It being always understood, that in other respects the subjects of her Britannic Majesty in Portugal shall be placed on the same footing as Portuguese subjects, in all causes, whether civil or criminal; and that they shall not, except in cases *flagrantis delicti*, be liable to imprisonment without formal commitment (*culpa formada*) under a warrant signed by a legal authority.

18. It is hereby agreed that her Britannic Majesty, relying upon the guarantees which are or may be afforded to British subjects by the law of Portugal under the present constitutional system, henceforward claims for British subjects in Portugal no privileges which are not enjoyed by Portuguese subjects in the Portuguese or British dominions. It being, however, understood, that her Britannic Majesty will be entitled, in the event (which God forbid) of political troubles affecting the operation of the above mentioned guarantees, to claim the re-establishment and observance of the privileges surrendered by the present and preceding article.

19. The present treaty shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years, or at any subsequent time.

And it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either party from the other, this treaty, and all the provisions thereof, shall altogether cease and determine.

It is agreed, nevertheless, that either of the two high contracting parties shall have the right, at the end of 5 years, to require a revision of any articles not affecting the principle of the treaty, on giving 6 months' notice of a desire to make such revision: provided, however, that it be distinctly understood that the power of giving such notice shall not extend beyond, nor be recognised after, the termination of the fifth year.

The present treaty shall be ratified, and the ratifications shall be exchanged at Lisbon at the expiration of two months from the date of its signature, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seal of their arms.

Done at Lisbon, the 3d of July, in the year of our Lord 1842.

HOWARD DE WALDEN.
DUQUE DE PALMELLA.

True Intent and Spirit of certain Points of Treaty.

Lisbon, July 3. 1843.

The undersigned, her Britannic Majesty's plenipotentiary for the negotiation of a treaty of commerce and navigation between Great Britain and Portugal, has the honour to declare to his Excellency the Duke of Palmella, that with reference to article 5. all vessels built in the territory of her Most Faithful Majesty, or which shall be British built, or which shall have been captured from the enemy by the ships of the Portuguese government, and slave vessels condemned under similar circumstances, and which shall be wholly owned by any subject or subjects of her Most Faithful Majesty, and whereof the master and three-fourths of the mariners are subjects of her Most Faithful Majesty, will be considered as Portuguese, and will be entitled to be placed on the footing of national vessels, and to be treated on an equality with the vessels of the most favoured nation, in the ports of her Britannic Majesty, *i. e.*, in Great Britain and Ireland and the colonies hereinafter enumerated.

With reference to article 8., in the words "growth, produce, and manufacture," the wines and brandies of Portugal are comprehended.

With reference to article 14., the jurisdiction of the Cinque Ports does not interfere with the stipulations of this article.

With reference to article 17., in respect to the declaration of her Britannic Majesty regarding the conditional surrender of the rights connected with the Conservatorial Court, whenever the Portuguese government shall have officially communicated to her Majesty's government any law or laws establishing the guarantees in question, her Majesty will recognise the right of the Portuguese government to declare the further jurisdiction and authority of the British Conservatorial Court to have ceased by consent of her Majesty.

The colonies referred to are Canada, Newfoundland, Nova Scotia, Cape Breton, New Brunswick, Prince Edward Island, and all other British possessions in North America, British West Indies, including the islands and possessions on the continent of South America, Cape of Good Hope, and other possessions in Africa; the Mauritius, the Island of Ceylon, Van Diemen's Land, New South Wales, New Zealand.

Howard de Walden. Lisbon, July 3. 1843.

The undersigned, her Most Faithful Majesty's plenipotentiary, has the honour to declare, by order of the government, to Lord Howard de Walden, in reference to the article 1. of the treaty of commerce and navigation, by both concluded and signed to-day, between Portugal and Great Britain, that the maximo that can be collected from any British subject for *mancio* or *decimai ndustrial*, will be 20 per cent. upon [redacted] rent of their shops, dwellings, and warehouses, which will serve as an invariable rule to the tribun[redacted] of the treasury, for deciding the appeals made by British subjects.

Duke of Palmella. Lisbon, July 3. 1842.

PRUSSIA.

Convention of Commerce between his Britannic Majesty and the King of Prussia, signed at London, April 2. 1824.

Article 1. From and after the 1st day of May next, Prussian vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, and British vessels entering or departing from the ports of his Prussian Majesty's dominions, shall not be subject to any other or higher duties or

charges whatever, than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All articles of the growth, produce, or manufacture of any of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom and of Prussia, respectively, in vessels of the one country, shall, in like manner, be permitted to be imported into and exported from those ports in vessels of the other.

3. All articles not of the growth, produce, or manufacture of the dominions of his Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland, into the ports of Prussia, in British ships, shall be subject only to the same duties as are payable upon the like articles if imported in Prussian ships; and the same reciprocity shall be observed in the ports of the United Kingdom, in respect to all articles not the growth, produce, or manufacture of the dominions of his Prussian Majesty, which can legally be imported into the ports of the United Kingdom in Prussian ships.

4. All goods, which can legally be imported into the ports of either country, shall be admitted at the same rate of duty, whether imported in vessels of the other country, or in national vessels; and all goods which can be legally exported from the ports of either country, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the other country, or in national vessels.

5. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company, corporation, or agent, acting on its behalf or under its authority, in the purchase of any article, the growth, produce, or manufacture of either country, imported into the other, on account of or in reference to the character of the vessel in which such article was imported; it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years: and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

7. The present convention shall be ratified, and the ratifications shall be exchanged at London, within 1 month from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 2d day of April, in the year of our Lord 1824

GEORGE CANNING. W. HUSKISSON. WERTHER.

An order in council, dated May 25, 1824, directs that, from May 1, 1824, Prussian vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports; that all articles of the growth, produce, or manufacture of any of the dominions of his Prussian Majesty, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom of Great Britain and Ireland in British vessels, shall, in like manner, be permitted to be imported into and exported from the said ports in Prussian vessels; that all articles not of the growth, produce, or manufacture of the dominions of his Prussian Majesty, which can legally be imported from Prussia into the ports of the United Kingdom in Prussian vessels, shall be subject only to the same duties as are payable upon the like articles if imported in British ships; that all goods which can legally be imported into the ports of the United Kingdom shall be admitted at the same rate of duty, when imported in Prussian vessels, that is charged on similar articles imported in British vessels; and that all goods which can be legally exported from the ports of the United Kingdom, shall be entitled to the same bounties, drawbacks, and allowances, when exported in Prussian vessels, that are granted, paid, or allowed on similar articles when exported in British vessels

A Treasury letter, dated October 13, 1824, directs, that with respect to pilotage and all other duties charged on vessels belonging to Prussia, Sweden, and Norway, Denmark, Hanover, and Hamburg, which have entered or which may enter the ports of the United Kingdom, either from stress of weather or from any other causes, it was the intention of the Lords of the Committee of Privy Council for Trade, that such dues should not be higher than are charged upon British vessels, and that it is only to the case of goods imported into this country, and not brought direct from the country to which the vessel belongs, that the equality of duty does not apply.

An order in council, dated May 3, 1823, states, that his Majesty is pleased to declare, that the ships of and belonging to the dominions of his Majesty the King of Prussia are entitled to the privileges granted by the law of navigation, and may import from the dominions of his Majesty the King of Prussia, into any of the British possessions abroad, goods the produce of such dominions, and may export goods from such British possessions abroad, to be carried to any foreign country whatever.

PRUSSIA, BAVARIA, &c.

Convention of Commerce and Navigation between Great Britain, on the one part; and Prussia, Bavaria, Saxony, Wurtemberg, Baden, the Electorate of Hesse, the Grand Duchy of Hesse, the States forming the Commercial Union of Thuringia, Nassau, and Frankfort, on the other part.

Article 1. In consideration of the circumstance that British vessels are admitted, together with their cargoes, to entry in the ports of Prussia, and of the other states of the aforenamed Union of Customs, when coming from the ports of all countries, and in consideration of the concessions stipulated in this present convention for British trade with all the states of this Union of Customs; in consideration also of the facility which the application of steam power to inland navigation affords for the conveyance of produce and merchandise of all kinds up and down rivers; and in consideration of the new opening which may by these means be given to the trade and navigation between the U. Kingdom and the British possessions abroad on the one hand, and the states now composing the Union of Customs, on the other; some of which states use as the natural outlet of their commerce ports not within their own dominions; it is agreed that, from and after the date of the exchange of the ratifications of this present convention, Prussian vessels, and the vessels of the other states forming the said Union of Customs, together with their cargoes, consisting of all such goods as can be legally imported into the U. Kingdom and the British possessions abroad, by the said vessels from the ports of the countries to which they respectively belong, shall, when coming from the mouths of the Meuse, of the Ems, of the Weser, and of the Elbe, or from the mouths of any navigable river lying between the Elbe and the Meuse, and forming the means of communication between the sea and the territory of any of the German states which are parties to this treaty, be admitted into the ports of the U. Kingdom, and of the British possessions abroad, in as full and ample a manner, as if the ports from which such vessels may have come, as aforesaid, were within the dominions of Prussia, or of any other of the states aforesaid; and such vessels shall be permitted to import the goods above mentioned upon the same terms on which the said goods might be imported if coming from the national ports of such vessels; and also that, in like manner, such vessels proceeding from Great Britain and her colonial possessions abroad to the places thus referred to, shall be treated as if returning to a Prussian Baltic port: — it being understood that these privileges are to extend to the vessels of Prussia and of the states aforesaid, and to their cargoes, only in respect to each of the said ports in which British vessels and their cargoes shall, upon their arrival thereat, and depar-

ture therefrom, continue to be placed on the same footing as the vessels of Prussia and of the other states of the union.

2. The King of Prussia, in his own name, and in the name of the states aforesaid, agrees to place, always and in every way, the trade and navigation of the subjects of Her Britannic Majesty, in respect to the importation of sugar and rice, upon the same footing as that of the most favoured nation.

3. In the event of other German states joining the Germanic Union of Customs, it is hereby agreed that such other states shall be included in all the stipulations of the present convention.

4. The present convention shall be in force until the 1st of January, 1842, and further for the term of 6 years, provided neither of the high contracting parties shall have given to the other 6 months' previous notice that the same shall cease to be in force on the said 1st of January, 1842; and if neither party shall have given to the other six months' previous notice that the present convention shall cease on the 1st day of January, 1848, then the present convention shall further remain in force until the 1st of January, 1854, and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same, each of the high contracting parties reserving to itself the right of giving such notice to the other; and it is hereby agreed between them, that at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

The present convention shall be ratified, and the ratifications thereof shall be exchanged at London, at the expiration of 2 months, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 2d day of March, in the year of our Lord 1841.

PALMERSTON.
H. LABOUCHERE.

By an order in council, dated August 28, 1841, it is ordered, that Prussian vessels, and the vessels of the other states forming the German Union of Customs, together with their cargoes, consisting of all such goods as can be legally imported into the U. Kingdom and the British possessions abroad, by the said vessels, from the ports of the countries to which they respectively belong, shall, when coming from the mouths of the Meuse, of the Ems, of the Weser, and of the Elbe, or from the mouths of any navigable river, lying between the Elbe and the Meuse, and forming the means of communication between the sea and the territory of any of the German states, which are parties to this treaty, be admitted into the ports of the U. Kingdom and of the British possessions abroad, in as full and ample a manner as if ports from which such vessels may have come as aforesaid, and such vessels shall be permitted to import the goods above-mentioned upon the same terms on which the said goods might be imported if coming from the national ports of such vessels; and also that in like manner such vessels proceeding from Great Britain and her colonial possessions abroad, to the ports or places thus referred to, shall be treated as if returning to a Prussian Baltic port; it being understood that these privileges are to extend to the vessels of Prussia and of the states aforesaid, and to their cargoes only in respect to each of the said states, which British vessels and their cargoes shall, upon their arrival thereat and departure therefrom, continue to be placed upon the same footing as the vessels of Prussia and of the other states of the union.

RIO DE LA PLATA (THE STATES OF).

Treaty of Amity, Commerce, and Navigation, between his Majesty and the United Provinces of Rio de La Plata.

Article 1. There shall be perpetual amity between the dominions and subjects of his Majesty the King of the United Kingdom of Great Britain and Ireland, and the United Provinces of Rio de la Plata and their inhabitants.

2. There shall be, between all the territories of his Britannic Majesty in Europe and the territories of the United Provinces of Rio de la Plata, a reciprocal freedom of commerce; the inhabitants of the two countries, respectively, shall have liberty freely and securely to come, with their ships and cargoes, to all such places, ports, and rivers in the territories aforesaid, to which other foreigners are or may be permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and generally, the merchants and traders of each nation respectively shall enjoy the most complete protection and security for their commerce, subject always to the laws and statutes of the two countries respectively.

3. His Majesty the King of the United Kingdom of Great Britain and Ireland engages further, that in all his dominions situated out of Europe, the inhabitants of the United Provinces of Rio de la Plata shall have the like liberty of commerce and navigation stipulated for in the preceding article, to the full extent in which the same is permitted at present, or shall be permitted hereafter, to any other nation.

4. No higher or other duties shall be imposed on the importation into the territories of his Britannic Majesty, of any articles of the growth, produce, or manufacture of the United Provinces of Rio de la Plata, and no higher or other duties shall be imposed on the importation into the said United Provinces, of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any other or higher duties or charges be imposed, in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories or dominions of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation or importation of any articles the growth, produce, or manufacture of his Britannic Majesty's dominions, or of the said United Provinces, which shall not equally extend to all other nations.

5. No higher or other duties or charges on account of tonnage, light, or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed, in any of the ports of the said United Provinces, on British vessels of the burden of above 120 tons, than those payable in the same ports by vessels of the said United Provinces of the same burden, nor in the ports of any of his Britannic Majesty's territories on the vessels of the United Provinces of above 120 tons, than shall be payable, in the same ports, on British vessels of the same burden.

6. The same duties shall be paid on the importation into the said United Provinces of any article the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such importation shall be in vessels of the said United Provinces, or in British vessels; and the same duties shall be paid on the importation into the dominions of his Britannic Majesty of any article the growth, produce, or manufacture of the said United Provinces, whether such importation shall be in British vessels, or in vessels of the said United Provinces; the same duties shall be paid, and the same drawbacks and bounties allowed upon the exportation of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions to the said United Provinces, whether such exportation shall be in vessels of the said United Provinces, or in British vessels; and the same duties shall be paid, and the same drawbacks and bounties allowed on the exportation of any articles the growth, produce, or manufacture of the said United Provinces to his Britannic Majesty's dominions, whether such exportation shall be in British vessels or in vessels of the said United Provinces.

7. In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British vessel or a vessel of the said United Provinces, it is hereby agreed, that all vessels built in the dominions of his Britannic Majesty, and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the territories of the

said United Provinces, properly registered, and owned by the citizens thereof, or any of them, and whereof the master and three-fourths of the mariners, at least, are citizens of the said United Provinces, shall be considered as vessels of the United Provinces.

8. All merchants, commanders of ships, and others, the subjects of his Britannic Majesty, shall have the same liberty in all the territories of the said United Provinces as the natives thereof, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes, nor to pay them any salary or remuneration, unless they shall choose to employ them; and absolute freedom shall be allowed in all cases to the buyer and seller to bargain and fix the price of any goods imported into or exported from the said United Provinces, as they shall see good.

9. In whatever relates to the lading and unlading of ships, the safety of merchandise, goods, and effects, the disposal of property of every sort and denomination, by sale, donation, or exchange, or in any other manner whatsoever, as also the administration of justice, the subjects and citizens of the two contracting parties shall enjoy, in their respective dominions, the same privileges, liberties, and rights as the most favoured nation, and shall not be charged in any of these respects with any other duties or imposts than those which are paid or may be paid by the native subjects or citizens of the power in whose dominions they may be resident. They shall be exempted from all compulsory military service whatsoever, whether by sea or land, and from all forced loans, or military exactions or requisitions; neither shall they be compelled to pay any ordinary taxes, under any pretext whatsoever, greater than those that are paid by native subjects or citizens.

10. It shall be free for each of the two contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but before any consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of consuls such particular places as either of them may judge fit to be so excepted.

11. For the better security of commerce between the subjects of his Britannic Majesty and the inhabitants of the United Provinces of Rio de la Plata, it is agreed, that if at any time any interruption of friendly commercial intercourse, or any rupture, should unfortunately take place between the two contracting parties, the subjects or citizens of either of the two contracting parties residing in the dominions of the other shall have the privilege of remaining and continuing their trade therein without any manner of interruption, so long as they behave peaceably and commit no offence against the laws; and their effects and property, whether intrusted to individuals or to the state, shall not be liable to seizure or sequestration, or to any other demands than those which may be made upon the like effects or property belonging to the native inhabitants of the state in which such subjects or citizens may reside.

12. The subjects of his Britannic Majesty residing in the United Provinces of Rio de la Plata shall not be disturbed, persecuted, or annoyed on account of their religion, but they shall have perfect liberty of conscience therein, and to celebrate divine service either within their own private houses, or in their own particular churches or chapels, which they shall be at liberty to build and maintain in convenient places, approved of by the government of the said United Provinces: liberty shall also be granted to bury the subjects of his Britannic Majesty who may die in the territories of the said United Provinces in their own burial places, which, in the same manner, they may freely establish and maintain. In the like manner, the citizens of the said United Provinces shall enjoy, within all the dominions of his Britannic Majesty, a perfect and unrestrained liberty of conscience, and of exercising their religion publicly or privately, within their own dwelling houses, or in the chapels and places of worship appointed for that purpose, agreeably to the system of toleration established in the dominions of his said Majesty.

13. It shall be free for the subjects of his Britannic Majesty residing in the United Provinces of Rio de la Plata, to dispose of their property, of every description, by will or testament, as they may judge fit; and in the event of any British subject dying without such will or testament in the territories of the United Provinces, the British consul-general, or, in his absence, his representative, shall have the right to nominate curators to take charge of the property of the deceased for the benefit of his lawful heirs and creditors, without interference, giving convenient notice thereof to the authorities of the country; and reciprocally.

14. His Britannic Majesty being extremely desirous of totally abolishing the slave trade, the United Provinces of Rio de la Plata engage to co-operate with his Britannic Majesty for the completion of so beneficent a work, and to prohibit all persons inhabiting within the said United Provinces, or subject to their jurisdiction, in the most effectual manner, and by the most solemn laws, from taking any share in such trade.

15. The present treaty shall be ratified, and the ratifications shall be exchanged in London within 4 months, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed their seals thereunto.

Done at Buenos Ayres, 2d day of February, in the year of our Lord 1825.

WOODBINE PARISH, H.M. Consul-General.
MANL. J. GARCIA.

An order in council, dated 3d September, 1827, orders that vessels of the United Provinces of Rio de la Plata entering the ports of the United Kingdom of Great Britain and Ireland, in ballast, or laden direct from any of the ports of Rio de la Plata, or departing from the ports of the said United Kingdom, together with the cargoes on board the same, such cargoes consisting of articles which may be legally imported or exported, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports; or on similar articles when imported into or exported from such ports in British vessels; and also such articles, when exported from the said ports in vessels of the United Provinces of Rio de la Plata, respectively, shall be entitled to the same bounties, drawbacks, and allowances that are granted on similar articles when exported in British vessels.

Local Dues. — Provided nevertheless, that nothing herein shall extend to any duties or charges on account of tonnage, light or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges to which any vessels of the United Provinces of Rio de la Plata, of the burden of 120 tons, or of any less burden, are now by law liable in the ports of any of his Majesty's dominions; it appearing to his Majesty and his privy council, that British vessels of the burden of 120 tons, or of any less burden, are subject in the ports of the said United Provinces to higher duties and charges than are levied in those ports on vessels of the said United Provinces of the burden of 120 tons, or of any less burden.

RUSSIA.

Treaty of Commerce and Navigation between Her Majesty and the Emperor of all the Russias, signed at St. Petersburg, January 11. 1843.

Article 1. There shall be reciprocal freedom of navigation and commerce for the ships and subjects of the two high contracting powers, in all parts of their respective dominions where navigation and commerce are at present allowed, or may hereafter be allowed, to the ships and subjects of any other nation.

2. From the date of the exchange of the ratifications of the present treaty, British vessels arriving in or departing from the ports of his Majesty the Emperor of all the Russias, and Russian vessels arriving in or departing from the ports of the United Kingdom of Great Britain and Ireland, and of all the possessions of her Britannic Majesty, shall be subject to no other or higher duties or charges, of whatsoever

nature they may be, than those which are now or shall hereafter be imposed on national vessels, on their entering in or departing from such ports.

3. In consideration that British ships arriving directly from other countries than those belonging to the high contracting parties are admitted, with their cargoes, into the ports of the Russian Empire, without paying any other duties whatsoever than those payable by Russian vessels; and in consideration of the advantages which, in this respect, the present treaty specifically grants to British commerce in the Grand Duchy of Finland; it is agreed, that from the date of the exchange of the ratifications of the present treaty, Russian vessels arriving from the mouth of the Vistula, the Niemen, or any other river which forms the outlet of a navigable stream having its source in the dominions of his Majesty the Emperor of all the Russias, or passing through the said dominions, shall be admitted, with their cargoes, into the ports of the United Kingdom of Great Britain and Ireland, and of all the possessions of her Britannic Majesty, exactly in the same manner as if those vessels arrived directly from Russian or Finnish ports, with all the privileges and immunities agreed upon by the present treaty of commerce and navigation. In like manner, Russian vessels proceeding from any port of Great Britain, or of the British possessions, for the mouth of any of the above-mentioned rivers, shall be treated as if they were returning to a port of the Empire of Russia, or of the Grand Duchy of Finland. It is, however, understood, that these privileges shall apply to Russian vessels and their cargoes, with respect to places situated at the mouths of the above-mentioned rivers, only so long as British vessels and their cargoes shall be treated at those places, on their arrival and departure, on the same footing with Russian vessels.

4. All productions of the soil, industry, and art of the dominions and possessions of his Majesty the Emperor of all the Russias, including the sai' productions which may be exported by the rivers or streams mentioned in the preceding article, an' which may be imported into the ports of the United Kingdom and the possessions of her Britannic Majesty; and also all the productions of the soil, industry, and art of the United Kingdom and possessions of her Britannic Majesty, which m.y be imported into the ports of his Majesty the Emperor of all the Russias, shall enjoy reciprocally, in all respects, the same privileges and immunities, and may be imported and exported exactly in the same manner, in vessels of the one as in vessels of the other high contracting party.

5. All articles which are not the productions of the soil, industry, and art of the respective states or of their possessions, and which may be legally imported from the ports of his Majesty the Emperor of all the Russias, as likewise from those of the rivers and streams mentioned in the third article, into the ports of the United Kingdom of Great Britain and Ireland, and of all the possessions of her Britannic Majesty, in Russian vessels, shall be subject to the same duties only as would be payable upon the same articles, if they were imported in British vessels.

In like manner, all articles which are not the productions of the soil, industry, and art of the respective states or of their possessions, and which may be legally imported from the ports of the United Kingdom, and of all the possessions of her Britannic Majesty, into the ports of his Majesty the Emperor of all the Russias, in British vessels, shall be subject to the same duties only which would be payable upon the same articles, if they were imported in Russian vessels.

Her Britannic Majesty grants by this treaty to Russian navigation and trade, all the benefits and privileges of navigation and commerce now enjoyed, or which may hereafter be enjoyed, by the most favoured nations, under existing laws and acts of parliament, or in virtue of orders in council, or treaties.

6. All merchandise and articles of commerce which, according to the stipulations of the present treaty, or according to the laws and ordinances in force in the respective countries, may be legally imported into or exported from the dominions and possessions of the two high contracting parties, either under the British flag, or under the Russian flag, shall, in like manner, be subject to the same duties, whether imported in vessels of the other state, or in national vessels; and the same bounties, drawbacks, and advantages shall be granted upon all merchandise and articles of commerce, which may be legally exported from the ports of either state, whether exported in vessels of the one or in vessels of the other state.

7. All merchandise and articles of commerce which shall be imported into, deposited or warehoused in, the ports of the dominions and possessions of the high contracting parties, shall be subject, while so warehoused, to the same regulations, conditions, and duties, whether imported in British or in Russian vessels. In the same manner, the re-exportation of such merchandise or articles of commerce shall be treated in the same manner, and be liable to the payment of the same duties, whether exported in British or in Russian vessels.

8. No priority or preference shall be given, directly or indirectly, by either of the two governments, or by any company, corporation, or agent acting in its name or under its authority, in the purchase of any production of the soil, industry, or art of either of the two states and their possessions, imported into the ports of the other, on account of the nationality of the vessel in which such article may have been imported; it being the fixed intention of the two contracting parties, that no difference or distinction whatever shall be made in this respect.

9. In regard to the commerce to be carried on in Russian vessels with the British possessions in the East Indies, her Britannic Majesty consents to grant to the subjects of his Majesty the Emperor of all the Russias, the same advantages and privileges as are or may be enjoyed, under any treaty or act of parliament, by the subjects or citizens of the most favoured nation; subject to the laws, rules, regulations, and restrictions which are or may become applicable to the vessels and subjects of any other state enjoying the same advantages and privileges for trading with the said possessions.

10. The stipulations of the present treaty shall not apply to the coasting trade carried on between port and port in the dominions of either contracting party, by the sailing or steam vessels of the other, so far as regards the carrying of passengers, merchandise, or articles of commerce; this trade being reserved exclusively to national vessels.

11. The vessels and subjects of the high contracting parties shall, by the present treaty, reciprocally enjoy all such advantages, immunities, and privileges, in the ports of their respective dominions and possessions, as are now enjoyed by the navigation and commerce of the most favoured nations; the intention being to secure, in the United Kingdom and in the British possessions, to Russian vessels and subjects, the full and entire advantages of navigation and commerce granted by existing laws and acts of parliament, orders in council, or treaties, to other powers, or which may hereafter be granted; and, in like manner, British vessels and subjects shall enjoy, in the ports of the dominions and possessions of his Majesty the Emperor of all the Russias, the full and entire advantages of navigation and commerce granted by existing laws, regulations, and ordinances, or by treaties, to foreign powers, or which may hereafter be granted. And their Majesties the Queen of the United Kingdom of Great Britain and Ireland, and the Emperor of all the Russias, engage reciprocally not to grant any favours, privileges, or immunities whatsoever, in matters of commerce and navigation, to the subjects or citizens of any other state, which shall not be also at the same time granted to the subjects of the other high contracting party, gratuitously, if the concession in favour of the other state shall have been gratuitous, or upon giving as nearly as possible the same compensation or equivalent, in case the concession shall have been conditional.

12. It is understood that, in regard to commerce and navigation in the Russian possessions on the north-west coast of America, the convention concluded at St. Petersburg on the $\frac{16}{28}$th February, 1825, continues in force.

13. Any British or Russian vessel which may be compelled by stress of weather or by accident to take

shelter in the ports of either of the high contracting parties, shall be at liberty to refit therein, to procure all necessary stores, and to put to sea again, without paying any other than port and lighthouse dues, which shall be the same as those payable by national vessels. In case, however, the master of such vessel should be under the necessity of disposing of a part of his merchandise in order to defray his expenses, he shall be bound to conform to the regulations and tariffs of the place to which he may have come.

In the event of a vessel being wrecked at a place belonging to either of the high contracting parties, there shall not only be afforded to the persons shipwrecked every kind of assistance, but, moreover, the merchandise and effects which they may have thrown overboard, or which may have been saved, shall not be seized or detained under any pretext whatsoever. The said effects and merchandise shall, on the contrary, be preserved and restored on payment of the same rate of salvage, and of customs or other duties, which would have been payable in the like case of a wreck of a national vessel. In the case either of shipwreck, or of a vessel being driven into port by stress of weather, the respective consuls, vice-consuls, or commercial agents, shall be authorised to interpose in order to afford the necessary assistance to their fellow-countrymen.

14. The consuls, vice-consuls, or commercial agents of each of the two high contracting parties residing in the dominions of the other, shall receive from the local authorities such assistance as can by law be given to them, for the recovery of deserters from ships of war or merchant vessels of their respective countries.

15. The present treaty shall remain in force during the space of ten years, dating from the exchange of the ratifications thereof; and further, until the expiration of twelve months after either of the high contracting parties shall have given notice to the other of its intention to put an end thereto; each of the high contracting parties reserving to itself the right of giving such notice to the other at the expiration of the first nine years: and it is agreed between them, that at the expiration of twelve months after such notice shall have been received by either of the high contracting parties from the other, the present treaty, and all the stipulations contained therein, shall cease to be binding on the two parties.

The present treaty shall be ratified, and the ratifications thereof exchanged at London, at the expiration of one month, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have fixed thereto the seals of their arms.

Done at St. Petersburg, the $\frac{11}{30}$th day of $\frac{\text{January}}{\text{December}}$, in the year of our Lord 184$\frac{3}{2}$.

STUART DE ROTHSAY.
NESSELRODE.
CANCRINE.

Separate Article I. The commercial intercourse of Russia with the kingdoms of Sweden and Norway being regulated by special stipulations, which may hereafter be renewed, and which do not form part of the regulations applicable to foreign commerce in general, the two high contracting parties, being desirous of removing from their commercial relations every kind of doubt or cause of discussion, have agreed that those special stipulations granted in favour of the commerce of Sweden and Norway, in consideration of equivalent advantages granted in those countries to the commerce of the Grand Duchy of Finland, shall in no case apply to the relations of commerce and navigation established between the two high contracting parties by the present treaty.

Separate Article II. It is understood, in like manner, that the exemptions, immunities, and privileges hereinafter mentioned, shall not be considered as at variance with the principle of reciprocity, which forms the basis of the treaty of this date, that is to say: —

1. The exemption from navigation dues during the first three years, which is enjoyed by vessels built in Russia, and belonging to Russian subjects;
2. The exemptions of the like nature granted in the Russian ports of the Black Sea, the sea of Azoff, and the Danube, to such Turkish vessels arriving from ports of the Ottoman Empire situated on the Black Sea, as do not exceed eighty lasts burden;
3. The permission granted to the inhabitants of the coast of the government of Archangel, to import duty free, or on payment of moderate duties, into the ports of the said government, dried or salted fish, as likewise certain kinds of furs, and to export therefrom, in the same manner, corn, rope, and cordage, pitch, and ravensduck;
4. The privilege of the Russian American Company;
5. The privilege of the Steam Navigation Companies of Lubeck and Havre; lastly,
6. The immunities granted in Russia to certain English companies, called "Yacht Clubs."

The present separate articles shall have the same force and validity as if they were inserted, word for word, in the treaty signed this day. They shall be ratified, and the ratifications thereof exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed the same, and have fixed thereto the seals of their arms.

Done at St. Petersburg, the $\frac{11}{30}$th day of $\frac{\text{January}}{\text{December}}$, in the year of our Lord 184$\frac{3}{2}$.

STUART DE ROTHSAY.
NESSELRODE.
CANCRINE.

Regulations as to Travellers in Russia.

St. Petersburg, Jan. $\frac{15}{27}$th, 1842.

By order of the minister of finance, the department of foreign commerce has just published a notice consequent on the promulgation of the new tariff of customs for the regulation of the trade by the frontiers of Europe: —

1. In what relates to travellers arriving in Russia, the authorities will conform strictly to the regulations concerning travellers, with this single difference — that, in future, it will not be permitted to each traveller to have more than one fur pelisse; and that the duty lately established, of 35 per cent. *ad valorem*, will be levied upon such articles of silver plate as they may have over and above the number specified. The articles that are not comprised in the category of the regulations relating to travellers cannot be introduced without payment of the duties; and as to those of which the importation is prohibited, they can only be re-exported under the circumstances foreseen by the law. In any other case they will be confiscated, especially if there shall not have been made on their behalf any declaration or previous decision by the superior authorities of the customs authorising their admission.
2. In consequence, articles included in the category of merchandise or provisions of which the importation is permitted by the tariff cannot in any case be introduced duty free.
3. Nothing shall be recognised as the effects of travellers but what they bring with them. Effects separately forwarded shall be considered as merchandise, and be liable to the provisions of the tariff.
4. Nothing shall be recognised as effects for the personal use of travellers — which, under certain circumstances, are admitted free of duty — except those that bear evident marks of the use that has been made of them. Effects not bearing such marks shall be considered as new.
5. The verification, at a private residence, of effects so brought, shall only be permitted in case of works of art.

SARDINIA.

Treaty of Navigation between her Majesty and the King of Sardinia, signed at Turin, September 6, 1841.

Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and his Majesty the King of Sardinia, desiring to ameliorate, enlarge, and regulate the commercial relations between their respective kingdoms, and to furnish every sort of facility and encouragement to their respective subjects engaged in commercial operations with each other, and being persuaded that nothing can contribute more to the attainment of this desirable object than a reciprocal abrogation of all differential duties of navigation, of whatever nature, with regard to vessels of one of the two nations in the ports of the other, have named plenipotentiaries to conclude a treaty to this effect.

Article 1. British vessels which shall arrive laden in the ports of the kingdom of Sardinia, coming from the ports of the United Kingdom of Great Britain and Ireland; and reciprocally, Sardinian vessels which shall arrive laden in the ports of the U. Kingdom of Great Britain and Ireland, coming from the ports of Sardinia; as well as British or Sardinian vessels which shall arrive in ballast, in respect of any voyage whatever, in the ports of one or the other of these kingdoms, shall be treated on their entry, during their stay, and on their departure, on the same footing as national vessels, with respect to duties of tonnage, harbour, light-houses, pilotage, quarantine, wharfage, beaconage, signals, and any other duties of navigation whatever, which affect vessels, and are levied in the name and for the profit of government, public functionaries, communes, or establishments of whatever kind.

2. In order to avoid all misunderstanding with regard to the regulations according to which are fixed the conditions which establish the nationality of vessels, it is agreed that all vessels shall be considered as British vessels which are built in the dominions of her Britannic Majesty; and all those which, having been captured from an enemy by her Majesty's ships of war, or by her subjects furnished with letters of marque by the lords commissioners of the Admiralty, shall have been regularly declared a lawful prize by one of the prize courts of her Britannic Majesty; as well as all vessels which shall have been condemned by any competent court for a breach of the laws made for the prevention of the slave trade; provided that they are owned, navigated, and registered according to the laws of Great Britain; that they are the entire property of one or more of the subjects of her Majesty the Queen of Great Britain and Ireland; and that the master and three fourths of the crew are British subjects.

In the same manner, all vessels shall be considered as Sardinian vessels which are built in the dominions of his Sardinian Majesty; and all those which, having been captured from an enemy by his Majesty's ships of war, or by his subjects furnished with letters of marque, shall have been regularly declared a lawful prize by one of the prize courts of the kingdom of Sardinia; as well as all vessels which shall have been condemned by any competent court for a breach of the laws made for the prevention of the slave trade: provided that they are owned, navigated, and registered according to the laws of the said kingdom; that they are the entire property of one or more subjects of his Sardinian Majesty; and that the master and three-fourths of the crew are Sardinian subjects.

3. In all that regards the stationing of vessels, their loading and unloading in the ports, basins, roadsteads, and harbours, of one of the two countries, no privilege shall be accorded to national vessels which shall not be equally acceded to the vessels of the other country; the desire of the contracting parties being that in this respect likewise vessels shall be treated on a footing of perfect equality.

4. Vessels of the two countries shall be at liberty to discharge the whole or part of their cargo in the ports of the dominions of either of the high contracting parties, according as the captain or the proprietor, or whoever is duly authorised to act in the port as agent for the vessel or cargo shall consider advisable; and then proceed with the remainder of their cargo to the other ports of the same country.

5. Should any ships of war or mercantile vessels of one of the two countries be wrecked upon the coast of the other, such ships or vessels, or any part thereof, their rigging, and all the appurtenances thereof, as well as all effects and merchandise which shall be saved therefrom, or the proceeds of the sale thereof, shall be faithfully restored to the proprietors, or their duly authorised factors, upon being claimed by them. In the event of such proprietors or factors not being on the spot, the said appurtenances, merchandise, or the proceeds thereof, shall be delivered, together with all papers found on board such vessels, to the British or Sardinian consul in whose district the wreck may have taken place; and such consul, proprietor, or factor shall pay only the expenses incurred in the preservation of the property, together with the rate of salvage which would have been payable in the like case of a wreck of a national vessel. The merchandise and goods saved from the wreck shall not be subject to the established duties, unless cleared for consumption.

6. It is expressly understood that the preceding articles are not applicable to the navigation of the coast, or coasting trade of each of the two countries which is exclusively reserved to each of the high contracting parties.

7. British vessels arriving from Gibraltar or from Malta shall enjoy, in the ports of his Majesty the King of Sardinia, the same advantages as are accorded to British vessels arriving from the ports of the United Kingdom of Great Britain and Ireland; and reciprocally, Sardinian vessels, which shall enter the ports of the Island of Malta or of Gibraltar, shall enjoy all the advantages which are assured to them by the present treaty, when entering the ports of the United Kingdom of Great Britain and Ireland.

8. The present treaty shall be in force for the term of 10 years from the date of the exchange of the ratifications thereof, and further until the expiration of 12 months after one of the contracting parties shall have announced to the other the intention to terminate the same, each of the said high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years.

The ratifications of the present treaty shall be exchanged at Turin, within the space of 2 months from the date of the signature thereof, or sooner if possible.

In witness whereof, we have signed the same in double original, and have affixed thereto the seal of our arms.

Done at Turin, the 6th of September, 1841.

RALPH ABERCROMBY.
SOLAR DE LA MARGUERITE.

THE TWO SICILIES.

Treaty of Commerce and Navigation between His Britannic Majesty and the King of the Two Sicilies, signed at London, September 26, 1816.

Article 1. His Britannic Majesty consents, that all the privileges and exemptions which his subjects, their commerce and shipping, have enjoyed, and do enjoy, in the dominions, ports, and domains of his Sicilian Majesty, in virtue of the treaty of peace and commerce concluded at Madrid on the 10th of May (23d of May), 1667, between Great Britain and Spain; of the treaties of commerce between the same powers, signed at Utrecht, the 9th of December, 1713, and at Madrid, the 13th of December, 1715; and of the convention concluded at Utrecht, the 8th of March, 1712-1713, between Great Britain and the kingdom of Sicily, shall be *abolished*; and it is agreed upon in consequence, between their said Britannic and Sicilian Majesties, their heirs and successors, that the said privileges and exemptions, whether of persons, or of flags and shipping, are and shall continue for ever abolished.

2. His Sicilian Majesty engages not to continue, nor hereafter to grant, to the subjects of any other power whatever, the privileges and exemptions abolished by the present convention.

3. His Sicilian Majesty promises that the subjects of his Britannic Majesty shall not be subjected, within

his dominions, to a more rigorous system of examination and search by the officers of customs than that to which the subjects of his said Sicilian Majesty are liable.

4. His Majesty the King of the Two Sicilies promises that British commerce in general, and the British subjects who carry it on, shall be treated throughout his dominions upon the same footing as the most favoured nations, not only with respect to the persons and property of the said British subjects, but also with regard to every species of article in which they may traffic, and the taxes or other charges payable on the said articles, or on the shipping in which the importation shall be made.

5. With respect to the personal privileges to be enjoyed by the subjects of his Britannic Majesty, in the kingdom of the Two Sicilies, his Sicilian Majesty promises that they shall have a free and undoubted right to travel, and to reside in the territories and dominions of his said Majesty, subject to the same precautions of police which are practised towards the most favoured nations. They shall be entitled to occupy dwellings and warehouses, and to dispose of their personal property of every kind and description, by sale, gift, exchange, or will, and in any other way whatever, without the smallest loss or hindrance being given them on that head. They shall not be obliged to pay, under any pretence whatever, other taxes or rates than those which are paid, or that hereafter may be paid, by the most favoured nations in the dominions of his said Sicilian Majesty. They shall be exempt from all military service, whether by land or sea; their dwellings, warehouses, and every thing belonging or appertaining thereto for objects of commerce or residence, shall be respected. They shall not be subjected to any vexatious search or visits. No arbitrary examination or inspection of their books, papers, or accounts, shall be made under the pretence of the supreme authority of the state, but these shall alone be executed by the legal sentence of the competent tribunals. His Sicilian Majesty engages on all these occasions to guarantee to the subjects of his Britannic Majesty who shall reside in his states and dominions, the preservation of their property and personal security, in the same manner as those are guaranteed to his subjects and to all foreigners belonging to the most favoured and most highly privileged nations.

6. According to the tenor of the articles 1. and 2. of this treaty, his Sicilian Majesty engages not to declare null and void the privileges and exemptions which actually exist in favour of British commerce within his dominions, till the same day, and except by the same act, by which the privileges and exemptions, whatsoever they are, of all other nations, shall be declared null and void within the same.

7. His Sicilian Majesty promises, from the date when the general abolition of the privileges according to the articles 1, 2. and 6. shall take place, to make a reduction of 10 per cent. upon the amount of the duties payable according to the tariff in force the 1st of January, 1816, upon the total of the merchandise or production of the United Kingdom of Great Britain and Ireland, her colonies, possessions, and dependencies, imported into the states of his said Sicilian Majesty, according to the tenor of article 4. of the present convention; it being understood that nothing in this article shall be construed to prevent the King of the Two Sicilies from granting, if he shall think proper, the same reduction of duty to other foreign nations.

8. The subjects of the Ionian Islands shall, in consequence of their being actually under the immediate protection of his Britannic Majesty, enjoy all the advantages which are granted to the commerce and to the subjects of Great Britain by the present treaty; it being well understood, that to prevent all abuses, and to prove its identity, every Ionian vessel shall be furnished with a patent, signed by the Lord High Commissioner or his representative.

9. The present convention shall be ratified, and the ratifications thereof exchanged in London, within the space of 6 months, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed it, and thereunto affixed the seal of their arms.

Done at London, the 26th of September, 1816.

CASTLEREAGH. CASTELCICALA.

Separate and Additional Article.

In order to avoid all doubt respecting the reduction upon the duties in favour of British commerce which his Sicilian Majesty has promised in the 7th article of the convention signed this day between his Britannic Majesty and his Sicilian Majesty, it is declared, by this present separate and additional article, that by the concession of 10 per cent. of diminution, it is understood that in case the amount of the duty should be 20 per cent. upon the value of the merchandise, the effect of the reduction of 10 per cent. is to reduce the duty from 20 to 18; and so for other cases in proportion. And that for the articles which are not taxed *ad valorem* in the tariff, the reduction of the duty shall be proportionate; that is to say, a deduction of a tenth part upon the amount of the sum payable shall be granted.

The present separate and additional article shall have the same force and validity as if it had been inserted word for word in the convention of this day: it shall be ratified and the ratification thereof shall be exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed it, and have thereunto affixed the seal of their arms.

Done at London, the 26th of September, 1816.

CASTLEREAGH. CASTELCICALA.

TURKEY.

Capitulations and Articles of Peace between Great Britain and the Ottoman Empire, as agreed upon, augmented, and altered, at different Periods, and, finally, confirmed by the Treaty of Peace concluded at the Dardanelles, in 1809.

SULTAN MEHEMED,

MAY HE LIVE FOR EVER.

"*Let every thing be done in conformity to these capitulations, and contrary thereto let nothing be done.*"

1. The English nation and merchants, and all other merchants sailing under the English flag, with their vessels and merchandise of all descriptions, may pass safely by sea, and go and come into our dominions, without any the least prejudice or molestation being given to their persons, property, or effects, by any person whatsoever, but they shall be left in the undisturbed enjoyment of their privileges, and be at liberty to attend to their affairs.

2. If any of the English coming into our dominions by land be molested or detained, such persons shall be instantly released, without any further obstruction being given to them.

3. English vessels entering the ports and harbours of our dominions shall and may at all times safely and securely abide and remain therein, and at their free will and pleasure depart therefrom, without any opposition or hindrance from any one.

4. If it shall happen that any of their ships suffer by stress of weather, and not be provided with necessary stores and requisites, they shall be assisted by all who happen to be present, whether the crews of our Imperial ships, or others, both by sea and land.

5. Being come into the ports and harbours of our dominions, they shall and may be at liberty to purchase at their pleasure, with their own money, provisions and all other necessary articles, and to provide themselves with water, without interruption or hindrance from any one.

6. If any of their ships be wrecked upon any of the coasts of our dominions, all beys, cadis, governors, commandants, and others our servants, who may be near or present, shall give them all help, protection, and assistance, and restore to them whatsoever goods and effects may be driven ashore; and in the event

of any plunder being committed, they shall make diligent search and inquiry to find out the property, which, when recovered, shall be wholly restored by them.

7. The merchants, interpreters, bankers, and others of the said nation, shall and may, both by sea and land, come into our dominions, and there trade with the most perfect security; and in coming and going, neither they nor their attendants shall receive any the least obstruction, molestation, or injury, either ... their persons or property, from the boys, cadis, sea captains, soldiers, and others our slaves.

17. Our ships and galleys, and all other vessels, which may fall in with any English ships in the seas of our dominions, shall not give them any molestation, nor detain them by demanding any thing, but shall show good and mutual friendship the one to the other, without occasioning them any prejudice.

19. If the corsairs or galliots of the Levant be found to have taken any English vessels, or robbed or plundered them of their goods and effects, also if any one shall have forcibly taken any thing from the English, all possible diligence and exertion shall be used and employed for the discovery of the property, and inflicting condign punishment on those who may have committed such depredations; and their ships, goods, and effects shall be restored to them without delay or intrigue.

21. Duties shall not be demanded or taken of the English, or of the merchants sailing under the flag of that nation, on any piastres and sequins they may import into our sacred dominions, or on those they may transport to any other place.

36. English merchants, and all others sailing under their flag, may, freely and unrestrictedly, trade and purchase all sorts of merchandise (prohibited commodities alone excepted), and convey them, either by land or sea, or by way of the river Tanais, to the countries of Muscovy or Russia, and bring back thence other merchandise into our sacred dominions, for the purposes of traffic, and also transport others to Persia and other conquered countries.

38. Should the ships bound for Constantinople be forced by contrary winds to put into Caffa, or any other place of those parts, and not be disposed to buy or sell any thing, no one shall presume forcibly to take out or seize any part of their merchandise, or give to the ships or crews any molestation, or obstruct the vessels that are bound to these ports.

40. On their ships arriving at any port, and landing their goods, they may, after having paid their duties, safely and securely depart, without experiencing any molestation.

41. English ships bound to Constantinople, Alexandria, Tripoli of Syria, Scanderoon, or other ports of our sacred dominions, shall in future be bound to pay duties, according to custom, on such goods only as they shall, of their own free will, land with a view to sale; and for such merchandise as they shall not discharge, no duty shall be demanded, neither shall the least molestation or hindrance be given to them.

44. English and other merchants navigating under their flags, who trade to Aleppo, shall pay such duties on the silks, brought and laden by them on board their ships, as are paid by the French and Venetians, and not one asper more.

55. The Imperial fleet, galleys, and other vessels, departing from our sacred dominions, and falling in with English ships at sea, shall in no wise molest or detain them, nor take from them any thing whatsoever. English ships shall no longer be liable to any further search, or exaction at sea under colour of search or examination.

70. English ships coming to the ports of Constantinople, Alexandria, Smyrna, Cyprus, and other ports of our sacred dominions, shall pay 300 aspers for anchorage duty, without an asper more being demanded of them.

72. No molestation shall be given to any of the aforesaid nation buying camlets, mohairs, or grogram yarn, at Angora and Beghbazar, and desirous of exporting the same from thence, after having paid the duty of 3 per cent., by any demand of customs for the exportation thereof, neither shall one asper more be demanded of them.

75. That it being represented to us that English merchants have been accustomed hitherto to pay no custom or scale duty, either on the silks bought by them at Brussa and Constantinople, or on those which come from Persia and Georgia, and are purchased by them at Smyrna from the Armenians; if such usage or custom really exists, and the same be not prejudicial to the empire, such duty shall not be paid in future.

(*N. B.* — These capitulations may be found entire in *Hertslet's Treaties*; and in *Chitty's Commercial Law*, vol. ii. pp. 290—511. Appen.)

Treaty between Great Britain and the Sublime Porte, concluded at the Dardanelles, the 5th of January, 1809.

1. From the moment of signing the present treaty, every act of hostility between England and Turkey shall cease.

5. In return for the indulgence and good treatment afforded by the Sublime Porte to English merchants, with respect to their goods and property, as well as in all matters tending to facilitate their commerce, England shall reciprocally extend every indulgence and friendly treatment to the flags, subjects, and merchants of the Sublime Porte, which may hereafter frequent the dominions of his Britannic Majesty for the purpose of commerce.

6. The last Custom-house tariff established at Constantinople, at the ancient rate of 3 per cent., and particularly the article relating to the interior commerce, shall continue to be observed, as they are at present regulated, and to which England promises to conform.

10. English patents of protection shall not be granted to dependants, or merchants who are subjects of the Sublime Porte, nor shall any passport be delivered to such persons, on the part of ambassadors or consuls, without permission previously obtained from the Sublime Porte.

Done near the Castles of the Dardanelles, the 5th of January, 1809, which corresponds with the year of the Hegira 1223, the 19th day of the moon Zilkaade.

SEYD MEHEMMED EMIN VAAID EFFENDI.
ROBERT ADAIR.

Convention of Commerce and Navigation between Her Majesty and the Sultan of the Ottoman Empire, with two additional Articles thereunto annexed.

Art. 1. — All rights, privileges, and immunities which have been conferred on the subjects or ships of Great Britain by the existing capitulations and treaties are confirmed now and for ever, except in as far as they may be specifically altered by the present convention: and it is, moreover, expressly stipulated that all rights, privileges, or immunities which the Sublime Porte now grants, or may hereafter grant, to the ships and subjects of any other foreign power, or which it may suffer the ships and subjects of any other foreign power to enjoy, shall be equally granted to, and exercised and enjoyed by, the subjects and ships of Great Britain.

Art. 2. — The subjects of Her Britannic Majesty, or their agents, shall be permitted to purchase at all places in the Ottoman dominions (whether for the purposes of internal trade or exportation) all articles, without any exception whatsoever, the produce, growth, or manufacture of the said dominions; and the Sublime Porte formally engages to abolish all monopolies of agricultural produce, or of any other articles whatsoever, as well as all permits from the local governors, either for the purchase of any article or for its removal from one place to another when purchased; and any attempt to compel the subjects of Her Britannic Majesty to receive such permits from the local governors shall be considered as an infraction of treaties, and the Sublime Porte shall immediately punish with severity any vizirs and other officers who shall have been guilty of such misconduct, and render full justice to British subjects for all injuries or losses which they may duly prove themselves to have suffered.

Art. 3. — If any article of Turkish produce, growth, or manufacture be purchased by the British mer-

chant or his agent, for the purpose of selling the same for internal consumption in Turkey, the British merchant or his agent shall pay, at the purchase and sale of such articles, and in any manner of trade therein, the same duties that are paid, in similar circumstances, by the most favoured class of Turkish subjects engaged in the internal trade of Turkey, whether Mussulmans or Rayahs.

Art. 4. — If any article of Turkish produce, growth, or manufacture be purchased for exportation, the same shall be conveyed by the British merchant or his agent, free of any kind of charge or duty whatsoever, to a convenient place of shipment, on its entry into which it shall be liable to one fixed duty of 9 per cent. *ad valorem*, in lieu of all other interior duties.

Subsequently, on exportation, the duty of 3 per cent., as established and existing at present, shall be paid. But all articles bought in the shipping ports for exportation, and which have already paid the interior duty at entering into the same, will only pay the 3 per cent. export duty.

Art. 5. — The regulations under which firmans are issued to British merchant vessels for passing the Dardanelles and the Bosphorus, shall be so framed as to occasion to such vessels the least possible delay.

Art. 6. — It is agreed by the Turkish government that the regulations established in the present convention shall be general throughout the Turkish empire, whether in Turkey in Europe, in Turkey in Asia, in Egypt, or other African possessions belonging to the Sublime Porte, and shall be applicable to all the subjects, whatever their description, of the Ottoman dominions; and the Turkish government also agrees not to object to other foreign powers settling their trade upon the basis of this present convention.

Art. 7. — It having been the custom of Great Britain and the Sublime Porte, with a view to prevent all difficulties and delay in estimating the value of articles imported into the Turkish dominions, or exported therefrom, by British subjects, to appoint at intervals of fourteen years, a commission of men well acquainted with the traffic of both countries, who have fixed by a tariff the sum of money in the coin of the Grand Signior which should be paid as duty on each article; and the term of fourteen years, during which the last adjustment of the said tariff was to remain in force, having expired, the high contracting parties have agreed to name conjointly fresh commissioners to fix and determine the amount in money which is to be paid by British subjects, as the duty of 3 per cent. upon the value of all commodities imported and exported by them; and the said commissioners shall establish an equitable arrangement for estimating the interior duties which, by the present treaty, are established on Turkish goods to be exported, and shall also determine on the places of shipment where it may be most convenient that such duties should be levied.

The new tariff thus established to be in force for 7 years after it has been fixed, at the end of which time it shall be in the power of either of the parties to demand a revision of that tariff; but if no such demand be made on either side within the 6 months after the end of the first 7 years, then the tariff shall remain in force for 7 years more, reckoned from the end of the preceding 7 years; and so it shall be at the end of each successive period of 7 years.

Art. 8. — The present convention shall be ratified, and the ratifications shall be exchanged at Constantinople within the space of 4 months.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed their seals thereunto.

Done at Balta-Liman, near Constantinople, the 16th day of August, 1838.

PONSONBY.

(Signed in the Turkish original)

MUSTAPHA RESCHID, &c.

Additional Articles.

Certain difficulties having arisen between the ambassador of her Britannic Majesty and the plenipotentiaries of the Sublime Porte, in fixing the new conditions which should regulate the commerce in British goods imported into the Turkish dominions, or passing through the same in transit, it is agreed between his Excellency the British ambassador and the plenipotentiaries of the Sublime Porte, that the present convention should receive their signatures, without the articles which have reference to the above-mentioned subjects forming part of the body of the said convention.

But at the same time it is also agreed — the following articles having been consented to by the Turkish government — that they shall be submitted to the approbation of her Majesty's government, and, should they be approved and accepted by her Majesty's government, they shall then form an integral part of the treaty now concluded.

The articles in question are the following: —

Art. 1. — All articles being the growth, produce, or manufacture of the U. Kingdom of Great Britain and Ireland and its dependencies, and all merchandise, of whatsoever description, embarked in British vessels, and being the property of British subjects, or being brought overland, or by sea, from other countries by the same, shall be admitted, as heretofore, into all ports of the Ottoman dominions, without exception, on the payment of 3 per cent. duty, calculated upon the value of such articles.

And in lieu of all other and interior duties, whether levied on the purchaser or seller, to which these articles are at present subject, it is agreed that the importer, after receiving his goods, shall pay, if he sells them at the place of reception, or if he send them thence to be sold elsewhere in the interior of the Turkish empire, one fixed duty of 2 per cent.; after which such goods may be sold and resold in the interior, or exported, without any further duty whatsoever being levied or demanded on them.

But all goods that have paid the 3 per cent. import duty at one port shall be sent to another free of any further duty, and it is only when sold there, or transmitted thence into the interior, that the second duty shall be paid.

It is always understood that Her Majesty's government do not pretend, either by this article or any other in the present treaty, to stipulate for more than the plain and fair construction of the terms employed; nor to preclude in any manner the Ottoman government from the exercise of its rights of internal administration, where the exercise of those rights does not evidently infringe upon the privileges accorded by ancient treaties, or the present treaty, to British merchandise or British subjects.

Art. 2. — All foreign goods brought into Turkey from other countries shall be freely purchased and traded in, in any manner, by the subjects of Her Britannic Majesty, or the agents of the same, at any place in the Ottoman dominions; and if such foreign goods have paid no other duty than the duty paid on importation, then the British subject or his agent shall be able to purchase such foreign goods on paying the extra duty of 2 per cent, which he will have to pay on the sale of his own imported goods, or on their transmission for sale into the interior; and after that such foreign goods shall be resold in the interior, or exported, without further duty; or, should such foreign goods have already paid the amount of the two duties (*i. e.* the import duty and the one fixed interior duty), then they shall be purchased by the British subject or his agent, and afterwards resold or exported, without being ever submitted to any further duty.

Act. 3. — No charge whatsoever shall be made upon British goods (such being the growth, produce, or manufacture of the U. Kingdom or its dependencies, or the growth, produce, or manufacture of any foreign country, and charged in British vessels, and belonging to British subjects) passing through the straits of the Dardanelles, of the Bosphorus, and of the Black Sea, whether such goods shall pass through those straits in the ships that brought them, or are transhipped in those straits, or, destined to be sold elsewhere, are landed with a view to their being transferred to other vessels (and thus to proceed on their voyage) within a reasonable time.

All merchandise imported into Turkey for the purpose of being transmitted to other countries, or

which, remaining in the hands of the importer, shall be transmitted by him for sale to other countries shall only pay the duty of 3 per cent. paid on importation, and no other duty whatsoever.

Done at Balta-Liman, near Constantinople, the 16th day of August, 1838.

PONSONBY.

(Signed in the Turkish original)

MUSTAHPA RESCHID, &c.

Official Note delivered to Lord Ponsonby by his Excellency Nouree Effendi, on the 27th of August, 1838, relative to the 2d Article of the preceding Convention.

(*Translation.*)

It is stipulated by the 2d article of the treaty of commerce concluded between the Sublime Porte and the British government on the 25th Djémaziulevel, 1254 (August 16. 1838), that English merchants are at liberty to purchase all kinds of merchandise in the Ottoman empire.

But in order that the right of English merchants to sell within the Ottoman empire, or to export the merchandise which they may purchase, may not be liable to misconception, the embassy of Her Britannic Majesty has desired that an explanation should be given on this point, either in the treaty itself, or in a special note.

The meaning of the passage of which an elucidation is requested is clear, from the relation which the subsequent points in the 2d article bear to each other. But we nevertheless repeat, that English merchants may, in virtue of the treaty, purchase within the Ottoman empire all kinds of merchandise; may, if they think proper, send the same abroad after having paid the duty thereon stipulated by the treaty; or may, if they think fit, resell the same within the Ottoman empire on conforming to the arrangements established by the said treaty with reference to internal commerce.

Such are the arrangements of the treaty; and we give this explanation to the ambassador, renewing to his Excellency the assurances of our sincere and perfect friendship.

The 7th Djémaziul-akir, 1254 (August 27. 1838.)

Convention between Great Britain, Austria, France, Prussia, Russia, and Turkey, respecting the Straits of the Dardanelles and of the Bosphorus. Signed at London, July 13. 1841.

Article 1. His Highness the Sultan, on the one part, declares that he is firmly resolved to maintain for the future the principle invariably established as the ancient rule of his empire, and in virtue of which it has at all times been prohibited for the ships of war of foreign powers to enter the straits of the Dardanelles and of the Bosphorus; and that, so long as the Porte is at peace, his Highness will admit no foreign ship of war into the said straits.

And their Majesties the Queen of the United Kingdom of Great Britain and Ireland, the Emperor of Austria, King of Hungary and Bohemia, the King of the French, the King of Prussia, and the Emperor of all the Russias, on the other part, engage to respect this determination of the Sultan, and to conform themselves to the principle above declared.

2. It is understood that in recording the inviolability of the ancient rule of the Ottoman empire mentioned in the preceding article, the Sultan reserves to himself, as in past times, to deliver firmans of passage for light vessels under flag of war, which shall be employed, as is usual, in the service of the missions of foreign powers.

3. His Highness the Sultan reserves to himself to communicate the present convention to all the powers with whom the Sublime Porte is in relations of friendship, inviting them to accede thereto.

The present convention shall be ratified, and the ratifications thereof shall be exchanged at London, at the expiration of 2 months, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 13th day of July, in the year of our Lord 1841.

PALMERSTON.
ESTERHAZY.
NEUMANN.
BOURQUENEY.
BULOW.
BRUNNOW.
CHEKIB.

UNITED STATES.

Convention of Commerce between Great Britain and the U. States of America, signed at London, the 3d *of July*, 1815.

Article 1. There shall be between all the territories of his Britannic Majesty in Europe, and the territories of the U. States, a reciprocal liberty of commerce. The inhabitants of the 2 countries respectively shall have liberty freely and securely to come with their ships and cargoes to all such places, ports, and rivers in the territories aforesaid, to which other foreigners are permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; and also to hire and occupy houses and warehouses for the purpose of their commerce; and generally the merchants and traders of each nation respectively shall enjoy the most complete protection and security for their commerce; but subject always to the laws and statutes of the 2 countries respectively.

2. No higher or other duties shall be imposed on the importation into the territories of his Britannic Majesty in Europe, of any articles, the growth, produce, or manufacture of the U. States, and no higher or other duties shall be imposed on the importation into the U. States, of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any higher or other duties or charges be imposed in either of the two countries on the exportation of any articles to his Britannic Majesty's territories in Europe, or to the U. States, respectively, than such as are payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation or importation of any articles, the growth, produce, or manufacture of the U. States, or of his Britannic Majesty's territories in Europe, to or from the said territories of his Britannic Majesty in Europe, or to or from the said U. States, which shall not equally extend to all other nations.

No higher or other duties or charges shall be imposed in any of the ports of the U. States on British vessels, than those payable in the same ports by vessels of the U. States; nor in the ports of any of his Britannic Majesty's territories in Europe on the vessels of the U. States, than shall be payable in the same ports on British vessels.

The same duties shall be paid on the importation into the U. States of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, whether such importation shall be in the vessels of the U. States, or in British vessels; and the same duties shall be paid on the importation into the ports of any of his Britannic Majesty's territories in Europe of any articles, the growth, produce, or manufacture of the U. States, whether such importation shall be in British vessels, or in vessels of the U. States.

The same duties shall be paid, and the same bounties allowed, on the exportation of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, to the U. States, whether such exportation shall be in vessels of the U. States, or in British vessels; and the same duties shall be paid, and the same bounties allowed, on the exportation of any articles, the growth, pro-

duce, or manufacture of the U. States, to his Britannic Majesty's territories in Europe, whether such exportation shall be in British vessels, or in vessels of the U. States.

It is further agreed, that in all cases where drawbacks are or may be allowed upon the re-exportation of any goods, the growth, produce, or manufacture of either country respectively, the amount of the said drawbacks shall be the same, whether the said goods shall have been originally imported in a British or American vessel; but when such re-exportation shall take place from the U. States in a British vessel, or from the territories of his Britannic Majesty in Europe in an American vessel, to any other foreign nation, the 2 contracting parties reserve to themselves, respectively, the right of regulating or diminishing, in such case, the amount of the said drawback.

The intercourse between the U. States and his Britannic Majesty's possessions in the West Indies, and on the continent of North America, shall not be affected by any of the provisions of this article, but each party shall remain in the complete possession of its rights, with respect to such an intercourse.

3. His Britannic Majesty agrees that the vessels of the U. States of America shall be admitted and hospitably received at the principal settlements of the British dominions in the East Indies, viz. *Calcutta*, *Madras*, *Bombay*, and *Prince of Wales' Island*, and that the citizens of the said U. States may freely carry on trade between the said principal settlements and the said U. States, in all articles of which the importation and exportation respectively, to and from the said territories, shall not be entirely prohibited; provided only, that it shall not be lawful for them, in any time of war between the British government and any state or power whatever, to export from the said territories, without the special permission of the British government, any military stores, or naval stores, or rice. The citizens of the U. States shall pay for their vessels, when admitted, no higher or other duty or charge than shall be payable on the vessels of the most favoured European nations, and they shall pay no higher or other duties or charges on the importation or exportation of the cargoes of the said vessels, than shall be payable on the same articles when imported or exported in the vessels of the most favoured European nations.

But it is expressly agreed, that the vessels of the U. States shall not carry any articles from the said principal settlements to any port or place, except to some port or place in the U. States of America, where the same shall be unladen.

It is also understood, that the permission granted by this article is not to extend to allow the vessels of the U. States to carry on any part of the coasting trade of the said British territories; but the vessels of the U. States, having in the first instance proceeded to one of the said principal settlements of the British dominions in the East Indies, and then going with their original cargoes, or any part thereof, from one of the said principal settlements to another, shall not be considered as carrying on the coasting trade. The vessels of the U. States may also touch for refreshments, but not for commerce, in the course of their voyage to or from the British territories in India, or to or from the dominions of the Emperor of China, at the Cape of Good Hope, the island of St. Helena, or such other places as may be in the possession of Great Britain, in the African or Indian seas; it being well understood, that in all that regards this article, the citizens of the U. States shall be subject in all respects to the laws and regulations of the British government from time to time established.

4. It shall be free for each of the 2 contracting parties respectively to appoint consuls, for the protection of trade, to reside in the dominions and territories of the other party; but before any consul shall act as such, he shall in the usual form be approved and admitted by the government to which he is sent; and it is hereby declared, that in case of illegal and improper conduct towards the laws or government of the country to which he is sent, such consul may either be punished according to law, if the laws will reach the case, or be sent back, the offended government assigning to the other the reasons for the same.

It is hereby declared, that either of the contracting parties may except from the residence of consuls such particular places as such party shall judge fit to be so excepted.

5. This convention, when the same shall have been duly ratified by his Britannic Majesty and by the President of the U. States, by and with the advice and consent of their Senate, and the respective ratifications mutually exchanged, shall be binding and obligatory on his Majesty and on the said U. States for 4 years from the date of its signature; and the ratifications shall be exchanged in 6 months from this time, or sooner if possible.

Done at London, the 3d of July, 1815.

FRED. J. ROBINSON. JOHN Q. ADAMS.
HENRY GOULBURN. H. CLAY.
WILLIAM ADAMS. ALBERT GALATIN.

This convention was subsequently prolonged by conventions for that purpose in 1818 and 1827.

Convention between Great Britain and the United States of America, signed at London, the 20th October. 1818.

Art. 1. — Whereas differences have arisen respecting the liberty claimed by the U. States for the inhabitants thereof, to take, dry, and cure fish, on certain coasts, bays, harbours, and creeks of his Britannic Majesty's dominions in America, it is agreed between the high contracting parties, that the inhabitants of the said United States shall have for ever, in common with the subjects of his Britannic Majesty, the liberty to take fish of every kind on that part of the coast of Newfoundland which extends from Cape Ray to the Rameau Islands, on the western and northern coasts of Newfoundland, from the said Cape Ray to the Quirpon Islands, on the shores of the Magdalen Islands, and also on the coasts, bays, harbours, and creeks, from Mount Joly, on the southern coast of Labrador, to and through the Straits of Belleisle, and thence northwardly indefinitely along the coast, without prejudice, however, to any of the exclusive rights of the Hudson Bay Company: and that the American fishermen shall also have liberty, for ever, to dry and cure fish in any of the unsettled bays, harbours, and creeks of the southern part of the coast of Newfoundland, and of the coast of Labrador; but so soon as the same, or any portion thereof, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish, without previous agreement for such purpose with the inhabitants, proprietors, or possessors of the ground. And the U. States hereby renounce for ever any liberty heretofore enjoyed or claimed by the inhabitants thereof to take, dry, or cure fish on or within three marine miles of any of the coasts, bays, creeks, or harbours of his Britannic Majesty's dominions in America, not included within the above-mentioned limits; provided, however, that the American fishermen shall be admitted to enter such bays or harbours for the purpose of shelter and of repairing damages therein, of purchasing wood, and of obtaining water, and for no other purpose whatever: but they shall be under such restrictions as may be necessary to prevent their taking, drying, or curing fish therein, or in any other manner abusing the privileges hereby reserved to them.

2. It is agreed that a line drawn from the most north-western point of the Lake of the Woods, along the 49th parallel of north latitude, or if the said point shall not be in the 49th parallel of north latitude, then that a line drawn from the said point due north or south, as the case may be, until the said line shall intersect the said parallel of north latitude, and from the point of such intersection due west along and with the said parallel, shall be the line of demarcation between the territories of the U. States and those of his Britannic Majesty, and that the said line shall form the northern boundary of the said territories of the U. States, and the southern boundary of the territories of his Britannic Majesty, from the Lake of Woods to the Stony Mountains.

3. It is agreed that any country that may be claimed by either party on the north-west coast of America, westward of the Stony Mountains, shall, together with its harbours, bays, and creeks, and the navigation of all rivers within the same, be free and open, for the term of 10 years from the date of the signature of the present convention, to the vessels, citizens, and subjects of the two powers: it being well

understood, that this agreement is not to be construed to the prejudice of any claim which either of the two high contracting parties may have to any part of the said country, nor shall it be taken to affect the claims of any other power or state to any part of the said country, the only object of the high contracting parties, in that respect, being to prevent disputes and differences among themselves.

4. All the provisions of the convention to "regulate the commerce between the territories of the U. States and of his Britannic Majesty, concluded at London," on the 3d of July, in the year of our Lord 1815, with the exception of the clause which limited its duration to 4 years, and excepting, also, so far as the same was affected by the declaration of his Majesty respecting the island of St. Helena, are hereby extended and continued in force for the term of 10 years from the date of the signature of the present convention, in the same manner as if all the provisions of the said convention were herein specially recited.

5. Whereas it was agreed by the first article of the treaty of Ghent, that "all territory, places, and possessions whatever, taken by either party from the other during the war, or which may be taken after the signing of this treaty, excepting only the islands hereinafter mentioned, shall be restored without delay, and without causing any destruction, or carrying away any of the artillery, or other public property originally captured in the said forts or places, which shall remain therein upon the exchange of the ratifications of this treaty, or any slaves, or other private property;" and whereas, under the aforesaid article, the United States claim for their citizens, and as their private property, the restitution of, or full compensation for, all slaves who at the date of the exchange of the ratifications of the said treaty were in any territory, place, or possessions whatsoever, directed by the said treaty to be restored to the U. States, but then still occupied by the British forces, whether such slaves were, at the date aforesaid, on shore, or on board any British vessel lying in waters within the territory or jurisdiction of the U. States; and whereas differences have arisen whether, by the true intent and meaning of the aforesaid article of the treaty of Ghent, the U. States are entitled to the restoration of, or full compensation for, all or any slaves as above described, the high contracting parties hereby agree to refer the said differences to some friendly sovereign or state to be named for that purpose: and the high contracting parties further engage to consider the decision of such friendly sovereign or state to be final and conclusive on all the matters referred.

6. This convention, when the same shall have been duly ratified by the President of the U. States, by and with the advice and consent of their senate, and by his Britannic Majesty, and the respective ratifications mutually exchanged, shall be binding and obligatory on the said U. States and on his Majesty; and the ratifications shall be exchanged in six months from this date, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have thereunto affixed the seal of their arms.

Done at London, the 20th October, 1818.

ALBERT GALATIN.
RICHARD RUSH.
FREDERICK JOHN ROBINSON.
HENRY GOULBURN.

URUGUAY.

Treaty of Amity, Commerce, and Navigation, between her Majesty and the Oriental Republic of the Uruguay, signed at London, August 26. 1842.

Article 1. There shall be perpetual peace and amity between the dominions and subjects of her Majesty the Queen of the United Kingdom of Great Britain and Ireland, her heirs and successors, and the Oriental Republic of the Uruguay and its citizens.

2. There shall be between all the territories of her Britannic Majesty in Europe, and the territories of the Oriental Republic of the Uruguay, a reciprocal freedom of commerce. The subjects and citizens of the two countries, respectively, shall have liberty freely and securely to come, with their ships and cargoes, to all places, ports, and rivers in the territories aforesaid, to which other foreigners are or may be permitted to come; to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and, generally, the merchants and traders of each nation shall enjoy, within the territories of the other, the most complete protection and security for their commerce; subject always to the laws and statutes of the land.

In like manner the respective ships of war and post-office packets of the two countries shall have liberty freely and securely to come to all harbours, rivers, and places, in either country, to which other foreign ships of war and packets are or may be permitted to come; and they shall be allowed to enter into the same, to anchor and to remain there and refit; subject always to the laws and statutes of the two countries respectively.

It is hereby declared, that the stipulations of the present article are not to be understood as applying to the navigation and carrying trade between one port and another, situated in the dominions of either contracting party; such navigation and trade being reserved exclusively to national vessels.

3. There shall be reciprocal liberty of commerce and navigation between and amongst the subjects and citizens of the two high contracting parties; and the subjects and citizens of the two countries respectively shall not pay in the ports, harbours, roads, cities, towns, or places whatsoever in either country, any other or higher duties, taxes, or imposts, under whatsoever names designated or included, than those which are there paid by the subjects or citizens of the most favoured nation; and the subjects and citizens of each of the high contracting parties shall enjoy the same rights, privileges, liberties, favours, immunities, and exemptions, in matters of commerce and navigation, that are granted or may hereafter be granted in either country to the subjects or citizens of the most favoured nation.

No duty of customs or other impost shall be charged upon any goods the produce of one country, upon importation by sea or by land from such country into the other, higher than the duty or impost charged upon goods of the same kind, the produce of or imported from any other country. And her Majesty the Queen of the United Kingdom of Great Britain and Ireland, and the Oriental Republic of the Uruguay, do hereby bind and engage themselves not to grant any favour, privilege, or immunity, in matters of commerce and navigation, to the subjects or citizens of any other state, which shall not be also and at the same time extended to the subjects or citizens of the other high contracting party; gratuitously, if the concession in favour of that other state shall have been gratuitous; and on giving as nearly as possible the same compensation or equivalent, in case the concession shall have been conditional.

4. No higher or other duties or payments on account of tonnage, light or harbour dues, pilotage, salvage in case of damage or shipwreck, or any local charges, shall be imposed in any of the ports of the one country upon the vessels of the other, than are payable in those ports upon national vessels.

5. The same duties shall be paid on all articles the growth, produce, or manufacture of her Britannic Majesty's dominions, when imported into the territories of the Oriental Republic of the Uruguay, whether such article be imported in vessels of the said republic, or in British vessels; and the same duties shall be paid on all articles the growth, produce, or manufacture of the said republic, when imported into the dominions of her Britannic Majesty, whether such articles be imported in British vessels or in vessels of the said republic. The same duties shall be paid, and the same bounties and drawbacks allowed, on all articles the growth, produce, or manufacture of her Britannic Majesty's dominions, when exported to the said republic of the Uruguay, whether such articles be exported in vessels of the said Republic, or in British vessels; and the same duties shall be paid, and the same bounties and drawbacks allowed, on all articles the growth, produce, or manufacture of the said republic, when exported

to the dominions of her Britannic Majesty, whether such articles be exported in British vessels, or in vessels of the said republic.

6. In order to avoid any misunderstanding with respect to the regulations which may respectively determine what shall be considered a British vessel, or a vessel of the Oriental Republic of the Uruguay, when engaged in commerce between the two countries; it is hereby agreed, that all vessels built in the dominions of her Britannic Majesty, or having been made prize of war and condemned as such, or having been forfeited under any law made for the prevention of the slave trade, and condemned in any competent court for a breach of such law, and which shall be owned and navigated by subjects of her Majesty, and whereof the master and three-fourths at least of the mariners shall be subjects of her Britannic Majesty, and which shall be registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built within the territory of the said Oriental Republic of the Uruguay, or having been made prize of war and condemned as such, or having been forfeited under any law made for the prevention of the slave trade, and condemned in any competent court for a breach of such law, or being of *bonâ fide* British construction, built in any port of her Britannic Majesty's dominions, and acquired by purchase; and which shall be owned and navigated by citizens of the said republic, and whereof the master and three-fourths at least of the mariners shall be citizens of the said republic, or matriculated subjects of her Britannic Majesty, and which shall be registered according to the laws of the said republic, shall be considered as vessels of the said Oriental Republic of the Uruguay, so far as shall relate to any commercial rights or privileges in the several ports of her Britannic Majesty's dominions.

And it is further agreed, that no ship considered as being the ship of either country shall be qualified to trade as above described under the provisions of this treaty, unless she be furnished with a register, passport, or sea-letter, under the signature of the proper person authorised to grant the same, according to the laws of the respective countries, and in a form to be reciprocally communicated by the two governments to each other. Such register, passport, or sea-letter shall certify the name, occupation, and residence of the owner or owners in the dominions of her Britannic Majesty, or in the territories of the Oriental Republic of the Uruguay, as the case may be; shall declare that he or they is or are the sole owner of the ship, or owners in the proportion to be specified; and shall state the name, burden, and description of the vessel, as to build and measurement; and if the vessel is of foreign build, of what country, and, as far as may be possible, when and from whom purchased; and all other particulars constituting the national character of the vessel, as the case may be.

7. The subjects of her Britannic Majesty shall have full liberty, in all the territories of the Oriental Republic of the Uruguay, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; and they shall not be obliged to employ any other persons in those capacities, than those employed by the citizens of the Oriental Republic of the Uruguay; and they shall not be restrained in their choice of persons to act in such capacities, nor be obliged to pay them any other salary or remuneration, than such as is paid in like cases by the citizens of the said republic; and absolute freedom shall be allowed in all cases to the buyer and seller to bargain and fix the price of any goods, wares, or merchandise imported into and exported from the Oriental Republic of the Uruguay, as they shall see fit, provided they observe the laws and established customs of the country. The same privileges shall be enjoyed in the dominions of her Britannic Majesty by the citizens of the Oriental Republic of the Uruguay, under the same conditions.

The subjects and citizens of each of the contracting parties respectively shall, in the territories of the other, receive and enjoy full and perfect protection for their persons and property, and shall have free and open access to the courts of justice in the said countries respectively, for the prosecution and defence of their just rights; and they shall be at liberty to employ, in all causes, the advocates, attornies, or agents of whatever description, whom they may think proper; and they shall enjoy, in this respect, the same rights and privileges therein as native citizens.

8. In whatever relates to the police of ports; the lading and unlading of ships; the safety of merchandise, goods, and effects; the succession to personal estates by will or otherwise; and the disposal of personal property of every sort and denomination by sale, donation, exchange, or in any other manner whatsoever; and to the administration of justice; the subjects and citizens of each of the two contracting parties shall enjoy, in the dominions and territories of the other, the same privileges, liberties, and rights, as native subjects or citizens; and they shall not be charged in any of these respects with any higher imposts or duties than those which are or may be paid by natives; conforming of course to the local laws and regulations of such dominions or territories.

And it is further agreed, that the subjects and citizens of the two contracting parties shall have and enjoy, in all the dominions or territories of each other, the most full and perfect liberty to devise or dispose of their property and effects of every kind and denomination, and wheresoever situate, by will or testament, to such person or persons, and in such proportions, as their own free will may dictate.

If any subject or citizen of either of the two contracting parties should die without will or testament in the dominions or territories of the other, the consul-general or consul, or, in his absence, the representative of such consul-general or consul, shall have the right to nominate curators to take charge of the property of the deceased, so far as the laws of the country will permit, for the benefit of the lawful heirs and creditors of the deceased, without being interfered with by the authorities of the country, but giving to those authorities due and proper notice.

9. The subjects of her Britannic Majesty residing in the territories of the Oriental Republic of the Uruguay, and the citizens of the said republic residing in the dominions of her Britannic Majesty, shall be exempted from all compulsory military service whatsoever, either by sea or land, and from all forced loans or military exactions or requisitions.

Neither shall they be compelled, under any pretext whatsoever, to pay any charges, requisitions, or taxes, greater than those which are or may be paid by native subjects or citizens of the territories in which they reside.

10. It shall be free for each of the two contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but no consul shall act as such until he shall in the usual form be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of consuls such particular places as they may judge fit to be excepted. The diplomatic agents and consuls of the Oriental Republic of the Uruguay, in the dominions of her Britannic Majesty, shall enjoy whatever privileges, exemptions, and immunities are or may there be granted to agents of the same rank belonging to the most favoured nation; and in like manner the diplomatic agents and consuls of her Britannic Majesty, in the territories of the Oriental Republic of the Uruguay, shall enjoy, according to the strictest reciprocity, whatever privileges, exemptions, and immunities are or may there be granted to the diplomatic agents and consuls of the most favoured nation.

11. For the better security of commerce between the subjects of her Britannic Majesty and the citizens of the Oriental Republic of the Uruguay, it is agreed, that if at any time any interruption of friendly intercourse or any rupture should unfortunately take place between the two countries, the subjects or citizens of either of the two contracting parties who may be within the territories of the other, shall, if residing upon the coasts, be allowed 4 months, and if residing in the interior, 9 months, to wind up their accounts and to dispose of their property; and a safe conduct shall be given to all such of the aforesaid persons as may choose to quit the country, to enable them to embark unmolested at the port which the government of the country shall select. It is, moreover, further agreed, that all subjects or citizens of either of the two contracting parties who, at the time of any such interruption of friendly relations between the two countries, shall be established in the exercise of any trade or special employment in the dominions

or territories of the other, shall have the privilege of remaining and of continuing such trade and employment therein, without any manner of interruption, in full enjoyment of their liberty and property, so long as they conduct themselves peaceably, and commit no offence against the laws; and their goods and effects, of whatever description, whether in their own custody or intrusted to individuals or to the state, shall not be liable to seizure or sequestration, or to any other charges or demands than those to which like effects or property belonging to native subjects or citizens may eb liable. Debts between individuals, property in the public funds, and shares of companies, shall never eb confiscated, sequestrated, or detained.

12. The subjects of her Britannic Majesty, and the citizens of the Oriental Republic of the Uruguay, respectively, residing in the territories of the other party, shall enjoy, in their houses, persons, and properties, the protection of the government, and continue in possession of the privileges which they now legally enjoy. They shall not be disturbed, molested, or annoyed in any manner on account of their religion, but they shall have perfect liberty of conscience, provided they respect the religion of the country in which they reside, as well as the constitution, laws, and customs of the land. They shall also have permission to celebrate divine service, according to the rites and ceremonies of their own church, either within their own private houses, or in their own particular churches or chapels, which they shall be at liberty to build and maintain in convenient places, approved of by the government. Liberty shall also be granted to the subjects or citizens of either of the two contracting parties resident in the territories of the other, to bury, in burial places of their own, such of their fellow-subjects or fellow-citizens who may die in such territories. Such burial places may be freely established and maintained; and the funerals and sepulchres of the dead shall not be disturbed in any way, or upon any account.

13. The present treaty shall be in force for the term of 10 years from the date thereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same: each of the high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years, or at any subsequent time.

And it is hereby agreed between them, that at the expiration of 12 months after such notice shall have been received by either party from the other, this treaty, and all the provisions thereof, shall altogether cease and determine.

14. The present treaty shall be ratified, and the ratifications shall be exchanged at London, as soon as possible within the period of 18 months from the date thereof.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of August, in the year of our Lord 1842.

ABERDEEN.
RIPON.
JOSE ELLAURI.

Additional Article.

Whereas by Art. 9. of the treaty of amity, commerce, and navigation, concluded and signed this day between her Britannic Majesty and the Oriental Republic of the Uruguay, it is stipulated that the subjects of her Britannic Majesty residing in the said republic shall not be compelled, under any pretext whatsoever, to pay any charges, requisitions, or taxes, greater than those which are or may be paid by native citizens; and whereas, by a law of the Oriental Republic of the Uruguay, a foreigner pays for the licence to open a shop, or other establishment included in the provisions of the said law, a sum greater than that which is paid by a native citizen; her Britannic Majesty engages, notwithstanding the provisions of the above-mentioned article, not to insist upon the abolition of this distinction, so long as it exists impartially with regard to the subjects or citizens of every other foreign nation.

And his Excellency the President of the Oriental Republic of the Uruguay engages, on his part, that if at any future time the amount payable by British subjects for such licence should be increased, a corresponding increase shall at the same time be made in the sum payable by native citizens of the republic; so that the proportion between the sum payable by British subjects and the sum payable by citizens of the Oriental Republic of the Uruguay, respectively, shall never be altered to the prejudice of British subjects.

The present additional article shall have the same force and validity as if it were inserted, word for word, in the treaty signed this day. It shall be ratified, and the ratifications shall be exchanged at the same time.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of August, in the year of our Lord 1842.

ABERDEEN.
RIPON.
JOSE ELLAURI.

Second Additional Article.

Whereas a strict and immediate execution of that part of article 6. of the treaty of amity, commerce, and navigation, signed at London on the 26th of August, 1842, between her Majesty the Queen of the U. Kingdom of Great Britain and Ireland, and the Oriental Republic of the Uruguay, which stipulates that a ship must have been actually built within the territory of the Oriental Republic of the Uruguay, to be considered a ship of that republic, would, in the present state of Uruguay shipping, deprive the republic of the full advantage of the reciprocity intended to be established by the treaty; it is agreed that, for the space of 7 years from the date of the exchange of the ratifications of the said treaty, any ships, wheresoever built, being owned, navigated, and registered in conformity with the provisions of article 6. of the treaty, shall be considered as ships of the Oriental Republic of the Uruguay: her Majesty the Queen of the U. Kingdom of Great Britain and Ireland reserving to hesrelf the right to claim, at the end of the said term of 7 years, the strict enforcement of all the stipulations contained in the said article of the treaty, relative to the conditions which are to determine the national character of vessels of the Oriental Republic of the Uruguay.

The present additional article shall have the same force and validity as if it had been inserted, word for word, in the aforesaid treaty of the 26th of August, 1842. It shall be ratified, and the ratifications shall be exchanged at the same time and place as those of the treaty.

In witness whereof, the undersigned, plenipotentiaries of her Britannic Majesty, and of the Oriental Republic of the Uruguay, have signed the same, and have affixed thereto the seals of their arms.

Done at Montevideo, the 8th day of March, in the year of our Lord 1843.

J. H. MANDEVILLE.
SANTIAGO VASQUEZ.

TREBISOND, anciently Trapezus, from its resemblance to a trapezium, a town of Asia Minor, on the south-east coast of the Black Sea, lat. 40° 1′ N., lon. 39° 44′ 52″ E. Population variously estimated at from 15,000 to 30,000. The town is built on the declivity of a hill rising gently from the sea. It is a place of great antiquity; and, from the year 1203 to the final subversion of the Eastern empire by Mohammed II.

in the 15th century, was the seat of a dukedom, or, as it was sometimes called, an empire, comprising the country between the Phasis and the Halys. Its fortifications are still of considerable strength, at least for a Turkish city. The space included within the walls is of great extent; but it is principally filled with gardens and groves. The houses are mean in their outward appearance, and comfortless within. — (*Tournefort, Voyage du Levant*, tome ii. pp. 231—239.; *Kinneir's Journey through Asia Minor, &c.* p. 338.)

Harbour. — Trebisond has two ports, one on the W. and one on the E. side of a small peninsula, or point of land, projecting a short way into the sea. That on the east is the best sheltered, and is the place of anchorage for the largest ships. It is, however, exposed to all but the southerly gales; but it does not appear that, with ordinary precaution, any danger need be apprehended. The ground, from ¼ to ½ a mile E. from the point, is clean, and holds extremely well. Ships moor with open hause to the N., and a good hawser and stream anchor on shore, as a stern-fast. At night, the wind always comes off the land. Captain Middleton says that the only bad weather is from the N. W.; but that, though the swell be considerable, it does not cause any heavy strain upon the cables. — (*Nautical Magazine*, vol. ii. p. 181.) — At Platana, near Trebisond, and quite as exposed, Turkish vessels have from time immemorial rode in safety the whole winter; a satisfactory proof that the dangers supposed to be incident to the roads along the coast are wholly visionary. — (*Ibid.* p. 214.)

Trade. — In antiquity, and in more modern times, previously to the conquest of Constantinople by the Turks, and the exclusion of all foreign vessels from the Black Sea, Trebisond was the seat of an extensive trade. Any one, indeed, who casts his eye over a map of Asia, must be satisfied that this city is the natural emporium of all the countries to the S. E. of the Black Sea, from Kars on the east, round by Diarbeker to Amasia on the west. Erzeroum, the principal city of Armenia, is only about 135 miles S. E. from Trebisond. Its merchants are distinguished by their superior attainments, and by their enterprise and activity. For a lengthened period, they have derived most part of their supplies of European commodities by way of Smyrna or Constantinople: nothing, however, but the impossibility of obtaining them at so convenient a port as Trebisond, could have made them resort to such distant markets as those now mentioned; and it may well excite surprise, considering the period during which the Black Sea has been open, that efforts were not sooner made to establish an intercourse with Armenia, Georgia, and the north-western parts of Persia, through this channel. We are glad, however, to have to state, that within these few years this has been done; and, notwithstanding the difficulties that necessarily attach to every attempt to open new channels of commerce with semi-civilised nations, the experiment has proved more than ordinarily successful.

The policy of Russia has recently, also, given to Trebisond an importance it did not formerly possess. Previously to the 1st of January, 1832, the trade between Europe and Persia, by way of the Black Sea, principally centered in the Russian port of Redout Kalé, at the mouth of the Phasis. This was a consequence of the exemption granted in 1822 to the Russian provinces to the south of the Caucasus from the duties charged in the other parts of the empire. But the exemption having ceased at the period referred to, and the Trans-Caucasian provinces having been subjected to the same duties as the other provinces, the transit trade to Persia by way of Redout Kalé, Teflis, and the Caspian Sea, has almost entirely ceased, and it is now carried on through Trebisond, Erzeroum, and Tabreez. In consequence, the increase of trade at Trebisond has been very remarkable. We subjoin a

Statement of the Number and Tonnage of Vessels, with the Value of their Cargoes, and distinguishing the Countries to which the same belonged, which entered and cleared at the Port of Trebisond in the Year 1835. — (*Consular Return.*)

Countries.	Entered.			Cleared.		
	Vessels.	Tonnage.	Value of Cargoes.	Vessels.	Tonnage.	Value of Cargoes.
			£			£
British - -	18	1,915	155,260	17	1,851	30,167
Turkish - -	113	16,644	619,336	102	15,212	602,854
Russian - -	16	2,651	157,459	14	2,275	31,084
Austrian - -	11	5,329	64,612	11	5,329	2,315
Greek - -	6	912	3,141	6	912	1,793
Sardinian - -	5	881	4,164	5	881	19,777
Samian - -	1	112	16,580	1	112	
Total -	170	26,444	1,020,532	156	24,572	690,920

Most of the vessels from Constantinople had on board British produce; and it is believed that from 7-10ths to 9-10ths of the goods imported to be forwarded to Persia are of British origin, consisting principally of cotton goods, woollen, hardware, tin, sugar, &c. Previously to 1831 no British iron had ever been seen at Trebisond; but it was then introduced, and is now imported to the exclusion of all other sorts. M. de Hagemeister admits that it has entirely superseded the iron of Russia in this and other markets on the southern side of the Black Sea. — (*Report on the Commerce of the Black Sea*, p. 207.)

In Persia, as in almost all Eastern countries, foreign products are admitted, on paying a low duty. Latterly, however, the schah has evinced a disposition to restrict the importation of English goods, or to load them with heavier duties. This conduct, so unusual in an Eastern prince, may, it is probable, have been suggested by the foreign agents at his court.

Direct Trade with Trebisond.—The transit trade of Trebisond is by far the most important; but, as the goods destined for Persia by this channel are cleared out for Turkey, they appear in the list of exports to it, and, consequently, make our trade with Turkey appear much greater than it really amounts to.

The trade with Trebisond itself is, however, far from inconsiderable, and might be indefinitely extended. The iron of Great Britain is now, as stated above, imported to the exclusion of that of Russia, which was formerly the only sort made use of. Considerable quantities of cotton yarn are also supplied through Trebisond to the looms in the eastern part of Asia Minor that used to be wholly supplied with native yarn, and a taste for British cottons is beginning to spread among the population.

We carry away from Trebisond Persian silk, wool, tobacco, wax, opium, boxwood, nuts, &c. But, owing to the restrictions on exportation, the trade has hitherto laboured under many difficulties; and numbers of ships have sailed in ballast for Odessa, Galacz, and other ports, where they load.

The principal articles of import are manufactured cottons, mostly from Great Britain, sugar, coffee, rum, salt, tin, wine, &c. Cottons are sold at long credits; sugar, coffee, &c, are sold at shorter credits, and are more regularly paid. The exports consist of silk, sheep's wool, tobacco, shawls and carpets, galls, and drugs of various sorts, boxwood, nuts, &c. There are very rich copper mines in the mountains to the south of Trebisond; but they are but little wrought; and the Turks are so blind to their own interests, as to prohibit the exportation of copper, as well as of corn and wax. It is difficult, therefore, to obtain return cargoes. More than half the articles imported are destined for Persia. In 1832, no fewer than 9,199 packages passed through Trebisond for Tabreez; and it is believed that of these fully 8,000 consisted of British manufactures.

Money, Weights, and Measures, same as at CONSTANTINOPLE; which see.

TRIESTE, a large city and sea-port of the Austrian dominions, the capital of a district of Illyria, situated near the N. E. extremity of the Gulph of Venice, lat. 45° 38′ 37″ N., lon. 13° 46′ 27″ E. Population, in 1836, of the city only, 51,346, and including the district comprised within the limits of the free port, 75,851. It is divided into the old and new towns. The former is built upon elevated ground; the latter, which is lower down, is laid out with greater regularity, and is partly intersected by a canal, into which vessels not drawing more than 9 or 10 feet water enter to load and unload.

Harbour. — The harbour of Trieste, though rather limited in size, is easy of access and convenient. It is protected from southerly gales by the *Molo Teresiano*, so called from the Empress Maria Theresa, at the extremity of which the new light-house, mentioned below, has been constructed. The port, with the mole, forms a crescent 1¼ mile in length, being a continued quay, faced with hewn stones, with stairs and jetties for the convenience of embarkation. On the north side of the port is a dock or harbour, appropriated exclusively for vessels performing quarantine. It is walled round; and is furnished with hotels, warehouses, and every sort of accommodation required for the use of passengers and goods. Ships under 300 tons burden lie close to the quays; those of greater size mooring a little further out.

The principal defects of the port are, its limited size, and its being exposed to the N. W. winds, which sometimes blow with much violence, and throw in a heavy sea. The gales, however, are seldom of long continuance; and the holding ground being good, when the anchors are backed and proper precautions taken, no accident occurs. The tide at Trieste is scarcely perceptible; but the depth of water is influenced by the wind, being increased by a long continued sirocco or S. E. wind, and diminished by the prevalence of the E. N. E. wind, known by the name of *Boro*. The access to the port is not obstructed by any bar or shallow; and there is good anchorage in the roads, in from 6 to 7 and 10 fathoms water. A good sailing vessel may beat in by night or by day, except it blow hard from the N. E. or E. N. E., when she had better anchor in the Bay of Roses, or Pirano, where she will ride in perfect safety.

Pilots. — Ships bound for Trieste are under no obligation to take pilots; but those entering the port for the first time would do well to take one on making the coast of Istria. Boats are always hovering off Rovigno; they are not manned by regular pilots, but by fishermen, who, though unfit to be trusted with the management of the ship, know the bearings of the places and the depth of water. The fee usually paid them for pilotage is 20 dollars; in addition to which, they are supported at the ship's expense during the performance of quarantine.

Light-houses. — The light-house at the extremity of the Theresian mole is 106 feet (Eng.) high. The light is intermittent; and may be seen, supposing the eye of the observer to be elevated 12 feet above the level of the sea, about 12 nautical miles, or from Pirano on the side of Istria, and the shoals of Grado on the Italian coast. A light-house has also been erected on the point of Salvore, bearing from Trieste W. by S., distant about 18 miles. The lantern is elevated about 103 feet above the level of the sea. From this point Pirano Bay opens, where vessels may anchor in safety in all sorts of weather.

Money. — Mercantile accounts are usually kept at Trieste in what is commonly called *convention* money, from an agreement entered into with respect to it by some of the German princes, in 1763. The current coins that are legal tender are dollars, ½ dollars or florins, and zwanzigers, or pieces of 20 kreutzers. Ten dollars are coined out of the Cologne marc (3,608 gr. Eng.) of pure silver, so that the value of the dollar is 4*s.* 3*d.* sterling.

The florin, or ½ dollar = 2*s.* 1½*d.* sterling; zwanzigers, or pieces of 20 kreutzers (60 to the marc), = 8½*d.* sterling. Hence it follows that 1*s.* sterling = 28½ kreutzers (60 to a florin); and the pound sterling = 9 fl. 24½ kr., or, as it is commonly taken, 9 fl. 25 kr. All contracts are either expressly declared, or are understood, to be in silver money; gold coins, not being legal tender, pass only as merchandise.

Weights and Measures. — Those chiefly in use at Trieste are those of Vienna and Venice. The commercial pound contains 4 quarters, 16 ounces, or 32 loths: it is = 8,639 English grains. Thus, 100 lbs. at Trieste = 123·6 lbs. avoirdupois; or 90½ lbs. of Trieste = 112 lbs. avoirdupois.

The principal dry measure is the stajo or staro = 2·34 Winch. bushels. The Vienna metzen, which is sometimes used, = 1·723 Winch. bushel. The polonick = 0·861 Winch. bushel.

The principal liquid measure is the orna or eimer = 40 boccali = 15 wine or 12½ Imperial gallons very nearly. The barile = 173½ English wine gallons.

The orna of oil contains 5¼ caffisi, and weighs about 107 commercial pounds. It is = 17 wine or 14·16 Imperial gallons.

The ell woollen measure 26·6 English inches. The ell for silk = 25·2 English inches.

Trade. — Trieste has no command of internal navigation; but being the most convenient, or rather

sorts of mercantile transactions by the privilege of *porto franco* conferred on the town, and a considerable extent of contiguous country. Under this franchise, all goods, with but very few exceptions, may be imported into and exported from the city free of all duties whatever. Foreign products, when taken for consumption into the interior, are subject to the duties mentioned under the head *Tariff*, in a subsequent part of this article.

Exports. — These are very various, consisting partly of the raw and partly of the manufactured products of Austria Proper, Illyria, Dalmatia, Hungary, and Italy; with foreign articles imported and warehoused. Among the principal articles of raw produce may be specified, corn, chiefly wheat and maize, with rice, wine, oil, shumac, tobacco, wax, &c.; silk, silk rags and waste, hemp, wool, flax, linen rags, hides, furs, skins, &c.; the produce of the mines makes an important item, consisting of quicksilver, cinnabar, iron, lead, copper, brass, litharge, alum, vitriol, &c.; the forests of Carniola furnish timber, for ship building and other purposes, of excellent quality and in great abundance, with staves, cork wood, box, hoops, &c.; marble also ranks under this head. Of manufactured articles, the most important are, thrown silk, silk stuffs, printed cottons from Austria and Switzerland, coarse and fine linens, and all sorts of leather; under this head are also ranked soap, Venetian treacle, liqueurs, &c., with jewellery, tools and utensils of all sorts, glass ware and mirrors, Venetian beads, refined sugar, and a host of other articles. Of foreign articles imported and re-shipped, the most important are sugar, coffee, and dye stuffs. Trieste is also a considerable *depôt* for all sorts of produce from the Black Sea, Turkey, and Egypt.

It is not possible to obtain any accurate account of the quantity and value of the exports; but Mr. Money, the late British consul at Trieste, who carefully inquired into the subject, supposed that they might amount, in 1833, exclusive of those shipped for Venice, Fiume, and other Austrian ports, to about 1,800,000*l.* a year, which he divided as follows: —

	£
Raw Produce, viz. — Grain, rice, oil, honey, wax, shumac, tobacco, &c.	350,000
Silk, hemp, wool, rags, hides and skins	380,800
Metals, mineral and other products; as, quicksilver, iron, lead, copper, brass, zinc, litharge, argol, antimony, arsenic, alum, vitriol, potash, turpentine, marbles, &c.	230,000
Timber, plank, boards, &c.	180,000
Manufactures, viz. — Of silk, cotton, wool, linen, leather, &c.	235,000
Soap, candles, Venetian treacle, and medicines	80,000
Tools, machinery, arms, &c.	25,000

Manufactures — *continued.*	
Household furniture, musical instruments, glass and glass wares, porcelain, &c.	20,000
Foreign Articles re-shipped for exportation, exclusive of those for Lombardy and the Papal States	300,000
Total	£1,800,000

Mr. Money further supposed that these articles were distributed amongst the countries trading with Trieste, as follows: —

	£
To Turkey and the Levant	380,000
Egypt	300,000
Greece, the Ionian Islands, and Malta	130,000
the Kingdom of the Two Sicilies	350,000
Ports in France, Sardinia, and Tuscany	100,000
Spain, Portugal, and Barbary	120,000
Great Britain	220,000
Ports in the North of Germany	150,000
the United States of America	30,000
South America and the West Indies	20,000
Total exports	£1,800,000

There has, however, been some, though but little, increase in the interval; and we have been assured by high mercantile authority, that the entire value of the exports from Trieste to foreign countries may at present (1843) be estimated at 2,000,000*l.* a year.

We subjoin

An Account of the principal Articles of Raw Produce exported from Trieste, with their Prices free on board on the 7th January, 1843, in Austrian and English Money, Weights, and Measures. — (*From the Circular of Grant, Brothers, and Co.*)

Articles.	Trieste Prices and Tares.				Free on Board, Commission included.			
	fl.	*fl.*	*Per*	*Tare.*	£	*s.*	*d.*	*Per*
Antimony, crude	15½	to 16½	100 lbs.	lbs. 50 pb.	1	11	9	cwt.
regulus of	31	— 31½	—	real	3	0	4	—
Argol, white	16	— 23	—	—	2	4	4	—
Biscuit, 1st quality	6½		—	—	0	14	8	—
2d quality	5½		V. weight	—	0	12	6	—
Brimstone, Romagna, rough	2½	— 3½	100 lbs.	—	7	7	5	ton
do. roll	none		—	10 per 0/0	0	0	0	—
Candles, tallow, mould	25	— 25½	—	real	0	0	5 1-5	lb.
Cantharides	1	— 1½	lb.	—	0	2	10	—
Copper, in pigs	47	— 50	100 lbs.	in bulk	0	0	10 1-5	—
Cotton, Make	30	— 31	—	—	0	0	6 3-10	—
Cream of tartar	29	— 31	—	real	2	19	7	cwt.
Flour, 1st quality	13		bl. of 156 lbs.	—	1	6	9	barrel of 193 lb.
2d —	11		—	—	1	2	9	—
3d —	9½		nett	—	0	19	3	nett
Fruit, currants, Patrase	9	— 9½	100 lbs.	—	0	19	10	cwt.
Zante								
raisins, Smyrna, red	6½	— 7	—	—	0	13	8	—
black	4	— 4½	—	—	0	8	3	—
Elemè	10	— 10½	—	—	1	0	4	—
Cumè, red	7	— 7½	—	—	0	14	2	—
Sultana	14		—	—	1	7	4	—
Smyrna figs	10	— 16	—	—	1	10	10	—
Calamata figs	6½		—	—	0	12	9	—
Galls in sorts	25½	— 26	—	—	2	10	0	—
blue	30	— 37	—	—	3	11	0	—
Glass tumblers, half pint	3		100 T.	—	0	6	3	100 T.
Grain, wheat, Italian soft	0		staro	in bulk	0	0	0	1. quart
Odessa	4½	— 4½	—	—	1	11	10	—
hard	4½	— 4½	—	—	1	14	3	—
Tangarock	4½	— 4½	—	—	1	14	10	—
Bannat	0		—	—	0	0	0	—
beans, Egyptian	2½	— 2½	—	—	0	19	10	—
white	5½	— 5½	—	—	1	8	3	—
Indian corn	2½	— 3	—	—	1	1	1	—
linseed, Levant	0		—	—	0	0	0	—
Sicilian	0		—	—	0	0	0	—
Egyptian	5½	— 5½	—	—	2	2	0	—
Sesamum seed, Levant	10½	— 10½	—	real	3	16	2	—
rape seed, Black Sea	0		—	—	0	0	0	—
rye, Black Sea	0		—	—	0	0	0	—
Gum Arabic, picked, ordinary to very fine	38	— 100	—	—	0	1	8 9-20	lb.
Geddo	18	— 36	—	—	0	0	7 2-5	—
Mastic	150	— 320	—	—	0	5	3 7-20	—
Hemp, Italian, good strong for cordage	13	— 15	—	2 per 0/0	28	19	6	ton
Hungarian	none		—	no tare	0	0	0	—
Iron, Russian, new sable	90		1,000 lbs.	—	17	6	10	—
Carinthian	88	— 102	—	—	19	12	7	—
Lead, Carinthian	13½		100 lbs.	—	1	5	8	cwt
Liquorice paste, Sicily	18	— 20	—	real	1	18	7	—
Madder roots, Smyrna	23	— 28½	—	4 per 0/0	2	14	2	—
Opium, Turkey	5½	— 5½	lb.	real	52	11	6	—
Egyptian	0		—	—	0	0	0	—
Olive oil, in oak casks, Corfu	0		107 lbs.	—	0	0	0	252 gal., of 9 lb.
Puglia	21½	— 21½	—	—	40	10	0	—
Levant	22	— 22	—	—	41	7	7	—
Quicksilver, in iron bottles	236½		100 lbs.	—	4	0	0 1-4	lb.
in skins	234½		—	—	0	3	11 17-20	—
Rags, linen, Hungarian, SFFF	15		—	no tare	1	8	8	cwt.
SFF	12½		—	—	1	4	5	—
SFF	10½		—	—	0	19	7	—
FX	8		—	—	0	15	4	—
Roman, ½ firsts, ½ 2ds	0		—	—	0	0	0	—
Shumac, Trieste, new crop	3½	— 3½	—	—	0	7	3	—
Tyrol —	3½	— 3½	—	—	0	7	1	—
Verona —	2½	— 2½	—	—	0	4	10	—
Soap	11	— 22	—	real	2	2	2	—
Steel, No. 1 to 00	113	— 150	1,000 lbs.	—	1	4	11	—
Tallow, Dalmatian	90		100 lbs.	—	1	14	10	—
Trieste	21½	— 21½	—	—	2	2	2	—
Servia	0		—	—	0	0	0	—
Vermillion	214½		—	—	0	3	7 4-5	—
Wool, Italian, washed	60	— 90	—	—	8	12	0	—
Zinc	17½		—	—	1	15	7	—

Imports. — There is a great difference between the imports into and the exports from Trieste; the value of the former being certainly not less than 4,000,000*l.* sterling. The excess of imports is explained partly by the fact that large quantities of foreign goods imported into Trieste are subsequently transhipped by coasting vessels to Venice, Fiume, and other ports, partly by the residence of English and other foreigners at Vienna, and partly by there being an excess of exports as compared with imports from other parts of the empire. The great articles of import are sugar, cotton goods and raw cotton, oil, coffee, wheat, silks, indigo and other dye stuffs, valonia, &c.

An Account of the principal Articles of Foreign and Colonial Produce imported into Trieste during each of the 12 years ending with 1842.

Articles.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
Cassia lignea - chests	1,234	2,316	4,661	5,809	3,880	5,347	1,423	1,700	2,251	2,175	2,375	2,295
Ditto - mats	902	-	5,602	23,716	11,824	10,950	2,767	-	-	-	-	-
Cocoa - bags & bar.	3,205	2,291	4,911	1,861	4,883	9,620	3,829	8,420	4,116	5,308	5,210	6,310
Coffee —	45,36	182,671	94,965	105,889	106,507	173,430	84,004	140,850	120,147	196,176	119,615	176,010
Ditto - casks	2,878	5,175	5,339	4,867	6,686	5,201	3,875	5,739	6,585	3,657	4,657	2,681
Cotton, viz.—												
American and Brazil - bales	8,479	9,915	8,717	15,855	22,616	25,726	22,116	23,278	21,160	51,968	22,222	42,870
Levant and Egyptian - bales	57,461	75,756	53,929	37,340	53,676	97,578	69,689	84,552	60,071	32,931	53,918	76,528
Hides, viz —												
Ox and cow, dry -	3,200	13,320	191,776	302,095	139,124	94,850	16,220	46,702	118,438	83,582	191,418	182,070
Indigo - chests	314	454	372	174	356	848	323	581	582	566	598	570
Ditto - serrons	5	22	8	47	35	-	15	49	22	43	16	41
Nankeen - pieces	27,500	51,400	50,800	16,400	32,300	36,100	-	15,000	2,000	-	-	-
Pepper - centners	18,460	18,656	24,295	30,152	21,170	750	15,285	18,115	9,000	29,000	9,700	16,200
Pimento - bags	2,150	2,020	3,795	1,186	3,335	6,710	3,209	1,811	2,742	1,150	2,680	3,100
Rum - casks	873	915	1,092	1,010	751	1,584	355	1,598	2,105	1,707	915	501
Sugar, viz.—												
Cuba - boxes	18,892	11,070	3,530	11,872	18,165	15,180	21,502	14,501	14,241	20,718	10,983	20,589
Brazil - chests	17,793	28,398	15,478	19,178	26,216	31,616	16,295	26,580	29,256	26,125	23,585	21,662
Do. boxes, barrels, and bags	7,596	18,227	13,271	12,657	21,224	38,140	6,376	14,603	24,821	25,280	14,000	18,422
W. Ind., raw, casks	1,086	192	85	15	1,510	760	114	1,628	3,524	1,793	462	529
Egyptian, packages	-	3,515	482	12	12	-	-	-	-	-	531	148
E. Ind., bgs. & cases	9,097	19,357	549	6,030	7,665	26,911	17,853	302	3,658	479	-	1,597
Refined, hhds. bars. and boxes	7,856	10,598	4,618	5,699	4,027	9,490	7,681	14,604	12,101	13,813	27,813	14,018
Stockfish - roys.	116,228	84,858	62,586	65,688	151,734	133,843	74,303	84,190	80,000	47,760	45,230	41,550

Trieste being a free port, goods destined for its consumption, and that of the adjoining territory, pay no duties whatever, and are exported and imported without notice by the customs. Goods brought from the interior for export at Trieste, are charged an export duty on passing the Custom-House line. Goods imported at Trieste, to be conveyed through the Austrian dominions to those of any other power, are charged a small transit duty.

Gunpowder, salt, and tobacco, being articles monopolised by government, are not allowed to be imported into Trieste except for sale to the government or its contractors. Vessels arriving with gunpowder on board, deliver it at the arsenal, and on their clearing out it is returned to them free of expense. The utmost vigilance is exerted to prevent the introduction of tobacco; but with very little effect. The only articles, the exportation of which from the Austrian dominions is at present prohibited, are gold and silver in bars, and silk cocoons.

Account of the Arrivals of Shipping, and of the principal Articles of Import, at Trieste, in 1843.

Great Britain. — In 40 British, 14 Austrian, 2 Russian, 1 Greek, 1 Roman States, 1 Norwegian, 1 Swedish, and 4 Prussian vessels: — Coffee, 50 tons St. Domingo, 50 tons La Guayra; sugar, 383 casks crushed, 5,822 boxes Havannah, 1,811 cases, 518 barrels, 599 bags Brazil, 1,676 bags East India; cocoa, 24 tons; cassia lignea, 142 tons; pepper, 126 tons; pimento, 81 tons; ginger, 102 tons; cinnamon, 101 bales; cochineal, 22 serons; cloves, 10 packages; rum, 112 puncheons; shellac, 273 packages; indigo, 219 cases, 16 serons; tea, 102 chests; logwood, 24 tons; Pernambuco wood, 11,100 pieces; sapan wood, 35,697 pieces, 300 tons; ebony, 1,138 pieces; iron, 348 tons, 19,436 bundles, 39,139 rails; tin, 510 ingots, 650 blocks, 429 barrels, bars, 7,928 boxes, plates; copper, 20,598 ingots, 22 casks, 154 packages; lead, 1,354 ingots; hardware, 165 packages; earthenware, 155 crates; manufactures, 3,274 packages; cotton, 4,158 bales; cotton twist, 1,173 bales; coals, 3,983 tons; herrings, 1,260 barrels; pilchards, 480 casks.

United States. — In 31 American, 1 British, 1 Norwegian, 2 Swedish, 1 Lubeck vess. (47 vessels from New York, 11 New Orleans, 6 Mobile, 4 Baltimore, 2 Boston, 2 Savannah, 1 Philadelphia, 1 Charleston, 1 Richmond, 1 Apalachicola): — Coffee, 199 tons St. Domingo, 64 tons St. Jago, 28 tons La Guayra; sugar, 776 boxes Havannah, 78 casks Porto Rico; pimento, 91 tons; cassia lignea, 3 tons; logwood, 749 tons; cotton, 29,210 bales; tobacco, 1,926 bales.

Brazil. — In 36 British, 25 Austrian, 4 Sardinian, 12 Danish, 11 Swedish, 2 Bremen, 2 Hamburg, 1 French, 3 Prussian vessels (37 vessels from Rio, 35 Pernambuco, 13 Bahia, 5 Maceio, 3 Paraiba, 2 Maroin, 1 Continguiba): — Coffee, 7,570 tons Rio, 40 tons Bahia; sugar, 20,426 cases, 7,263 barrels, 14,766 bags white, 2,080 cases, 310 barrels, 1,456 bags muscovado.

Cuba. — In 4 British, 1 Austrian, 14 American, 1 Sardinian, 1 Hamburg, 8 Spanish vessels (10 vessels from Havannah, 10 Matanza, 8 St. Jago, 1 Trinita): — Coffee, 371 tons Havannah, 1,020 tons St. Jago; sugar, 1,828 boxes white, 22,285 boxes yellow; rum, 87 puncheons; logwood, 21 tons.

St. Domingo. — In 2 British vessels: — Coffee, 443 tons; logwood, 6 tons.

Porto Rico. — In 1 Swedish, 1 Bremen vessel: — Coffee, 203 tons.

Sumatra. — In 1 American vessel: — Pepper, 303 tons.

France. — In 6 French, 35 Austrian, 1 Russian, 7 Roman States, 1 Tuscan vessel (42 vessels from Marseilles, 5 Bordeaux, 2 Havre de Grace, 1 Cette): — Coffee, 35 tons St. Domingo, 50 tons Havannah, 358 tons St. Jago, 22 tons Porto Rico, 28 tons La Guayra, 9 tons Java; sugar, 245 casks refined, 10 casks crushed, 1,519 casks, 150 barrels Porto Rico, 150 boxes white, 6,499 boxes yellow Havannah; cloves, 1,538 packages; rum, 32 puncheons; logwood, 154 tons; cotton, 2,904 bales.

Spain. — In 3 Spanish, 1 British, 2 Austrian, 1 Roman States, 1 Sardinian, 1 Neapolitan vessel (6 vessels from Barcelona, 2 Almeria, 1 Cadiz): — Coffee, 20 tons Havannah, 179 tons St. Jago, 53 tons Porto Rico; sugar, 324 boxes white, 618 boxes yellow Havannah; lead, 2,475 ingots, 80 rolls, 2,080 bags shot.

Portugal. — In 2 Austrian, 1 Russian, 3 Sardinian, 1 Swedish, 1 Portuguese vessel (6 vessels from Lisbon, 2 Oporto): — Coffee, 115 tons Rio; sugar, 355 cases, 1,456 barrels, 2,699 bags white Brazil, 157 cases muscovado Brazil; cocoa, 86 tons; cinnamon, 24 bales; cotton, 308 bales.

Holland. — In 10 Dutch, 1 British, 3 Austrian, 2 Russian, 1 Sardinian, 2 Danish, 5 Swedish, 1 Belgian, 1 Hanover, 1 Prussian vessel (24 vessels from Amsterdam, 3 Rotterdam): — Coffee, 10 tons Porto Rico, 195 tons Java, 7 tons Surinam; sugar, 6,044 casks, 1,178 barrels, 255 boxes crushed, 204 casks refined, 56 cases, 245 barrels white Brazil, 7,199 bags Java.

Antwerp. — In 1 Belgian, 1 British, 2 Austrian, 1 Neapolitan, 2 Danish, 1 Swedish, 2 Mecklenburg, 1 Prussian vessel: — Sugar, 514 casks, 2,406 boxes crushed, 736 casks refined.

Hamburg. — In 1 Hamburg, 1 Danish, 1 Oldenburg, 1 Hanover vessel: — Sugar, 141 boxes white, 801 boxes yellow Havannah, 210 cases white Brazil; tin, 106 blocks; fish oil, 795 casks.

Norway. — In 1 Norwegian, 1 Danish, 1 Bremen vessel: — Stockfish, 573 tons.

Stockholm. — In 1 Swedish, 1 Danish vessel: — Tar, 2,062 barrels.

During the year, 1,392 square rigged vessels have arrived; viz. 500 Austrian, 368 Greek, 115 British, 67 Neapolitan, 50 Ionian, 48 American, 48 Russian, 31 Sardinian, 25 Danish, 24 Swedish, 21 Turkish, 15 Roman States, 11 French, 11 Spanish, 10 Norwegian, 10 Dutch, 10 Prussian, 5 Tuscan, 5 Bremen, 4 Hamburg, 4 Mecklenburg, 2 Belgian, 2 Hanover, 2 Egyptian, 1 Oldenburg, 1 Lubeck, 1 Portuguese, and 1 Argentine. — (*From the Circular of Lang, Freeland, & Co.*)

Shipping. — Since the loss of Flanders, the mercantile navy of Austria has been confined wholly to the ports on the Adriatic. But it is, notwithstanding, very considerable; and engrosses at this moment a very large share of the trade of the Mediterranean and Black Sea. The oak timber of Carniola and the Dalmatian coast is reckoned about the very best in the world: so that the Austrian ships, being built of it, are very strong, at the same time that they are particularly handsome. They are also well manned and provided. The seamen are expert, temperate, and orderly; and Mr. Money says, that the laws for the regulation of the merchant service are excellent.

By far the greater number of vessels of large burden belong to Trieste. The rest belong to Venice.

Fiume, Ragusa, and the Bocche di Cattaro. On the other hand, the smaller vessels employed in the coasting trade, which is very considerable, are more equally divided; Venice having, probably, as many as Trieste, while a good number belong to the ports of Istria, Hungary, and Dalmatia.

The foreign trade of this port comprises all voyages beyond the limits of the Adriatic; and may be divided as follows: —*viz.*

1. The Levant trade, including the Ionian Islands, Greece, Constantinople, Smyrna, Odessa, &c., the ports in Syria, Cyprus, Candia, and Egypt, more especially Alexandria.

2. The *ponente* or Mediterranean trade, in the west, comprising the coast of Barbary, Spain, France, and Italy; being principally carried on with Marseilles, Genoa, and Leghorn.

3. The commerce on the ocean, which the Austrian merchants have attempted with considerable success. Several ships sail for Brazil, the U. States, England, Hamburg, &c.

The number of Austrian vessels engaged in foreign trade is seen by the subjoined statement to amount to about 527, having an aggregate burden of 146,246. But exclusive of these, above 200 vessels of about 40 tons each are engaged in the coasting trade. The fishery is but inconsiderable.

We are indebted to the *Lloyd Austriaco* for the following returns respecting the navigation of Trieste during 1839: —

Arrivals.	Vessels.	Tons.	Clearances.	Vessels.	Tons.
Sailing vessels engaged in foreign trade	1,858	228,253	Sailing vessels engaged in the foreign trade	1,807	236,353
Steam vessels (ditto)	24	7,748	Steam vessels (ditto)	24	7,748
Sailing boats engaged in the coasting trade	2,858	107,712	Sailing boats engaged in the coasting trade	3,469	107,486
Steam boats (ditto)	203	46,890	Steam boats (ditto)	203	46,890
Smaller craft (ditto)	7,714	179,238	Smaller craft (ditto)	6,196	143,982
Total	12,657	567,841	Total	11,699	542,559

Customs Regulations. — The Custom-house at Trieste has nothing whatever to do with the entry, reporting, &c. of vessels. When a ship arrives, she is reported to the Health Office; which publishes a list of arrivals and departures, with a statement of their cargoes, as they appear in the manifests. Ships are cleared by the same office; the masters being assisted by the consuls of the country to which they belong. As soon as a vessel has performed quarantine, she loads or unloads without any interference or inspection by the customs officers, or by any one else. Goods unsusceptible of contagion may be landed during quarantine.

Being a free port, the bonding and warehousing system is, of course, unknown at Trieste.

Port Charges. — These are paid at the office of the harbour master on clearing out. They are the same, whatever may be the ship's stay; and are, perhaps, the most moderate of any in Europe.

Port Charges paid by Austrian and Foreign Ships.

Austrian, and foreign privileged ships:	Fl. kr.	*Foreign ships not privileged:*	Fl. kr.
Anchorage, per ton admeasurement	0 4	Anchorage, light-house, and cargo as above, per ton admeasurement, and per ton weight of goods	0 10
light-house	0 3	New tonnage duty, per ton admeasurement	0 16
Cargo duty, per ton weight of goods	*0 3	Abbuonaggio, payable by ships departing in ballast, or with less than half a cargo	0 9

N. B. — If grain, per 20 staja.

Comparative Statement of the Port Charges paid at Trieste, respectively, by a native and privileged foreign Ship, and a foreign Ship not privileged, each of 300 Tons Burden, with mixed Cargoes.

Native and privileged:	Fl. kr.	*Foreign, not privileged:*	Fl. kr.
Anchorage and light, as above, 300 tons, at 7 kreutzers per ton admeasurement	35 0	Anchorage, light and cargo duty, as above	50 0
Cargo duty, 300 tons, at 3 kreutzers	15 0	Tonnage duty, 300 tons, at 16 kreutzers	80 0
Total	50 0		130 0

or about 4*l.* 18*s.* sterling.

or about 12*l.* 10*s.* sterling.

If the ship depart in ballast, or with less than ½ a cargo, there is a further charge of 9 kreutzers per ton, or 45 florins; making in all, 175 florins.

Quarantine is strictly enforced at Trieste, and the establishments for facilitating its performance are complete and efficient. The Board of Health at this port is the central or principal one for the Austrian States; and maintains an active correspondence with all the principal ports, both in the Mediterranean and elsewhere. There are 2 lazarettos, — that called St. Teresa, or Lazaretto *Nuovo*, is appropriated to vessels from the Levant and Egypt, which are, for the most part, subjected to the long or full quarantine of 40 days. It is spacious, and properly guarded; having a sufficient number of military and medical officers and assistants; with extensive quays and magazines for housing and airing goods, dwelling houses and apartments for resident officers and passengers, &c. It is, in fact, one of the most perfect establishments of the kind in existence. The other, or old (*Vecchio*) lazaretto, contiguous to the great mole, is appropriated to ships and passengers performing a quarantine of not more than 28 days; and, though inferior to the former, is sufficiently capacious and convenient. The sanitary offices, including that of harbour master, are near the centre of the port; where also are moored vessels under observation for a term not exceeding 8 days. Here also are facilities for communicating *viva voce* with persons under quarantine; and spacious warehouses, with adequate guards and other officers. But, notwithstanding these conveniences, if a vessel arrive having an infectious malady on board, she is not allowed to enter either lazaretto at Trieste, but is sent to an island near Venice, fitted out for the purpose, where assistance may be afforded with less risk of propagating infection.

The ordinary Board of Health consists of a president; two assistants, one of whom is a doctor of medicine; and three provisors, two of whom are merchants.

Quarantine Charges payable at the port of Trieste, by all Ships.

	Currency.	Sterling.		Currency.	Sterling.
Arrival.	Fl. kr.	s. d.	*Departure.*	Fl. kr.	s. d.
In pratique:			In pratique:		
Entry with or without cargo, ships, 100 tons and upwards	1 30	3 0	Bill of health, ships 100 tons & upwards	0 45	1 6
50 to 99	1 0	2 0	50 to 99	0 30	1 0
15 — 49	0 17	0 6·8	15 — 49	0 9	0 3·6
In quarantine:			Certificate of goods shipped in pratique	0 17	0 6·8
For the interrogatory of master	1 30	3 0	In quarantine:		
For do. of guardian on admission to pratique	0 34	1 1·6	Patent	1 8	2 3·2
			Pay of the guardian on board during the performance of quarantine, per diem	1 8	2 3·2
			His provisions do.	0 20	0 8

Quarantine Dues payable on Goods. — Non-susceptible goods pay *ad valorem* at the rate of 6 kreutzers per 100 florins or 1 mille. Susceptible goods pay an extra charge, according to tariff, or to circumstances. Besides the above *ad valorem* duty, goods not susceptible pay 4 kreutzers (1¾*d.*) per every 1,000 lbs. weight of Vienna. Grain is subject to an extra charge of about ½ per cent.

Brokers, Commission Merchants, Brokerage, &c. — There are a few exceptions to the freedom generally enjoyed of settling and exercising any trade at Trieste. Brokers, for example, are limited in number, and appointed by the Chamber of Commerce. They are obliged to give security, are under various regulations, and may not themselves trade as principals. They are of 3 classes: 1st, brokers for the sale and purchase of merchandise, who are again subdivided into particular classes, according to the articles they are conversant with, as grain, oil, cotton, drugs, hides and leather, colonial produce, manufactures, &c.; 2d, bill brokers, or exchange agents; and, 3d, ship and insurance brokers. Such authorised brokers are alone allowed to extend contracts, certificates, surveys, or other documents; and they are considered as public functionaries, whose depositions are received as legal evidence.

Any one may be a commission merchant or factor, but he may not issue printed circulars or lists of prices; nor will his books, however regularly kept, be considered as evidence in a court of justice, unless he is *matriculated*, for which the possession of a certain amount of capital is required. This, however, is little more than mere form, and a great deal of business is done by persons acting both as merchants and brokers, without being duly authorised.

The usual rate of a merchant's or factor's commission on the purchase of goods is 2 per cent.; on sales, ½ per cent.; *del credere* is sometimes added.

A merchant's commission for collecting freight, and doing other shipping business, is 2 per cent. on the inward cargo; and by custom of the place, the house to which a ship is consigned or recommended by the charterers, is entitled to a commission of 2 per cent on the outward cargo, whether it has or has not been instrumental in procuring the goods that are laden outwards.

A broker's commission for freighting a ship, or procuring a charter, is 2 per cent. This does not include the charge for writing charter, or for any other services performed in the clearance. In case of general cargoes, when the broker has to collect goods from different merchants, he charges 3 per cent. commission. A bill broker's commission (courtage) is sometimes 1 per mille, more commonly ½ per mille. Brokerage for the sale or purchase of merchandise varies from ⅛ per cent. to 1 per cent., according to circumstances, and the nature of the article.

Insurance. — The insurance of ships is carried on to a considerable extent at Trieste. The security is unexceptionable, the terms more moderate than in England, and losses are said to be adjusted promptly and liberally. The oppressive duties on policies of insurance in England have been the cause that most insurances on ships for the Adriatic, that were formerly effected in London, Liverpool, &c., are now effected at Trieste. The insurance of houses is universal; and that of lives is also, of late years, practised to a considerable extent. House insurance is carried on by joint companies, of limited responsibility.

Bankruptcy is not of very frequent occurrence at Trieste. The laws with respect to it do not differ much from those in force in most other countries. Frauds are punishable by imprisonment; but here, as elsewhere, they are very difficult to detect. Honest bankrupts are discharged, on making a complete disclosure of their affairs, and a surrender of their assets. Property settled on a wife is not affected by the debts of the husband; a regulation which, it is evident, must lead to fraud.

Communications by Land. — The intercourse between Trieste and Austria, Hungary, &c., is necessarily all carried on by land. The roads leading to Vienna, and to the Hungarian towns, particularly the first, are kept in good repair, and the tolls are moderate; but owing to the rugged nature of the country, the ascent is in some places very considerable. The diligence from Trieste to Vienna, 340 English miles, performs the journey in 72 hours. The draught horses employed on the roads are excellent; but, in some of the mountainous districts, bullocks are used.

Repeated surveys have been made of the country between Vienna and Trieste, in the view of forming a canal. But the difficulties in the way of such a project seem to be all but insuperable. The ground is not only rugged, but the subsoil of the country stretching northwards to a considerable distance from Trieste is so very porous, that, unless precautions were taken to obviate it, the water in the canal would speedily escape. A railroad has been proposed, and it might, no doubt, be accomplished. But the expense would be so very great, that it is extremely problematical whether it would ever yield any thing like a return.

Carecning, Stores, &c. — Timber at Trieste is excellent, workmen good, and their wages moderate; so that it is a very favourable place for careening and repairing. Water is very good, but rather scarce; so that, if a large supply be required, due notice must be given. Ships are served in regular rotation. Beef is very good, but rather high priced. Butter and cheese are dear; and fuel is excessively so. On the whole, therefore, Trieste cannot be considered as a favourable place for the provisioning of a ship.

Banking. — There are no public banks at Trieste. The bank of Vienna has an office here, but it is merely for the exchange of its notes for cash, or, more frequently, of large notes for small ones. These notes, being guaranteed by government, are legal tender, and in general circulation, but no other company is allowed to issue notes to be used as a circulating medium. There is not, however, any deficiency of currency. Banking business is transacted by private companies, or by individuals, who are subject to certain regulations, and are obliged to lay before competent authority an attested statement of the capital embarked in their concerns. Their business principally consists in procuring bills of exchange from other places for the use of the merchants of Trieste, or in discounting, (in which latter operation they have many private competitors,) at the rate of from 4 to 6 per cent. per annum, according to the nature of the paper offered, and in proportion to the scarcity or abundance of cash.

The principal bankers of Trieste are of undoubted solidity, and do not indulge in dangerous speculations; and notwithstanding the apparent want of great banking establishments, the business of buying and selling, and of making payments and remittances, whether in bills or specie, is transacted at this port with great facility; and there seldom arises any distress, pressure, or stagnation, from want of money or credit.

It is not usual for respectable bankers to give interest on deposits. The partners in joint stock companies, banks, &c. are, in general, responsible only to the extent of their declared capital; and the individuals composing them are only liable each to the extent of their share. The same individual is frequently a general merchant, a partner in a banking house, and a member of an insurance company. All these businesses may at present be said to be prosperous.

Credit. — Goods imported into Trieste are sometimes sold for ready money, a discount being usually understood, and allowed in such case, of 2 or 2½ per cent. But they are commonly sold at 3 months' credit, that is, by bills of that date; occasionally, but rarely, they are sold at 6 months.

Bills thus obtained, though offering no other guarantee than the signature of the drawer or acceptor, may be discounted or insured at a moderate rate by companies who dedicate themselves to this branch of business, and who, from their extensive dealings, are good judges of the risk. The practice has become almost universal; and it not only facilitates sales, but has a tendency to prevent bankruptcies, as it is difficult for a house long to conceal its insolvency; and its credit is, by this mode of trial, soon ascertained.

Tares. — Real tare is allowed on most articles of export; and on all articles of import, except cotton and sugar. The tare on Brazil sugar in chests depends on their length and size, but in general it amounts to from 15 to 18 per cent.; on Brazil sugar in bags the tare is 3 per cent.: on Havannah sugar a tare is allowed of 62 lbs. English per box, being from 13 to 14 per cent.; on Jamaica sugar the tare is 14 per cent Tare on American cotton, 4 per cent.

An Account of the Number of Vessels, with the Amount of their Tonnage, that were built or purchased in the Austrian Ports on the Adriatic, and also those that were wrecked, broken up, or sold out of the Austrian Mercantile Navy, in the Years 1839, 1840, 1841, and 1842, and showing the total Number existing on the 31st of December, 1842.

	1839.		1840.		1841.		1842.		Total.	
	Vess.	Tonn.	Vess.	Tonn.	Vess.	Tonn.	Vess.	Tonn.	Vess.	Tonn.
Austrian merchant vessels existing on the 1st of January, 1839	-	-	-	-	-	-	-	-	458	119,012
Number of vessels built at Trieste	12	4,326	8	2,935	5	1,398	6	1,038		
Ditto, built at Venice	9	2,138	14	4,519	10	2,412	8	1,936		
Ditto, built at Hungarian coast	12	4,022	13	4,986	14	4,590	8	2,315		
Ditto, at other ports	5	1,581	7	1,635	5	1,848	8	2,071		
Total number of vessels built in each year	38	12,067	42	14,075	34	10,048	30	8,260		
Number of vessels purchased	13	2,744	4	1,434	3	922	4	759		
Number of vessels wrecked	30	7,152	17	4,005	11	2,586	7	1,610		
Ditto, broken up	3	335	2	564	7	1,873	6	1,647		
Ditto, sold out of the Austrian service	4	524	3	680	5	1,642	4	546		
Increase in each year	14	6,800	24	10,260	14	5,069	17	5,196	69	27,325
Vessels existing on the 31st of December, 1842	-	-	-	-	-	-	-	-	527	146,246
Number of steam vessels belonging to the Austrian Lloyd's Steam Navigation Company, 31st of December, 1842, of 120 horse power	-	-	-	-	-	-	-	-	4	1,521
Ditto, ditto, of 100 horse power	-	-	-	-	-	-	-	-	3	960
Ditto, ditto, of 70 horse power	-	-	-	-	-	-	-	-	1	230
Ditto, ditto, of 60 horse power	-	-	-	-	-	-	-	-	2	560
Ditto, ditto, of 45 horse power	-	-	-	-	-	-	-	-	2	360
Total	-	-	-	-	-	-	-	-	12	3,631

Tariff (*Austrian*). — Subjoined is the existing tariff of the import, export, and transit duties charged in the Austrian empire on some of the most important articles of trade and consumption. It came into operation on the 27th of February, 1838.

The duties imposed by this tariff, though, in some instances, considerably lower than those formerly charged, are still, speaking generally, very heavy. The duty on cotton and woollen goods, for example, is 60 per cent. *ad valorem*; while that on coffee is 38*s.* the English cwt., that on raw sugar for consumption 32*s.* the cwt., and so forth. There is, in fact, a singular contradiction in the commercial policy of Austria; in some respects it is as liberal as could be wished for, while in others it is selfish and illiberal in the extreme. In all that respects ports and shipping, the legislation of Austria may be advantageously contrasted with that of almost any other nation. All articles are freely admitted into Trieste and Venice, and may be consumed in them, or warehoused and re-exported, without being liable to any duty, the port charges being at the same time very reasonable. But the moment that it is attempted to introduce any article from a free port into the interior, it is loaded with oppressive duties, and subjected to vexatious regulations. These have been imposed in the view of protecting and encouraging domestic industry; but it is, perhaps, unnecessary to say that their effect in Austria, as in all other countries, has been precisely the reverse. Instead of trusting to their own exertions, and bringing the inexhaustible resources of science and ingenuity to their aid, the native producers, deprived of the stimulus of competition, depend for success on the efforts of the customs officers to exclude foreign products, and to secure them a monopoly. There is, consequently, but little improvement. Every thing has about it an air of languor and routine. Most part, also, of the foreign products now to be met with in the interior have found their way there through clandestine channels. The mischievous influence of such a system is, indeed, too obvious to be disputed by any one not interested in its support. The modifications made of late years in the tariff, and the commercial treaty negotiated with this country, may, we hope, be regarded as the forerunners of still greater changes. A reduction of the duty on most foreign articles to a half or a third part of its present amount would do more than any thing else to promote the industry of the empire, to stimulate commerce, and to increase the customs revenue. Now that the navigation of the Danube is opened, a reduction of this sort is more than ever necessary. The introduction of a taste for the production of foreigners is of all others the most likely means by which the long dormant energies and immense productive capacities of Hungary, Transylvania, and the other eastern provinces of the empire, may be stimulated and developed. Unluckily, however, the existing duties must either go far, by excluding foreign products, wholly to prevent the formation of such a taste in the countries referred to, or, if they should be imported, it will only be in limited quantities, and through the agency of the smuggler. The latter derives employment and wealth from this vicious system; and were it intended for his advantage, it might be said to be well contrived, and the means judiciously adapted to bring about the desired end. But it is directly opposed to invention and industry; paralyses the manufactures it was intended to protect; and either annihilates all commerce, or makes it redound to the advantage only of those who trample on the laws. No system can be more completely at variance with the paternal intentions of the Austrian government; and

its downfall may be expected the moment they become fully aware of its real nature and practical influence.

The great drawback under which Austria labours, is the situation of by far the larger portion of her provinces in the central parts of Europe; and separated from the great markets for their produce, either by a wide tract of intervening country, or by high mountain ridges, Austria is naturally an agricultural country; and, unless compelled by circumstances to divert a portion of her energies to manufactures, will, no doubt, continue such for a lengthened period: and hence, as the products of agricultural industry are at once heavy and bulky in proportion to their value, the advantage of opening improved channels of communication with other countries. In this respect, the free navigation of the Danube is of much importance, though a great deal more stress has been laid upon it in this country than it deserves. The expense of carrying corn and timber from Hungary to the Black Sea, and thence to the ports of Western Europe, will, we apprehend, always be found too heavy to permit of England or France ever supplying themselves, at least to any considerable extent, with the corn, flax, or timber of Hungary or Transylvania. The cost of conveying produce from the interior of the continent to the nearest shipping ports is a most important element, which is too generally lost sight of in this country. To show its influence, we may mention that, on the 28th of November, 1838, wheat sold at Lemberg, one of the principal markets of Galicia, for 15*s.* 2*d.* a quarter; when its price at Dantzic, on the 20th of the same month was 41*s.* 6*d.*; the difference, amounting to 26*s.* 4*d.* a quarter, being occasioned by the difficulty and expense of conveying corn down the Vistula, from Lemberg to Dantzic. We may remark, by the way, that this fact sets in a very striking point of view, the absurdity of the statements so frequently put forth in our newspapers, contrasting prices in this country with those in foreign markets, and ascribing their excess in England wholly to the influence of our corn laws!

The Austrian government and people have long been alive to the many advantages that would result from opening a communication between Hungary and Fiume, and other ports on the Adriatic. And notwithstanding the obstacles opposed by the interposition of the Julian Alps, and other mountain ridges, an excellent road has been carried from Carlstadt to Fiume. Still, however, the expenses of the carriage of bulky products are too great to make this route sufficiently available; and the advantage of further improving and cheapening the communication is too obvious to need being pointed out.

Table of Import, Export, and Transit Duties levied in the Austrian Empire on the following Articles.

Articles.	Duty in Austrian Money and Rates.				Duty in English Money and Rates.				
	Unit of Charge.	Import Duty.	Export Duty.	Transit Duty.	Unit of Charge.	Import Duty.	Export Duty.	Transit Duty.
		fl. k.	fl. k.	fl. k.		£ s. d.	£ s. d.	d.
Arms, fire, all kinds	per 1 fl. value	0 12	0 0½	0 12	ad valorem	20 0 0	0 0 0 1-10	20
Beef and all kinds of butchers' meat, fresh	gross centner	0 50	0 1½	0 2	123 1-3 lbs.	0 1 8	0 0 0 5-8	0 4-5
salted	—	2 55	0 6¾	0 2	—	0 4 11	0 0 0 2 5-8	0 4-5
from Hungary	—	1 40	0 6¾	0 2	—	0 2 8	0 0 0 2 5-8	0 4-5
Beer in casks	—	0 48	0 1	0 2	—	0 0 8 2-5	0 0 0 0 3-5	0 4-5
bottles, kegs, &c. packed in casks or hampers	—	5 0	0 5	0 2	—	0 10 0	0 0 0 2	0 1-5
not packed	per bottle	0 6	0 0½	0 2	per bottle	0 0 2 2-5	0 0 0 1-10	0 4-5
Bells of bell-metal, or other common metals	nett centner	0 10	—	—	123 1-3 lbs.	0 0 4		
Books with permission of censorship	per 1 fl. value	0 36	0 0½	0 8	ad valorem	60 0 0	0 0 0 1-10	3 2-5
Brass, and all compositions of brass with other than precious metals, raw or in blocks and bars	nett centner	8 20	0 6½	0 2	123 1-3 lbs.	0 16 8	0 0 0 2 5-8	0 4-5
in plates, rolled, wire	—	13 20	0 12½	0 2	—	1 6 4	0 0 0 5	0 4-5
wrought	—	60 0	0 25	0 8	—	6 0 0	0 0 0 10	3 2-5
Coal (sea coal)	gross centner	15 0	0 25	0 2	—	1 10 0	0 0 0 10	0 4-5
Coffee	nett centner	21 0	0 17½	0 5	—	2 2 0	0 0 0 7	2
Copper, raw, rolled, plates, blocks	—	0 50	0 50	0 2	—	0 1 8	0 1 0	0 4-5
wrought, as kettles, boilers, &c.	—	10 0	0 12½	0 5	—	1 0 0	0 0 5	2
wire	—	15 0	0 12½	0 5	—	1 10 0	0 0 5	2
Corn, wheat	gross centner	0 22½	0 1	0 5	—	0 0 9	0 0 0 2-5	0 4-5
barley and oats	—	0 15	0 0¾	0 2	—	0 0 6	0 0 0 3-8	0 4-5
Indian corn	—	0 17	0 0¾	0 2	—	0 0 6 4-5	0 0 0 3-8	0 4-5
Rye and buck wheat	—	0 16	0 0¾	0 2	—	0 0 6 2-5	0 0 0 3-8	
Cotton manufactures, all kinds	per 1 fl. value	0 36	½ 30 cent.	0 27	ad valorem	60 0 0	0 0 0 1-10	0 4-5
twist	nett centner	15 0	0 50	0 27	123 1-3 lbs.	1 10 0	0 1 8	10 4-5
Earthenware, common	gross centner	7 30	0 6¾	0 5	—	0 15 0	0 0 0 2 4-5	2
Porcelain, all kinds	per 1 fl. value	0 36	0 0¾	0 27	ad valorem	60 0 0	0 0 0 1-10	10 4-5
Fire engines	nett centner	10 0	0 25	0 5	123 1-3 lbs.	1 0 0	0 0 10	
Fish: stockfish, codfish, herrings, &c., salted or cured	gross centner	2 0	0 5	0 5	—	0 4 0	0 0 0 2	
Glass: flint and crown glass wares, ordinary	—	6 0	0 25	0 2	—	0 12 0	0 0 0 10	0 4-5
cut, all kinds, plates for looking glasses	—	6 40	0 4	0 2	—	0 13 4	0 0 1 3-5	0 4-5
artificial brilliants	—	20 0	0 4	0 2	—	2 0 0	0 0 1 3-5	10 4-5
	—	30 0	0 4	0 2	—	3 0 0	0 0 1 3-5	0 4-5

Table of Import, Export, Transit Duties, &c. — *continued*.

Articles.	Duty in Austrian Money and Rates.				Duty in English Money and Rates.				
	Unit of Charge.	Import Duty.	Export Duty.	Transit Duty.	Unit of Charge.	Import Duty.	Export Duty.	Transit Duty.
		fl. k.	fl. k.	fl. k.		£ s. d.	£ s. d.	d.
Hats, beaver, silk, whalebone and other stuffs, also, straw and ladies' hats and bonnets	each	1 0	0 1	0 27	each	0 2 0	0 0 0 2-5	10 4-5
Indigo	gross centner	7 30	1 52½	0 27	123 1-3 lbs.	0 15 0	0 3 9	10 4-4
Instruments, mathematical, chirurgical, and optical	per 1 fl. value	0 6	0 0½	0 2	ad valorem	10 0 0	0 0 0 1-10	0 4-5
musical	—	0 12	0 0½	0 2	—	20 0 0	0 0 0 1-10	0 4-5
Iron, raw, in pigs	nett centner	2 24	0 48	0 2	123 1-3 lbs.	0 5 7 1-5	0 0 0 3-5	0 4-5
cast, wares of	—	5 24	0 2½	0 2	—	0 10 9 3-5	0 0 1	0 4-5
hammered in bars, rods	—	6 0	0 2½	0 2	—	0 12 0	0 0 1	0 4-5
cast steel	—	3 30	0 8½	0 2	—	0 7 0	0 0 3 4-5	0 4-5
hammered steel	—	7 12	0 3	0 2	—	0 14 4 4-5	0 0 1 2-5	0 4-5
sheet iron	gross centner	9 36	0 4	0 2	—	0 19 2 2-5	0 0 1 3-5	0 4-5
tin	—	15 36	0 6½	0 2	—	1 11 2 2-5	0 0 2 4-5	0 4-5
steel and iron wire	nett centner	12 0	0 5	0 2	—	1 4 0	0 0 2	4 4-5
ironmongery, as anchors, hammered wares, ordinary rasps, files, &c. locksmiths', tinsmiths', and spurinakers' work; also carriage springs and hoops, common locksmiths', &c. work, fine, and all fine polished hardware	—	12 0	0 5	0 2	—	1 4 0	0 0 2	0 4-5
fine tiles, needles, graver's tools, &c.	per 1 fl. value	0 36	0 0½	0 12	ad valorem	60 0 0	0 0 0 1-10	4 4-5
	nett lb.	0 12	0 0½	0 12	nett lb.	0 0 4	0 0 0 1-10	0 4-5
Lead, raw, in blocks	nett centner	6 18	0 24	0 2	123 1-3 lbs.	0 12 7 2-5	0 0 1 1-10	0 4-5
cast, as balls and shot	—	7 12	0 3	0 2	—	0 14 4 4-5	0 0 1 1-2	0 4-5
Leather, ox and cow hides, tanned	—	15 0	0 25	0 5	—	1 10 0	0 0 10	2
calves' skins, tanned and dressed	—	35 0	0 50	0 5	—	3 10 0	0 1 8	2
Linens, knit, as stockings, gloves, &c.	nett lb.	6 0	0 0½	0 27	nett lb.	0 12 0	0 0 0 1-5	10 4-5
cambric	—	6 0	0 0½	0 27	—	0 12 0	0 0 0 1-5	10 4-5
ribands, tapes, galoons, &c.	—	2 30	0 0½	0 27	—	0 5 0	0 0 0 1-10	10 4-5
other fine woven linens	—	3 20½	0 0½	0 27	—	0 6 8 1-5	0 0 0 1-20	10 4-5
Oil, olive	gross centner	4 0	0 10	0 2	123 1-3 lbs.	0 8 0	0 0 4	0 4-5
palm, cocoa-nut, lint, or hempseed oil	—	2 30	0 6½	0 2	—	0 5 0	0 0 2 3-5	0 4-5
fish or train oil	—	0 18	0 2½	0 2	—	0 0 7 2-5	0 0 0 3	0 4-5
patch or tar oil	—	2 0	0 5	0 2	—	0 4 0	0 0 0 2	0 4-5
turpentine	—	2 0	0 5	0 2	—	0 4 0	0 0 0 2	0 4-5
Painters' colours, raw	—	0 25	0 5	0 2	—	0 0 10	0 0 0 2	0 4-5
prepared	—	3 20	0 0	0 2	—	0 6 8	0 0 0 2	0 4-5
Papers, all kinds, except worked into articles of luxury	nett centner	3 20	0 4	0 2	—	0 6 8	0 0 0 1 3-8	4 4-5
Pewter and tin manufactures	per 1 fl. value	0 36	0 0½	0 12	ad valorem	60 0 0	0 0 0 1 1-10	4 4-5
Plate, gold and silver	1 gross lb.	0 24	0 2	0 12	per lb.	0 0 8	0 0 0 1-5	0 4-5
Playing cards	per dozen packs	0 36	- -	0 1	per doz. packs	0 1 1 2-5	free	0 2-5
Salt	gross centner	prohibited	free	0 2	123 1-3 lbs.	prohibited	free	0 4-5
Silk; woven silks	nett lb.	10 0	0 1½	0 27	nett lb.	1 0 0	0 0 0 3-5	10 4-5
Spermaceti and wax	gross lb.	0 36	0 0½	0 27	gross lb.	0 1 1 2-5	0 0 0 3-10	10 4-5
Spirits, distilled, in casks	gross centner	15 24	0 10½	0 12	123 1-3 lbs.	1 6 8 2-5	0 0 0 3-5	4 4-5
in bottles	—	10 0	0 12½	0 12	—	1 0 0	0 0 5	4 4-5
Sugar, refined, all kinds	nett centner	18 0	0 9	- -	—	1 16 0		
raw, powdered for the trade	—	15 0	0 9	- -	—	1 10 0		
raw, for the use of refiners								
others, for refineries	—	7 30	0 4½	- -	—	0 15 6		
Tobacco, in leaf	—	15 0	0 20	0 5	—	1 10 0	0 0 8	2
manufactured	—	40 0	0 5	0 5	—	4 0 0	0 0 2	2
Wine: Cape wine, French, Spanish, and German wines, in casks, &c.	gross centner	15 0	0 2	0 2	—	1 10 0	0 0 0 4-5	0 4-5
in bottles	per bottle	0 30	0 0	0 2	per bottle	0 1 0	- -	0 1-5
Woods: dyewoods, in blocks or pieces	nett centner	0 12½	0 5	0 2	123 1-3 lbs.	0 0 5	0 0 2	0 4-5
Woollen manufactures, all kinds	per 1 fl. value	0 36	0 0½	0 27	ad valorem	60 0 0	0 0 0 1-10	4 4-5

One Vienna pound = 1·235 lb. avoirdupois hence the centner of 100 Vienna pounds = 123·5 or 123½ lbs. avoirdupois.

The Austrian florin of the standard of 20 to the Cologne mark, is almost exactly 2 shillings sterling.

In the Lombardo Venetian kingdom, the centner of 100 kilogrammes is still the weight used in levying the duty, the difference between 100 kilogrammes = 78·8 lbs. of Austria being allowed.

TRINITY HOUSE. This society was incorporated by Henry VIII., in 1515, for the promotion of commerce and navigation, by licensing and regulating pilots, and ordering and erecting beacons, light-houses, buoys, &c. A similar society, for the like purposes, was afterwards established at Hull; and also another at Newcastle-upon-Tyne in 1537; which 3 establishments, says Hakluyt, were in imitation of that founded by the Emperor Charles V. at Seville in Spain; who, observing the numerous shipwrecks in the voyages to and from the West Indies, occasioned by the ignorance of seamen, established, at the *Casa de Contratacion*, lectures on navigation, and a pilot-major for the examination of other pilots and mariners; having also directed books to be published on that subject for the use of navigators.

Henry VIII., by his charter, confirmed to the Deptford Trinity House Society all the ancient rights, privileges &c. of the shipmen and mariners of England, and their several possessions at Deptford, from which it is plain that the Society had existed long previously. The corporation was confirmed, in 1685, in the enjoyment of its privileges and possessions, by letters patent of the 1st of James II. by the name of the Master,

Wardens, and Assistants of the Guild or Fraternity of the most glorious and undivided Trinity and of St. Clement's, in the parish of Deptford Strond, in the County of Kent. At first, the corporation appears to have consisted of seamen only; but since the charter of James II., noblemen and gentlemen have been enrolled among its elder brethren. It is governed by 31 elder brothers, of whom 1 is master, 4 wardens, and 8 assistants: but the inferior members of the fraternity, named younger brethren, are not limited in point of number; every master or mate, expert in navigation, being admissible as such. Besides the power of erecting light-houses, and other sea-marks, on the several coasts of the kingdom, for the security of navigation — (see LIGHT-HOUSES), — the master, wardens, assistants, and elder brethren are invested by charter with the following powers; viz. the examination of the mathematical scholars of Christ's Hospital; the appointment of pilots to conduct ships into and out of the Thames; the settling the several rates of pilotage; and the granting licences to poor seamen, not free of the city or past going to sea, to row on the river Thames for their support. They formerly, also, enjoyed several other powers, which have since fallen into disuse or been vested in other hands. To this company belongs the Ballast Office, for clearing and deepening the Thames, by taking up a sufficient quantity of ballast for the supply of all ships that sail out of the river, for which they pay certain rates. — (See BALLAST.) The corporation is authorised to receive voluntary subscriptions, benefactions, &c.; and to purchase, in mortmain, lands, tenements, &c. to the amount of 500*l.* per annum. The ancient Hall of the Trinity House at Deptford, where the meetings of the brethren were formerly held, was pulled down long ago. They now meet in an elegant building erected for the purpose in London, near the Tower.

Trinity House Revenues, &c. — The gross revenue under the management of the Trinity House amounts to about 298,000*l.* a year; but the nett revenue is rather under ¼ that sum. It arises from the dues payable to the corporation on account of light-houses, buoyage and beaconage, and ballastage; and from the interest of money in the funds, and the rent of freehold property. In 1842, the receipts were as under: —

	£	s.	d.	£	s.	d.	£	s.	d.
Light-houses. — Total sums received on account of light-houses	-		-	242,032	5	9½			
Deduct commission on collection	9,554	9	4½						
Charges on account of maintenance, &c.*	174,166	14	2	183,721	3	6½			
Nett light-house revenue	-		-				58,311	2	3
Buoyage and Beaconage — gross amount of	-		-	11,158	8	8			
Deduct commission on collection	383	1	11						
Charges	10,063	19	2	10,447	1	1			
Nett buoyage, beaconage, and revenue †	-		-				1,011	7	7
Ballastage — gross amount of	-		-	30,906	11	7			
Deduct charges	31,915	16	11						
Deficiency of ballastage revenue †	-		-	1,009	5	4			
Rent of Land and houses, dividends on account of funded property, &c., all charges deducted	-		-	-		-	10,851	7	3½
							73,173	17	1½
							1,009	5	4
Total nett revenue	-		-	-		-	72,164	11	9½

By far the greater portion of this large sum is laid out on pensions to poor disabled seamen, and on the maintenance of their widows, orphans, &c. We have seen the number of persons so relieved stated at 3,000; and we believe that the fund is both judiciously and economically administered. Still, however, as we have remarked in another article — (*ante*, p. 779.) — it does appear to us, considering the vast importance to a maritime nation like this of keeping the charges on shipping as low as possible, that it would be good policy to provide otherwise for the poor persons now dependent on the Trinity House, and to reduce the charges on account of lights, &c. to the lowest sum that would suffice to maintain the establishment in a proper state of efficiency. No one, certainly, would wish to see the poor seamen or their widows or orphans deprived of any part of the pittance they now receive; but a larger amount might be given them from other sources, and be at the same time less felt by the public. Every one knows that nothing contributes so much to facilitate a commercial intercourse by land as good roads and low tolls; and good lights, buoys, beacons, &c., and light charges, have precisely the same influence at sea.

TRIPANG, OR SEA SLUG (*Biche de Mer*), a species of fish of the genus *Holothuria*, found chiefly on coral reefs in the Eastern seas, and highly esteemed in China, into which it is imported in large quantities. It is an unseemly looking substance, of a dirty brown colour, hard, rigid, scarcely possessing any power of locomotion, or appearance of animation. Sometimes the slug is as much as 2 feet in length, and from 7 to 8 inches in circumference. A span in length, and 2 or 3 inches in girth, is, however, the ordinary size. The quality and value of the fish, however, do not by any means depend upon its size, but upon properties in it neither obvious to nor discernible by those who have not been long and extensively engaged in the trade. In shallow water the animal is taken out by the hand, but in deeper water it is sometimes speared. When taken it is gutted, dried in the sun, and smoked over a wood fire; this being the only preparation it receives.

* This sum includes 3,481*l.* expended on account of new works; 50,713*l.* for interest paid on monies borrowed to complete the purchase of certain lights; and 10,946*l.* repairs, coals, stores, wages to engineers of the yachts required for conducting the light and buoyage service, and salary to superintendent and storekeeper at the wharf at Blackwall and rates, taxes, repairs, &c. on the establishment at that place.

† It will be seen that the charges on account of ballastage exceed the revenue; the amount of such excess, 1,009*l.* 5*s.* 4*d.*, is deducted at the foot of this account.

The fishery is carried on from the western shores of New Guinea, and the southern shores of Australia, to Ceylon inclusive. Indeed, within the last few years it has been successfully prosecuted on the shores of the Mauritius. The whole produce goes to China. In the market of Macassar, the great staple of this fishery, not less than *thirty* varieties are distinguished, varying in price from 5 Spanish dollars a *picul* (133⅓ lbs.) to 14 times that price, each variety being distinguished by well-known names! The quantity of tripang sent annually to China from Macassar is about 7,000 piculs, or 8,333 cwt.; the price usually varying from 8 dollars a picul to 110 and 115, according to quality. — (*Crawfurd's Indian Archipelago*, vol. iii. p. 441.) There is also a considerable export of tripang from Manilla to Canton.

Besides tripang, *fish-maws* and *sharks' fins* are exported to China from every maritime country of India.

TROY WEIGHT, one of the most ancient of the different kinds used in Britain. The pound English Troy contains 12 ounces, or 5,760 grains. It is used in the weighing of gold, silver, and jewels; the compounding of medicines; in experiments in natural philosophy; in comparing different weights with each other; and is now (by 5 Geo. 4. c. 74.) made the standard of weight.

Troy Weight, *Scotch*, was established by James VI. in the year 1618, who enacted that only one weight should be used in Scotland, viz. the French Troy stone of 16 pounds, and 16 ounces to the pound. The pound contains 7,609 grains, and is equal to 17 oz. 6 dr. avoirdupois. The cwt. or 112 lbs. avoirdupois, contains only 103 lbs. 2¼ oz. of this weight, though generally reckoned equal to 104 lbs. This weight is very nearly identical with that formerly used at Paris and Amsterdam; and is generally known by the name of Dutch weight. Though prohibited by the articles of Union, it has been used in most parts of Scotland in weighing iron, hemp, flax, and other Dutch and Baltic goods, meal, butcher's meat, lead, &c. — (See Weights and Measures.)

TRUCK SYSTEM, a name given to a practice that has prevailed, particularly in the mining and manufacturing districts, of paying the wages of workmen in goods instead of money. The plan has been, for the masters to establish warehouses or shops; and the workmen in their employment have either got their wages accounted for to them by supplies of goods from such *depôts*, without receiving any money; or they have got the money, with a tacit or express understanding that they were to resort to the warehouses or shops of their master for such articles as they were furnished with.

Advantages and Disadvantages of the Truck System. — A great deal of contradictory evidence has been given, and very opposite opinions have been held, as to the practical operation and real effect of this system on the workmen. Nor is this to be wondered at, seeing that every thing depends on the mode in which it is administered, and that it may be either highly advantageous or highly injurious to the labourer. If a manufacturer of character establish a shop supplied with the principal articles required for the use of the workmen in his employment, and give them free liberty to resort to it or not as they please, it can, at all events, do them no harm, and will, most likely, render them material service. The manufacturer, having the command of capital, may, in general, lay in his goods to greater advantage than they can be laid in by the greater number of retail tradesmen in moderate-sized towns; and not being dependent on the profits of his shop for support, he is, even though he had no advantage in their purchase, able to sell his goods at a cheaper rate than they can be afforded by the majority of shopkeepers. Some times, also, a factory is established in a district where shops either do not exist at all, or are very deficient; and in such cases the master consults the interest and convenience of those dependent on him when he provides a supply of the principal articles required for their subsistence. It is easy, therefore, to see that the keeping of shops by masters for the use of their workmen may be very beneficial to the latter. But to insure its being so, it is indispensable that the masters should be above taking an advantage when it is within their reach, and that their conduct towards the workmen should not be in any degree influenced by the circumstance of the latter dealing or not dealing with their shops.

Such disinterestedness is, however, a great deal more than could be rationally expected from the generality of men; and hence, though many instances may be specified in which the truck system was advantageous to the workmen, those of a contrary description were unfortunately, far more numerous. It is obvious, indeed, that a practice of this sort affords very great facilities for fraudulent dealings. Under the old law, a manufacturer who had a shop, had means, supposing he were inclined to use them, not possessed by any ordinary shopkeeper as respects his customers, for forcing upon his workmen inferior goods at an exorbitant price. They are at first supplied on liberal terms, and are readily accommodated with goods in anticipation of wages, till they get considerably into debt. The pernicious influence of this deceitful system then begins fully to disclose itself. The workmen cease to be free agents; they are compelled to take such goods and at such prices as the master pleases; for, were they to attempt to emancipate themselves from this state of thraldom by leaving their employment, they would be exposed to the risk of prosecution and imprisonment for the debts they had incurred. It is not easy to imagine the extent to which these facilities for defrauding the labouring class were taken advantage of in various districts of the country. In many instances, indeed, the profits made by the shops exceeded those made by the business to which they were contingent; and thousands of workmen, whose wages were nominally 30*s.* a week, did not really receive, owing to the bad quality and high price of the goods supplied to them, more than 20*s.*, and often not so much.

Abolition of the Truck System. — A system of dealing with the labouring classes, so very susceptible of abuse, and which, in point of fact, was very extensively abused, was loudly and justly complained of. A bill was in consequence introduced for its suppression by Mr. Littleton (now Lord Hatherton), which, after a great deal of opposition and discussion, was passed into a law, 1 & 2 Will. 4. c. 32. — (*See abstract subjoined.*)

Those who opposed this act did so on two grounds; — 1st, that it was improper to interfere at all in a matter of this sort; and, 2d, that the interference would not be effective. The first of these objections does not appear entitled to any weight. In suppressing the truck system, the legislature did nothing that could in anywise regulate or fetter the fair employment of capital: it interfered merely to put down abuse; to carry, in fact, the contract of wages into full effect, by preventing the workman from being defrauded of a portion of the wages he had stipulated for. The presumption no doubt is, in questions between workmen and their employers, that government had better abstain from all interference, and leave it to the parties to adjust their disputes on the principle of mutual interest and compromised advantage. Still, however, this is merely a presumption; and must not be viewed as an absolute rule. Instances have repeatedly occurred where the interference of the legislature to prevent or suppress abuse, on occasions of the sort now alluded to, has been imperiously required, and been highly advantageous. Those who claim its interposition are, indeed, bound to show clearly that it is called for to obviate some gross abuse, or that it will materially redound to the public advantage; and this, we think, was done in the completest manner, by the opponents of the truck system. Regard for the interests of the more respectable part of the masters, as well as for those of the workmen, required its abolition; for, while it continued, those who despised taking an advantage of their dependants were less favourably situated than those who did. It is ludicrous, therefore, in a case of this sort, to set up a cuckoo cry about the "freedom of industry." The good incident to the truck system was in practice found to be vastly overbalanced by the abuses that grew out of it; and as these could not, under the existing law of debtor and creditor, be separately destroyed, the legislature did right in attempting to suppress it altogether.

It was said, indeed, that this would be found to be impracticable; and the manufacturers would enter underhand into partnerships with the keepers of shops, and that the system would really be continued, in another and, perhaps, more objectionable form. This anticipation has, we believe, been in some degree realised; but the system has notwithstanding been in many places abandoned, and is nowhere practised to any thing like the extent to which it was carried previously to the passing of Lord Hatherton's act. It will not, however, be completely rooted out, till all small debts, however they originate, be put beyond the pale of the law. We have already vindicated the expediency of this measure on other grounds — (see CREDIT); and the influence it would have in effectually destroying whatever is most pernicious in the truck system, is a weighty additional recommendation in its favour. Were all right of action upon debts for less than 50*l.* or 100*l.* taken away, no master would think of acquiring a control over the free agency of his workmen, by getting them in debt to him; and no workman would, under such circumstances, submit to be directed in his choice of shops or goods. The case of the Scotch colliers affords a curious illustration of what is now stated. Down to 1775, these persons were really *adscripti glebæ*, or prædial slaves; that is, they and their descendants were bound to perpetual service at the works to which they belonged, — a right to their labour being acquired by any new proprietor to whom the works were sold! The 15 Geo. 3. c. 28. was passed for the emancipation of the colliers from this state of bondage. It, however, failed of practically accomplishing its object; for the masters speedily contrived, by making them advances in anticipation of their wages, to retain them as completely as ever under their control! To obviate this abuse, the 39 Geo. 3. c. 56. was passed; which most properly took from the masters all title to pursue the colliers for loans, unless advanced for the support of the collier and his family during sickness. This act had the desired effect; and the colliers have since been as free as any other class of labourers. — (See edition of the *Wealth of Nations* by the author of this work, p. 172.) In fact, were small debts put beyond the pale of the law, it would not be necessary to interfere directly with the truck system; for it would not then be possible to pervert it to any very injurious purpose.

The following are the principal clauses in the act 1 & 2 Will. 4. c. 37., entitled, "An Act to prohibit the Payment in certain Trades, of Wages in Goods, or otherwise than in the Current Coin of the Realm:" —

1. In all contracts hereafter to be made for the hiring of any artificer in any of the trades herein after enumerated, or for the performance by any artificer of any labour in any of the said trades, the wages of such artificer shall be made payable only in the current coin of this realm, and not otherwise; any contract to the contrary being illegal, null, and void.
2. If such contract contain any stipulations as to the manner in which the wages shall be expended, it is void.
3. Wages must be paid to the workman in coin only. Payment in goods illegal and void.
4. Artificers may recover wages, if not paid in the current coin.
5. In an action brought for wages, no set-off shall be allowed for goods supplied by the employer, or by any shop in which he is interested
6. No employer shall have any action or suit in equity against his artificer, for goods supplied to him on account of wages, or supplied by any shop in which he has an interest.
7. If the artificer, or his wife or children, become chargeable

to the parish, the overseers may recover any wages earned within the 3 preceding months, and not paid in cash.

8. Nothing in this act is to invalidate the payment of wages in bank notes or drafts on any bankers within 15 miles, if artificer consents.

9. Any employer of any artificer in any of the trades hereinafter enumerated, who shall, by himself or by the agency of any other person, directly or indirectly enter into any contract, ... make any payment hereby declared illegal, shall for the first offence forfeit a sum not exceeding 10*l.* nor less than 5*l.*, and for the second offence any sum not exceeding 20*l.* nor less than 10*l.*, and for a third offence he shall be guilty of a misdemeanour, and be punished by fine only, at the discretion of the court, so that the fines shall not in any case exceed 10 *l.*

10. Offences shall be inquired of and fines recovered before 2 justices, and the amount of the fines shall be in the discretion of such justices, or in cases of misdemeanour, of the court before which the offence may be tried; and in case of a second offence, it shall be sufficient evidence of the previous conviction, if a certificate, signed by the officer having the custody of the record, be produced, stating in a compendious form the general nature of the offence. But a second or third offence shall only be punished as a first or second offence, if committed within 10 days after the prior conviction: and a fourth or any subsequent offence shall be punished as a third offence. But no second or third offence shall be prosecuted after more than 2 years from the commission of the next preceding offence.

11. Justices may compel the attendance of witnesses, on the request of the parties. Penalty for non-attendance without excuse, and after proof of due service of summons at the usual place of abode for such persons, 24 hours at the least before the time appointed for appearance, a commitment to some prison within the jurisdiction of the justices, without bail or mainprize, for not exceeding 14 days, or until such person shall submit to be examined.

Section from 12 inclusive, regulate proceedings.

19. Act only to apply to the following trades: — Making, casting, converting, or manufacturing of iron or steel, or any parts, branches, or processes thereof; working any mines of coal, ironstone, limestone, salt rock; or working or getting stone, slate, or clay; or making or preparing salt, bricks, tiles, or quarries; or making or manufacturing any kinds of nails, chains, rivets, &c. or any other articles or hardwares made of iron or steel, or of iron and steel combined, or of any plated articles of cutlery, or of any goods or wares made of brass, tin, lead, pewter, or other metal, or of any japanned goods or wares whatsoever; or making, spinning, throwing, doubling, winding, weaving, combing, knitting, bleaching, dyeing, printing, or otherwise preparing any kinds of woollen, worsted, yarn, stuff, kersey, linen, fustian, cloth, serge, cotton, leather, fur, hemp, flax, mohair, or silk manufactures whatsoever, or any manufactures whatsoever made of the said last mentioned materials, whether the same be or

... e preparing finishing any glass, porcelain, china, or ... ever, or any parts, branches, or ... erials used in any of such last mentioned

trades; or making or preparing of bone, thread, silk, or cotton lace, or of lace made of any mixed materials.

20. Not to extend to any domestic servant, or servant in husbandry.

21. No one engaged in any of the trades or occupations enumerated, or his father, son, or brother, shall act as a justice.

22. County magistrates to act in cases where those of towns are disqualified as above.

23. Not to prevent any employer from supplying or contracting to supply to any artificer any medicine or medical attendance, or any fuel, or any materials, tools, or implements to be by such artificer employed in his trade or occupation, if such artificers be employed in mining, or any hay, corn, or other provender to be consumed by any horse or other beast of burden employed by any such artificer in his trade and occupation; nor from demising to any artificer employed in any of the trades or occupations enumerated the whole or any part of any tenement at any rent: nor from supplying or contracting to supply to any such artificer any victuals dressed or prepared under the roof of any such employer, and there consumed by such artificer; nor from making or contracting to make any deduction from the wages of any artificer for any such rent, or medicine or medical attendance, or fuel, materials, tools, implements, hay, corn, or provender, or such victuals, or for any money advanced to each artificer for any such purpose; but such deduction shall not exceed the true value of such fuel, materials, tools, implements, hay, corn, and provender, and shall not be in any case made from the wages of such artificer unless the agreement for such deduction shall be in writing and signed by such artificer.

24. Not to prevent any such employer from advancing to any such artificer any money to be by him contributed to any friendly society or bank for savings, or for his relief in sickness, or for the education of any child of such artificer, nor from deducting or contracting to deduct any money from the wages of such artificer for the education of any such child, provided the agreement for such deduction shall be in writing and signed by such artificer.

25. Workmen, labourers, and other persons in any manner engaged in any employment or operation, in or about the several trades and occupations aforesaid, shall be deemed "artificers;" and all masters, bailiffs, foremen, managers, clerks, and other persons engaged in the hiring, employment, or superintendence of the labour of any such artificers shall be deemed to be "employers;" and any money or other thing had or contracted to be paid, or given as a remuneration for any labour done or to be done, whether within a certain time or to a certain amount, or for a time or an amount uncertain, shall be deemed to be the "wages" of such labour; and any agreement, understanding, device, contrivance, collusion, or arrangement whatsoever on the subject of wages, whether written or oral, whether direct or indirect, to which the employer and artificer are parties, or are assenting, or by which they are mutually bound to each other, or whereby either of them shall have endeavoured to impose an obligation on the other of them, shall be deemed a "contract."

TRUFFLES, a sort of vegetable production, like a mushroom, formed under ground. A few have been found in Northamptonshire; they are pretty abundant in Italy, the south of France, and several other countries. They are reckoned a great delicacy. The *pâtés au truffes d'Angoulême* are highly esteemed, and are sent as presents to very distant places. — (*Rees's Cyclopædia.*)

TUNIS, the capital of the regency of the same name, on the northern coast of Africa, the Goletta fort being in lat. 36° 48′ 30″ N., lon. 10° 25′ 45″ E. The bay of Tunis is somewhat in the form of a horseshoe. Its western extremity, Cape Carthage, is situated about 4 miles N.E. from the Goletta; and its eastern extremity, Cape Zafran, bears from Cape Carthage E. by S., distant about 13 miles. The bay is about 16 miles deep, and has good anchorage all over, in from 10 to 4 fathoms water. It is exposed to the N. and N. E. gales; but they seldom occasion any damage. Tunis lies on the west side of the bay, being separated from it by a large lagoon, having, where deepest, about 7 feet water. The port is at the Goletta, or channel, passing through the narrow belt of land separating the lagoon from the sea; the entrance to it is by a canal, in which there is at all times 15 feet water; and ships may use it on paying a fee of 3 dollars a day. It is not, however, much resorted to; all vessels of considerable burden loading and unloading from their moorings in the bay, by means of lighters. The population of Tunis has been variously estimated; and may probably amount to 100,000, being the most populous of any African city after Cairo. The streets are narrow, unpaved, and filthy. The buildings, though of stone, are mean and poor; and the inhabitants present the picture of poverty and oppression. There is a fort at the Goletta, of considerable strength.

Trade. — Notwithstanding the various drawbacks arising out of the nature of the government, and the ignorance and prejudices of the people, commerce and industry are in a more advanced state in Tunis than in any other part of Northern Africa, Egypt excepted. Though subject to droughts, the climate is, on the whole, excellent. The soil still preserves that exuberant fertility for which it was famous in antiquity.

Non quicquid Libycis terit
Fervens area messibus. — (*Senec. in Thyest.*)

It seldom receives any other manure than that of sometimes burning the weeds and stubble; and yet, in despite of its slovenly culture, the crops are luxuriant; and there is generally a considerable excess of wheat and barley for exportation. Corn is principally shipped at Biserta, about 50 miles W. of Tunis. Olive oil is one of the principal articles of export. It is of various qualities; some good, and some very indifferent. Susa is said to be the best place for its shipment. Soap of an excellent quality is largely manufactured in the regency. It may be had either soft or in wedges. The soft is made of barilla and pure oil, and is much esteemed. The hard soap is made from the lees of oil, and is reckoned

very strong. The principal soap-works are at Susa. Little, however, is prepared on a speculative anticipation of a demand for exportation; but any quantity may be had by contracting for it a few months before the period when it is wanted. A sort of woollen scull-caps are largely exported. They are in extensive demand all over the Levant, and are nowhere made in such perfection as here. Ivory and gold dust, hides, wax, morocco leather, sponge, barilla, coral, dates, ostrich feathers, &c. are among the articles of export.

The imports from Europe consist of woollens, coarse German and Irish linens, cotton stuffs, hardware, sugar, coffee, spices, tin plates, lead, alum, dye stuffs, wine, silk, Spanish wool, &c. There is very little direct trade between Tunis and England; but a good deal is indirectly carried on, through the intervention of Malta and Gibraltar. Marseilles has probably the largest share of the trade with the regency. In 1830, there entered the different ports of Tunis 194 ships, of the burden of 20,747 tons, exclusive of those engaged in the trade with the other African states and Turkey.

Exclusive of the trade by sea, a considerable trade is carried on between Tunis and the interior of Africa, by means of caravans. These import slaves, gold dust, ivory, feathers, drugs, &c. They carry back cotton stuffs, linens, hardware, spices, cochineal, &c.

Naval and military stores imported into Tunis pay no duty. Other articles pay a duty of 3 per cent. *ad valorem* on a rated tariff. Obstructions arising out of monopolies, &c. are occasionally thrown in the way of exportation; and in general it is necessary, before proceeding to ship, to obtain a *tiskery*, or licence to that effect, from the bey. That, however, may be, for the most part, procured without much difficulty.

Money. — Accounts are kept in piastres of 16 carobas or 52 aspers. The piastre is worth about 1*s.* 1*d.* sterling. The asper is an imaginary money. The value of foreign coins depends on the state of the exchange.

Weights. — Gold, silver, and pearls are weighed by the ounce of 8 meticals; 16 of these ounces make the Tunis pound = 7,773·5 Eng. grs. The principal commercial weight is the cantaro, containing 100 lbs., or rottoli, being equivalent to 111·05 lbs. avoird., or 50·36 kilog.

Measures. — The principal corn measure is the cafiz, divided into 16 whibas; and the whiba into 12 sahas. One cafiz = 11¼ Imperial bushels.

The wine measure is the millerolle of Marseilles = 14·1 Imp. gallons, or 64·33 litres. It is divided into 6½ mitres.

The principal oil measure is the metal or mettar = 5·125 wine gallons, or 19·39 litres; but it is of different dimensions in different parts of the country; and is larger at Susa, whence most of the oil is exported, than at Tunis.

The pic, or principal long measure, is of 3 sorts; viz. the pic woollen measure = 26·5 Eng. inches; the pic silk measure = 24·8 do.; and the pic linen measure = 18·6 do.

For further particulars, see that chapter of *Shaw's Travels in Barbary*, &c. (one of the most learned and excellent works of the kind in the English language), that treats of the kingdom of *Tunis*; *Macgill's Account of Tunis*, passim; *Jackson's Commerce of the Mediterranean*, pp. 55—96.; *Kelly's Cambist*, &c.

Ruins of Carthage. — The famous city of Carthage, one of the greatest emporiums of the ancient world, long the mistress of the sea, and the most formidable enemy of Rome, was situated near the cape which still bears her name, about 10 miles N. E. from Tunis. Such, however, have been the alterations on the coast, that the port of the city, within whose ample expanse whole navies used to ride, is now wholly filled up: antiquaries differ as to its situation; and the sea has in some places receded from 2 to 3 miles from the ruins of the buildings by which it was formerly skirted. The common sewers are still in a very perfect state, as are several cisterns, public reservoirs, and other remains of that sort, with the fragment of a noble aqueduct that supplied the city with water. But besides these and a very few Punic inscriptions that have been dug up, there is nothing left to attest the ancient grandeur and magnificence of the city, or to identify it with the illustrious people by whom it was founded and occupied till its destruction by Scipio Nasica. There are no temples, no triumphal arches, no granite columns or obelisks covered with Phœnician characters, and no ancient entablatures. These have all fallen a sacrifice to hostile attacks, or to the destroying hand of time.

> Nunc passim, vix reliquias, vix nomina servans,
> Obruitur, propriis non agnoscenda ruinis.

Such mutilated fragments of buildings as still remain are evidently the work of a later age; of those who occupied the city between the period when a colony was sent to it by Augustus, and its final subversion by the Saracens in the 7th century.

TURBITH, or TURPETH, the cortical part of the root of a species of *Convolvulus*, brought from different parts of the East Indies. It is a longish root about the thickness of the finger, resinous, heavy, of a brownish hue without and whitish within. It is imported cloven in the middle, lengthwise, and the heart or woody matter taken out The best is ponderous, not wrinkled, easy to break, and discovers to the eye a large quantity of resinous matter. At first it makes an impression of sweetness on the taste; but, when chewed for some time, betrays a nauseous acrimony. It is used in medicine, but only to a small extent. — (*Lewis's Mat. Med.*)

Turbith (Mineral), the name given by chemists to the subsulphate of mercury.

TURBOT (*Pleuronectes maximus*), a well-known and highly esteemed species of fish. Very considerable quantities of turbot are now taken on various parts of our coasts, from the Orkneys to the Land's End, yet a preference is given in the London markets to those caught by the Dutch. The latter are said to have sometimes drawn as much as 80,000*l.* in a single year, for turbots sold in London.

Fresh turbots, however taken, or in whatever ship imported, may be imported free of duty. — (See Fish.)

TURMERIC, the root of the *Curcuma longa*. It is externally greyish, and internally of a deep lively yellow or saffron colour; very hard; and not unlike, either in figure or size, to ginger. That should be preferred, which is large, new, resinous, difficult to break, and heavy. It is imported from Bengal, Java, China, &c.: but some of a superior quality is said to have been brought from Tobago. Small quantities of it have also been grown in England. It has a somewhat aromatic, and not very agreeable smell; and a bitterish, slightly acrid, but rather warm taste. It used to be in con-

siderable estimation as a medicine; but, in Europe, it is now only used as a dye. It yields a beautiful bright yellow colour; which, however, is extremely fugitive, and no means have hitherto been discovered of fixing it. It is sometimes employed to heighten the yellows made with weld, and to give an orange tint to scarlet; but the shade imparted by the turmeric soon disappears. The Indians use it to colour and season their food. — (*Lewis's Mat. Med.*; *Bancroft on Colours*, vol. i. p. 276.)

The entries of turmeric for consumption amount to about 4,000 cwts.; but as the duty on the article when brought from a foreign possession was reduced in 1842 from 10*s.* to 5*s.* per cwt., and when brought from a British possession from 2*s.* 4*d.* to 1*d.* per do., it is probable that the consumption will be materially increased. Its price, duty paid, in London, varies, according to quality, from 10*s.* to 32*s.* per cwt.

TURPENTINE (Ger. *Turpentin*; Fr. *Térébenthine*; It. *Trementina*; Rus. *Skipidar*; Pol. *Terpentyna*). There are several species of turpentine, but all of them possess the same general and chemical properties.

1. *Common Turpentine*, is a resinous juice which exudes from the Scotch fir or wild pine (*Pinus sylvestris*). The trees which are most exposed to the sun, and have the thickest barks, yield it in the greatest abundance. They begin to produce it when about 40 years old. The bark of the tree is wounded and the turpentine flows out in drops, which fall into a hole, or sort of cup, previously dug at the foot of the tree, holding about 1½ pint. It is purified by being exposed to liquefy in the sun's rays, in barrels perforated in the bottom, through which it filters. In the U. States, the collection of turpentine is confided chiefly to negroes, each of whom has the charge of from 3,000 to 4,000 trees. The process lasts all the year, although the incisions are not made in the trees till the middle of March, and the flow of the turpentine generally ceases about the end of October. The boxes are emptied 5 or 6 times during the year; and it is estimated that 250 boxes will produce a barrel weighing 320 lbs. Turpentine has a strong, somewhat fragrant odour, and a bitter, disagreeable taste; its consistence is greater than that of honey; its colour dirty yellow; and it is more opaque than the other sorts. We import it almost entirely from the U. States.

2. *Venice Turpentine*, is the produce of the larch (*Pinus Larix*). It is obtained by boring a hole into the heart of the tree about 2 feet from the ground, and fitting into it a small tube through which the turpentine flows into vessels prepared for its reception. It is purified by straining through cloths, or hair sieves. It is more fluid, having the consistence of new honey, a yellowish colour, and is less unpleasant to the smell and taste, than the common turpentine. Genuine Venetian turpentine is principally obtained from the forests of Baye, in Provence; but much of that to be found in the shops comes from America, and is, perhaps, obtained from a different species of fir.

3. *Canadian Balsam*, or *Turpentine*, is obtained from incisions in the bark of the *Pinus Balsamea*, a native of the coldest regions of North America. It is imported in casks, each containing about 1 cwt. It has a strong, not disagreeable odour, and a bitterish taste; is transparent, whitish, and has the consistence of copaiva balsam. — (See BALSAM.)

4. *Chian*, or *Cyprus Turpentine*, is obtained from the *Pistacia Terebinthus*, a native of the north of Africa and the south of Europe, and cultivated in Chios and Cyprus. It flows out of incisions made in the bark of the tree in the month of July; and is subsequently strained and purified. It has a fragrant odour, a moderately warm taste, devoid of acrimony or bitterness, and a white or very pale yellow colour; it is about as consistent as thick honey, is clear, transparent, and tenacious. From its comparative high price, Chian turpentine is seldom procured genuine, being for the most part adulterated either with Venetian or common turpentine. The different species of turpentine may be dissolved in rectified spirit, or pure alcohol; and, by distillation, they all give similar oils, which, from their being distilled (and not from any resemblance to alcohol, or spirits properly so called), are vulgarly termed spirit of turpentine. If the distillation be performed with water, the produce is an essential oil, the common spirit of turpentine; and if the distillation be carried on in a *retort*, without water, the product is more volatile and pungent, — a concentrated oil, as it were, — and is called the ethereal spirit of turpentine. The residuum that is left, in both cases, is a brownish resinous mass, brittle, capable of being melted, highly inflammable, insoluble in water, but mixing freely with oils: it is the common rosin of commerce. — (*Lib. of Entert. Knowledge, Vegetable Substances*; *Thomson's Dispensatory.*)

The entries of turpentine for home consumption in 1841 and 1842 amounted, at an average, to 396,996 cwt. a year. It is entirely imported from the U. States.

TURPENTINE, OIL OF (Ger. *Terpentinöl*; Fr. *Eau de raze, Huile de térébenthine*; It. *Acqua di rasa*; Sp. *Aguarras*), the essential oil drawn from turpentine by distillation. There are two sorts of this oil: the best, red; and the second, white. It is very extensively used by house painters, and in the manufacture of varnish, &c. The distillers have been charged with using it in the preparation of gin. Oil of turpentine is very often adulterated.

TURQUOISE (Ger. *Türkiss*; Fr. *Turquoise*; It. *Turchina*; Sp. *Turquesa*), a precious stone in considerable estimation. Its colour, which is its principal recommendation, is a beautiful celestial blue, which migrates into pale blue, and is sometimes tinged with green. Specific gravity, 3·127. It is destitute of lustre, opaque, and does not admit of a very high polish. It is much worn in necklaces, and every part of ornamental jewellery, from the size of a pin's head to that of an almond: it contrasts beautifully with brilliants, or pearls, set in fine gold, and appears to most advantage when cut spheroidal. —(*Mawe on Diamonds*, 2d ed. p. 129.)

Real turquoises are exclusively furnished by Persia. The mines whence they are obtained are situated near Nishapore. They are the property of the Crown, and are farmed to the highest bidder. They bring a rent of from 2,000*l*. to 2,700*l*. a year. —(*Fraser's Travels on the Shores of the Caspian*, pp. 343—347.)

TUTENAG, the name given in commercial language to the zinc or spelter of China. —(See ZINC.) This commodity used to be smuggled from China (the exportation of unwrought metals from that empire being prohibited) to Hindostan, the Malay Archipelago, and neighbouring countries, to the amount, it is supposed, of about 50,000 cwt. a year. In 1820, the British free traders introduced German spelter or zinc for the first time into the Indian market. In 1826, the importation of tutenag from China into Calcutta ceased: and it has now been totally superseded throughout India by spelter. Of this latter commodity there were exported from Great Britain, in 1840, to the East India Company's territories and Ceylon, 50,585 cwts., besides the quantities furnished by Hamburg, Rotterdam, Antwerp, and other continental ports.

TYRE, the principal city of Phœnicia, and the most celebrated emporium of the ancient world. This famous city was situated on the S. E. coast of the Mediterranean, where the inconsiderable town of Tsour now stands, in lat. 33° 17′ N., lon. 35° 14′ 35″ E. The trade that is at present carried on at Tsour is too trifling to deserve notice; but as this work is intended to give some account, however imperfect, of the revolutions in the channels of commercial enterprise, we may, perhaps, be excused for submitting a few statements with respect to the commerce carried on by so renowned a people as the Tyrians.

Tyre was founded by a colony from Sidon, the most ancient of the Phœnician cities. The date of this event is not certainly known, but Larcher supposes it to have been 1,690 years before the Christian æra. —(*Chronologie d'Hérodote*, cap. ii. p. 131.) It is singular, that while Homer mentions Sidon, he takes no notice of Tyre, whose glory speedily eclipsed that of the mother city; but this is no conclusive proof that the latter was not then a considerable emporium. The prophets Isaiah, Jeremiah, and Ezekiel, who flourished from 700 to 600 years before Christ, represent Tyre as a city of unrivalled wealth, whose "merchants were princes, and her traffickers the honourable of the earth." Originally, the city was built on the main land: but having been besieged for a lengthened period by the Babylonian monarch Nebuchadnezzar, the inhabitants conveyed themselves and their goods to an island at a little distance, where a new city was founded, which enjoyed an increased degree of celebrity and commercial prosperity. The old city was, on that account, entitled Palætyre, and the other simply Tyre. The new city continued to flourish, extending its colonies and its commerce on all sides, till it was attacked by Alexander the Great. The resistance made by the Tyrians to that conqueror showed that they had not been enervated by luxury, and that their martial virtues were nowise inferior to their commercial skill and enterprise. The overthrow of the Persian empire was effected with less difficulty than the capture of this single city. The victor had not magnanimity to treat the vanquished as their heroic conduct deserved. In despite, however, of the cruelties inflicted on the city, she rose again to considerable eminence. But the foundation of Alexandria, by diverting the commerce that had formerly centered at Tyre into a new channel, gave her an irreparable blow; and she gradually declined till, consistently with the denunciation of the prophet, her palaces have been levelled with the dust, and she has become "a place for the spreading of nets in the midst of the sea."

Commerce, Colonies, &c. of Tyre. — Phœnicia was one of the smallest countries of antiquity. It occupied that part of the Syrian coast which stretches from Aradus (the modern Rouad) on the north, to a little below Tyre on the south, a distance of about 50 leagues. Its breadth was much less considerable, being for the most part bounded by Mount Libanus to the east, and Mount Carmel on the south. The surface of this narrow tract was generally rugged and mountainous; and the soil in the valleys, though moderately fertile, did not afford sufficient supplies of food to feed the population. Libanus and its dependent ridges were, however, covered with timber suitable for ship building; and besides Tyre and Sidon, Phœnicia possessed the ports of Tripoli, Byblos, Berytus, &c. In this situation, occupying a country unable to supply them with sufficient quantities of corn, hemmed in by mountains, and by powerful and warlike neighbours, on the one hand, and having, on the other, the wide expanse of the Mediterranean, studded with islands, and surrounded by fertile countries, to invite the

enterprise of her citizens, they were naturally led to engage in maritime and commercial adventures; and became the boldest and most experienced mariners, and the greatest discoverers, of ancient times.

From the remotest antiquity, a considerable trade seems to have been carried on between the Eastern and Western worlds. The spices, drugs, precious stones, and other valuable products of Arabia and India, have always been highly esteemed in Europe, and have been exchanged for the gold and silver, the tin, wines, &c. of the latter. At the first dawn of authentic history, we find Phœnicia the principal centre of this commerce. Her inhabitants are designated in the early sacred writings by the name of Canaanites, —a term which, in the language of the East, means merchants. The products of Arabia, India, Persia, &c. were originally conveyed to her by companies of travelling merchants, or caravans; which seem to have been constituted in the same way, and to have performed exactly the same part in the commerce of the East, in the days of Jacob, that they do at present. —(*Gen.* xxxvii. 25, &c.) At a later period, however, in the reigns of David and Solomon, the Phœnicians, having formed an alliance with the Hebrews, acquired the ports of Elath and Ezion-geber, at the north-east extremity of the Red Sea. Here they fitted out fleets, which traded with the ports on that sea, and probably with those of southern Arabia, the west coast of India, and Ethiopia. The ships are said to have visited Ophir; and a great deal of erudition has been expended in attempting to determine the exact situation of that emporium or country. We agree, however, with Heeren, in thinking that it was not the name of any particular place; but that it was a sort of general designation given to the coasts of Arabia, India, and Africa, bordering on the Indian Ocean; somewhat in the same loose way as we now use the terms East and West Indies. —(See the chapter on the *Navigation and Commerce of the Phœnicians*, in the translation of Heeren's work.)

The distance of the Red Sea from Tyre being very considerable, the conveyance of goods from the one to the other by land must have been tedious and expensive. To lessen this inconvenience, the Tyrians, shortly after they got possession of Elath and Ezion-geber, seized upon Rhinoculura, the port in the Mediterranean nearest to the Red Sea. The products of Arabia, India, &c., being carried hither by the most compendious route, were then put on board ships, and conveyed by a brief and easy voyage to Tyre. If we except the transit by Egypt, this was the shortest and most direct, and for that reason, no doubt, the cheapest, channel by which the commerce between Southern Asia and Europe could then be conducted. But it is not believed that the Phœnicians possessed any permanent footing on the Red Sea after the death of Solomon. The want of it does not, however, seem to have sensibly affected their trade; and Tyre continued, till the foundation of Alexandria, to be the grand emporium for Eastern products, with which it was abundantly supplied by caravans from Arabia, the bottom of the Persian Gulph, and from Babylon, by way of Palmyra.

The commerce of the Phœnicians with the countries bordering on the Mediterranean was still more extensive and valuable. At an early period, they established settlements in Cyprus and Rhodes. The former was a very valuable acquisition, from its proximity, the number of its ports, its fertility, and the variety of its vegetable and mineral productions. Having passed successively into Greece, Italy, and Sardinia, they proceeded to explore the southern shores of France and Spain, and the northern shores of Africa. They afterwards adventured upon the Atlantic; and were the first people whose flag was displayed beyond the pillars of Hercules.*

Of the colonies of Tyre, Gades, now Cadiz, was one of the most ancient and important. It is supposed by M. de St. Croix to have originally been distinguished by the name of Tartessus or Tarshish, mentioned in the sacred writings. —(*De l'Etat et du Sort des Anciennes Colonies*, p. 14.) Heeren, on the other hand, contends, as in the case of Ophir, that by Tarshish is to be understood the whole southern part of Spain, which was early occupied and settled by Phœnician colonists. —(See also *Huet, Commerce des Anciens*, cap. 8.) At all events, however, it is certain that Cadiz early became the centre of a commerce that extended all along the coasts of Europe as far as Britain, and perhaps the Baltic. There can be no doubt that by the Cassiterides, or Tin Islands, visited by the Phœnicians, are to be understood the Scilly Islands and Cornwall. —(See TIN.) The navigation of the Phœnicians, probably, also, extended a considerable way along the western coast of Africa; of this, however, no details have reached us.

But, of all the colonies founded by Tyre, Carthage has been by far the most celebrated. It was at first only a simple factory; but was materially increased by the arrival of a large body of colonists, forced by dissensions at home to leave their native land, about 883 years before Christ. —(*St. Croix*, p. 20.) Imbued with the enterprising mercantile spirit of their ancestors, the Carthaginians rose, in no very long period, to the highest eminence as a naval and commercial state. The settlements founded by the Phœnicians in Africa, Spain, Sicily, &c. gradually fell into their hands; and after

* Mons Calpe and Mons Abyla, the Gibraltar and Ceuta of modern times.

the destruction of Tyre by Alexander, Carthage engrossed a large share of the commerce of which it had previously been the centre. The subsequent history of Carthage, and the misfortunes by which she was overwhelmed, are well known. We shall only, therefore, observe, that commerce, instead of being, as some shallow theorists have imagined, the cause of her decline, was the real source of her power and greatness; the means by which she was enabled to wage a lengthened, doubtful, and desperate contest with Rome herself for the empire of the world.

The commerce and navigation of Tyre probably attained their maximum from 650 to 550 years before Christ. At that period the Tyrians were the factors and merchants of the civilised world; and they enjoyed an undisputed pre-eminence in maritime affairs. The prophet Ezekiel (chap. xxvii.) has described in magnificent terms the glory of Tyre; and has enumerated several of the most valuable productions found in her markets, and the countries whence they were brought. The fir trees of Senir (Hermon), the cedars of Lebanon, the oaks of Bashan (the country to the east of Galilee), the ivory of the Indies, the fine linen of Egypt, and the purple and hyacinth of the isles of Elishah (Peloponnesus), are specified among the articles used for her ships. The inhabitants of Sidon, Arvad (Aradus), Gebel (Byblos), served her as mariners and carpenters. Gold, silver, lead, tin, iron, and vessels of brass; slaves, horses, mules, sheep, and goats; pearls, precious stones, and coral; wheat, balm, honey, oil, spices, and gums; wine, wool, and silk; are mentioned as being brought into the port of Tyre by sea, or to its markets by land, from Syria, Arabia, Damascus, Greece, Tarshish, and other places, the exact site of which it is difficult to determine.*

Such, according to the inspired writer, was Tyre, the "Queen of the waters" before she was besieged by Nebuchadnezzar. But, as has been already remarked, the result of that siege did not affect her trade, which was as successfully and advantageously carried on from the new city as from the old. Inasmuch, however, as Carthage soon after began to rival her as a maritime and mercantile state, this may, perhaps, be considered as the æra of her greatest celebrity.

It would not be easy to over-rate the beneficial influence of that extensive commerce from which the Phœnicians derived such immense wealth. It inspired the people with whom they traded with new wants and desires, at the same time that it gave them the means of gratifying them. It everywhere gave fresh life to industry, and a new and powerful stimulus to invention. The rude uncivilised inhabitants of Greece, Spain, and Northern Africa acquired some knowledge of the arts and sciences practised by the Phœnicians; and the advantages of which they were found to be productive secured their gradual though slow advancement.

Nor were the Phœnicians celebrated only for their wealth, and the extent of their commerce and navigation. Their fame, and their right to be classed amongst those who have conferred the greatest benefits on mankind, rest on a still more unassailable foundation. Antiquity is unanimous in ascribing to them the invention and practice of all those arts, sciences, and contrivances that facilitate the prosecution of commercial undertakings. They are held to be the inventors of arithmetic, weights and measures, of money, of the art of keeping accounts, and, in short, of every thing that belongs to the business of a counting-house. They were also famous for the invention of ship building and navigation; for the discovery of glass—(See Glass); for their manufactures of fine linen and tapestry; for their skill in architecture, and in the art of working metals and ivory; and still more for the incomparable splendour and beauty of their purple dye.—(See the learned and invaluable work of the President de Goguet, *Sur L'Origine des Loix, &c.* Eng. trans. vol. i. p. 296., and vol. ii. pp. 95—100.; see also the chapter of Heeren on the *Manufactures and Land Commerce of the Phœnicians.*)

But the invention and dissemination of these highly useful arts form but a part of what the people of Europe owe to the Phœnicians. It is not possible to say in what degree the religion of the Greeks was borrowed from theirs; but that it was to a pretty large extent seems abundantly certain. Hercules, under the name of Melcarthus, was the tutelar deity of Tyre; and his expeditions along the shores of the Mediterranean, and to the straits connecting it with the ocean, seem to be merely a poetical representation of the progress of the Phœnician navigators, who introduced arts and civilisation, and established the worship of Hercules, wherever they went. The temple erected in honour of the god at Gades was long regarded with peculiar veneration.

The Greeks were, however, indebted to the Phœnicians, not merely for the rudiments of civilisation, but for the great instrument of its future progress—the gift of letters. No fact in ancient history is better established than that a knowledge of alpha-

* There is, in Dr. Vincent's *Commerce and Navigation of the Ancients in the Indian Ocean* (vol. ii. pp. 624—652.), an elaborate and (like the other parts of that work) prolix commentary on this chapter of Ezekiel, in which most of the names of the things and places mentioned are satisfactorily explained.—(See also *Heeren on the Phœnicians*, cap. iv.)

betic writing was first carried to Greece by Phœnician adventurers: and it may be safely affirmed, that this was the greatest boon any people ever received at the hands of another.

Before quitting this subject, we may briefly advert to the statement of Herodotus with respect to the circumnavigation of Africa by Phœnician sailors. The venerable father of history mentions, that a fleet fitted out by Necho king of Egypt, but manned and commanded by Phœnicians, took its departure from a port on the Red Sea, at an epoch which is believed to correspond with the year 604 before the Christian æra, and that, keeping always to the right, they doubled the southern promontory of Africa; and returned, after a voyage of 3 years, to Egypt, by the Pillars of Hercules. — (*Herod.* lib. iv. § 42.) Herodotus further mentions, that they related that, in sailing round Africa, they had the sun on their right hand, or to the north, — a circumstance which he frankly acknowledges seemed incredible to him, but which, as every one is now aware, must have been the case if the voyage was actually performed.

Many learned and able writers, and particularly Gosselin (*Recherches sur la Géographie Systématique et Positive des Anciens*, tome i. pp. 204—217.), have treated this account as fabulous. But the objections of Gosselin have been successfully answered in an elaborate note by Larcher (*Hérodote*, tome iii. pp. 458—464. ed. 1802; and Major Rennell has sufficiently demonstrated the practicability of the voyage (*Geography of Herodotus*, p. 682, &c.). Without entering upon this discussion, we may observe, that not one of those who question the authenticity of the account given by Herodotus, presumes to doubt that the Phœnicians braved the boisterous seas on the coasts of Spain, Gaul, and Britain; and that they had, partially at least, explored the Indian Ocean. But the ships and seamen that did this much, might, undoubtedly, under favourable circumstances, double the Cape of Good Hope. The relation of Herodotus has, besides, such an appearance of good faith; and the circumstance, which he doubts, of the navigators having the sun on the right, affords so strong a confirmation of its truth; that there really seems no reasonable ground for doubting that the Phœnicians preceded, by 2,000 years, Vasco de Gama in his perilous enterprise.

Present State of Syria. — The principal modern ports on the coast of Syria are Alexandretta, Latakia, Tripoli, Beyrout, Seyde, and Acre. The commerce which they carry on is but inconsiderable. This, however, is not owing to the badness of the ports, the unsuitableness of the country, or to any natural cause, but wholly to long continued oppression and misgovernment. There is a passage in the dedication to Sandys' *Travels*, that describes the state of Syria, Asia Minor, Egypt, &c. about two centuries ago, with a force and eloquence which it is not very likely will soon be surpassed: —

"Those countries, once so glorious and famous for their happy estate, are now, through vice and ingratitude, become the most deplored spectacles of extreme misery; the wild beasts of mankinde having broken in upon them and rooted out all civilitie, and the pride of a sterne and barbarous tyrant possessing the thrones of ancient and just dominion; who, ayming onely at the height of greatnesse and sensualitie, hath in tract of time reduced so great and goodly a part of the world, to that lamentable distresse and servitude under which (to the astonishment of the understanding beholders) it now faints and groneth. Those rich lands at this present remain waste and overgrowne with bushes, receptacles of wild beasts, of theeves and murderers; large territories dispeopled or thinly inhabited; goodly cities made desolate; sumptuous buildings become ruines; glorious temples either subverted, or prostituted to impietie; true religion discountenanced and oppressed; all nobilitie extinguished; no light of learning permitted, nor vertue cherished: violence and rapine insulting over all, and leaving no securitie save to an abject mind and unlookt on povertie."

Those who compare this beautiful passage with the authentic statements of Volney — incomparably the best of the modern travellers who have visited the countries referred to — will find that it continues to be as accurate as it is eloquent.

U. V.

VALONIA, a species of acorn, forming a very considerable article of export from the Morea and the Lævant. The more substance there is in the husk, or cup of the acorn, the better. It is of a bright drab colour, which it preserves so long as it is kept dry: any dampness injures it; as it then turns black, and loses both its strength and value. It is principally used by tanners, and is always in demand. Though a very bulky article, it is uniformly bought and sold by weight. A ship can only take a small proportion of her registered tonnage of valonia, so that its freight per ton is always high.

Of 163,983 cwts. of valonia imported in 1840, 143,095 cwts. were brought from Turkey, 15,195 cwts. from Italy, and the residue from Greece and the Ionian Islands. The entries for home consumption amounted, during the 3 years ending with 1842, to about 8,200 tons, or 164,000 cwt. a year. The duty was reduced in 1842 from 20*s.* to 5*s.* a ton. The price of valonia in the London market in 1843 varied from 18*l.* to 22*l.* a ton.

VALPARAISO, the principal sea-port of Chili, in lat. 33° 1′ 48″ S., lon. 71° 31′ 8″ W. Population perhaps 10,000 or 12,000. The water in the bay is deep, and it affords a secure anchorage, except during northerly gales, to the violence of which it is exposed; but as the holding ground is good, and the pull of the anchor against a steep hill, accidents seldom occur to ships properly found in anchors and cables. There is no mole or jetty; but the water close to the shore is so deep, that it is customary for the smaller class of vessels to carry out an anchor to the northward, and to moor the ship with the stern ashore by another cable made fast to the shore. Large ships lie a little further off, and load and unload by means of lighters. The best shelter is in that part called the Fisherman's Bay, lying between the castle and fort St. Antonio, where, close to a clear shingle beach, there is 9 fathoms water. In the very worst weather, a landing may be effected in this part of the bay. — (See *Miers's Chili and La Plata*, i. 440., where there is a plan of Valparaiso.) The harbours of Valdivia and Concepcion are much superior to that of Valparaiso; the former being, indeed, not only the best in Chili, but second to few in any part of the world. But Valparaiso, being near the capital, Santiago, and being the central *dépôt*, for the resources of the province, is most frequented. The town is inconveniently situated, at the extremity of a mountainous ridge; most of the houses being built either upon its acclivity or in its breaches. Large quantities of corn and other articles of provision are shipped here for Callao and Panama, but principally for the former. Exclusive of wheat, the principal articles of export are tallow and hides, copper, the precious metals, indigo, wool, sarsaparilla, &c. It appears from the accounts laid before the reader in another article — (see *antè*, p. 1003.) — that the productiveness of the Chili mines has materially increased during the last few years, and that the average produce of those of gold and silver may now be taken at about 2,500,000 dol. or 500,000*l.* a year. There is a great want of capital in the country; and the anarchy and insecurity that have prevailed since the commencement of the revolutionary war have been very unfavourable to all sorts of industry. There can, however, be no doubt that Chili has already gained considerably, and that she will every day gain more, by her emancipation from the yoke of Old Spain. Our exports to this distant country amount to above 1,000,000*l.* a year; and the probability is that they will become still more extensive.

A country with a scanty population which imports so largely cannot be in the wretched condition that Mr. Miers and other disappointed travellers would have us to believe. The candour and good sense of M. de la Perouse are above all question; and every one who compares his remarks on the condition of Chili with what has now been stated, must see that its commerce, at least, has gained prodigiously by the revolution.

"The influence of the government is in constant opposition to that of the climate. The system of prohibition exists at Chili in its fullest extent. This kingdom, of which the productions would, if increased to their maximum, supply all Europe; whose wool would be sufficient for the manufactures of France and England; and whose herds, converted into salt provisions, would produce a vast revenue; — this kingdom, alas! has no commerce. Four or five small vessels bring, every year, from Lima, tobacco, sugar, and some articles of European manufacture, which the miserable inhabitants can obtain only at second or third hand, after they have been charged with heavy customs duties at Cadiz, at Lima, and lastly, at their arrival in Chili; in exchange they give their tallow, hides, some deals, and their wheat, which, however, is at so low a price, that the cultivator has no inducement to extend his tillage. Thus Chili, with all its gold, and articles of exchange, can scarcely procure sugars, tobacco, stuffs, linens, cambrics, and hardware, necessary to the ordinary wants of life." — (*Perouse's Voyage*, vol. i. p. 50. Eng. ed.)

Instead, however, of 4 or 5 small ships from Lima, in 1842, no fewer than 214 British ships, of the burden of 61,535 tons, entered Valparaiso only, exclusive of those at the other ports, and exclusive also of a great number of American, French, and other ships. All sorts of European goods are carried direct to Chili, and are admitted at reasonable duties. The advantages resulting from this extensive intercourse with foreigners, and from the settlement of English adventurers in the country, have been already immense, and will every day become more visible. It was impossible, considering the ignorance of the mass of the people, that the old system of tyranny and superstition could be pulled to pieces without a good deal of violence and mischief; but the foundations of a better order of things have been laid; nor can there be a doubt that Chili is destined to become an opulent and a flourishing country.

Monies, Weights, and Measures of Chili are the same as those of Spain; for which, see CADIZ. The quintal of 4 arrobas, or 100 lbs., = 101·44 lbs. avoirdupois. The fanega, or principal corn measure, contains 3,439 English cubic inches, and is therefore = 1·599 Winch. bushels. Hence 5 fanegas = 1 Winch. quarter very nearly. The vara, or measure of length, = 33·384 Eng. inches.

Gross Return of British and Foreign Trade at the Port of Valparaiso in Chili during the Year ending 31st December, 1842.

Nation.	Arrived. No. of Vessels.	Tonnage.	No. of Crews.	Departed. No. of Vessels.	Tonnage.	No. of Crews.
British	214	61,535	3,664	209	59,787	3,603
Chilian	204	33,034	2,271	215	30,929	2,134
Peruvian	29	4,137	334	26	4,164	312
Equatorian	6	1,330	74	5	1,175	66
Mexican	2	228	21	3	378	32
Spanish	12	3,860	199	10	2,696	152
Kanaca or Polynesian	1	56	8	1	56	8
United States of America	50	17,148	986	47	15,963	911
French	56	14,230	867	56	14,326	868
Bremen	2	310	26	2	310	26
Hamburg	17	4,130	236	17	3,785	212
Lubeck	1	246	13	1	246	13
Danish	17	4,134	240	18	4,564	250
Swedish	17	5,632	255	17	5,632	255
Norwegian	2	770	58	2	770	58
Belgian	8	1,627	103	7	1,484	92
Sardinian	6	1,190	85	7	1,640	100
Tuscan	1	160	11	1	160	11
Austrian	2	1,134	41	2	1,068	40
Prussian	2	606	31	2	606	31
Russian	2	726	34	1	326	16
Total	651	156,783	9,527	647	149,865	9,160

VAN DIEMEN'S LAND, or TASMANIA, a large island belonging to Great Britain, forming part of Australia, lying between 41° 20′ and 43° 30′ S. lat., and 144° 40′ and 148° 20′ W. lon. It is supposed to contain about 27,000 square miles. — (See the *Mercator's Chart* prefixed to this work.)

This land was discovered by the Dutch navigator Tasman, in 1642, and was named in honour of Anthony Van Diemen, at that time governor-general of the Dutch possessions in the East Indies; but it is now frequently called Tasmania, from its discoverer. Previously to 1798, it was supposed to form part of New Holland, but it was then ascertained to be an island. It was taken possession of by the British in 1803; and in 1804 Hobart Town, the capital, was founded.

The surface is generally hilly and mountainous; but, though none of the land be of the first quality, there are several moderately fertile plains, and a good deal of the hilly ground is susceptible of being cultivated. On the whole, however, it is not supposed that more than about a third part of the entire surface of the island can be considered arable: but about a third more may be advantageously used as sheep pasture. As compared with New Holland, it is well watered. The climate, though variable, is, generally speaking, good, and suitable for European constitutions; and it is not exposed to the tremendous droughts that occasion so much mischief in New South Wales. Wheat is raised in considerable quantities. Wool, however, is at present the staple produce of the colony.

Van Diemen's Land, like New South Wales, was originally intended to serve as a penal colony, and convicts are still sent to it; latterly, however, it has received a very considerable number of free settlers. In 1841, the total population of the island, exclusive of aborigines, was as follows: —

	Free.		Convicts.
Males	19,362	Males	14,116
Females	14,403	Females	2,275
Military	991		16,391
Females	243		
	35,059	Grand total	51,450

The prosperity of the colony was formerly a good deal retarded by the enormities committed by a banditti of runaway convicts, known by the name of bush-rangers; and more recently by the hostilities of the natives. Vigorous measures were, however, adopted for the suppression of such outrages, by confining the natives within a limited district; and these, we are glad to say, appear to have been effectual for their object.

Hobart Town is situated in the southern part of the island, on the west side of the river Derwent, near its junction with Storm Bay, in lat. 42° 54′ S., lon. 147° 28′ E. The water is deep, and the anchorage good. A jetty has been constructed, accessible to the largest ships. The situation appears to have been very well chosen; and the town has been judiciously laid out. In 1838, the district of Hobart Town contained 14,382 inhabitants, of whom 3,553 were convicts. The houses are supposed to be worth, at an average, 50*l.* a year. There are several printing establishments in the town, and various newspapers, some of them very well conducted. There is also a Book Society, a Mechanics' Institute, and several respectable schools and academies. The Van Diemen's Land Banking Company, the Derwent Bank, and the Commercial Bank, have each offices in Hobart Town. They are joint stock companies.

Launceston, the second town in the island, is situated in the northern part, at the head

of the navigable river Tamar, which falls into Port Dalrymple. Its population may amount to about 10,000. It has a considerable trade with Sydney and Hobart Town, and with England.

Trade of Van Diemen's Land. — Hardware, haberdashery, apparel, cotton and linen goods, woollens, malt liquor, spirits, wine, &c. form the principal articles of import.

Here, as in New South Wales, wool forms by far the most important article of export; next to it is whale oil, and then follows wheat and flour, live stock, timber, whalebone, mimosa bark, and various less important articles. The usual excess of the imports over the exports is accounted for here, as at Sydney, by the remittances to defray the cost of the convict establishment.

Account of the Import and Export Trade of Van Diemen's Land in 1839, 1840, and 1841.

Countries from and to which Imports and Exports were made.	Value of Imports.			Value of Exports.		
	1839.	1840.	1841.	1839.	1840.	1841.
	£	£	£	£	£	£
Great Britain	573,491	737,251	685,875	326,369	334,156	357,862
British colonies	150,061	217,033	135,148	545,156	531,321	271,899
United States of America	4,013	6,896	6,277	3,600	1,630	80
Foreign states	17,322	27,176	24,681	- - -	- -	660
	746,887	988,356	851,981	875,125	867,107	630,501
	1839.		1840.		1841.	
	Tons.		*Tons.*		*Tons.*	
Shipping inwards	79,283		85,081		84,214	
Ditto outwards	77,586		86,701		85,201	

Account of Imports into and Exports from Van Diemen's Land in 1841, distinguishing those from and to the U. Kingdom.

Principal Articles.	From the United Kingdom.	From other Countries.	Total.
Imports.	£	£	£
Apparel	62,186	3,582	65,768
Beef and pork	29,079	11,446	40,525
Boots and shoes	11,464	95	11,559
Butter and cheese	16,373	1,724	18,097
Canvass and bagging	15,557	2,970	18,527
Cottons and linens	38,124	235	38,359
Glass and earthenware	22,100	836	22,936
Haberdashery	59,092	1,647	60,739
Hardware	80,680	3,216	83,896
Hats and caps	14,140	97	14,237
Live stock	550	44,405	44,955
Malt liquor	32,711	4,598	37,309
Oilmen's wares	26,108	4,935	31,043
Silks and millinery	15,000	295	15,295
Soap	15,840	460	16,309
Stationery	22,780	866	23,646
Spirits, viz. brandy	18,543	1,721	20,264
geneva	6,655	425	7,080
rum	18,633	1,396	20,029
Tobacco	13,201	8,513	21,714
Wine	21,390	9,625	31,015
Imports — *continued.*			
Woollens and cloths	42,144	1,960	44,084
All other articles	103,236	61,361	164,597
Total imports	685,875	166,106	851,981

Principal Articles.	To the U. Kingdom.	To other Countries.	Total.
Exports.			
Flour	- -	54,930	54,930
Wheat	- -	30,391	30,391
Live stock	- -	24,843	24,843
Oil	81,794	1,811	83,605
Timber	200	18,375	18,575
Whalebone	15,215	80	15,295
Wool	253,815	1,038	254,853
All other articles	6,858	141,171	148,009
Total exports	357,862	272,639	630,501

The increase in the production of wool has been quite as rapid here as in N. S Wales. The stock of sheep, which in 1828 amounted to 553 698 head, had, in 1838, increased to 1,214,600 head; and while the imports of wool from Van Diemen's Land into the U. Kingdom in 1820 did not exceed 993,979 lbs., they amounted in 1842 to 3,491,685 lbs. Latterly, however, this colony has been involved in the same distress and difficulty that have occasioned such severe suffering in New South Wales. Owing to a variety of circumstances, of which the most important, perhaps, was the increase of the issues of bank paper and the facility of obtaining discounts, the prices of most descriptions of insular property increased rapidly down to 1836, and a mania for speculative purchases became all but universal. Land which in 1824 would not have realised more than from *5s.* to 10*s.* an acre, was, in 1836, eagerly bought up at prices ranging from *40s.* to 80*s.*; and sheep and cattle, which in the former year might have been purchased respectively for *5s.* and 40*s.*, could not in the latter be bought for less than 2*l.* and 12*l.* But latterly, all this baseless fabric has fallen to pieces; and the prices of most articles have reverted to the level of 1824, or even lower, occasioning, by their fall, the ruin of a vast number of persons. The sale of crown lands has almost entirely ceased; and the prices of lands belonging to private parties are little better than nominal. But, though severe, in the meantime, a crisis of this sort affects no real source of wealth, and cannot, therefore, be of long duration. But the lesson it affords should not be thrown away; and the colonists would do well to remember that a rapid rise of prices and great facilities of obtaining discounts, how desirable soever in the meantime, are the sure precursors of glutted and falling markets, bankruptcy, and ruin. The upset price of land in this colony is fixed at the same extravagant rate as in New South Wales; and has had, and no doubt will continue to have, the same pernicious consequences.

Custom-House Regulations, Rates of Pilotage, Harbour Dues, etc.

Custom-house Regulations.

(Hours for public business from 10 to 3 daily, excepting on Saturday, from 10 to 12.)

	£	s.	d.
Entry of a British vessel, not colonial, with merchandise	1	10	0
Entry of any foreign vessel	3	0	0
Permission to trade	1	1	0
Dues on each bond	0	10	6
Dues on port clearance and fee	0	7	6

Transports are free from port charges.

Colonial Vessels. — Entry, and clearance to the outports 0 4 0

Fee on ditto 0 2 0

Entry and clearance to the fishery or to the out settlement 0 10 0

Fee on ditto 0 2 0

Clearance of an open boat 0 1 0

Annual licence for a boat 0 2 6

	£	s.	d.
Duties. — On brandy, per gallon	0	10	0
On Hollands or geneva, per gallon	0	10	0
On rum, per gallon, the produce of the West Indian colonies	0	7	6
On British gin, per gallon	0	7	6
On tobacco, per lb.	0	1	6

The duty on all spirits, either British or foreign, is increased in proportion to strength, if over proof, according to Sykes's hydrometer.

On all merchandise of foreign produce or manufacture, an *ad valorem* duty of 5 per cent. on importation, agreeably to the act of 4 Geo. 4. c. 96., with the exception of wine, which is subjected to a duty of 15 per cent. Goods of British manufacture are not subjected to any duty.

	£	s.	d.
Wharfage. — On landing each cask, bale, or package	0	0	9
On landing iron, per ton	0	9	0
On landing salt, per ton	0	3	0

	£	s.	d.
On landing timber, per 1,000 feet -	0	2	0
On shipping each cask, bale, or package -	0	0	3
On shipping iron, per ton - -	0	3	0
On shipping salt, per ton - -	0	1	0

Colonial produce, when landed or shipped, is not subjected to any charge, except for a sufferance.

	£	s.	d.
Fees. — A sufferance to land or ship goods -	0	1	0
A warrant to remove goods from under bond -	0	1	0
On landing each cask or package of spirits or wine	0	0	6
On the registry of vessels not exceeding 40 tons -	2	0	0
On the registry of vessels above 40 tons, per ton -	0	1	0
To the chief clerk, on the registry of vessels -	0	10	0
On indorsing change of master -	0	10	0

Warehouse Rent and Charges. — A government order published the 7th of February, 1826, fixes the following rents on spirits and tobacco, in the king's bonded stores, viz. —

1st. All spirituous liquors, 1s. 3d. per ton of 252 gallons, for every week, or any period less than a week, during which the same shall be deposited.

2dly. Tobacco, 6d. per ton for every week, or any period less than a week, during which the same shall be deposited.

3dly. The amount of all such warehouse rent, in respect of any cask or package required to be delivered, must be paid before the same can be so delivered.

4thly. No allowance whatsoever will at any time be made, in respect of, nor will the government be answerable for, any loss by fire, leakage, robbery, or casualty of any kind.

Government Order, 28th of February, 1826. — Representations having been made to the lieutenant governor, of the inconvenience and delay attending the stowing and unstowing of goods in the bonded warehouses, a gang of men has been appointed to be employed under the storekeeper for this purpose exclusively, and the following scale of charges will be required to be paid: —

For Spirits. — Per pipe, ½ pipe, or puncheon, each stowing 9d., unstowing 1s. 6d.

Per ½ pipe, hogs'ead, or barrel, stowing 6d., unstowing 2s.

Per case containing 3 or more dozen bottles, stowing 3d., unstowing 4d.

Per case containing a less quantity than 3 dozen, stowing 2d., unstowing 3d.

For Tobacco. — In large serons, each, stowing 6d., unstowing 9d.

In cases, each, stowing 3d., unstowing 4d.

In kegs, each, stowing 2d., unstowing 3d.

In baskets, rolls, or small serons, stowing 1d., unstowing 1½d.

In consequence of this arrangement, it is to be understood that no labourers are to be admitted into or employed at the bonded warehouse, except the storekeeper's gang.

Goods intended to be warehoused under bond must be landed before 12 o'clock.

Hours of attendance at the Custom house quay, from 8 o'clock till 4 from the 1st of September to the 30th of April, and from 9 till 4 from the 1st of May till the 31st of August.

The appointed days for opening the bonded warehouse for the delivery of goods are Mondays and Thursdays in every week, at 1 o'clock, on which days the duties must be paid prior to 12 o'clock. Tobacco is issued on the same days, from 10 to 12 o'clock.

Rates of Pilotage at the Derwent.

Draught of water.	Into. £	s.	d.	Out. £	s.	d.
10 feet and under - -	3	0	11½	2	7	4½
11 ditto - -	3	3	4½	2	9	5½
12 ditto - -	3	8	3	2	13	1½
13 ditto - -	3	15	6½	2	18	9½
14 ditto - -	4	3	5½	2	6	4
15 ditto - -	4	19	11½	3	17	8½
16 ditto - -	5	17	0	4	11	0
17 ditto - -	7	1	4½	5	9	11
18 ditto - -	8	15	0½	6	14	7½
19 ditto - -	10	14	6	8	6	10
20 ditto - -	13	3	3	10	4	9

At Port Dalrymple.

Proceeding above Whirlpool Reach.	£	s.	d.	Remaining below Whirlpool Reach. £	s.	d.
7 feet and under - -	2	5	6	1	10	4
Above 7 feet per foot -	0	6	6	0	4	4

If the pilot does not board the vessel outside the middle ground at the Heads at George Town, or, the weather not permitting his going outside, if he be not ready to show the channel by keeping his boat in the fair way until the ship can be boarded, he shall forfeit half the pilotage inwards.

For every number of inches below 6, no charge is to be made; for ½ a foot and upwards, 1 foot is to be charged.

Colonial vessels are exempted from the payment of pilotage, unless the master shall make the signal for a pilot and accept his service.

Harbour Dues at the Derwent.

	£	s.	d.
For mooring and unmooring a vessel within the harbour, per register ton - -	0	0	1
For each removal of the ship within the harbour, per register ton - -	0	0	1

Colonial vessels under 80 tons, per register to be exempted from the payment of the foregoing dues, unless the services of the harbour master be specially required.

At Port Dalrymple.

	£	s.	d.
For each removal of a ship or vessel from anchorage or moorings, to other anchorage or moorings, under 200 tons - -	0	15	0
200 tons and under 300 - -	1	0	0
300 tons and under 400 - -	1	10	0
400 tons and under 500 - -	2	0	0
500 tons and upwards - -	2	10	0

Each vessel entering the harbour will be charged with 2 removes.

Vessels belonging to the port are not to pay harbour dues.

No vessels to be deemed colonial that are not registered in Van Diemen's Land.

These details have been principally derived from the *Statistics of the Colony*, published at Hobart Town in 1843; and partly from Lieut. Breton's book, and different *Parliamentary Papers*.

VANILLA, the fruit of the *Epidendrum Vanilla*, a species of vine extensively cultivated in Mexico. It has a trailing stem, not unlike the common ivy, but not so woody, which attaches itself to any tree that grows near it. The Indians propagate it by planting cuttings at the foot of trees selected for that purpose. It rises to the height of 18 or 20 feet; the flowers are of a greenish yellow colour, mixed with white; the fruit is about 8 or 10 inches long, of a yellow colour when gathered, but dark brown or black when imported into Europe; it is wrinkled on the outside, and full of a vast number of seeds like grains of sand, having, when properly prepared, a peculiar and delicious fragrance. It is principally used for mixing with and perfuming chocolate; and is, on that account, largely imported into Spain; but as chocolate, owing to oppressive duties, is little used in England, vanilla is not much known in this country.

Vanilla is principally gathered in the intendancy of Vera Cruz, in Mexico, at Misantla, Colipa, Vacuatla, and other places. It is collected by the Indians, who sell it to the whites (*gente de razon*), who prepare it for market. They spread it to dry in the sun for some hours, then wrap it in woollen cloths to sweat. Like pepper, it changes its colour in this operation — becoming almost black. It is finally dried by exposing it to the sun for a day. There are four varieties of vanilla, all differing in price and excellence; viz. the *vanilla fina*, the *zacate*, the *rezacate*, and the *vasura*. The best comes from the forests surrounding the village of Zentila, in the intendancy of Oaxaca. According to Humboldt, the mean exportation of vanilla from Vera Cruz may amount to from 900 to 1,000 millares, worth at Vera Cruz from 30,000 to 40,000 dollars. — Vanilla is also imported from Brazil, but it is very inferior. The finest Mexican vanilla is extremely high priced. All sorts are subjected in this country to a duty of 5*s.* per lb. — (See *Humboldt, Nouvelle Espagne*, 2d edit. tome iii. pp. 37. 46.; *Poinsett's Notes on Mexico*, p. 194. *&c.*)

VELLUM, a species of fine parchment. (See PARCHMENT.)

VENICE, a famous city of Austrian Italy, formerly the capital of the republic of that name, on a cluster of small islands towards the northern extremity of the Adriatic, in lat 45° 25′ 53″ N., lon. 12° 20′ 31″ E. Population about 100,000. The commerce of Venice, once the most extensive of any European city, is now comparatively trifling; and the population is gradually diminishing both in numbers and wealth

Her imports consist of wheat and other sorts of grain, from the adjoining provinces of Lombardy and the Black Sea; olive oil, principally from the Ionian Islands; cotton stuffs and hardware from England; sugar, coffee, and other colonial products from England, the United States, Brazil, &c.; dried fish, dye stuffs, &c. The exports principally consist of grain, raw and wrought silk, paper, woollen manufactures, fruits, cheese, &c., the products of the adjoining provinces of Italy, and of her own industry; but her manufactures, so famous in the middle ages, are now much decayed.

Port. — The islands on which Venice is built lie within a line of long, low, narrow islands, running N. and S., and enclosing what is termed the lagoon, or shallows, that surround the city, and separate it from the main land. The principal entrance from the sea to the lagoon is at Malamocco, about 1¼ league S. from the city; but there are other, though less frequented, entrances, both to the S. and the N. of this one. There is a bar outside Malamocco, on which there are not more than 10 feet at high water at spring tides; but there is a channel between the western point of the bar and the village of San Pietro, which has 16 feet water at springs, and 14 at neaps. Merchant vessels usually moor off the ducal palace; but sometimes they come into the grand canal which intersects the city, and sometimes they moor in the wider channel of the Giudecca. Vessels coming from the south for the most part make Pirano or Rovigno on the coast of Istria, where they take on board pilots, who carry them to the bar opposite to Malamocco. But the employment of Istrian pilots is quite optional with the master, and is not, as is sometimes represented, a compulsory regulation. When one is taken, the usual fee from Pirano or Rovigno to the bar is 20 Austrian dollars, or about 4*l*. On arriving at the bar, ships are conducted across it and into port by pilots, whose duty it is to meet them outside, or on the bar, and of whose services they must avail themselves. — (For the charges on account of pilotage, see *post*.)

Money. — Formerly there were various methods of accounting here; but now accounts are kept, as at Genoa, in lire Italiane, divided into centesimi, or 100th parts. The lira is supposed to be of the same weight, fineness, and, consequently, value as the franc. But the coins *actually in circulation*, denominated lire, are respectively equal in sterling value to about 5*d*. and 4½*d*. The latter are coined by the Austrian government.

Weights and Measures. — The commercial weights are here, as at Genoa, of two sorts; the *peso sottile* and the *peso grosso*. The French kilogramme, called the libra Italiana, is also sometimes introduced.

100 lbs. peso grosso =	105·186 lbs. avoirdupois.	100 lbs. peso sottile =	66·428 lbs. avoirdupois.
—	127·830 lbs. Troy	—	80·728 lbs. Troy.
—	47·698 kilogrammes.	—	30·123 kilogrammes.
—	98·485 lbs. of Hamburg.	—	62·196 lbs. of Hamburg.
—	96·569 lbs. of Amsterdam.	—	60·986 lbs. of Amsterdam.

The moggio, or measure for corn, is divided into 4 staje, 16 quarte, or 64 quartaroli. The staja = 2·27 Winch. bushels.

The measure for wine, anfora = 4 bigonzi, or 8 mastelli, or 48 sechii, or 192 bozze, or 768 quartuzzi. It contains 137 English wine gallons.

The botta = 5 bigonzi. Oil is sold by weight or measure. The botta contains 2 migliaje, or 80 miri of 25 lbs. peso grosso. The miro = 4·028 English wine gallons.

The braccio, or long measure, for woollen = 26·6 English inches; the braccio for silks = 24·8 do. The foot of Venice = 13·68 English inches. — (*Nelkenbrecher*, and *Kelly*.)

Historical Notice. — Venice was the earliest, and for a lengthened period the most considerable, commercial city of modern Europe. Her origin dates from the invasion of Italy by Attila in 452. A number of the inhabitants of Aquileia, and the neighbouring territory, flying from the ravages of the barbarians, found a poor but secure asylum in the cluster of small islands opposite the mouth of the Brenta, near the head of the Adriatic Gulph. In this situation they were forced to cultivate commerce and its subsidiary arts, as the only means by which they could maintain themselves. At a very early period they began to trade with Constantinople and the Levant; and notwithstanding the competition of the Genoese and Pisans, they continued to engross the principal trade in Eastern products, till the discovery of a route to India by the Cape of Good Hope turned this traffic into a totally new channel. The crusades contributed to increase the wealth and to extend the commerce and the possessions of Venice. Towards the middle of the 15th century, when the Turkish sultan, Mahomet II., entered Constantinople sword in hand, and placed himself on the throne of Constantine and Justinian, the power of the Venetians had attained its maximum. At that period, besides several extensive, populous, and well cultivated provinces in Lombardy, the republic was mistress of Crete and Cyprus, of the greater part of the Morea, and most of the isles in the Egean Sea. She had secured a chain of forts and factories that extended along the coasts of Greece from the Morea to Dalmatia; while she monopolised almost the whole foreign trade of Egypt. The preservation of this monopoly, of the absolute dominion she had early usurped over the Adriatic, and of the dependence of her colonies and distant establishments, were amongst the principal objects of the Venetian government; and the measures it adopted in that view were skilfully devised, and prosecuted with inflexible constancy. With the single exception of Rome, Venice, in the 15th century, was by far the richest and most magnificent of European cities; and her singular situation in the midst of the sea, on which she seems to float, contributed to impress those who visited her with still higher notions of her wealth and grandeur. Sannazarius is not the only one who has preferred Venice to the ancient capital of the world; but none have so beautifully expressed their preference.

Viderat Adriacis Venetam Neptunus in undis,
Stare urbem, et toto ponere jura mari.
Nunc mihi Tarpeïas quantumvis, Jupiter, arces
Objice, et illa tua mœnia Martis, ait:
Si Tiberim pelago præfers, urbem aspice utramque,
Illam homines dicas, hanc posuisse Deos.

Though justly regarded as one of the principal bulwarks of Christendom against the Turks, Venice had to contend, in the early part of the 16th century, against a combination of the European powers. The famous league of Cambray, of which Pope Julius II. was the real author, was formed for the avowed purpose of effecting the entire subjugation of the Venetians, and the partition of their territories. The emperor and the kings of France and Spain joined this powerful confederacy. But, owing less to the valour of the Venetians, than to dissensions amongst their enemies, the league was speedily dissolved without materially weakening the power of the republic. From that period the policy of Venice was comparatively pacific and cautious. But notwithstanding her efforts to keep on good terms with the Turks, the latter invaded Cyprus in 1570; and conquered it, after a gallant resistance, continued for 11 years. The Venetians had the principal share in the decisive victory gained over the Turks at Lepanto in 1571: but owing to the discordant views of the confederates, it was not properly followed up, and could not prevent the fall of Cyprus.

The war with the Turks in Candia commenced in 1645, and continued till 1670. The Venetians exerted all their energies in defence of this valuable island; and its acquisition cost the Turks above 200,000 men. The loss of Candia, and the rapid decline of the commerce of the republic, now almost wholly turned into other channels, reduced Venice, at the close of the 17th century, to a state of great exhaustion. She may be said, indeed, to have owed the last 100 years of her existence more to the forbearance and jealousies of others than to any strength of her own. Nothing, however, could avert that fate she had seen overwhelm so many once powerful states. In 1797, the "maiden city" submitted to the yoke of the conqueror; and the last surviving witness of antiquity — the link that united the ancient to the modern world — stripped of independence, of commerce, and of wealth, is now slowly sinking into the waves whence she arose.

The foundation of Venice is described by Gibbon, c. 35.; and in his 60th chapter he has eloquently depicted her prosperity in the year 1200. Mr. Hallam, in his work on the *Middle Ages* (vol. i. pp. 470—487.), has given a brief account of the changes of the Venetian government. Her history occupies a considerable space in the voluminous work of M. Sismondi on the *Italian Republics*; but his details as to her trade and commercial policy are singularly meagre and uninteresting. All previous histories of Venice have, however, been thrown into the shade by the valuable work of M. Daru (*Histoire de la République de Vénise*, 2d ed. 8 vols. 8vo. Paris, 1821.) Having had access to genuine sources of information, inaccessible to all his predecessors, M. Daru's work is as superior to theirs in accuracy, as it is in most other qualities required in a history.

Trade, Navigation, and Manufactures of the Venetians in the 15th Century. — The Venetian ships of the largest class were denominated galeasses, and were fitted out for the double purpose of war and commerce. Some of them carried 50 pieces of cannon, and crews of 600 men. These vessels were sometimes, also, called argosers or argosies. They had early an intercourse with England; and argosies used to be common in our ports. In 1325, Edward II. entered into a commercial treaty with Venice, in which full liberty is given to the Venetians, for 10 years, to sell their merchandise in England, and to return home in safety, without being made answerable, as was the practice in those days, for the crimes or debts of other strangers. — (*Anderson's Chron. Deduction, Anno* 1325.) Sir William Monson mentions, that the last argosie that sailed from Venice for England was lost, with a rich cargo and many passengers, on the coast of the Isle of Wight, in 1587.

In the beginning of the 15th century, the annual value of the goods exported from Venice by sea, exclusive of those exported to the states adjoining her provinces in Lombardy, was estimated, by contemporary writers, at 10,000,000 ducats; the profits of the out and home voyage, including freight, being estimated at 4,000,000 ducats. At the period in question, the Venetian shipping consisted of 3,000 vessels of from 100 to 200 tons burden, carrying 17,000 sailors; 300 ships with 8,000 sailors; and 45 galleys of various size, kept afloat by the republic for the protection of her trade, &c., having 11,000 men on board. In the dock-yard, 16,000 labourers were usually employed.* The trade to Syria and Egypt seems to have been conducted principally by ready money; for 500,000 ducats are said to have been annually exported to these countries; 100,000 were sent to England. — (*Daru*, tome ii. p. 189, &c.) The vessels of Venice visited every port of the Mediterranean, and every coast of Europe; and her maritime commerce was, probably, not much inferior to that of all the rest of Christendom. So late as 1518, 5 Venetian galeasses arrived at Antwerp, laden with spices, drugs, silks, &c. for the fair at that city.

The Venetians did not, however, confine themselves to the supply of Europe with the

* This is the statement of the native authorities; but there can be no doubt that it is greatly exaggerated; — 1,600 would be a more reasonable number.

commodities of the East, and to the extension and improvement of navigation. They attempted new arts, and prosecuted them with vigour and success, at a period when they were entirely unknown in other European countries. The glass manufacture of Venice was the first, and for a long time the most celebrated, of any in Europe; and her manufactures of silk, cloth of gold, leather, refined sugar, &c. were deservedly esteemed. The jealousy of the government, and their intolerance of any thing like free discussion, was unfavourable to the production of great literary works. Every scholar is, however, aware of the fame which Venice early acquired by the perfection to which she carried the art of printing. The classics that issued from the Aldine presses are still universally and justly admired for their beauty and correctness. The Bank of Venice was established in the 12th century. It continued throughout a bank of deposit merely, and was skilfully conducted.

But the policy of government, though favourable to the introduction and establishment of manufactures, was fatal to their progressive advancement. The importation of foreign manufactured commodities into the territories of the republic for domestic consumption was forbidden under the severest penalties. The processes to be followed in the manufacture of most articles were regulated by law. — "*Dès l'année* 1172, *un tribunal avoit été crée pour la police des arts et métiers, la qualité et la quantité des matières furent soigneusement déterminées.*" — (*Daru*, iii. 153.) Having, in this way, little to fear from foreign competition, and being tied down to a system of routine, there was nothing left to stimulate invention and discovery; and during the last century the manufactures of Venice were chiefly remarkable as evincing the extraordinary perfection to which they had early arrived, and the absence of all recent improvements. An unexceptionable judge, M. Berthollet, employed by the French government to report on the state of the arts of Venice, observed, "*Que l'industrie des Vénitiens, comme celle des Chinois, avoit été précoce, mais étoit restée stationnaire.*"— (*Daru*, tome iii. p. 161.)

M. Daru has given the following extract from an article in the statutes of the State Inquisition, which strikingly displays the real character of the Venetian government, and their jealousy of foreigners: — "If any workman or artisan carry his art to a foreign country, to the prejudice of the republic, he shall be ordered to return; if he do not obey, his nearest relations shall be imprisoned, that his regard for them may induce him to come back. If he return, the past shall be forgiven, and employment shall be provided for him in Venice. If, in despite of the imprisonment of his relations, he persevere in his absence, an *emissary shall be employed to despatch him*; and after his death his relations shall be set at liberty!"— (Tom. iii. p. 150.)

The 19th book of M. Daru's history contains a comprehensive and well-digested account of the commerce, manufactures, and navigation of Venice. But it was not possible, in a work on the general history of the republic, to enter so fully into the details as to these subjects as their importance would have justified. The *Storia Civile e Politica del Commercio de' Veneziani*, di Carlo Antonio Marin, in 8 vols. 8vo., published at Venice at different periods, from 1798 to 1808, is unworthy of the title. It contains, indeed, a great many curious statements; but it is exceedingly prolix; and while the most unimportant and trivial subjects are frequently discussed at extreme length, many of great interest are either entirely omitted, or are treated in a very brief and unsatisfactory manner. The commercial history of Venice remains to be written; and were it well executed, it would be a most valuable acquisition.

Present Trade and Manufactures of Venice. — From the period when Venice came into the possession of Austria, down to 1830, it seems to have been the policy of the government to encourage Trieste in preference to Venice; and the circumstance of the former being a free port, gave her a very decided advantage over the latter. Latterly, however, a more equitable policy has prevailed. In 1830, Venice was made a free port, and has since fully participated in every privilege conferred on Trieste. But, notwithstanding this circumstance, the latter still continues to preserve the ascendancy; and the revival of trade that has taken place at Venice has not been so great as might have been anticipated. The truth is, that except in so far as she is the *entrepôt* of the adjoining provinces of Lombardy, Venice has no considerable natural advantage as a trading city; and her extraordinary prosperity during the middle ages is more to be ascribed to the comparative security enjoyed by the inhabitants, and to their success in engrossing the principal share of the commerce of the Levant, than to any other circumstance. Still, however, her trade is far from inconsiderable. But, unfortunately, there are no means by which to ascertain its precise amount. The great articles of import are sugar, coffee, and other colonial products; indigo and other dye stuffs, olive oil, salted fish, various descriptions of cotton, woollen, and other manufactured goods; wheat and other grain, from the Black Sea; tin plates and hardware, raw cotton, &c.; amounting, in all, to the value probably of 1,500,000*l.* or 1,600,000*l.* The exports principally consist of silk and silk goods, wheat and other grain, paper, jewellery, glass, and glass wares, Venetian treacle, books, with a great variety of other articles, including portions of most of those that are imported. It should, however, be observed, that by far the greater part both of the import and export trade of the city is carried on through Trieste by coasting vessels, that are every day passing between the two cities. The smuggling of prohibited and overtaxed articles into Austrian Lombardy is practised to a great extent. It is believed that fully two thirds of the coffee made use of in Lombardy is clandestinely introduced; and sugar, British cottons, and hardware, with a variety of other articles, are supplied through illegitimate channels. The facilities for smuggling, owing to the nature of the frontier, and the ease with which the officers are corrupted, are such, that the articles passing through the hands of the fair trader afford no test of the real extent of the business done. It is to be hoped that the Austrian government may take an enlightened view of this important matter. It cannot but be anxious for the suppression of smuggling; and it may be assured that this is not practicable otherwise than

by a reduction of duties. The regulations as to the payment of the duties on goods destined for the interior, the clearing of ships, &c., are the same at Venice as at Trieste; which see.

The manufactures of Venice are very various, and more extensive than is generally supposed. The glassworks, which produce magnificent mirrors, with every variety of artificial pearls and gems, coloured beads, &c., situated on the island of Murano, employ, in all, about 4,000 hands, including the women and children employed in arranging the beads. — (*Bowring.*) Jewellery, including gold chains, is also extensively produced; as are gold and silver stuffs, velvets, silks, laces, and other expensive goods; and treacle, soap, earthenware, wax-lights, &c., to a greater or less extent. Printing is more extensively carried on in this than in any other city of Italy, and books form a considerable article of export. Ship-building is also carried on to some extent, both here and at Chiozza. In 1836, the first steam-engine seen in Venice was set up for a sugar refinery.

From the circumstance of Venice being situated nearly opposite the mouths of the Brenta, which bring down large quantities of mud, the probability is that the lagoon, by which she is surrounded, will ultimately be filled up. Under the republic this was a subject of great apprehension, and every device was resorted to that seemed likely to avert a result so pregnant with danger to the independence of the city. But now that there is no particular motive for hindering the mud from accumulating in the lagoon, it is probable that, in the course of time, the shallow will be converted into terra firma, and Venice lose her insular position.

Railway to Venice. — But whether the lagoon should, or should not, be filled up, Venice will very speedily be connected with the mainland by artificial means. A railway is now in the course of being constructed, which is to extend from the city to Padua, and thence to Verona, &c. That part of this important work which passes through the lagoon is to be supported on arches, the construction of which is already far advanced. It may be expected that the formation of this new and easy channel of communication with some of the most fertile districts of Lombardy, will be of considerable service to Venice; and will tend, in some degree, to revive her decaying energies.

There belong to the city, exclusive of fishing-boats, about 30,000 tons of shipping, of which a large proportion is employed in the coasting trade. Many of the inhabitants depend for their subsistence on fishing in the lagoon, and the contiguous portion of the Adriatic. — (Exclusive of the authorities already referred to, see *Bowring's Report on the Statistics of Italy*; *Geog. Dict.*; *Commercial Circulars*, &c.)

A steam-packet has been established between Venice and Trieste.

Shipping Charges in the Port of Venice on Ships of different Nations, of the Burden of 300 Tons.

Description of Charge.	If Austrian, or of a Nation having a Treaty of Reciprocity with Austria.		If of a Nation not having a Treaty of Reciprocity with Austria.	
	Austrian Livres.	£ s. d.	*Austrian Livres.*	£ s. d.
Pilotage.				
From the bar to the place of finally mooring	61 57	2 1 0½	61 57	2 1 0½
Out of the port of departure	61 57	2 1 0½	61 57	2 1 0½
Tonnage Duty.				
One Austrian livre (8d. sterling) per ton (Originally levied on all ships not Austrian.)	Free.	-	300 0	10 0 0
Clearing Charges.				
If to a port out of the Gulph of Venice (but if to a port in the Gulph, 1s. 3½d. less in all cases)	2 30	0 1 6½	16 78	0 11 2½
Quarantine Charges.				
If performing 7 days, being the usual time for vessels from England	30 27	1 6 2	53 38	1 15 7
Total of ordinary charges	164 71	5 9 9½	493 20	16 8 10½
If in long quarantine, all ships pay extra	25 74	0 17 2	25 74	0 17 2
If departing in ballast, or with less than ½ a cargo, all ships, not Austrian, or not under treaty to be charged as such, pay extra tonnage duty, 45 cents (about 3½d. sterling) per ton, being, on a 300 ton ship	Free.	-	135 0	4 10 0
Total of extreme charges	190 45	6 6 11½	653 94	21 16 0½

Banking Establishments. — The old bank of Venice was founded so far back as 1171, being the most ancient establishment of the kind in Europe. It was a bank of deposit; and such was the estimation in which it was held, that its paper continued to bear an agio as compared with coin down to 1797, when the bank fell with the government by which it had been guaranteed. At present there are no corporate banking establishments in the city; and no bank notes are in circulation. There are, however, several private banking houses, which buy, sell, and discount bills; and make advances on land and other securities. They are under no legal regulations of any sort, except formally declaring the amount of their capital to the authorities when they commence business. The legal and usual rate of interest and discount is 6 per cent. It is not the practice to allow interest on deposits. Bills on London are usually drawn at 3 months, and on Trieste at 1 month.

Brokers, Commission, &c. — The number of brokers is limited, and they are licensed by government; but the business of commission merchant and factor is open to every one. Before, however, commencing any trade or profession at Venice, a petition must be presented for leave to the authorities: but this is more a matter of form than any thing else; its prayer being rarely, if ever, refused.

The usual rate of commission and factorage on the purchase or sale of colonial produce is 2 per cent., and on manufactured goods 3 per cent., inclusive of broker's commission, 1 per cent. A ship broker's commission on the freight of a whole cargo is 2 per cent., and on a general cargo 4 per cent. By the custom of the place, merchants charge 2 per cent. on the inward and 2 per cent. on the outward freight of all ships consigned to them; and this, though they had done no more than recommend the master to a broker! A bill broker's commission is ½ per mille. Merchants and bankers charge a commission on internal bills of ½ per cent., and on foreign do. of 1 per cent.

Insurances are effected by companies and individuals. The government charges no duty on the policies.

Communications with Lombardy are effected by flat-bottomed vessels, which, passing through the lagoon, enter the canals and rivers, and make their way through most part of the country watered by the Po and its tributaries. The freight of goods from Milan to Venice, distant about 170 miles, is about 1*l.* per ton. The principal products they bring down are grain, silk, hemp, and flax, cheese, rhubarb, &c. The country to the north of Venice affords large quantities of deals, which are shipped for Malta, Sicily, and the Levant.

Quarantine is enforced here the same as at Trieste. Ships coming from without the Straits of Gibraltar, provided there be no infectious disease on board, are admitted to *pratique* on performing a short quarantine of 7 days in a part of the lagoon, about a mile from the city. Long quarantine is performed a little farther off. The lazaretto, and establishments for passengers, &c. performing quarantine, are among the best in Europe. Ships having foul bills, or coming from suspicious places, are sent thither from Trieste. — (For the quarantine charges, see *ante*.)

Provisions, Ships' Stores, &c. — These articles may all be had at Venice of excellent quality, but not

cheap, with, perhaps, the exception of bread. Water is conveyed to the city by lighters, and is, consequently, pretty dear; fuel is very scarce, and very high priced.

Tares. — On goods leaving the free port of Venice for the interior of the Austrian states, the Custom-house allows no tares; but cases, casks, and other coverings go into the scale with their contents, and the duty is levied on the gross weight. Wine, spirits, &c. consumed in this city, being liable to an excise duty to cover the municipal expenses, have an allowance, if in iron-bound casks, of 18 per cent. on the weight; and if not in iron-bound casks, of 12 per cent. The tares allowed between merchants are as follow: —

Cotton wool, Pernambuco and Bahia	2 per cent.
East India, &c.	4
Sugar, Brazil	15 to 18 per cent.
Jamaica, muscovado	14
Bourbon, brown and yellow, and East India of all colours	5
refined, crushed	12
Brimstone	10
Italian hemp	2
Maddr	
Hungary potash	

On other articles, real tares are usually taken.

VERA CRUZ, the principal sea-port on the western coast of Mexico; lat 19° 11′ 52″ N., lon. 96° 8′ 45″ W. Population (supposed) 16,000. Opposite the town, at the distance of about 400 fathoms, is a small island on which is built the strong castle of St. Juan d'Ulloa, which commands the town. The harbour lies between the town and the castle, and is exceedingly insecure; the anchorage being so very bad, that no vessel is considered safe unless made fast to rings fixed for the purpose in the castle wall: nor is this always a sufficient protection from the fury of the northerly winds (*los nortes*), which sometimes blow with tremendous violence. Humboldt mentions, in proof of what is now stated, that a ship of the line, moored by 9 cables to the castle, tore, during a tempest, the brass rings from the wall, and was dashed to pieces on the opposite shore. — (*Nouvelle Espagne*, ed. 2de, iv. 59.) Its extreme unhealthiness is, however, a more serious drawback upon Vera Cruz, than the badness of its port. It is said to be the original seat of the yellow fever. The city is well built, and the streets clean; but it is surrounded by sand hills and ponds of stagnant water, which, within the tropics, are quite enough to generate disease. The inhabitants, and those accustomed to the climate, are not subject to this formidable disorder; but all strangers, even those from the Havannah and the West India Islands, are liable to the infection. No precautions can prevent its attack; and many have died at Xalapa, on the road to Mexico, who merely passed through this pestilential spot. During the period that the foreign trade of Mexico was carried on exclusively by the *flota*, which sailed periodically from Cadiz, Vera Cruz was celebrated for its fair, held at the arrival of the ships. It was then crowded with dealers from Mexico and most parts of Spanish America; but the abolition of the system of regular fleets in 1778 proved fatal to this fair, as well as to the still more celebrated fair of Portobello.

A light-house has been erected on the N.W. angle of the castle of St. Juan. The light, which is a revolving one of great power and brilliancy, is elevated 79 feet above the level of the sea.

Commerce. — An individual, looking at a map of the world, would be apt to conclude that Mexico is one of the most favourably situated countries for commerce; and, in some respects, this is true. But her trade labours, notwithstanding, under some serious disadvantages. Though washed by the Atlantic and Pacific Oceans, neither of her coasts is accessible for several months of the year. On the E. coast, or that bordering the Gulph of Mexico, there is not a single good harbour; and during the season when the coasts are accessible, they are extremely unhealthy. Owing also to the rapid ascent from the shores to the interior, the construction of roads, and the transport of commodities to and from the inner provinces, is alike difficult and expensive. No doubt, however, an efficient government and an industrious people would speedily, in a great measure, overcome these obstacles to an extensive intercourse with the foreigner. But Mexico has neither the one nor the other; and, at present, her trade is confined within the narrowest limits. Down to 1778, when the Spanish government relaxed the old prohibitive system, the foreign goods legally imported into Mexico comprised only a few Chinese and European manufactures; the former brought annually in *one* galleon of about 1,400 tons, and the latter sent *once in three years* exclusively in ships chartered by government from Seville or Cadjz! On the opening of the trade in 1779, private capitalists engaged in it; and after that period, at an average of 12 years before and after, the returns for exports alone rose from 11,000,000 to 19,000,000 of dollars, the difference being chiefly in the quantity of specie. How much greater would the increase have been, if the trade had not been fettered with vexatious duties, first on articles of Spanish produce in the markets of Seville and Cadiz; 2. on shipping for Mexico; 3. at Vera Cruz; and, 4. with an *alcavala*, or transfer duty, at every step, from the merchant to the consumer? On the breaking out of the civil war, the ports of Tampico, Mazatlan, and San Blas were opened by the new government; and soon afterwards foreign vessels were admitted into all the ports on the same terms as Spaniards. The Spanish capitalists retired to Cuba or Spain; and their places were supplied by British and American merchants, who established themselves in the interior, and supplied the inhabs. in return for dollars with manufactured goods, the superior quality and cheapness of which has, no doubt, had some influence in depressing native manufactures. The jealousy of the natives, however, and the absurd threats of the

government against foreign artificers and traders, has tended to prevent their settling in the country, and engaging in any considerable undertaking, other than the mines; and the depressed state of the latter, which have always furnished the principal article of export, has tended still further to depress and paralyse commerce. The roads, too, instead of being improved, have been suffered to fall into a state of almost irreparable decay. In this respect, the following extract from one of the letters of M. Chevalier is decisive. "The splendid road which, during the domination of the Spaniards, was constructed across deserts and precipices, by the merchants of Vera Cruz, to the summit of the upper country, is a melancholy instance of the carelessness with which the public interests of the country are directed. During the war of independence, this road was cut up in various points; and, down to this day, the enfranchised Mexicans have not replaced a single stone, nor filled up a single trench, nor even cut down one of the trees, which, in the absence of any considerable traffic, and under the influence of a tropical sun, are rapidly growing up to a magnificent size in the very middle of the road. In the upper country nothing would be more easy than to open noble means of communication. The soil is naturally level: and basaltic rocks, particularly adapted for the construction of roads, are found in great abundance. But even where there are roads, the Mexicans make little use of them. They carry to a yet more extravagant length the inconceivable predilection of the Spanish race in favour of transporting their goods on the backs of animals. You expect to meet with carts and waggons: no such thing; every thing is conveyed on the backs of mules or Indians. Troops of little consumptive donkeys bring into the city, in parcels not much bigger than a man's two fists, the charcoal required for the culinary operations of the inhabitants. The price of every bulky article is thus increased to an enormous degree. The interior districts are as inaccessible as if they were cut off by an enemy's army, and famine frequently ensues."

In consequence of this wretched state of the roads, of the insecurity consequent to the prevalence of revolutions, and the torpor and indolence of the inhabitants (occasioned partly and principally by physical, but partly, also, by moral causes), industry of all kinds is at an extremely low ebb; and the commerce of the republic is far from being commensurate either with her population, or the number and value of her exportable products.

The following table furnishes an official account of the vessels entering the ports of Vera Cruz, Tampico, San Blas, and Mazatlan during the year 1838, with the invoice value of their cargoes, &c

Countries.	Inward.			Outward.		
	Ships.	Tons.	Value.	Ships.	Tons.	Value.
			£			£
I. *Vera Cruz*:—						
British	6	1,588	167,750	7	1,531	Port blockaded by the French, and value not stated.
Mexican	22	1,999	Not stated	10	1,566	
American	9	1,450		11	1,973	
French	5	1,153		8	2,113	
Others	2	289		2	289	
Total at Vera Cruz	44	6,879	167,750	47	7,212	
II. *Tampico*:—						
British	25	-	225,120	27	-	1,182,938
Mexican	16	1,390	16,700	16	1,362	800
American	20	2,269	185,400	20	2,316	237,285
Others	9	992	103,900	7	685	7,000
III. *San Blas*:—						
British	6	970	110,800	6	970	106,600
American	3	783	70,800	3	783	17,100
Sardinian	2	492	18,000	2	492	2,800
Others	6	815	31,000	4	695	10,200
IV. *Mazatlan*:—						
British	6	1,453	57,000	4	1,128	65,200
American	5	1,110	80,000	2	518	42,100
Others	5	2,607	78,600	4	715?	?
	147	18,018	1,145,870?	112	16,876	1,672,621

The above statement, though not complete, shows the comparative trade of different countries with Mexico, and proves that about half her imports come from Great Britain, which also takes off about 5-6ths of her exports, bullion, the chief article, amounting to about 17,000,000 doll.

For a considerable period after the town of Vera Cruz had thrown off the Spanish yoke, the castle of St. Juan d'Ulloa continued in possession of the Spaniards. During this interval, the commerce of Vera Cruz was almost entirely transferred to the port of Alvarado, 12 leagues to the south-east. Alvarado is built upon the left bank of a river of the same name. The bar at the mouth of the river, about 1½ mile below the town, renders it inaccessible for vessels drawing above 10 or 12 feet water. Large ships are obliged to anchor in the roads, where they are exposed to all the violence of the north winds, loading and unloading by means of lighters. Alvarado is supposed, but probably without much foundation, to be a little healthier than Vera Cruz. The trade has now mostly reverted to its old channel.

But within these few years, Tampico has risen to considerable importance as a commercial sea-port. It is situated about 60 leagues N. N. W. of Vera Cruz, in lat. 20° 15′ 30″ N., lon. 97° 52′ W., being about 104 leagues from Mexico. Hitherto it is said to have been free from fever. The shifting of the bar at the mouth of the river, and the shallowness of the water on it, which is sometimes under 8, and rarely above 15 feet, are serious obstacles to the growth of the port. Vessels coming in sight are boarded by pilots, who conduct them, provided they do not draw too much water, over the bar. Those that cannot enter the port load and unload by means of lighters; mooring so that they may get readily to sea in the event of a gale coming on from the north.

Exports and Imports. — The precious metals have always formed the principal article of export from Mexico. During the 10 years ending with 1801, the average annual produce of the Mexican mines amounted, according to M. Humboldt, to 23,000,000 dollars — (*Nouvelle Espagne*, iv. 137.); and in 1805 the produce was 27,165,888 dollars. — (*Id.* iv. 83.) But during the revolutionary war, the old Spanish capitalists, to whom most of the mines belonged, being proscribed, emigrated with all the property they could scrape together: and this withdrawal of capital from the mines, added to the injury several of them sustained by the destruction of their works during the contest, the interruption of all regular pursuits which it occasioned, and the insecurity and anarchy that afterwards prevailed, caused an extraordinary falling off in the produce of the mines. Within these few years, however, a considerable improvement has taken place. The efforts, and the lavish expenditure, of a few of the companies formed in this country for working the mines, have been so far successful, that some of them have been got again into good order, and a large increase of produce may be fairly anticipated, provided they are permitted to prosecute their operations without molestation. But, as we have elsewhere stated (see *antè*, p. 831.), some of the parties who sold or leased the mines began to put forward claims never heard of before, the moment they perceived that there was a reasonable prospect of the companies succeeding; and in some instances they have not scrupled to enforce their claims by violence! It is to be hoped that the Mexican government will exert itself to repress these outrages. If it have power to put down, and yet wink at or tolerate such disgraceful proceedings, it will make itself responsible for the consequences; and will merit chastisement as well as contempt.

The total quantity of gold and silver coined in the different Mexican mints in 1840 and 1841 was, in 1840, 13,134,610 dollars; in 1841, 13,587,805 dollars: to which may be added about 4,000,000 dollars a year for the gold and silver raised and exported without being brought to the mints to be recoined. Hence the exports of the precious metals from Mexico may at present be estimated at from 17,000,000 to 18,000,000 doll. a-year.

Besides the precious metals, cochineal, flour, indigo, provisions, leather, sarsaparilla, vanilla, jalap, soap, logwood, and pimento are the principal articles exported from Vera Cruz.

The imports consist principally of cotton, woollen, linen, and silk goods, paper, brandy, quicksilver, iron, steel, wine, wax, &c.

According to Humboldt, the imports at Vera Cruz, before the revolutionary struggles, might be estimated, at an average, at about 15,000,000 dollars, and the exports at about 22,000,000 do.

It must, however, be observed that this statement refers only to the *registered* articles, or to those that paid the duties on importation and exportation. But exclusive of these, the value of the articles clandestinely imported by the ports on the Gulph, previously to the revolution, was estimated at 4,500,000 dollars a year; and 2,500,000 dollars were supposed to be annually smuggled out of the country in plate and bars, and ingots of gold and silver. A regular contraband trade used to be carried on between Vera Cruz and Jamaica: and notwithstanding all the efforts of government for their exclusion, and the excessive severity of its laws against smuggling, the shops of Mexico were always pretty well supplied with the products of England and Germany. — (*Humboldt, Nouvelle Espagne*, iv. 125.; *Poinsett's Notes on Mexico*, p. 133.)

Humboldt states, that the total population of Mexico, exclusive of Guatemala, may be estimated at about 7,000,000. Of this number about ½ are Indians, the rest being Europeans, or descendants of Europeans, and mixed races. But notwithstanding this large amount of population, the trade we carry on with Mexico is very inferior to that which we carry on with Brazil. The following is an account of the real or declared value of all sorts of British produce and manufactures exported to the States of Central and Southern America in 1842: —

	£		£
Mexico - - - -	374,969	States of the Rio de la Plata -	969,791
Guatemala - - - -	——	Chili - - - -	950,466
Colombia - - - -	231,711	Peru - - - -	684,313
Brazil - - - -	1,756,805		

The imports of British goods at second hand into Mexico and Colombia from the West Indies is still, however, far from inconsiderable; and a pretty large proportion of the British goods sent to Chili are conveyed thence to Acapulco and other Mexican ports on the Pacific. We subjoin —

An Account of the declared Value of the principal Articles of British Produce and Manufacture exported from the U. Kingdom to Mexico, during each of the 23 Years ending with 1842.

Years.	Cotton Manufactures. Entered by the Yard.	Cotton Manufactures. Hosiery, Lace, and Small Wares.	Cotton Twist and Yarn.	Earthenware of all Sorts	Hardwares and Cutlery.	Linen Manufactures entered by the Yard.	Silk Manufactures.	Woollen Manufactures.	Total declared Value of British Produce and Manufactures.
	£	£	£	£	£	£	£	£	£
1820	- -	- -	- -	94	- -	167	- -	- -	1,076
1821	- -	- -	- -	3,198	5,559	7,078	3,258	21,817	89,360
1822	30,543	3,788	- -	3,288	7,107	15,076	8,888	21,638	267,118
1823	187,166	6,238	- -	3,253	7,107	15,076	8,888	21,638	267,118
1824	285,647	6,956	- -	4,050	8,297	10,302	8,334	46,147	391,997
1825	660,346	7,518	- -	5,243	16,568	30,332	44,172	120,683	1,014,628
1826	261,148	11,243	95	2,997	14,017	41,116	9,476	35,580	471,285
1827	307,337	18,435	1,068	8,878	23,509	33,215	6,880	23,710	492,800
1828	227,514	9,210	41	973	7,656	29,639	4,114	9,955	307,029
1829	204,677	9,441	6,660	298	6,110	47,665	2,577	12,434	305,562
1830	631,003	29,515	32,026	3,342	21,100	134,814	16,072	79,878	978,111
1831	471,208	23,712	37,972	2,240	16,810	75,074	13,548	64,191	748,858
1832	101,062	5,608	29,537	4,083	9,801	19,185	2,431	15,856	199,821
1833	201,128	16,527	53,091	3,299	15,532	61,614	5,340	44,373	421,187
1834	251,177	7,878	27,364	6,165	21,057	63,212	5,806	57,907	459,610
1835	204,667	7,881	39,164	4,103	11,196	62,850	5,138	33,677	402,880
1836	114,065	7,693	33,633	2,869	16,153	17,153	6,132	17,653	231,822
1837	199,456	13,330	144,189	5,587	11,815	65,872	11,801	40,135	520,200
1838	259,320	8,114	15,707	5,313	7,566	76,758	8,999	37,145	439,776
1839	380,740	13,167	507	7,853	10,162	98,515	14,920	64,527	604,170
1840	232,312	14,004	2,150	6,940	9,207	91,929	12,442	64,366	467,350
1841	188,856	5,128	20,656	7,600	17,898	97,295	20,130	58,410	454,001
1842	- -	- -	- -	- -	- -	- -	- -	- -	374,969

Account of the Quantities of the principal Articles of Merchandise, exclusive of Bullion, imported into the U. Kingdom from Mexico, during each of the 22 Years ending with 1841.

Years.	Cochineal (including Granilla and Dust).	Fustic.	Hides (untanned).	Jalap.	Indigo.	Logwood.	Sarsaparilla.
	Lbs.	*Tons.*	*Cwt.*	*Lbs.*	*Lbs.*	*Tons*	*Lbs.*
1820	- -	- -	- -	11,875	- -	166	
1821	- -	- -	- -	- -	- -	1,597	
1822	1,914	- -	- -	- -	13,388	3,164	
1823	188,004	54	- -	- -	1,809	1,709	522
1824	114,990	113	4,163	- -	2,262	4,046	
1825	76,956	- -	2,443	- -	2,166	6,854	
1826	65,165	106	- -	19,746	455	2,549	
1827	119,744	- -	2,474	15,804	- -	3,144	
1828	139,586	513	73	24,607	6,014	6,199	1,311
1829	124,798	286	68	31,256	9,529	5,791	1,765
1830	85,043	763	3,985	61,187	13,003	6,155	35,257
1831	98,170	980	153	31,205	706	4,885	13,251
1832	122,290	125	1,128	6,326	1,359	6,284	9,037
1833	58,813	106	61	14,656	- -	6,410	19,571
1834	169,795	422	5,959	7,155	- -	7,911	
1835	41,814	191	- -	13,334	- -	6,213	
1836	85,026	172	54	7,558	- -	5,537	7,000
1837	76,106	102	32	16,088	- -	8,053	5,649
1838	151,272	30	98	31,265	- -	8,766	18,581
1839	199,079	52	58	18,405	- -	7,076	3,537
1840	43,074	516	413	22,500	- -	9,601	15,828
1841	29,678	216	316	8,742	- -	11,156	208

The Mexican government issued a new tariff in 1843. It prohibits the importation of a great many articles; and the duties it imposes on those that may be imported are, for the most part, heavy. This, however, is of comparatively little consequence, in so far at least as the foreigner is concerned; for the smuggler takes off nearly as large a supply of the prohibited and over-taxed products as would be taken off by the legitimate traders, were they admitted under reasonable duties.

VERDIGRIS (Ger. *Grünspan*; Fr. *Vert-de-gris*, *Verdet*; It. *Verderame*; Sp. *Cardenillo*, *Verdete*, *Verde-gris*; Rus. *Jar*), a kind of rust of copper, of a beautiful bluish green colour, formed from the corrosion of copper by fermented vegetables. Its specific gravity is 1·78. Its taste is disagreeably metallic; and, like all the compounds into which copper enters, it is poisonous. It was known to the ancients, and various ways of preparing it are described by Pliny. It is very extensively used by painters, and in dyeing; it is also used to some extent in medicine. The best verdigris is made at Montpellier; the wines of Languedoc being particularly well suited for corroding copper, and forming this substance. It is generally exported in cakes of about 25 lbs. weight each. It is also manufactured in this country, by means of the refuse of cider, &c.; the high duty of 2*s.* per lb. on the foreign article giving the home producers a pretty complete monopoly of the market. The goodness of verdigris is judged of from the deepness and brightness of its colour, its dryness, and its forming, when rubbed on the hand with a little water or saliva, smooth paste, free from grittiness. — (*Thomson's Chemistry*; *Rees's Cyclopædia.*)

VERJUICE (Ger. *Agrest*; Fr. *Verjus*; It. *Agresto*; Sp. *Agraz*), a kind of harsh, austere vinegar, made of the expressed juice of the wild apple, or crab. The French give this name to unripe grapes, and to the sour liquor obtained from them.

VERMICELLI (Ger. *Nudeln*; Du. *Meelneepen, Proppen*; Fr. *Vermicelli*; It. *Vermicelli, Tagliolini*; Sp. *Aletrias*), a species of wheaten paste formed into long, slender, hollow tubes, or threads, used amongst us in soups, broths, &c. — (See MACCARONI.)

VERMILLION. See CINNABAR.

VINEGAR (Ger. *Essig*; Du. *Azyn*; Fr. *Vinaigre*; It. *Aceto*; Sp. and Port. *Vinagre*; Rus. *Ukzus*; Lat. *Acetum*). — (See ACID (ACETIC), for a description of vinegar.) A duty being imposed on vinegar of 2*d.* the gallon, its manufacture is placed under the control of the excise. A licence, costing 5*l.*, and renewable annually, has to be taken out by every maker of vinegar, or acetous acid. In 1842, the duty on vinegar produced 23,842*l.*, showing that 2,861,040 gallons had been brought to the charge. The manufacture is almost confined to England; the quantities produced in Scotland and Ireland being quite inconsiderable. The duty was reduced, in 1826, from 4*d.* to 2*d.* per gallon.

All places for manufacturing or keeping vinegar must be entered, under a penalty of 50*l.* No vinegar maker is to receive any vinegar, or acetous acid, or sugar wash, or any preparation for vinegar, without giving 12 hours' notice to the excise, under penalty of 100*l.* Any person sending out or receiving vinegar shall, unless the duty on it be paid, and it be accompanied by a permit, forfeit 200*l.* All vinegar makers are to make entries at the next Excise-office of the quantity made within each month, and are bound to clear off the duties within a month of such entry, on pain of double duties.

VITRIOL. See COPPERAS.

VITRIOL, OIL OF. See ACID (SULPHURIC).

ULTRAMARINE (Ger. *Ultramarin*; Fr. *Bleu d'outremer*; It. *Oltramarino*; Sp. *Ultramar*; Rus. *Ultramarin*), a very fine blue powder made from the blue parts of *lapis lazuli*. It has the valuable property of neither fading, nor becoming tarnished, on exposure to the air, or a moderate heat; and on this account is highly prized by painters. Owing to its great price, it is very apt to be adulterated. It was introduced about the end of the fifteenth century.

USANCE, a period of *one, two*, or *three* months, or of so many days, after the date of a bill of exchange, according to the custom of different places, before the bill becomes due. Double or treble usance is double or treble the usual time; and ½ usance is ½ the time. When a month is divided, the ½ usance, notwithstanding the differences in the lengths of the months, is uniformly 15 days. Usances are calculated exclusively of the date of the bill. Bills of exchange drawn at usance are allowed the usual days of grace, and on the last of the 3 days the bill should be presented for payment. — (See EXCHANGE.)

USURY. See INTEREST AND ANNUITIES.

W.

WALNUTS, the fruit of the *Juglans*, or walnut-tree, of which there are several varieties. The walnut is a large handsome tree, with strong spreading branches. The fruit is a pretty large, smooth, ovate nut, containing an oily kernel, divided into four lobes. The nut has been always held in high estimation; it was called by the Romans *Jovis glans*, the acorn or mast of Jove, and hence the name of the tree. The walnut tree is indigenous to Persia and the countries bordering on the Caspian Sea. It has long been introduced into Great Britain; but the fruit seldom ripens in the more northerly parts of the island. Previously to the very general introduction of mahogany, the wood of the walnut tree was extensively used among us in making of furniture; and it continues to be largely employed for that purpose in many parts of the Continent. It is much used by turners; and is superior to every other sort of wood for the mounting of guns; a circumstance which caused great devastation among our walnut plantations during the latter years of the war. Great numbers of walnut trees are annually consumed in the Haute Vienne and other departments of France, in the manufacture of the wooden shoes or clogs used by the peasantry. The nuts are either gathered when ripe, being served up at desserts without any preparation; or they are plucked green, and pickled. — (*Poiret, Histoire Philosophique des Plantes*, tome vii. p. 213.; *Rees's Cyclopædia, &c.*)

Account of Walnuts imported, exported, and retained for Home Use, during 1841 and 1842, with the Nett Duty thereon and the Rate of Duty.

Years.	Imports.	Exports.	Retained for Home Use.	Duty.	Rate of Duty.
	Bush.	*Bush.*	*Bush.*	£	*Per Bush.*
1841	21,106	171	25,126	2,463	2*s.*
1842	33,588	7	31,301	3,519	2*s.*

WANGHEES, sometimes called JAPAN CANES, a species of cane imported from China. They should be chosen pliable, tough, round, and taper; the knots at regular distances from each other; and the heavier the better. Such as are dark-coloured, badly glazed, and light, should be rejected. —(*Milburn's Orient. Com.*)

WAREHOUSING SYSTEM. By this system is meant the provisions made for lodging imported articles in public warehouses, at a reasonable rent, without payment of the duties on importation till they be withdrawn for home consumption. If re-exported, no duty is ever paid.

1. *Expediency and Origin of the Warehousing System.* — It is laid down by Dr. Smith, in one of his justly celebrated maxims on the subject of taxation, that "Every tax ought to be levied at the time and in the manner that is most likely to be convenient for the contributor to pay it."—(*Wealth of Nations*, p. 371.) No one can doubt the soundness of this maxim; and yet it was very strangely neglected, down to 1803, in the management of the customs. Previously to this period, the duties on most goods imported had either to be paid at the moment of their importation, or a *bond*, with sufficient security for their future payment, had to be given to the revenue officers. The hardship and inconvenience of such a system is obvious. It was often very difficult to find sureties; and the merchant, in order to raise funds to pay the duties, was frequently reduced to the ruinous necessity of selling his goods immediately on their arrival, when, perhaps, the market was already glutted. Neither was this the only inconvenience that grew out of this system; for the duties having to be paid all at once, and not by degrees as the goods were sold for consumption, their price was raised by the amount of the profit on the capital advanced in payment of the duties; competition, too, was diminished in consequence of the greater command of funds required to carry on trade under such disadvantages; and a few rich individuals were enabled to monopolise the importation of those commodities on which heavy duties were payable. The system had, besides, an obvious tendency to discourage the carrying trade. It prevented this country from becoming the *entrepôt* for foreign products, by hindering the importation of such as were not immediately wanted for home consumption; and thus tended to lessen the resort of foreigners to our markets, inasmuch as it rendered it difficult, or rather impossible, for them to complete an assorted cargo. And in addition to all these circumstances, the difficulty of granting a really equivalent drawback to the exporters of such commodities as had paid duty, opened a door for the commission of every species of fraud.

But these disadvantages and drawbacks, obvious as they may now appear, did not attract the public attention till a comparatively late period. Sir Robert Walpole seems to have been one of the first who had a clear perception of their injurious influence; and it was the principal object of the famous *Excise Scheme*, proposed by him in 1733, to oblige the importers of tobacco and wine to deposit them in public warehouses; relieving them, however, from the necessity of paying the duties chargeable on them till they were withdrawn for home consumption.

No doubt can now remain in the mind of any one, that the adoption of this scheme would have been of the greatest advantage to the commerce and industry of the country. But so powerful was the delusion generated in the public mind with respect to it, that its proposal well nigh caused a rebellion. Most of the merchants of the day had availed themselves of the facilities which the existing system afforded of defrauding the revenue; and they dexterously endeavoured to thwart the success of a scheme which would have given a serious check to such practices, by making the public believe that it would be fatal to the commercial prosperity of the country. The efforts of the merchants were powerfully seconded by the spirit of party, which then ran very high. The political opponents of the ministry, anxious for an opportunity to prejudice them in the public estimation, contended that the scheme was only the first step towards the introduction of such a universal system of excise as would inevitably prove alike subversive of the comfort and liberty of the people. In consequence of these artful misrepresentations, the most violent clamours were everywhere excited against the scheme. On one occasion Sir Robert Walpole narrowly escaped falling a sacrifice to the ungovernable fury of the mob, which beset all the avenues to the House of Commons; and, after many violent and lengthened debates, the scheme was ultimately abandoned.

The disadvantages of the old plan, and the benefits to be derived from the establishment of a voluntary warehousing system, were most ably pointed out by Dean Tucker, in his "Essay on the Comparative Advantages and Disadvantages of Great Britain and France with respect to Trade," published in 1750. But so powerful was the impression made by the violent opposition to Sir Robert Walpole's scheme, and such is the force of prejudice, that it was not till 1803 that this obvious and signal improvement — the greatest, perhaps, that has been made in our commercial and financial system — could be safely adopted.

Regulations as to Warehousing. — The statute of 43 Geo. 3. c. 132. laid the founda-

tion of this system; but it was much improved and extended by subsequent statutes, the regulations of which have been embodied in the act 3 & 4 Will. 4. c. 57., which took effect on the 1st of September, 1833.

This act empowers the commissioners of the customs, under the authority and direction of the Lords of the Treasury, to nominate the ports at which goods may be warehoused without payment of duty, and the warehouses in which particular descriptions of goods may be deposited. It also fixes the time during which goods are allowed to remain in the warehouse; and prescribes the regulations as to their removal from port to port, their sale and stowage in the warehouse, the remission of the duties in case of loss by accident, the allowances for waste, &c. But as this statute is of much importance, we subjoin a full abstract of it.

ABSTRACT OF THE ACT 3 & 4 WILL. 4. C. 57. FOR THE WAREHOUSING OF GOODS.

Commencement of Act. — Act to commence the 1st day of September 1833, except where any other commencement is particularly directed. — § 1.

Treasury to appoint Warehousing Ports. — It shall be lawful for the commissioners of the treasury to appoint the ports in the U. Kingdom which shall be warehousing ports for the purposes of this act; and it shall be lawful for the commissioners of customs, subject to the directions of the commissioners of the treasury, to appoint in what warehouses or places of special security, or of ordinary security, as the case may require, in such ports, and in what different parts or divisions of such warehouses or places, and in what manner, any goods, and what sorts of goods, may be warehoused and secured without payment of any duty upon the first entry thereof, or for exportation only, in cases wherein the same may be prohibited to be imported for home use; and also to direct in what cases (if any) security by bond shall be required in respect of any warehouse so appointed by them. — § 2.

Warehouse of special Security by Appointment. — Whenever any warehouse shall have been approved by the said commissioners, as being a warehouse of special security, it shall be stated in their order of appointment that it is appointed as a warehouse of special security: provided, that all warehouses connected with wharfs for the landing of the goods to be lodged therein, and enclosed together with such wharfs within walls, such as are or shall be required by any act for the constructing of such warehouses and wharfs, and being appointed to be legal quays, shall, without any order of the commissioners of the customs, be warehouses for the purposes of this act, for all goods landed at such wharfs or quays at any port appointed by the commissioners of the treasury to be a warehousing port, and all such warehouses shall be warehouses of special security. — § 3.

Bonds given previous to Act to continue in force. — All appointments of warehouses made under the authority of any other act in force at the commencement of this act shall continue in force as if the same had been made under the authority of this act, and all bonds given in respect of any goods warehoused under any act in force at the commencement of this act shall continue in force for the purposes of this act. — § 4.

Commissioners to provide Warehouses for Tobacco. — The commissioners of customs shall, out of the monies arising from the duties of customs, provide from time to time warehouses for the warehousing of tobacco at the ports into which tobacco may be legally imported: provided, that for every hogshead, chest, or case of tobacco so warehoused the importer or proprietor thereof shall pay, for warehouse rent, such sum or sums, not exceeding any sum payable under any act in force at the commencement of this act, and at such periods and in such manner as the commissioners of the treasury shall direct; and all such sums shall be paid and appropriated as duties of customs. — § 5.

Power to revoke or alter an Appointment. — It shall be lawful for the commissioners of the treasury by their warrant, and for the commissioners of the customs by their order, to revoke any former warrant or any former order, or to make any alteration in or addition to any former warrant or any former order made by them respectively. — § 6.

Publication of Appointment in Gazette. — Every order made by the commissioners of customs in respect of warehouses of special security, as well those of original appointment as those of revocation, alteration, or addition, shall be published in the London Gazette, for those appointed in Great Britain, and in the Dublin Gazette for those appointed in Ireland. — § 7.

Warehouse-keeper may give general Bond. — Before any goods be entered to be warehoused in any warehouse in respect of which security by bond is required, the proprietor or occupier of such warehouse, if he be willing, shall give general security by bond, with 2 sufficient sureties (the 6 & 7 Vict. c. 84. requires only 1 surety), for the payment of the full duties of importation on all such goods as shall at any time be warehoused therein, or for the due exportation thereof; and if such proprietor or occupier be not willing to give such general security, the different importers of the separate quantities of goods shall, upon each importation, give such security in respect of the particular goods imported by them respectively, before such goods be entered to be warehoused. — § 8.

Sale of Goods in Warehouse by Proprietor to be valid. — If any goods lodged in any warehouse be the property of its occupier, and be *bonâ fide* sold by him, and upon such sale there shall have been a written agreement, signed by the parties, or a written contract of sale made, executed, and delivered by a broker or other person legally authorised on behalf of the parties respectively, and the amount of the price stipulated in the said agreement or contract shall have been actually paid or secured to be paid by the purchaser, every such sale shall be valid, although such goods shall remain in such warehouse; provided a transfer of such goods, according to such sale, shall have been entered in a book to be kept for that purpose by the officer of the customs having the charge of such warehouse, who is hereby required to keep such book, and to enter such transfers, with the dates thereof, upon application of the owners of the goods, and to produce such book upon demand made. — § 9.

Stowage in Warehouse to afford easy Access. — All goods warehoused shall be stowed in such manner as that easy access may be had to every package and parcel of the same; and if the occupier shall omit so to stow the same, he shall for every such omission forfeit the sum of *N.*; and if any goods be taken out of the warehouse without due entry of the same with the proper officers of the customs, the occupier of the warehouse shall be liable to the payment of the duties due thereon. — § 10.

Goods fraudulently concealed or removed, forfeited, &c. — If any goods warehoused be fraudulently concealed in or removed from the warehouse, the same shall be forfeited; and if any importer or proprietor of any goods warehoused, or any person in his employ, shall by any contrivance fraudulently open the warehouse or gain access to the goods, except in the presence of the proper officer acting in the execution of his duty, such importer or proprietor shall forfeit and pay for every such offence the sum of 500*l.* — § 11.

Examination on Entry and Landing. — Within 1 month after any tobacco shall have been warehoused, and upon the entry and landing of any goods to be warehoused, the proper officer of the customs shall take a particular account of the same, and shall mark the contents on each package, and shall mark the word "prohibited" on such packages as contain goods prohibited to be imported for home use; and all goods shall be warehoused and kept in the packages in which they have been imported, and no alteration shall be made in the packages or the packing of any goods in the warehouse, except in the cases herein provided. — § 12.

Goods to be carried to Warehouse under Authority of Officers of Customs. — All goods entered to be warehoused, or to be re-warehoused, shall be carried to the warehouse under the care or with the authority or permission of the proper officer of customs, and in such manner, and by such persons, and by such roads or ways, and within such spaces of time, as the said officer shall authorise, permit, or direct; and all such goods not so carried shall be forfeited. — § 13.

Goods to be cleared in 3 Years, and Ship's Stores in 1 Year. — All goods which have been warehoused, shall be duly cleared, either for exportation or for home use, within 3 years, and all surplus stores of ships within 1 year, from the day of the first entry thereof (unless further time be given by the commissioners of the treasury); and if any such goods be not so cleared, it shall be lawful for the commissioners of customs to cause them to be sold, and the produce shall be applied to the payment of warehouse rent and other charges, and the overplus, if any, paid to the proprietor; and such goods, when sold, shall be held subject to all the conditions to which they were subject previous to such sale, except that a further time of 3 months from the date of the sale shall be allowed to the purchaser for clearing such goods from the warehouse; and if the goods so sold shall not be duly cleared within such 3 months, the same shall be forfeited: provided, that if the goods so to be disposed of shall have been imported by the East India Company, or be of the description called "piece goods," imported from places within the limits of their charter into the port of London, the same shall, at the requisition of the commissioners of customs, be duly exposed to sale by the said company at their next ensuing sale, and shall be sold for the highest price then publicly offered for them. — § 14.

In case of Accident, Duty to be remitted. — If any goods entered to be warehoused, or entered to be delivered from the warehouse, be lost or destroyed by any unavoidable accident, either on shipboard or in the landing or shipping of the same, or in the receiving into or delivering from the warehouse, the commissioners of customs shall remit or return the duties payable or paid on the goods so lost or destroyed. — § 15.

Entry for Exportation or Home Use. — No goods which have been warehoused shall be taken or delivered from the warehouse except upon due entry, and under care of the proper officers for exportation, or upon due entry and payment of the full duties payable thereon for home use; except goods delivered into the charge of the searchers to be shipped as stores, and which shall and may be so shipped without entry or payment of any duty for any ship of the burden of 70 tons at least, bound upon a voyage to foreign parts, the probable duration of which out and home will not be less than 40 days: provided that such stores shall be duly borne upon the ship's victualling bill, and shall be shipped in such quantities and subject to such directions and regulations as the commissioners of customs shall direct and appoint. — § 16.

Rum for Stores and surplus Stores may be shipped without Entry. — Any rum of the British plantations may be delivered into the charge of the searcher, to be shipped as stores for any ship without entry or payment of any duty, and any surplus stores of any ship may be delivered into the charge of the searcher, to be reshipped as stores for the same ship, or for the same master in another ship, without entry or payment of duty, such rum and such surplus stores being duly borne upon the victualling bills of such ships respectively; and if the ship for the future use of which any surplus stores have been warehoused shall have been broken up or sold, such stores may be so delivered for the use of any other ship belonging to the same owners, or may be entered for payment of duty, and delivered for the private use of such owners, or any of them, or of the master or purser of such ship. — § 17.

Duties to be paid on original Quantities, except in certain Cases. — Upon the entry of any goods to be cleared from the warehouse, if the same be for home use, the person entering such goods inwards shall deliver a bill of the entry, and duplicates thereof, in like manner as is directed in the case of goods entered to be landed, as far as the same is applicable, and at the same time shall pay down to the proper officer of the customs the full duties of customs payable thereon, and not being less in amount than according to the account of the quantity first taken of the respective packages or parcels of the goods in such entry at the examination thereof at the time of the first entry and landing of the same, without any abatement on account of any deficiency, except as by this act is otherwise provided; and if the entry be for exportation or for removal to any other warehouse, and any of the packages or parcels of the goods be deficient of their respective quantities according to the account first taken, a like entry inwards shall also be passed in respect of the quantities so deficient, and the full duties shall be paid on the amount thereof before such packages or parcels of goods shall be delivered or taken for exportation or removal, except as by this act is otherwise provided; and if any goods so deficient in quantity shall be such as are charged to pay duty according to the value thereof, such value shall be estimated at the price for which the like sorts of goods of the best quality have been last or lately sold, either at any sale of the East India Company, or in any other manner, as the case may be. — § 18.

Duties on Tobacco, Sugar, and Spirits to be charged in Quantities delivered, except in certain Cases. — The duties payable upon tobacco, sugar, and spirits respectively, when taken out of warehouse for home use, shall be charged upon the quantities ascertained by the weight, measure, or strength of the same actually delivered; except that if the sugar shall not be in a warehouse of special security, no greater abatement on account of deficiency of the quantity first ascertained as aforesaid shall be made than shall be after the rate of 3 per cent. of such quantity for the first 3 months, and 1 per cent. for every subsequent month during which such sugar shall have been warehoused; and except, that if the spirits (being any other spirits than rum of the British plantations) shall not be in a warehouse of special security, no greater abatement on account of deficiency of the quantity or strength first ascertained as aforesaid shall be made than shall be after the several rates of allowances following; viz.

For every 100 gallons, hydrometer proof; viz.

For any time not exceeding 6 months	1 gallon
For any time exceeding 6 months and not exceeding 12 months	2 gallons
For any time exceeding 12 months and not exceeding 18 months	3 gallons
For any time exceeding 18 months and not exceeding 2 years	4 gallons
For any time exceeding 2 years	5 gallons

Provided that no abatement shall be made in respect of any deficiency in quantity of any spirits occasioned either by leakage or accident, and not by natural evaporation, in whatever warehouse the same may be, except as by this act is otherwise specially provided. — § 19.

Importer may enter Goods for Home Use, &c., although not actually warehoused. — If, after any goods have been duly entered and landed to be warehoused, and before the same have been deposited in the warehouse, the importer shall further enter the same or any part thereof for home use or for exportation as from the warehouse, the goods so entered shall be considered as virtually and constructively warehoused, although not actually deposited in the warehouse, and may be delivered and taken for home use or for exportation, as the case may be. — § 20.

Goods may be removed to other Ports to be rewarehoused. — Any goods which have been warehoused at some port in the U. K. may be removed by sea or inland carriage to any other port in the same, in which the like goods may be warehoused upon importation, to be rewarehoused at such other port, and again as often as may be required to any other such port, to be there rewarehoused, subject to the regulations herein-after mentioned; viz. 12 hours' notice in writing of the intention to remove such goods shall be given to the warehouse officer, specifying the particular goods intended to be removed, and the marks, numbers, and descriptions of the packages in which the same are contained, in what ship imported, when and by whom entered inwards to be warehoused, and, if subsequently rewarehoused, when and by whom rewarehoused, and to what port the same are to be removed; and thereupon the warehouse officer shall take a particular account of such goods, and shall mark the contents on every package in preparation for the delivering of the same for the purposes of such removal, and previous to the delivery

thereof may cause the proper seals of office to be affixed thereto: provided that tobacco, the produce of the British possessions in America or of the United States of America, and purchased for the use of his Majesty's navy, may be removed by the purser of any ship of war in actual service to the ports of Rochester, Portsmouth, or Plymouth, to be there rewarehoused, in name of such purser, in a warehouse approved for that purpose by the commissioners of customs. — § 21.

Entry of Goods for Removal. — Before such goods be delivered to be removed, due entry of the same shall be made, and a proper bill of such entry, with duplicates thereof, be delivered to the collector or comptroller, containing the before-mentioned particulars, and an exact account of the quantities of the different sorts of goods; and such bill of entry, signed by the collector and comptroller, shall be the warrant for the removal of such goods; and an account of the same, containing all such particulars, shall be transmitted by the officers of the port of removal to the officers of the port of destination; and upon the arrival of such goods at the port of destination due entry of the same to be rewarehoused shall in like manner be made with the collector and comptroller at such port, containing all the particulars and accounts before mentioned, together with the name of the port from which such goods have been removed, and the description and situation of the warehouse in which they are to be warehoused; and the bill of such entry, signed by such collector and comptroller, shall be the warrant to the landing officer and the warehouse officer to admit such goods to be there rewarehoused, under such examination as is made of the like goods when first warehoused upon importation from parts beyond the seas; and the particulars to be contained in such notice and in such entries shall be written and arranged in such form and manner as the collector and comptroller shall require; and the officers at the port of arrival shall transmit to the officers at the port of removal an account of the goods so arrived, according as they shall upon examination prove to be, and the warehouse officers at the port of removal shall notify such arrival in their books. — § 22.

Bond to rewarehouse, which may be given at either Port. — The persons removing such goods shall at the time of entering the same give bond, with 1 sufficient surety, for the due arrival and rewarehousing of such goods within a reasonable time, (with reference to the distance between the respective ports, to be fixed by the commissioners of customs), which bond may be taken by the collector and comptroller either of the port of removal or of the port of destination, as shall best suit the residence or convenience of the persons interested in the removal of such goods; and if such bond be given at the port of destination, a certificate thereof, under the hands of the collector and comptroller of such port shall, at the time of entering the goods, be produced to the collector or comptroller of the port of removal. — § 23.

Bond how to be discharged. — Such bond shall not be discharged unless such goods shall have been duly rewarehoused at the port of destination within the time allowed for such removal, or shall have been otherwise accounted for to the satisfaction of the said commissioners, nor until the full duties due upon any deficiency of such goods shall have been paid, nor until fresh security have been given in respect of such goods as herein-after provided, unless such goods shall be lodged in some warehouse in respect of which general security has been given by the proprietor or occupier, or in some warehouse in respect of which no security is required. — § 24.

Goods rewarehoused held on Terms of the first Warehousing. — Such goods, when so rewarehoused, may be entered and shipped for exportation, or entered and delivered for home use, as the like goods may be when first warehoused upon importation, and the time when such goods shall be allowed to remain rewarehoused at such port shall be reckoned from the day when the same were first entered to be warehoused. — § 25.

On Arrival, after Forms of rewarehousing, Parties may enter to export, &c. — If upon the arrival of such goods at the port of destination the parties shall be desirous forthwith to export the same, or to pay duty thereon for home use, without lodging the same in the warehouse for which they have been entered and examined to be rewarehoused, it shall be lawful for the officers of the customs at such port, after all the formalities of entering and examining such goods for rewarehousing have been duly performed (except the actual labour of carrying and lodging the same in the warehouse), to consider the same as virtually or constructively rewarehoused, and to permit them to be entered and shipped for exportation, or to be entered and delivered for home use, upon payment of the duties due thereon; and the account taken for the rewarehousing of such goods may serve as the account for delivering the same as if from the warehouse, either for shipment or for payment of duties, as the case may be; and all goods so exported, or for which the duties have been so paid, shall be deemed to have been duly cleared from the warehouse. — § 26.

Removal in the same Port. — Any goods which have been warehoused in some warehouse in the port of London may, with the permission of the commissioners of customs first obtained, be removed to any other warehouse in the said port in which the like goods may be warehoused; and any goods which have been warehoused in any other port may, with the permission of the collector and comptroller of such port first obtained, be removed to any other warehouse in the same port in which like goods may be warehoused, under such regulations as the commissioners of customs shall direct. — § 27.

Goods and Parties subject to original Conditions. — All goods which shall have been removed from one warehouse to another, whether in the same or in a different port, and all proprietors of such goods, shall be subject to all the conditions to which they would have been subject had such goods remained in the warehouse where they were originally warehoused. — § 28.

Goods sold, new Owner may give Bond. — If any goods have been warehoused in respect of which general security by bond shall not have been given by the proprietor or occupier, and particular security, as in such case is required, shall have been given by the importer of such goods, and the goods shall have been sold or disposed of, so that the original bonder shall be no longer interested in or have control over such goods, it shall be lawful to admit fresh security to be given by the bond of the new proprietor of such goods, or persons having the control over the same, with his sufficient surety, and to cancel the bond given by the original bonder, or to exonerate him and his surety to the extent of the fresh security so given. — § 29.

Bond of Remover to be in force until Bond be given by new Owner. — If the person removing any goods from 1 port to another, and who shall have given bond in respect of such removal and rewarehousing, shall continue to be interested in such goods after the same have been duly rewarehoused, and such goods shall have been so rewarehoused in some warehouse, in respect of which security is required, and the proprietor or occupier of the same shall not have given general security, the bond in respect of such removal and rewarehousing shall be conditioned and continue in force, for the rewarehousing of such goods, until fresh bond be given by some new proprietor or other person, in manner herein-before provided. — § 30.

To sort, separate, and repack in same or equal Packages. — It shall be lawful in the warehouse to sort, separate, pack, and repack any goods, and to make such lawful alterations therein, or arrangements thereof, as may be necessary either for the preservation of such goods, or in order to the sale, shipment, or legal disposal of the same; provided that such goods be repacked in the same packages in which the same goods, or some part of the whole quantity of the same parcel of goods, were imported, or in packages of entire quantity equal thereto, or in such other packages as the commissioners of customs shall permit (not being less in any case, if the goods be to be exported or to be removed to another warehouse, than may be required by law for the importation of such goods); and also in the warehouse to draw off any wine, or any rum of the British plantations, into reputed quart bottles or reputed pint bottles, for the purpose only of being exported from the warehouse; and also to draw off any such rum into casks containing not less than 20 gallons each, for the purpose only of being disposed of as stores for ships; and also to draw off any other spirits into reputed quart bottles, under such regulations as the commissioners of customs shall from time to time direct, for the purpose only of being exported from the warehouse;

and also to draw off and mix with any wine any brandy secured in *the same warehouse, not exceeding* the proportion of 10 gallons of brandy to 100 gallons of wine; and *also to fill* up any casks of wine or spirits from any other casks of the same, respectively secured in the same warehouse; and *also* in any warehouse of special security to rack off any wine from the lees, and to mix any wines of the same sort, erasing from the casks all import brands; and *also to take such moderate samples of goods* as may be allowed by the commissioners of customs, without entry and without payment of duty, except as the same may eventually become payable, on a deficiency of the original quantity. — § 31.

No Alteration in Goods or Package but according as the Commissioners direct. — No alteration shall be made in any goods or packages, nor shall any wine, rum, brandy, or spirits be bottled, drawn off, mixed, or filled up, nor shall any samples be taken except after such notices given by the respective importers or proprietors, and at such times and in such manner, and under such regulations and restrictions, as the commissioners of customs shall require and direct. — § 32.

Repacking in proper Packages. — Whereas it may happen, that after the repacking into proper packages of any parcel of goods which have been unpacked and separated or drawn off from the original package in any of the cases herein-before provided for, there may remain some surplus quantities of the respective parcels of such goods, which may not be sufficient to make or fill up any 1 of such proper packages, or it may happen that some part of such goods, when separated from other parts, may be such refuse, or in so damaged a state as to be worthless, or that the total quantity of such parcel of goods may be reduced by the separation of dirt or sediment, or by the dispersion of dust or otherwise: and whereas the duties payable on such goods may have been levied at a rate having regard to a just allowance for the state in which such goods are imported, and it is not proper that any manufacturing process should be performed in such warehouse to the detriment of the revenue; it is therefore enacted, that after such goods have been repacked in proper packages, the commissioners of customs, at the request of the importer or proprietor of such goods, may permit any of such refuse, damaged, or surplus goods not contained in any of such packages to be destroyed; and if the goods be such as may be delivered for home use, the duties shall be immediately paid upon any part of such surplus as may remain, and the same shall be delivered for home use accordingly; and if they be such as may not be so delivered, such surplus as may so remain shall be disposed of for the purpose of exportation in such manner as the commissioners shall direct; and thereupon the quantity contained in each of such packages shall be ascertained and marked upon the same, and the deficiency shall be ascertained by a comparison of the total quantity in such packages with the total quantity first warehoused, and the proportion which such deficiency may bear to the quantity in each package shall also be marked on the same, and added to such quantity, and the total shall be deemed to be the imported contents of such package, and be held subject to the full duties of importation, except as otherwise provided by this act: provided that it shall be lawful for the commissioners of customs to accept the abandonment, for the duties, of any quantity of tobacco, coffee, pepper, cocoa, lees of wine, and also of any whole packages of other goods, and to cause or permit the same to be destroyed, and to deduct such quantity of tobacco or coffee, or pepper, or cocoa, or the contents of such whole packages, from the total quantity of the same importation, in computing the amount of the deficiency of such total quantity. — § 33.

No Foreign Casks, &c. to be used for repacking. — No foreign casks, bottles, corks, packages, or materials whatever, except any in which some goods shall have been imported and warehoused, shall be used in the repacking of any goods in the warehouse, unless the full duties have been first paid thereon. — § 34.

Silks, Linens, &c. to be delivered out of Warehouse, to be cleaned. — It shall be lawful for the commissioners of the customs to permit any stuffs or fabrics of silk, linen, cotton, or wool, or of any mixture of them with any other material, to be taken out of warehouse to be cleaned, refreshed, dyed, stained, or calendered, or to be bleached or printed, without payment of duty of customs, under security, nevertheless, by bond to their satisfaction, that such goods shall be returned to the warehouse within the time that they shall appoint; and it shall be lawful for the said commissioners, in like manner, and under like security, to permit any rice, the produce of places within the limits of the East India Company's charter, to be delivered out of warehouse to be cleaned, making such allowance for waste as to the said commissioners shall appear to be reasonable. — § 35.

Copper Ore may be taken out of Warehouse to be smelted. — It shall be lawful for the importer or proprietor of any copper ore warehoused to give notice to the proper officers of his intention to take such ore out of warehouse to be smelted, stating in such notice the quantity of copper computed to be contained in such ore, and delivering to such officers sufficient samples or specimens for ascertaining by proper essays, at the expense of the proprietor, such quantity of copper, and giving sufficient security by bond for returning such quantity of copper into the warehouse; and if such officers shall be satisfied of the fairness of the samples or specimens of such ore, and of the assays made of the same, and of the security given, they shall deliver such ore for the purpose of being smelted: provided that if any copper ore intended to be so smelted shall be imported into any port where such ore or where copper cannot be warehoused, the same may be entered as being to be warehoused at the port at which the copper after smelting is to be warehoused, and such ore shall thereupon be taken account of and delivered for the purposes aforesaid, in like manner as if the same had been warehoused: provided also, that all copper so produced by smelting shall be deemed to be copper imported, and shall be warehoused as such. — § 36.

Goods in Bulk delivered. — No parcels of goods so warehoused which were imported in bulk shall be delivered, except in the whole quantity of each parcel, or in a quantity not less than 1 ton weight, unless by special leave of the proper officers. — § 37.

Packages to be marked before Delivery. — No goods so warehoused shall be delivered, unless the same or the packages containing the same shall have been marked in such distinguishing manner as the commissioners of customs shall from time to time direct. — § 38.

Decrease and Increase may be allowed, under Regulations of the Treasury. — It shall be lawful for the commissioners of the treasury to make regulations for ascertaining the amount of the decrease or increase of the quantity of any particular sorts of goods, and to direct in what proportion any abatement of duty payable under this act for deficiencies shall, upon the exportation of any such goods, be made on account of such decrease: provided, that if such goods be lodged in warehouses of special security, no duty shall be charged for any amount whatever of deficiency on any of such goods on the exportation thereof, except in cases where suspicion shall arise that part of such goods has been clandestinely conveyed away, nor shall any such goods (unless they be wine or spirits) be measured, counted, weighed, or gauged for exportation, except in such cases of suspicion. — § 39.

Allowance for Waste of Wine, Spirits, &c. in Warehouses not of special Security. — For any wine, spirits, coffee, cocoa nuts, or pepper lodged in warehouses not of special security, the following allowances for natural waste, in proportion to the time during which such goods have remained in warehouse, shall be made upon the exportation thereof; viz.

Wine, upon every cask; viz.	
For any time not exceeding 1 year - -	1 gallon
For any time exceeding 1 year, and not exceeding 2 years - - - -	2 gallons
For any time exceeding 2 years - -	3 gallons
Spirits, upon every 100 gallons hydrometer proof; viz.	
For any time not exceeding 6 months - -	1 gallon
For any time exceeding 6 months, and not exceeding 12 months - - -	2 gallons
Spirits, upon every 100 gallons hydrometer proof; viz.	
For any time exceeding 12 months, and not exceeding 18 months - - -	3 gallons
For any time exceeding 18 months, and not exceeding 2 years - - -	4 gallons
For any time exceeding 2 years - -	5 gallons
Coffee, cocoa nuts, pepper, for every 100 lbs., and so in proportion for any less quantity - -	2 lbs.

— § 40.

Embezzlement and Waste by Officers to be made good to Proprietor. — In case any embezzlement, waste, spoil, or destruction shall be made of any goods or merchandise warehoused in warehouses under

the authority of this act, through any wilful misconduct of any officer of customs or excise, such officer shall be deemed guilty of a misdemeanor, and shall upon conviction suffer such punishment as may be inflicted by law in cases of misdemeanor; and if such officer shall be so prosecuted to conviction by the importer, consignee, or proprietor of the goods or merchandise so embezzled, wasted, spoiled, or destroyed, no duty of customs or excise shall be payable for such goods or merchandise so embezzled, &c., and no forfeiture or seizure shall take place of any goods and merchandise so warehoused in respect of any deficiency caused by such embezzlement, waste, spoil, or destruction, and the damage occasioned by such embezzlement, &c. of such goods or merchandise shall be repaid and made good to such importer, consignee, or proprietor, by the commissioners of customs or excise, under such orders as shall be given by the commissioners of the treasury, or any 3 of them. — § 41.

On Entry outwards Bond for due shipping and landing shall be given. — Upon the entry outwards of any goods to be exported from the warehouse to parts beyond the seas, and before cocket be granted, the person in whose name the same be entered shall give security by bond in double the value of such goods, with 1 sufficient surety, that such goods shall be duly shipped and exported, and shall be landed at the place for which they be entered outwards, or otherwise accounted for to the satisfaction of the commissioners of customs. — § 42.

Bond for Beef and Pork exported from Warehouse. — Upon the entry outwards of any salted beef or salted pork to be exported from the warehouse to parts beyond seas, and before cocket be granted, the person in whose name the same be entered shall give security by bond in treble the value of the goods, with 2 sufficient sureties, of whom the master of the exporting ship shall be 1, that such beef or pork shall be duly shipped and exported, and that no part thereof shall be consumed on board such ship, and that the same shall be landed at the place for which it be entered outwards; and that a certificate of such landing shall be produced within a reasonable time, according to the voyage, to be fixed by the commissioners of customs, and mentioned in the bond, such certificate to be signed by the officers of the customs or other British officer, if the goods be landed at a place in the British dominions, or by the British consul, if the goods be landed at a place not in the British dominions, or such goods shall be otherwise accounted for to the satisfaction of said commissioners; and such master shall make and sign a declaration that such beef or pork is to be laden on board such ship as merchandise, to be carried to and landed at parts beyond the seas, and not as stores for the said ship; and if such ship shall not have on board at the time of clearance outwards a reasonable supply or stock of beef or pork, according to the intended voyage, borne upon the victualling bill, the master of such ship shall forfeit the sum of 100*l.* — § 43.

Restrictions as to the Isle of Man. — No goods shall be exported from warehouse to the Isle of Man, except such goods as may be imported into the said island with licence of the commissioners of customs, and in virtue of any such licence first obtained. — § 44.

Goods removed from Warehouse under Care of Customs Officers. — All goods taken from the warehouse for removal or for exportation shall be removed or carried to be shipped under the care or with the authority or permission of the proper officer of customs, and in such manner, and by such persons, and within such spaces of time, and by such roads or ways, as he shall authorise or direct; and all such goods not so removed or carried shall be forfeited. — § 45.

Ships to be not less than 70 Tons for exporting warehoused Goods. — It shall not be lawful for any person to export any goods so warehoused, nor to enter for exportation to parts beyond the seas any goods so warehoused, in any ship not of the burden of 70 tons or upwards. — § 46.

Goods landed in Docks liable to Claims for Freight as before landing. — All goods or merchandise which shall be landed in docks, and lodged in the custody of their proprietors, under this act, not being goods seized as forfeited, shall be subject or liable to the same claim for freight in favour of the master and owner or owners of the respective ships or vessels, or of any other person or persons interested in the freight of the same, as they were subject and liable to before landing; and the directors and proprietors of such docks are empowered and required, upon due notice in that behalf given to them, to detain and keep such goods and merchandise, not being seized as forfeited, in the warehouses belonging to the said docks, until the respective freights to which the same are subject and liable be duly paid, together with the rates and charges to which the same shall have been subject and liable, or until a deposit be made by the owners or consignees of such goods or merchandise, equal in amount to the demands made by the master, owner or owners of the ships or vessels, or other persons, on account of freight; which deposit the directors or proprietors of such docks, or their agents, are directed to receive and hold in trust, until the claim or demand for freight upon such goods shall be satisfied; upon proof of which, and demand made by the persons, their executors, &c. by whom the said deposit has been made, and the rates and charges due upon the said goods being paid, the deposit shall be returned to them by the said directors or proprietors. — § 47.

Warehousing Ports, &c. — Certain ports only are warehousing ports; nor may all sorts of goods be warehoused in every warehousing port. We subjoin a list of the warehousing ports in Great Britain and Ireland. Goods of all sorts may, speaking generally, be warehoused in the principal ports; but the regulations as to those that may be warehoused in the lesser ports are perpetually varying.

ENGLAND.

Aberystwith	Carnarvon	Fleetwood	Lynn	Rochester	Topsham
Arundel	Chepstow	Gainsborough	Maldon	Rye	Truro
Barnstaple	Chester	Gloucester	Maryport	Scarborough	Tynemouth
Bideford	Chichester	Goole	Milford	Shields, North	Weymouth
Boston	Colchester	Grimsby	Newcastle	Shields, South	Whitby
Bridgewater	Cowes	Hull	Newhaven	Shoreham	Whitehaven
Bridport	Dartmouth	Ipswich	Newport	Southampton	Wisbech
Bristol	Deal	Kingston	Plymouth	Stockton	Woodbridge
Cardiff	Dover	Lancaster	Pool	Sunderland	Workington
Cardigan	Exeter	Liverpool	Portsmouth	Swansea	Yarmouth
Carlisle	Falmouth	London			

SCOTLAND.

Aberdeen	Berwick	Dundee	Greenock	Montrose	Peterhead
Alloa	Borrowstonness	Glasgow	Inverness	Newburg	Port Glasgow
Arbroath	Dumfries	Grangemouth	Leith	Perth	Stirling
Banff	Dunbar				

IRELAND.

Dublin	Coleraine	Galway	New Ross	Sligo	Westport
Belfast	Drogheda	Limerick	Newry	Waterford	Wexford
Cork	Dundalk	Londonderry	Ross		

WAREHOUSE RENT.

Rates for warehouse rent on goods deposited in the king's warehouses at the several outports, viz. —

On large cases and vats containing toys or other merchandise, and packages of wine and other liquids, per week, 6*d.* each.

Packages of baggage, small packages of presents; viz. boxes, kegs, jars, &c., per week, 2*d.* each. All other packages not before described (except tobacco), per week, 4*d.* each

For every hogshead of tobacco deposited in the king's warehouse at London, 2*s.*; and for every hogshead taken out of the same, 2*s.* For every hogshead of tobacco warehoused in the king's warehouse at the outports, 1½*d.* per week.

WATCHES (*Ger. Uhren, Taschenuhren; Fr. Montres; It. Orinoli da tasca, o da saccoccia; Sp. Relojes de faltriquera; Rus. Karmannüe tschasü*), portable machines, generally of a small size and round flat shape, that measure and indicate the successive portions of time; having, for the most part, their motions regulated by a spiral spring. When constructed on the most approved principles, and executed in the best manner, a watch is not only an exceedingly useful, but a most admirable piece of mechanism. It has exercised the genius and invention of the most skilful mechanics, as well as of some of the ablest mathematicians, for nearly 3 centuries. And, considering the smallness of its size, its capacity of being carried about uninjured in every variety of position, the number and complexity of its movements, and the extraordinary accuracy with which it represents the successive portions of time as determined by the rotation of the earth on its axis, we need not wonder at Dr. Paley having referred to it as a striking specimen of human ingenuity.

Spring watches are constructed nearly on the same principle as pendulum clocks. Instead of the pendulum in the latter, a spring is used in the former, the isochronism of the vibrations of which corrects the unequal motions of the balance.

Historical Notice. — The invention of spring watches dates from about the middle of the 16th century, and has been warmly contested for Huygens and Hooke. The English writers generally incline in favour of the latter. Dr. Hutton says — (*Mathematical Dictionary*, art. *Watch*), that the words "Rob. Hooke invenit, 1658," were inscribed on the dial plate of a watch presented to Charles II. in 1675. But Montucla affirms (*Histoire des Mathématiques*, tom. ii. p. 413, ed. 1800), that Huygens made this "*belle découverte*" in 1656, and presented a spring watch to the States of Holland in 1657. Comparing these statements, it certainly appears that the claim of Huygens to the priority of the discovery is the better established of the two. We do not, however, believe that either of those distinguished persons owed, in this respect, any thing to the other. The probability seems to be, that the happy idea of employing a spring to regulate the motion of watches occurred to them both nearly at the same time.

Improvement of Watches. — Owing to the facility with which the longitude may be determined by the aid of accurately going watches, it is of great importance to have them made as perfect as possible. In this view, liberal premiums have been given to the makers of the best marine watches, or chronometers, by the governments of England, France, Spain, &c. In the reign of Queen Anne, parliament offered a reward of 20,000*l.* to any one who should make a watch, or other instrument, capable of determining the longitude at sea, within certain limits. This magnificent premium was awarded, in 1764, to the celebrated John Harrison, for a marine watch, which, being tried in a voyage to Barbadoes, determined its longitude with even more than the required accuracy. Other premiums, though of inferior amount, were subsequently given to Messrs. Mudge, Arnold, Earnshaw, &c. Since 1822, 2 prizes, one of 300*l.* and one of 200*l.*, have been annually given to the makers of the 2 chronometers adjudged to be the best, after having been submitted to a twelvemonth's trial at the Royal Observatory at Greenwich. And to such perfection has the manufacture attained, that some of the chronometers employed by navigators, though carried into the most opposite climates, have not varied to the extent of 2 seconds in their mean rate of going throughout the year.

Watch Manufacture. — The watch-making business, though latterly a good deal depressed, is largely carried on in London; the artists of which have attained to a high degree of excellence in this department. There may be about 14,000 gold and 85,000 silver watches annually assayed at Goldsmiths' Hall, London — (*Jacob on the Precious Metals*, vol. ii. p. 413.) — the aggregate value of which is, probably, not much under 600,000*l.* The manufacture is also carried on to a considerable extent at Liverpool, Coventry, Edinburgh, &c. Watch movements used to be extensively manufactured at Prescot in Lancashire; but latterly, we believe, the manufacturers have been withdrawing to Liverpool.

On the Continent, watches are principally manufactured in Paris, Geneva, and in Neufchâtel. Some of the French and Swiss watches, particularly the latter, are excellent; but, generally speaking, they are slight, and inferior to those made in London. Paris and Geneva watches are largely exported to foreign countries; and are everywhere in high estimation, particularly among the ladies.

Watches impressed with any mark or stamp, appearing to be or to represent any legal British assay mark or stamp, or purporting by any mark or appearance to be of the manufacture of the U. Kingdom, or not having the name and place of abode of some foreign maker abroad visible on the frame and also on the face, or not being in a complete state, with all the parts properly fixed in the case, may not be imported into the U. Kingdom, even for the purpose of being warehoused. — (3 & 4 *Will.* 4. c. 52. § 58.)

Watches in China. — Pretty considerable numbers of European watches are imported into China; and it may be worth mentioning, as a curious instance of the diversity of tastes, that the Chinese, as well as most other Eastern nations, who can afford it, uniformly *wear watches in pairs!* This sort of extravagance is not, however, confined to watches, but extends to a variety of other articles. Shawls, for example, are invariably worn in India in pairs of exactly the same pattern; and it is hardly possible, indeed, to find a native dealer who will sell a single shawl.

WATER. It may be thought unnecessary, perhaps, to say any thing in a work of this sort with respect to a fluid so well known and so abundant. But, besides being an indispensable necessary of life, water is, in most large cities, an *important commercial article.* It is in the latter point of view, principally, that we mean to consider it. — Inasmuch, however, as the mode of supplying different places with water, and its price, necessarily vary in every possible way, we shall limit our remarks on these subjects to the metropolis only. The few remarks we intend to offer of a general nature will apply indifferently to any populous place, the supply of which with water occasions a considerable expense.

1. *Quality of Water.* — Dr. Ure has made the following statements with respect to the quality of water: — "Water," says he, "is a very transparent fluid, possessing a moderate degree of activity with regard to organised substances, which renders it friendly to animal and vegetable life, for both which it is, indeed, indispensably necessary. Hence it acts but slightly on the organs of sense, and is therefore said to have neither taste nor smell. It appears to possess considerable elasticity, and yields in a perceptible degree to the pressure of air in the condensing machine.

"Native water is seldom, if ever, found perfectly pure. The waters that flow within or upon the surface of the earth contain various earthy, saline, metallic, vegetable, or animal particles, according to the substances over or through which they pass. Rain and snow waters are much purer than these, although they also contain whatever floats in the air, or has been exhaled along with the watery vapours.

"The purity of water may be known by the following marks or properties of pure water:—
"1. Pure water is lighter than water that is not pure.
"2. Pure water is more fluid than water that is not pure.
"3. It has no colour, smell, or taste.
"4. It wets more easily than the waters containing metallic and earthy salts, called hard waters, and feels softer when touched.
"5. Soap, or a solution of soap in alcohol, mixes easily and perfectly with it.
"6. It is not rendered turbid by adding to it a solution of gold in aqua regia; or a solution of silver or of lead, or of mercury, in nitric acid; or a solution of acetate of lead in water.
"Water was, till modern times, considered as an elementary or simple substance; but it is now ascertained to be a compound of oxygen and hydrogen."

2. *Supply of Water.* — London was very ill supplied with water previously to the early part of the 17th century, when the New River water was introduced into the city. This exceedingly useful work was planned and carried into effect by the famous Sir Hugh Middleton, who expended his whole fortune on the project; having, like many other public benefactors, entailed poverty on himself and his posterity by embarking in an undertaking productive of vast wealth to others, and of great public utility. The New River has its principal source near Chadwell, between Hertford and Ware, about 20 miles from London; but the artificial channel in which the water is conveyed is about 40 miles in length. Sir Hugh Middleton encountered innumerable difficulties during the progress of the undertaking, which it is probable would have been abandoned, at least for a time, but for the aid afforded by James I. The New River Company was incorporated in 1619, 6 years after the water had been brought to the reservoir at Islington. The undertaking yielded very little profit for a considerable number of years; but it has since become extremely profitable; so much so, that an original 500*l.* share has been sold for 16,000*l.*!

The Chelsea Water-Works Company was formed in 1723, and (with the aid of 3 smaller companies, none of which are now in existence) it, and the New River, supplied all that part of the metropolis north of the Thames with water, down to the year 1810. In that year, however, 3 new companies, the East London, West Middlesex, and Grand Junction, were established, under the authority of different acts of parliament. At this moment the metropolis is supplied with water by the following companies: —

New River,
Chelsea,
East London,
West Middlesex,
Grand Junction,
Lambeth,
Vauxhall, or South London, and
Southwark Water Works.

The following statements with respect to these companies are taken from Mr. Wade's treatise on the police of the metropolis. The Report of the commissioners appointed by government in 1827, to inquire into the state of the supply of water in the metropolis, is the principal authority on which they are founded.

"*The New River Company* get their supply from the spring at Chadwell, between Hertford and Ware. It comes in an open channel, of about 40 miles in length, to reservoirs at Clerkenwell. There are 2 reservoirs, having between them a surface of about 5 acres, and an average depth of 10 feet. These reservoirs are 81½ feet above low water mark in the Thames; and, by means of steam engines and a stand-pipe, an additional height of 60 feet can be given to the water, so that all the mains belonging to this Company are kept full by a considerable pressure of water. The highest service given by the New River is the cistern on the top of Covent Garden Theatre. The aqueduct by which the water is brought has only a fall of 2 inches per mile; thus it wastes, by evaporation, during the drought of summer, and is impeded by frost in the winter. At these times the Company pump an additional supply from the Thames, at Broken Wharf, between Blackfriars and Southwark Bridges. To this, however, they seldom have recourse; and their engine, erected since the works at London Bridge were broken down, has worked only 176 hours in the year. The New River Company supply 66,000 houses with water, at an annual average of about 1,100 hogsheads each, or, in all, about 75,000,000 hogsheads annually.

"*The East London Water Works* are situated at Old Ford, on the river Lea, about 3 miles from the Thames, and a little below the point to which the tide flows up the Lea. By the act of parliament, this Company must take its water when the tide runs up and the mills below have ceased working. The water is pumped into reservoirs and allowed to settle; and a supply of 6,000,000 gallons is daily distributed to about 42,000 houses. This Company supply no water at a greater elevation than 30 feet, and the usual height at which the delivery is made to the tenants is 6 feet above the pavement; they have 200 miles of iron pipes, which, in some places, cost them 7 guineas a yard. This and the New River are the only companies which do not draw their supply of water entirely from the Thames.

"*The West Middlesex* derive their supply of water from the Thames, at the upper end of Hammersmith, about 9½ miles above London Bridge, and where the bed of the Thames is gravel. The water is forced by engines to a reservoir at Kensington, 309 feet long, 123 wide, and 20 deep, paved and lined with bricks, and elevated about 120 feet above low water in the Thames. They have another reservoir on Little Primrose Hill, about 70 feet higher, and containing 88,000 hogsheads of water, under the pressure of which the drains are kept charged, in case of fires. They serve about 15,000 tenants, and the average daily supply is about 2,250,000 gallons.

"*The Chelsea Water Works* derive their supply from the Thames, about ¼ of a mile east of Chelsea Hospital; and they have 2 reservoirs — one in the Green Park and another in Hyde Park — the former having an elevation of 44 feet, and the latter of 70. These reservoirs, till within these few months, had never been cleaned, nor had there been any preparation made for that purpose in their construction. About ¼ of the water served out by this Company is allowed to settle in these reservoirs, and the remaining ¾ are sent directly from the Thames. Latterly, the Company have been making preparations for filtering the water; and also for allowing it to settle in reservoirs, at Chelsea, before it is delivered into the mains. The Chelsea Company serve about 12,400 houses, and the average daily supply is 1,760,000 gallons.

"*The Grand Junction Company* derive the whole of their supply from the Thames, immediately adjoining Chelsea Hospital; thence it is pumped, without any filtration or settling, into 3 reservoirs at Paddington. These reservoirs are about 71, 86, and 92 feet above high water mark in the Thames; their

united contents are 19,355,840 gallons; and by means of a stand-pipe, the water is forced to the height of 147 feet, or about 61 feet above the average height in the reservoir. The number of houses supplied by the Grand Junction Company is 7,700, and the average daily supply is about 2,800,000 gallons.

"*The Lambeth Company* take their supply from the Thames, between Westminster and Waterloo Bridges. It is drawn from the bed of the river by a suction pipe, and delivered to the tenants without

[illegible] which is laid 6 feet below low water mark, and as far into the river as the third arch of Vauxhall Bridge. At that particular place, the bed of the Thames is described as being always clean, and without any of those depositions of mud and more offensive substances that are found in many other places. Besides the greater purity of the bed of the Thames here than where any other Company on the south side take their supply, the Company allow the water to settle in reservoirs. The Vauxhall Company supply about 10,000 houses with about 1,000,000 gallons of water daily.

"*The Southwark Water Works* (the property of an individual) are supplied from the middle of the Thames, below Southwark and London Bridges; and the water thus taken is sent out to the tenants without standing to settle, or any filtration further than it receives from passing through wire grates and small holes in metallic plates. The number of houses supplied by these works is about 7,000, and the average daily supply about 720,000 gallons."

The results may be collected into a Table, as follows: —

		Average per Day. Gallons.	Gallons Annually.	Average per House, Gallons.
1. New River -	67,000	13,000,000	4,056,000,000	182
2. East London -	42,000	6,000,000	1,872,000,000	143
3. West Middlesex	-	2,250,000	702,000,000	150
4. Chelsea -		1,760,000	549,120,000	142
5. Grand Junction		2,800,000	873,600,000	363
6. Lambeth	16,000	1,241,000	388,128,000	77
7. South London	10,000	1,000,000	312,000,000	100
8. Southwark -	7,000	720,000	224,640,000	102
		28,771,000		

Average per house north of the river - 196 gallons.
Average per house south of the river - 93 ditto.

It would appear from this Table, as if the supply of water were either excessive on the Middlesex side of the river, or very deficient on the Surrey side. But this discrepancy is more apparent than real. The inhabitants in the northern district are, speaking generally, decidedly richer than those in the southern district; they have, particularly in the west end of the town, larger families, and a much greater number of horses. There is also a much larger expenditure of water upon the roads in Middlesex than in Surrey. Still, however, we believe that there is a more liberal supply in the former than in the latter.

Monopoly of the Water Companies. — The sanction of parliament was given to the 3 new companies formed in 1810, not so much in the view of increasing the actual supply of water, as of checking monopoly, and reducing the rates by their competition. But these expectations have not been realised. For a while, indeed, the competition of the several companies was exceedingly injurious to their interests, and occasioned the total destruction of some of the inferior ones; but no sooner had this happened, than the others discovered that their interests were in reality the same, and that the true way to promote them was to concert measures together. In furtherance of this object, the 5 companies for the supply of that part of the metropolis north of the river proceeded to divide the town into as many districts, binding themselves, under heavy penalties, *not to encroach on each other's estates*; and having in this way gone far to secure themselves against any new competitors, their next measure was to add *five and twenty* per cent. to the rates established in 1810; and these have, in several instances, been still further augmented! The benefits that were expected to result from their multiplication have, therefore, proved quite imaginary; and though the supply of water has been increased, it is neither so cheap nor so good as it might have been under a different system.

The results given in the above table apply to 1827; but in 1834 the following statement was laid before the House of Commons. It exhibits the number of houses supplied with water by the different companies, the quantity furnished to each house, and the different rates of charge.

Water Companies.	Houses supplied.	Total Yea Supply.		Charge for 1,000 Hhds.	
		Hhds.		*s.*	*d.*
New River Company	70,145	111,650,000		17	2
Chelsea do. -	13,892	15,755,000		29	0
Grand Junction do.	8,780	21,702,567	363	48	6
W. Middlesex do.	16,000	20,000,000	185	45	6
E. London do.	46,421	37,810,594	121	28	0
S. London do.	12,046	8,100,000		15	0
Lambeth do.	16,684	11,998,600		17	0
Southwark do.	7,100	7,000,000		21	0
Total water supply	191,068	237,014,761			

The striking discrepancies that appear in this table tend to confirm the principle we endeavoured to enforce in the article COMPANIES, that certain restrictions should, in almost all cases, be imposed on companies for the supply of water to a large city. These are not undertakings that can be safely trusted to the free principles that may generally be relied upon. If there be only one set of springs adjacent to a town, or if there be certain springs more conveniently situated for supplying it with water than any other, a company acquiring a right to such springs, and incorporated for the purpose of conveying the water to town, thereby gain an *exclusive advantage*; and if no limits be set to its dividends, its partners may make an enormous profit at the expense of the public, without its being possible materially to reduce them by means of competition. What has happened in the case of the New River Company sufficiently evinces the truth of what has now been stated. Had its dividends been limited to any thing like a reasonable profit, the water that is at present supplied by its means might have been furnished for a small part of what it actually costs. But in cases of this sort, priority of occupation, even without any other peculiar advantage, goes far to exclude all regular and wholesome competition. A company [illegible] by the competition of another company,

[illegible] it is attempted, it only continues for a limited period, and is sure to be [illegible] compressed. We are, therefore, clearly of opinion, that no company should ever be formed for the conveyance of water into a large city, without a maximum being set both to the rates and the dividends;

giving the company an option, in the event of the maximum rate yielding more than the maximum dividend, either to reduce the rate, or to apply the surplus to the purchase of the company's stock; so that ultimately the charge on account of the dividends may be got rid of.

We are glad to have to add, that we are supported in what is now stated by the *Report* of the Select Committee of the House of Commons on the supply of water for the metropolis, printed in 1821. It is there said — "The public is at present without any protection even against a further indefinite extension of demand. In cases of dispute there is no tribunal but the Boards of the companies themselves, to which individuals can appeal; there are no regulations but such as the companies may have voluntarily imposed upon themselves, and may therefore at any time revoke, for the continuance of the supply in its present state, or for defining the cases in which it may be withdrawn from the householder. All these points, and some others of the same nature, indispensably require legislative regulation, where the subject matter is an article of the first necessity, and the supply has, from peculiar circumstances, got into such a course that it is not under the operation of those principles which govern supply and demand in other cases.

"The principle of the acts under which these companies were instituted, was to encourage competition; and certainly in this, as in other cases, it is only from competition, or the expectation of competition, that a perfect security can be had for a good supply. But your committee are satisfied, that, from the peculiar nature of these undertakings, the principle of competition requires to be guarded by particular checks and limits in its application to them, in order to render it effectual, without the risk of destruction to the competing parties and thereby, ultimately, of a serious injury to the public." And the committee proceeds to remark — "The submission of their accounts annually to parliament, for a few years, would necessarily throw light on this part of the question."

We think that it would be highly expedient to adopt the suggestions of the committee, by calling upon the companies to lay annually detailed statements of their affairs before parliament. They should be obliged in these statements to give an account of the rates charged by them, and to make a special report as to every case in which they have withdrawn water from a householder. It is to no purpose to repeat, in opposition to this proposal, the common-places about competition securing for the citizens a sufficient supply of water at the lowest prices, in the same way that the competition of bakers and butchers secures them supplies of beef and bread! The statements already made show that there is no analogy whatever in the circumstances under which these articles are supplied. If a man be dissatisfied with any particular butcher or baker, he may go to another, but *it is not possible for him to change his water merchant*, unless he also change the place of his residence. No water company will encroach upon the district assigned to another; and supposing an individual unlucky enough to quarrel with those who have the absolute *monopoly* of the supply of the district in which he resides, he must either migrate to another, or be without water, unless he can get a supply upon his own premises! Such being the actual state of things, it is quite ludicrous to talk about competition affording any real security against extortion and abuse. Even the publication of the proceedings of the companies would be a very inadequate check on their conduct; but such as it is, it is perhaps the only one that can now be resorted to; and as it would have considerable influence, it ought not, certainly, to be neglected.

3 *Quality of the London Water.* — All the companies, with the exception of the New River and East London Companies, derive their supplies of water from the Thames; and in consequence of their taking it up within the limits to which the tide flows, it is necessarily, in the first instance, loaded with many impurities. But the reports that were formerly so very prevalent, with respect to the deleterious quality of the water taken from the river, have been shown to be very greatly exaggerated. The statement of Dr. Bostock, given in the *Report* of the commissioners, shows that by far the greater part of the impurities in the Thames water are mechanically suspended in, and not chemically combined with, it; and that they may be separated from it by filtration, or by merely allowing it to stand at rest. Most of the companies have recently made considerable efforts to improve their water, and though they have not done in this respect as much as they might and should have done, a considerable improvement has, on the whole, been effected: and notwithstanding all that has been said to the contrary, we have been assured, by those best qualified to form an opinion on such a subject, that, though not nearly so pure as a little pains would render it, there is not the slightest foundation for the notion that its impurities have been such as to affect, in any degree, the health of the inhabitants.

4. *Water for Ships.* — Various improvements have been made in the art of preserving water on board ships. Of these, the principal are the charring the inside of the casks in which the water is kept, and the substitution of iron tanks for casks. The latter, being made of the required shape, may be conveniently stowed into any part of the ship. In men-of-war, the iron tanks serve as ballast; the water being brought up by a forcing pump. Water is found to preserve better in them than in any other sort of vessel. Drip-stones may be employed with much advantage in the purification of water. When water is taken on board from a river into which the tide flows, it should, of course, be raised at low ebb.

WAX (Ger. *Wachs*; Fr. *Cire*; It. and Sp. *Cera*; Rus. *Wosk*), a vegetable product. Several plants contain wax in such abundance, as to make it worth while to extract it from them. But all that is known in commerce consists of bees' wax. The honey is first pressed from the comb, and the wax is then melted into cakes. It has a slight odour of honey, is insipid, and of a bright yellow hue. It is brittle, yet soft, and somewhat unctuous to the touch. It is often adulterated with earth, pea meal, resin, &c. The presence of the former may be suspected when the cake is very brittle, or when its colour inclines more to gray than to yellow; and the presence of resin may be suspected when the fracture appears smooth and shining, instead of being granulated. Wax, when bleached or purified, is white, perfectly insipid, inodorous, and somewhat translucent; it is harder, less unctuous to the touch, heavier, and less fusible than yellow wax. It is sometimes adulterated with the white oxide of lead to increase its weight, with white tallow, and with potato starch. The first is detected by melting the wax in water, when the oxide falls to the bottom; the presence of tallow is indicated by the wax being of a dull opaque white, and wanting the transparency which distinguishes pure wax; and starch may be detected by applying sulphuric acid to the suspected wax, as the acid carbonises the starch, without acting on the wax. — (*Thomson's Chemistry*, and *Dr. A. T. Thomson's Dispensatory.*)

Notwithstanding the large supply of wax produced at home, a considerable quantity is imported from abroad; and there can be no doubt that the imports would have been much greater, but for the magnitude of the duty, which formerly amounted to 10*s.* a cwt. on wax brought from a British possession, and to 30*s.* a cwt. on that brought from a foreign country. In 1842, however, these duties were reduced to 1*s.* and 2*s.* a cwt., which, there can be little doubt, will lead to a material increase of consumption. Of 8,462

cwts. of wax imported in 1840, 3,773 cwts. were brought from the western coast of Africa; 1,814 cwts. from Tripoli, Tunis, &c.; 1,435 from the East India Company's territories, &c.

WEIGHTS AND MEASURES. Weights are used to ascertain the gravity of bodies, — a quality depending partly on their magnitude, and partly on their density. Measures are used to determine the magnitude of bodies, or the space which they occupy.

(For an account of the weights and measures used in foreign countries, and their equivalents in English weights and measures, see the notices of the great sea-port towns dispersed throughout this work. Thus, for the Russian weights and measures, see PETERSBURG; for those of China, see CANTON; &c.)

Neither the magnitude nor the weight of any one body can be determined, unless by comparing it with some other body selected as a standard. It is impossible, indeed, to form any idea in respect of magnitude or weight, except in relation to some definite space or weight with which we are acquainted. We say that one article weighs 1 pound, another 2 pounds, a third 3, and so on; meaning not only that these weights are to each other as 1, 2, 3, &c., but also that the weight or specific gravity of the first is equal to the known and determinate weight denominated a pound, that the second is equal to 2 pounds, and so on.

Standards of Weight and Measure. — Standards of lineal measure must have been fixed upon at the earliest period, and appear to have consisted principally of parts of the human body, — as the cubit, or length of the arm from the elbow to the tip of the middle finger: the foot; the *ulna*, arm, or yard; the span; the digit, or finger; the fathom, or space from the extremity of one hand to that of the other, when they are both extended in opposite directions; the pace, &c. Large spaces were estimated by measures formed out of multiples of the smaller ones; and sometimes in day's journeys, or by the space which it was supposed an ordinary man might travel in a day, using a reasonable degree of diligence.

But lineal measures can only be used to determine the magnitude of solid bodies; the magnitude of bodies in a liquid or fluid state has to be determined by what are called measures of capacity. It is probable that, in the infancy of society, shells, or other hollow instruments afforded by nature, were used as standards. But the inaccuracy of the conclusions drawn from referring to them must soon have become obvious; and it early occurred, that to obtain an accurate measure of liquids nothing more was necessary than to constitute an artificial one, the dimensions, and consequently the capacity, of which should be determined by the lineal measures previously adopted.

The determination of the gravity or weight of different bodies supposes the invention of the balance. Nothing is known of the steps which led to its introduction; but it was used in the remotest antiquity. It seems probable that, at first, cubes of some common lineal measure, as a foot, or the fraction of a foot, formed of copper, iron, or some other metal, were used as standards of weight. When the standard was selected, if it was desired to ascertain the specific gravity or weight of any given article, all that was necessary was to put it into one of the scales of the balance, and as many cubes or parts of cubes on the other as might be necessary to counterpoise it.

Weights have, however, been frequently derived from grains of corn. Hence, in this, and in some other European countries, the lowest denomination of weight is a *grain*; and 32 of these grains are directed, by the ancient statute called *Compositio Mensurarum* to compose a pennyweight, whereof 20 make an ounce, 12 ounces a pound, and so upwards.

In every country in which commercial transactions are extensively carried on, the importance of having weights and measures determined by some fixed standard becomes obvious to every one. But as the size of different parts of the human body differ in different individuals, it is necessary to select some durable article, — a metallic rod, for example, — of the length of an ordinary cubit, foot, &c., and to make it a standard with which all the other cubits, feet, &c. used in mensuration shall correspond. These standards have always been preserved with the greatest care: at Rome, they were kept in the temple of Jupiter; and among the Jews, their custody was intrusted to the family of Aaron. — (*Paucton, Métrologie*, p. 223.)

The principal standards used in the ancient world, were, the cubit of the Jews, from which their other measures of length, capacity, and weight were derived; and the foot of the Greeks and Romans.

In England, our ancient historians tell us that a new, or rather a revived, standard of lineal measure was introduced by Henry I., who ordered that the ulna, or ancient ell, which corresponds to the modern yard, should be made of the exact length of his own arm, and that the other measures of length should be raised upon it. This standard has been maintained, without any sensible variation. In 1742, the Royal Society had a yard made, from a very careful comparison of the standard ells or yards of the reigns of Henry VII. and Elizabeth kept at the Exchequer. In 1758, an exact copy was

made of the Royal Society's yard; and this copy having been examined by a committee of the House of Commons, and reported by them to be equal to the standard yard, it was marked as such; and this identical yard is declared, by the act 5 Geo. 4. c. 74., to be the standard of lineal measure in Great Britain. The clause in the act is as follows: —

"From and after the 1st of May, 1825 (subsequently extended to the 1st of January, 1826), the straight line or distance between the centres of the 2 points in the gold studs in the straight brass rod, now in the custody of the clerk of the House of Commons, whereon the words and figures 'STANDARD YARD, 1760,' are engraved, shall be the original and genuine standard of that measure of length or lineal extension called a yard; and the same straight line or distance between the centres of the said 2 points in the said gold studs in the said brass rod, the brass being at the temperature of 62° by Fahrenheit's thermometer, shall be and is hereby denominated the 'IMPERIAL STANDARD YARD,' and shall be and is hereby declared to be the unit or only standard measure of extension, wherefrom or whereby all other measures of extension whatsoever, whether the same be lineal, superficial, or solid, shall be derived, computed, and ascertained; and that all measures of length shall be taken in parts or multiples or certain proportions of the said standard yard; and that 1-3d part of the said standard yard shall be a foot, and the 12th part of such foot shall be an inch; and that the pole or perch in length shall contain 5½ such yards, the furlong 220 such yards, and the mile 1,760 such yards."— § 1.

The superficial measures are formed on the basis of the square of this standard; it being enacted, that

"The rood of land shall contain 1,210 square yards, according to the said standard yard; and that the acre of land shall contain 4,840 such square yards, being 160 square perches, poles, or rods."— § 2.

Uniformity of Weights and Measures. — The confusion and inconvenience attending the use of weights and measures of the same denomination, but of different magnitudes, was early remarked; and there is hardly a country in which efforts have not been made to reduce them to the same uniform system. Numerous acts of parliament have been passed, having this object in view, and enjoining the use of the same weights and measures, under very severe penalties. But, owing to the inveteracy of ancient customs, and the difficulty of enforcing new regulations, these statutes have always had a very limited influence, and the greatest diversity has continued to prevail, except in lineal measures. But the statute of 5 Geo. 4. c. 74. seems to have, at length, effected what former statutes failed of accomplishing. It is, perhaps, indebted for its success in this respect to the moderate nature of the changes which it introduced. We have already seen that it made no alteration in the lineal measures previously in use. Neither did it affect the previously existing system of weights: both the Troy and the Avoirdupois weights having been preserved.

"The Troy weight," says Mr. Davies Gilbert, late President of the Royal Society, "appeared to us (the commissioners of weights and measures) to be the ancient weight of this kingdom, having, as we have reason to suppose, existed in the same state from the time of St. Edward the Confessor; and there are reasons, moreover, to believe that the word Troy has no reference to any town in France, but rather to the monkish name given to London, of Troy Novant, founded on the legend of Brute. Troy weight, therefore, according to this etymology, is, in fact, London weight. We were induced, moreover, to preserve the Troy weight, because all the coinage has been uniformly regulated by it; and all medical prescriptions or formulæ now are, and always have been, estimated by Troy weight, under a peculiar subdivision which the College of Physicians have expressed themselves most anxious to preserve."

It was resolved, therefore, to continue the use of Troy weight; and also, on account of the accuracy of the Troy standard, to raise the Avoirdupois weight from this basis.

"We found," said Mr. Davies Gilbert, "the Avoirdupois weight, by which all heavy goods have been for a long time weighed (probably derived from Avoirs (Averia), the ancient name for goods or chattels, and Poids, weight), to be universally used throughout the kingdom. This weight, however, seems not to have been preserved with such scrupulous accuracy as Troy weight, by which more precious articles have been weighed; but we had reason to believe that the pound cannot differ by more than 1, 2, or 3 grains, from 7,000 grains Troy; some being in excess, and others, though in a less degree, in defect, but in no case amounting to above 1, 2, or 3 grains. It therefore occurred to us, that we should be offering no violence to this system of weights, if we declared that 7,000 grains Troy should be hereafter considered as the pound Avoirdupois."

In accordance with these views, it was enacted, — "That from and after the 1st day of May, 1825, the standard brass weight of 1 pound Troy weight, made in the year 1758, now in the custody of the clerk of the House of Commons, shall be, and the same is hereby declared to be, the original and genuine standard measure of weight, and that such brass weight shall be, and is hereby denominated, the Imperial Standard Troy pound, and shall be, and the same is hereby declared to be, the unit or only standard measure of weight, from which all other weights shall be derived, computed, and ascertained; and that 1-12th part of the said Troy pound shall be an ounce; and that 1-20th part of such ounce shall be a pennyweight; and that 1-24th part of such pennyweight shall be a grain; so that 5,760 such grains shall be a Troy pound; and that 7,000 such grains shall be, and they are hereby declared to be, a pound Avoirdupois, and that 1-16th part of the said pound Avoirdupois shall be an ounce Avoirdupois, and that 1-16th part of such ounce shall be a dram."

The measures of capacity were found to be, at the period of passing the late statute, in the greatest confusion; and a considerable change has consequently been made in them. The wine gallon formerly amounted to 231 cubic inches, the corn gallon to 268·8, and the ale gallon to 282. But these are superseded by the Imperial gallon, which contains 277·274 cubic inches, or 277¼ very nearly. It is deduced as follows: —

"The standard measure of capacity, as well for liquids as for dry goods not measured by heaped measure, shall be the GALLON, containing 10 lbs. avoirdupois weight of distilled water weighed in air, at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches; and a measure shall be forthwith made of brass, of such contents as aforesaid, under the directions of the Lord High Treasurer or the commissioners of his Majesty's treasury; and such brass measure shall be, and is hereby declared to be, the Imperial standard gallon, and shall be, and is hereby declared to be, the unit and only standard measure of capacity, from which all other measures of capacity to be used, as well for

wine, beer, ale, spirits, and all sorts of liquids, as for dry goods not measured by heaped measure, shall be derived, computed, and ascertained; and all measures shall be taken in parts or multiples or certain proportions of the said Imperial standard gallon; and the quart shall be ¼th part of such standard gallon, and the pint shall be ½th of such standard gallon, and 2 such gallons shall be a peck, and 8 such gallons shall be a bushel, and 8 such bushels a quarter of corn or other dry goods, not measured by heaped measure."—§ 6.

We subjoin a Table showing the contents of the different gallons, both in measure and weight.

	Cubic Inches.	Avoirdupois Weight.			Troy Weight.			
		lbs.	*oz.*	*dr.*	*lbs.*	*oz.*	*dwt.*	*grs.*
Imperial gallon	277·274	10	0	0	12	1	16	16
Corn gallon	268·8	9	10	14	11	9	7	12
Wine gallon	231	8	5	6½	10	1	9	22
Ale gallon	282	10	2	11½	12	4	6	8

Heaped Measures. — The greatest blemish, by far, in the act 5 Geo. 4. c. 74. was the continuance and legitimation of the practice of selling by heaped measure. This practice has since, however, been abolished, along with the use of all local and customary measures, by the act 5 & 6 Will. 4. c. 63., which contains several important provisions.

This act sets out with repealing the 4 & 5 of Will. 4. c. 49., and the provisions in the acts 5 Geo. 4. c. 74. and 6 Geo. 4. c. 12., which require that all weights and measures shall be exact models or copies in shape or form of the standards deposited in the exchequer; and those allowing the use of weights and measures, not in conformity with the Imperial standard, established by said acts; or that allow goods or merchandise to be bought or sold by weights or measures established by local custom, or founded on special agreement. It then goes on to enact as follows: —

Weights and Measures stamped at the Exchequer declared legal. — Weights and measures verified and stamped at the exchequer as copies of standard weights and measures, shall be taken to be legal weights and measures, to be used for comparison as copies of the Imperial standard weights and measures, although not similar in shape to those required under the provisions of the said acts; and the comptroller-general, or other duly authorised officer of the exchequer, may compare and verify, and stamp as correct, standard measures of a yard, standard weights and standard measures of capacity, any weights and measures which correspond in length, weight, and capacity with the standards, or parts or multiples thereof, deposited in the exchequer, under the 5 Geo. 4. c. 74., although such weights and measures may not be models or copies in shape or form of the standards so deposited. — § 4.

Copies of the Standard Weights and Measures worn to be re-verified. — All copies of the Imperial standard weights and measures which have become defective, or have been mended, in consequence of wear or accident, shall forthwith be sent to the exchequer, for the purpose of being again compared and verified, and shall be stamped as re-verified copies of such standard weights and measures, provided the comptroller-general, or other officer appointed for such verification, deem them fit for the purposes of standards; and every new comparison and verification shall be indorsed upon the original indenture of verification; and such weights and measures shall be stamped upon payment of fees of verification only; and the comptroller-general, or other officer, shall keep an account of all copies of the Imperial standard weights and measures verified at the exchequer. — § 5.

Local and Customary Measures abolished. — From and after the passing of this act, the Winchester bushel, the Scotch ell, and all *local or customary* measures, shall be abolished; and every person who shall sell by any measure other than one of the Imperial measures, or some multiple or aliquot part thereof, shall be liable to a penalty not exceeding 40*s.* for every such sale: but nothing therein shall prevent the sale of any articles in any vessel, where such vessel is not represented as containing any amount of Imperial measure, or of any fixed, local, or customary measure heretofore in use. — § 6.

Heaped Measure abolished. — From and after the passing of this act, so much of the said acts as relates to heaped measure is hereby repealed, and the use of heaped measure shall be abolished, and all bargains, sales, and contracts made after the passing of this act, by heaped measure, shall be null and void; and every person who shall sell any articles by heaped measure shall be liable to a penalty not exceeding 40*s.* for every such sale. — § 7.

Articles sold by Heaped Measure, how to be sold. — Whereas some articles heretofore sold by heaped measure are incapable of being stricken, and may not be conveniently sold by weight; it is enacted, that all such articles may henceforth be sold by a bushel measure, corresponding in shape with the bushel prescribed by the 5 Geo. 4. c. 74. for the sale of heaped measure, or by any multiple or aliquot part thereof, filled in all parts as nearly to the level of the brim as the size and shape of the articles will admit; but nothing herein shall prevent the sale by weight of any article heretofore sold by heaped measure. — § 8.

Coals to be sold by Weight. — From and after the 1st of January, 1836, all coals, slack, culm, and cannel of every description shall be sold by weight, and not by measure, under a penalty of 40*s.* for every sale. — § 9.

All Articles to be sold by Avoirdupois, except, &c. — From and after the passing of this act, all articles sold by weight shall be sold by avoirdupois weight, except gold, silver, platina, diamonds, or other precious stones, which may be sold by troy weight; and drugs, which, *when sold by retail*, may be sold by apothecaries' weight. — § 10.

The Stone, Hundred Weight, &c. — From and after the passing of this act, the weight denominated a stone shall, in all cases, consist of 14 standard pounds avoirdupois, the hundred weight of 8 such stones, and the ton of 20 such hundred weights; but nothing herein shall prevent any bargain, sale, or contract being made by any multiple or aliquot part of the pound weight. — § 11.

Contents of Weights and Measures to be stamped on them. — All weights made after the passing of this act of the weight of one pound avoirdupois, or more, shall have the number of pounds contained in them stamped or cast on the top or side thereof in legible figures and letters; and all measures of capacity made after the passing of this act, shall have their contents stamped or marked on the outside thereof in legible figures and letters. — § 12.

Weights of Lead or Pewter not to be stamped. — The stamping of weights of lead or pewter, or of any mixture thereof, is prohibited after the 1st of January, 1836; but nothing herein shall prevent the use of lead or pewter, or any mixture thereof, in the manufacture of weights wholly and substantially cased with brass, copper, or iron, and legibly stamped or marked "cased," or prevent the insertion of such a plug of lead or pewter into weights as shall be *bond fide* necessary for adjusting them and affixing the stamp thereon. — § 13.

Conversion of Rents, Tolls, &c. — Clause 14. and 15. regulate the proceedings that are to take place in England, Ireland, and Scotland, for the conversion of rents, tolls, &c. payable in weights or measures now abolished into Imperial standard weights and measures.

Fiar Prices. — In Scotland, from and after the passing of this act, the fiar prices of all grain in every county shall be struck by the Imperial quarter, and all other returns of the prices of grain shall be set forth by the same, without any reference to any other measure whatsoever; and any sheriff clerk, clerk of a market, or other person offending against this provision, shall forfeit not exceeding 5*l.* — § 16.

Copies of Standards, Inspectors, &c. — Clauses 17, 18, 19, and 20. prescribe the mode in which copies of the standard weights and measures shall be provided in counties, cities, boroughs, &c., the appointment of inspectors of weights and measures, &c. Clause 22. orders, that the expense of providing copies of standard weights, with the remuneration to inspectors, be defrayed out of the county rate. Clause 23. prohibits any maker or seller of weights or measures from being appointed inspector, and orders all inspectors to enter into a bond of 200*l.* for the due performance of the duties of their office, and the safe custody of the stamps and standard weights and measures committed to their care. Clause 24. orders inspectors to attend at market towns when ordered by justices. The following clauses are of general importance.

Magistrates to procure Stamps for Inspectors for stamping all Weights, &c. — In England, the justices in general or quarter sessions assembled, and in Scotland the justices and magistrates at a meeting called by the sheriff, and in Ireland the grand juries, shall provide the inspectors with good and sufficient stamps for stamping or sealing weights and measures; and all weights and measures whatsoever, except as herein excepted, used for buying and selling, or for the collecting of any tolls or duties, or for the making of any charges on the conveyance of any goods or merchandise, shall be examined and compared with one or more copies of the Imperial standard weights and measures provided under authority of this act for such inspectors, who shall stamp, so as best to prevent fraud, such weights and measures, if they be found to correspond with the said copies; and the fees for such examination, comparison, and stamping shall be those in the schedule at the end of this act; and every person using any weight or measure other than those authorised by this act, or some aliquot part thereof, or which has not been stamped as aforesaid, except as herein excepted, or which shall be found light or otherwise unjust, shall forfeit not exceeding 5*l.*; and any contract, bargain, or sale made by such weights or measures shall be wholly null and void; and every light or unjust weight and measure shall, on being discovered by any inspector, be seized, and, on conviction, forfeited; but nothing herein shall require any single weight above 56 lbs. to be inspected and stamped, nor any wooden or wicker measure used in the sale of lime, or other articles of the like nature, or any glass or earthenware jug or drinking cup, though represented as containing the amount of any Imperial measure, or of any multiple thereof; but any person buying by any vessel represented as containing the amount of an Imperial measure, or of any multiple thereof, is authorised to require the contents of such vessel to be ascertained by comparison with a stamped measure, such measure to be provided by the person using such wooden or wicker measure, glass, jug, or drinking cup; and in case the person using such last-mentioned measure or vessel refuse to make such comparison, or if, upon comparison being made, it be found to be deficient in quantity, the person using the same shall be subject to the forfeitures and penalties imposed on those using light or unjust weights or measures. — § 21.

Weights and Measures once stamped need not be re-stamped. — No weight or measure duly stamped by any inspector appointed under the 4 & 5 Will. 4. c. 49., or this act, or by any person or persons authorised to examine and stamp weights or measures, shall be liable to be re-stamped, although the same be used in any other place than that at which it was originally stamped, but shall be considered as a legal weight or measure throughout the U. K., unless found to be defective or unjust — § 27.

Power to Justices, &c. to enter Shops and inspect Weights and Measures. — Justices, sheriffs, magistrates, and inspectors are authorised to examine weights and measures, and to order such as are light or otherwise unjust to be seized and forfeited; those using such weights and measures are subjected to a penalty of not more than 5*l.*; and a like penalty is imposed on those refusing to produce such weights and measures, or obstructing the magistrates. — § 28.

Penalties on Inspectors counterfeiting Stamps, &c. — Inspectors or other persons authorised to inspect weights or measures, who shall stamp any weight or measure without verifying the same, or who shall otherwise misconduct themselves in their office, shall for every such offence forfeit not more than 5*l.*; persons forging or counterfeiting any stamp or mark used for stamping or marking weights or measures, forfeit for every offence not more than 50*l.* and not less than 10*l.*; and persons knowingly using weights or measures marked with such counterfeit stamps, forfeit for every offence not more than 10*l.* nor less than 2*l.* — §§ 29, 30.

Penalty on Price Lists, &c. — From and after the 1st of January, 1836, any person printing, or clerk of any market or other person making any return, price list, price current, or any journal or other paper containing price list or price current, in which the weights and measures quoted or referred to denote or imply a greater or less weight or measure than is denoted or implied by the same denomination of Imperial weights and measures under the provisions of this act, shall forfeit and pay not exceeding 10*s.* for *every copy* of every such return, price list, price current, journal, or other paper which they publish. — § 31.

The remaining clauses relate to the recovery of penalties; and save the rights of the Founders' Company, and of the Universities of Oxford and Cambridge

Schedule of fees to be taken by all inspectors of weights and measures appointed under the authority of this act: —

For examining, comparing, and stamping all brass weights, within their respective jurisdictions, —

	s.	*d.*
Each half hundred weight	0	9
Each quarter of a hundred weight	0	6
Each stone	0	4
Each weight under a stone to a pound inclusiv		
Each weight under a pound		
Each set of weights of a pound and under		

For examining, comparing, and stamping all iron weights, or weights of other descriptions, not made of brass, within their respective jurisdictions, —

Each half hundred weight	0	
Each quarter of a hundred weight	0	2
Each stone	0	1
Each weight under a stone	0	0½
Each set of weights of a pound and under	0	2

For examining, comparing, and stamping all wooden measures, within their respective jurisdictions, —

	s.	*d.*
Each bushel	0	3
Each half bushel	0	2
Each peck, and all under	0	1
Each yard	0	0½

For examining, comparing, and stamping all measures of capacity of liquids, made of copper or other metal, within their respective jurisdictions, —

	s.	*d.*
Each five gallon	1	0
Each four gallon	0	9
Each three gallon	0	6
Each two gallon	0	4
Each gallon	0	2
Each half gallon	0	1
Each quarter and under	0	0½

Invariable or Natural Standards. — As the standards adopted in most countries have been in a great degree arbitrary, it has long been the opinion of scientific men, that, to construct a more perfect system of weights and measures, some natural and unchangeable basis should be adopted. It has, indeed, been contended by Pauctun and Bailly, that the measures of the ancients were deduced from a basis of this sort; and that the *stadium* always formed an aliquot part of the earth's circumference, that part differing amongst different nations and authors. But no learning or ingenuity can induce any one to believe what is so obviously incredible. The ancients had no means of determining the earth's circumference with any thing like the accuracy required to render it the great unit of a system of measures; and, what is equally decisive, no ancient author ever makes the slightest allusion to any such standard.

In more modern times, however, the idea of seeking for a unit of weight and measure in some unchanging natural object has been practically carried into effect. The standards that have been usually proposed for this object, have been some aliquot part of the quadrant of the meridian, or the length of a pendulum vibrating seconds in some given latitude. The latter has been in so far adopted into the existing system of weights and measures established by the act of 1823, that the length of the standard yard, as compared with that of a pendulum vibrating seconds in the latitude of London, is specified in the act as follows: —

"Whereas it has been ascertained by the commissioners appointed by his Majesty to inquire into the subject of weights and measures, that the said yard hereby declared to be the Imperial standard yard, when compared with a pendulum vibrating seconds of mean time in the latitude of London, in a vacuum at the level of the sea, is in the proportion of 36 inches to 39 inches and 1,393 ten-thousandth parts of an inch; be it therefore enacted and declared, that if at any time hereafter the said Imperial standard yard shall be lost, or shall be in any manner destroyed, defaced, or otherwise injured, it shall and may be restored by making, under the direction of the Lord High Treasurer, or the commissioners of his Majesty's treasury of the United Kingdom of Great Britain and Ireland, or any 3 of them for the time being, a new standard yard, bearing the same proportion to such pendulum as aforesaid, as the said Imperial standard yard bears to such pendulum."

TABLES OF ENGLISH WEIGHTS AND MEASURES, ACCORDING TO THE NEW OR IMPERIAL MEASURE.

IMPERIAL TROY WEIGHT.

The standard pound containing 5,760 grs.

			French Grammes.
	1 Grain	=	0·0648
24 Grains -	1 Pennyweight	=	1·5552
20 Pennyweights -	1 Ounce	=	31·1027
12 Ounces -	1 Pound	=	373·2330

Troy weight is used in the weighing of gold, silver, jewels, &c. It is also used in ascertaining the strength of spirituous liquors; in philosophical experiments; and in comparing different weights with each other.

APOTHECARIES' WEIGHT.

			Fr. Gram.
	1 Grain -	=	0·0648
20 Grains -	1 Scruple -	=	1·296
3 Scruples -	1 Dram -	=	3·888
8 Drams -	1 Ounce -	=	31·102
12 Ounces -	1 Pound -	=	373·233

This weight is essentially the same as Troy weight, but differently divided. It is chiefly used for medical prescriptions; but drugs are mostly bought and sold by avoirdupois weight.

DIAMOND WEIGHT. — Diamonds and other precious stones are weighed by carats, the carat being divided into 4 grains, and the grain into 16 parts. The diamond carat weighs $3\frac{1}{5}$ grains Troy: thus,

Diamond Weight.		Troy Weight. Decigrammes.
16 Parts -	1 Grain -	$0\frac{8}{10}$ Grains - = $51\frac{1}{2}$
4 Grains -	1 Carat -	$3\frac{1}{5}$ — - - = $205\frac{1}{4}$

IMPERIAL AVOIRDUPOIS WEIGHT.

			Fr. Gram.
	1 Dram -	=	1·771
16 Drams -	1 Ounce -	=	28·346
16 Ounces -	1 Pound -	=	453·544
28 Pounds -	1 Quarter -	=	12·699 kil.
4 Quarters -	1 Hundred wt.	=	50·796 —
20 Hundred wt. -	1 Ton -	=	1015·920 —

The dram is subdivided into 3 scruples, and each scruple into 10 grains; the pound, or 7,640 grains avoirdupois, equals 7,000 grains Troy, and hence 1 grain Troy equals 1·097 grains avoirdupois.

Hence also 144 lbs. avoirdupois = 175 lbs. Troy.
and - 192 oz. ditto = 175 oz. ditto.

The stone is generally 14 lbs. avoirdupois weight, but for butcher's meat or fish it is 8 lbs. Hence, the hundred weight (cwt.) equals 8 stone of 14 lbs. or 14 stone of 8 lbs.

A stone of glass is 5 lbs. A seam of glass 24 stone, or 120 lbs.

Hay and straw are sold by the load of 36 trusses. The truss of hay weighs 56 lbs. and of straw 36 lbs. The truss of new hay is 60 lbs. until the 1st of September.

The custom of allowing more than 16 ounces to the pound of butter used to be very general in several parts of the country.

CHEESE AND BUTTER.

8 Pounds	=	1 Clove.
32 Cloves -	=	1 Wey in Essex.
42 do. -	=	1 do. in Suffolk.
56 Pounds	=	1 Firkin of Butter.

IMPERIAL LONG MEASURE.

			Fr. Metres.
12 Inches -	1 Foot -	=	0·3048
3 Feet -	1 Yard -	=	0·9144
$5\frac{1}{2}$ Yards -	1 Pole or Rod	=	5·0291
40 Poles -	1 Furlong -	=	201·1632
8 Furlongs -	1 Mile -	=	1609·3059
3 Miles -	1 League -	=	4827·9179
60 Geographical or $69\frac{1}{5}$ Eng. Miles	1 Degree -	=	111·20·7442

Besides the above, there are the palm, which equals 3 inches; the hand, 4 inches; the span, 9 inches; and the fathom, 6 feet.

IMPERIAL SUPERFICIAL MEASURE.

			Fr. Sq. Metres.
144 Inches -	1 Square foot	=	0·0929
9 Square feet -	1 Square yard	=	0·8316
$30\frac{1}{4}$ Square yards -	1 Square pole	=	25·2961
40 Square poles -	1 Rood	=	1011·6562
4 Roods -	1 Acre	=	4046·6618

The inch is generally divided, on scales, into 10ths, or decimal parts; but in squaring the dimensions of artificers' work, the duodecimal system is adopted; the inch being divided into 12 parts or lines, each part into 12 seconds, and each second into 12 thirds.

Land is usually measured by a chain of 4 poles, or 22 yards, which is divided into 100 links. Ten chains in length and 1 in breadth make an acre, which equals 160 square perches, or 4,840 square yards.

CUBIC OR SOLID MEASURE.

			Fr. Cubic Metres.
1,728 Cubic inches -	1 Cubic foot -	=	·0283
27 Cubic feet -	1 Cubic yard -	=	·7654
40 Feet of rough timber, or 50 Feet hewn do.	1 Load or Ton	=	1·1326 / 1·4157
12 Cubic feet -	1 Ton of shipping	=	1·1892

By cubic measure, marble, stone, timber, masonry, and all artificers' works of length, breadth, and thickness, are measured, and also the contents of all measures of capacity, both liquid and dry.

IMPERIAL LIQUID AND DRY MEASURE.

Deduced from the Standard Gallon, containing 10 lbs. weight of distilled water, temperature 62°, barometer 30 inches.

Weight of Water	Cubic Feet.	Cubic Inches	Gills.	Pints.	Quarts.	Pottles.	Gallons.	Pecks.	Bushels.	Coombs.	Quarter.
5 oz.		8·665	1								
lbs. 1¼		34·659	4	1							
2½		69·318	8	2	1						
5		138·637	16	4	2	1					
10		277·274	32	8	4	2	1				
20		554·548	64	16	8	4	2	1			
80	1·2837	2218·191	256	64	32	16	8	4	1		
320	5·1347	8872·765	1,024	256	128	64	32	16	4	1	
640	10·2694	17745·526	2,048	512	256	128	64	32	8	2	1

The dimensions of the Imperial standard bushel are as follows:—The outer diameter 19½ inches, and the inner diameter 18½. The depth is 8, and the height of the cone, for heaped measure, is 6 inches. The contents of the Imperial heaped bushel were 2815·4887 cubic inches. The subdivisions and multiples are in the same proportion.

WOOL WEIGHT.

Like all other bulky articles, wool is weighed by avoirdupois weight, but the divisions differ; thus,

7 Pounds	=	1 Clove.	6½ Tods	=	1 Wey.
2 Cloves	=	1 Stone.	2 Weys	=	1 Sack.
2 Stone	=	1 Tod.	12 Sacks	=	1 Last.

A pack of wool contains 240 lbs.

OLD MEASURES SUPERSEDED BY THE IMPERIAL SYSTEM.

OLD WINE MEASURE.

		Cub. In.		Fr. Litres.
	1 Pint	28·875	=	0·4731
2 Pints	1 Quart	57·75	=	0·9463
4 Quarts	1 Gallon	231	=	3·7854
42 Gallons	1 Tierce	5·614 feet	=	158·9673
2 Tierces	1 Puncheon	11·228	=	317·9345
63 Gallons	1 Hogshead	8·421	=	238·4509
2 Hogshds.	1 Pipe or Butt	16·842	=	476·9018
2 Pipes	1 Tun	33·684	=	953·8036

The pint is subdivided into halves and quarters; the latter is called a gill. A rundlet is 18 gallons, and an anker 9.

Conversion of Old Wine Measure into Imperial Measure.—The old wine gallon contains 231 cubic inches, and the Imperial gallon 277·274 ditto. Hence to convert wine gallons into Imperial gallons, multiply by $\frac{231}{277 \cdot 274}$, or by ·83311; and to convert Imperial gallons into wine gallons, multiply by the reciprocal fraction $\frac{277 \cdot 274}{231}$, or by 1·20032. But for most practical purposes, wine measure multiplied by 5 and divided by 6 will give Imperial measure with sufficient accuracy, and conversely.

N.B.—The multipliers and divisors employed to reduce old wine, ale, &c. measures to Imperial measure, serve also to reduce prices by the former to the latter.

We subjoin, from the very complete and valuable work of Mr. Buchanan, of Edinburgh, on Weights and Measures, a

Table of English Wine Gallons, from 1 to 100, with their Equivalents in Imperial Gallons.

Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.
1	0·83311	26	21·66088	51	42·48866	76	63·31643
2	1·66622	27	22·49399	52	43·32177	77	64·14954
3	2·49933	28	23·32711	53	44·15488	78	64·98265
4	3·33244	29	24·16022	54	44·98799	79	65·81576
5	4·16555	30	24·99333	55	45·82110	80	66·64887
6	4·99867	31	25·82644	56	46·65421	81	67·48198
7	5·83178	32	26·65955	57	47·48732	82	68·31509
8	6·66489	33	27·49266	58	48·32043	83	69·14820
9	7·49800	34	28·32577	59	49·15354	84	69·98132
10	8·33111	35	29·15888	60	49·98665	85	70·81443
11	9·16422	36	29·99199	61	50·81976	86	71·64754
12	9·99733	37	30·82510	62	51·65288	87	72·48065
13	10·83044	38	31·65821	63	52·48599	88	73·31376
14	11·66355	39	32·49133	64	53·31910	89	74·14687
15	12·49666	40	33·32444	65	54·15221	90	74·97998
16	13·32977	41	34·15755	66	54·98532	91	75·81309
17	14·16289	42	34·99066	67	55·81843	92	76·64620
18	14·99600	43	35·82377	68	56·65155	93	77·47931
19	15·82910	44	36·65688	69	57·48465	94	78·31242
20	16·66222	45	37·48999	70	58·31776	95	79·14554
21	17·49533	46	38·32310	71	59·15087	96	79·97865
22	18·32844	47	39·15666	72	59·98398	97	80·81176
23	19·16155	48	39·98932	73	60·81710	98	81·64487
24	19·99466	49	40·82243	74	61·65021	99	82·47798
25	20·82777	50	41·65555	75	62·48332	100	83·31109

Hence, supposing the former denominations to be preserved, a tierce of wine = 35 Imperial gallons very nearly; a puncheon = 70 ditto very nearly; a hogshead = 52½ ditto very nearly; a pipe or butt = 105 ditto very nearly; and a tun = 210 ditto very nearly.

OLD ALE AND BEER MEASURE.

			Cub. In.		Fr. Litres.
	1 Pint	-	35·25	- =	0·5776
2 Pints	1 Quart	-	70·5	- =	1·1552
4 Quarts	1 Gallon	-	282	- =	4·6208
8 Gallons	1 Firkin ale		1·305 feet	=	36·9669
9 Gallons	1 ditto beer		1·468	— =	41·5872
2 Firkins	1 Kilderkin		2·937	— =	83·1744
2 Kilderkins	1 Barrel		5·875	— =	166·3488
1½ Barrel	1 Hogshead		8·812	— =	249·5232
2 Barrels	1 Puncheon		10·750	— =	332·6976
2 Hogsheads	1 Butt	-	17·624	— =	499·0464
2 Butts	1 Tun	-	35·248	— =	998·0928

Conversion of Old Ale and Beer Measure into Imperial Measure.—The old ale gallon contains 282 cubic inches, and the Imperial standard gallon 277·274 ditto. Hence, to convert ale gallons into Imperial gallons, multiply by $\frac{282}{277 \cdot 274}$, or by 1·0170415; and to convert Imperial gallons into ale gallons, multiply by the reciprocal fraction $\frac{277 \cdot 274}{282}$, or by ·9832411. Unless extreme accuracy be required, the first 3 decimals need only be used. And for most practical purposes, ale measure multiplied by 59 and divided by 60 will give Imperial measure with sufficient accuracy, and conversely.

Table of English Ale Gallons, from 1 to 100, with their Equivalents in Imperial Gallons.

Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.
1	1·01701	26	26·44316	51	51·86927	76	77·29538
2	2·03409	27	27·46020	52	52·88631	77	78·31243
3	3·05115	28	28·47725	53	53·90336	78	79·32947
4	4·06818	29	29·49429	54	54·92040	79	80·34652
5	5·08522	30	30·51134	55	55·93745	80	81·36356
6	6·10226	31	31·52838	56	56·95449	81	82·38060
7	7·11931	32	32·54542	57	57·97154	82	83·39765
8	8·13636	33	33·56247	58	58·98858	83	84·41469
9	9·15340	34	34·57951	59	60·00563	84	85·43174
10	10·17045	35	35·59656	60	61·02267	85	86·44878
11	11·18749	36	36·61360	61	62·03971	86	87·46583
12	12·20455	37	37·63065	62	63·05676	87	88·48287
13	13·22158	38	38·64769	63	64·07380	88	89·49992
14	14·23862	39	39·66474	64	65·09085	89	90·51696
15	15·25567	40	40·68178	65	66·10789	90	91·53401
16	16·27271	41	41·69882	66	67·12494	91	92·55105
17	17·28976	42	42·71587	67	68·14198	92	93·56809
18	18·30680	43	43·73291	68	69·15903	93	94·58514
19	19·32385	44	44·74996	69	70·17607	94	95·60218
20	20·34089	45	45·76700	70	71·19312	95	96·61923
21	21·35793	46	46·78405	71	72·21016	96	97·63627
22	22·37498	47	47·80109	72	73·22720	97	98·65332
23	23·39202	48	48·81814	73	74·24425	98	99·67036
24	24·40907	49	49·83518	74	75·26129	99	100·68741
25	25·42611	50	50·85223	75	76·27834	100	101·70445

OLD DRY OR WINCHESTER MEASURE.

			Cub. In.		Fr. Litres.
4 Gills	1 Pint	-	33·6	- =	0·55053
2 Pints	1 Quart	-	67·2	- =	1·10107
2 Quarts	1 Pottle	-	134·4	- =	2·20214
2 Pottles	1 Gallon	-	268·8	- =	4·40428
2 Gallons	1 Peck	-	537·6	- =	8·80856
4 Pecks	1 Bushel	-	2150·42	- =	35·23430
4 Bushel	1 Coom	-	4·977 feet	=	140·93721
2 Cooms	1 Quarter	-	9·954	— =	281·87443
5 Quarters	1 Wey or Load		49·770	— =	1409·37216
2 Weys	1 Last	-	99·540	— =	2818·74432

The Winchester bushel is 18½ inches wide, and 8 inches deep. Corn and seeds are measured by striking the bushel from the brim, with a round piece of light wood, about 2 inches in diameter, and of equal thickness from one end to the other. All other dry goods are heaped.

Conversion of Winchester Bushels into Imperial Bushels.—The Winchester bushel contains 2150·42 cubic inches, and the Imperial standard bushel 2218·192 ditto. Hence, to convert Winchester bushels into Imperial bushels, multiply by $\frac{2150 \cdot 42}{2218 \cdot 192}$, or by ·969447; and to convert Imperial bushels into Winchester bushels, multiply by the reciprocal fraction $\frac{2218 \cdot 192}{2150 \cdot 42}$, or 1·0315157. For practical purposes, multiply Winchester measure by 31 and divide by 32 for Imperial measure, and the contrary.

In some markets, corn is sold by weight, which is the fairest mode of dealing, though not the most convenient in practice. Even where measures are used, it is customary to weigh certain quantities or proportions, and to regulate the prices accordingly. The average bushel of wheat is generally reckoned at 60 lbs. — of barley 47 lbs. — of oats 38 lbs. — peas 64, beans 63, clover 68, rye and canary 53, and rape 48 lbs. In some places, a load of corn, for a man, is reckoned 5 bushels, and a cart load 40 bushels.

Table of Winchester Quarters, from 1 to 100, with their Equivalents in Imperial Quarters.

Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.
1	1·036945	26	26·961562	51	52·886180	76	78·810797
2	1·073889	27	28·012507	52	53·923124	77	79·847742
3	2·110834	28	29·044452	53	54·960069	78	80·884687
4	3·147779	29	30·081396	54	55·997014	79	81·921631
5	4·184724	30	31·118341	55	57·033959	80	82·958576
6	5·221668	31	32·155286	56	58·070903	81	83·995521
7	6·258613	32	33·192230	57	59·107848	82	85·032465
8	7·295558	33	34·229175	58	60·144792	83	86·069410
9	8·332503	34	35·266120	59	61·181737	84	87·106355
10	9·369447	35	36·303065	60	62·218682	85	88·143300
11	10·406392	36	37·340009	61	63·255627	86	89·180244
12	11·443336	37	38·376954	62	64·292571	87	90·217189
13	12·480281	38	39·413899	63	65·329516	88	91·254134
14	13·517226	39	40·450843	64	66·366461	89	92·291078
15	14·554171	40	41·487788	65	67·403406	90	93·328023
16	15·591115	41	42·524733	66	68·440350	91	94·364968
17	16·628060	42	43·561677	67	69·477295	92	95·401912
18	17·665005	43	44·598622	68	70·514240	93	96·438857
19	18·701949	44	45·635567	69	71·551184	94	97·475802
20	19·738894	45	46·672512	70	72·588129	95	98·512747
21	20·775839	46	47·709456	71	73·625074	96	99·549691
22	21·812783	47	48·746401	72	74·662018	97	100·586636
23	22·849728	48	49·783346	73	75·698963	98	101·623581
24	23·886673	49	50·820290	74	76·735908	99	102·660525
25	24·923618	50	51·857235	75	77·772853	100	103·697470

COAL MEASURE.

Coals were formerly sold by the chaldron, which bears a certain proportion to Winchester measure.

4 Pecks	-	=	1 Bushel.
3 Bushels	-	=	1 Sack.
3 Sacks	-	=	1 Vat.
4 Vats	-	=	1 Chaldron.
21 Chaldrons	-	=	1 Score.

The coal bushel holds 1 Winchester quart more than the Winchester bushel; its contents being 2217·62 cubic inches. It is 19¼ inches wide from outside to outside, and 8 inches deep. In measuring coals it was heaped up in the form of a cone, to the height of at least 6 inches above the brim (according to a regulation passed at Guildhall in 1806), the outside of the bushel being the extremity of the cone, so that the bushel should contain at least 2814·9 cubic inches, nearly equal to the Imperial heaped bushel. Hence the chaldron should measure 58·64 cubic feet.

But the sale of coals by measure has, in consequence of the frauds to which it led — (*see antè*, p. 284.), — been abolished; and they are now sold by weight.

Of Wood Fuel, English Measure. — Wood fuel is assized into shids, billets, faggots, fall wood, and cord wood. A shid is to be 4 feet long, and, according as they are marked and notched, their proportion must be in the girth; viz. if they have but 1 notch, they must be 16 inches in the girth; if 2 notches, 23 inches; if 3 notches, 28 inches; if 4 notches, 33 inches; and if 5 notches, 38 inches about. Billets are to be 3 feet long, of which there should be 3 sorts; viz. a single cask, and a cask of 2; the 1st is 7 inches, the 2d 10 inches, and the 3d 14 inches about: they are sold by the 100 of 5 score. Faggots are to be 3 feet long, and at the band 24 inches about, besides the knot of such faggots; 50 go to the load. Bavins and spray wood are sold by the 100, which are accounted a load. Cord wood is the bigger sort of fire wood, and it is measured by a cord, or line, whereof there are 2 measures; that of 14 feet in length, 3 feet in breadth, and 3 feet in height. The other is 8 feet in length, 4 feet in height, and 4 feet in breadth.

MEASURES OF WOOD.

1,000 Billets of wood	-	=	1 Cord.
10 cwt. of ditto	-	=	1 Cord.
1 Cord of wood	-	=	¼ Chaldron of coals.
100 lbs. of wood	-	=	1 Quintal of wood.

French System of Weights and Measures. — The new metrical system established in France subsequently to the Revolution, is founded on the measurement of the quadrant of the meridian, or of the distance from the pole to the equator. This distance having been determined with the greatest care, its ten-millionth part was assumed as the *mètre*, or unit of length, all the other lineal measures being multiples or submultiples of it, in decimal proportion. The mètre corresponds pretty nearly to the ancient French *aune*, or yard, being equal to 3·07844 French feet, or 3·281 English feet, or 39·3708 English inches.

The unit of weight is the *gramme*, which is a cubic centimètre, or the 100th part of a mètre of distilled water of the temperature of melting ice; it weighs 15·434 English Troy grains.

In order to express the decimal proportion, the following vocabulary of names has been adopted, in which the terms for multiplying are Greek, and those for dividing Latin.

For multipliers, the word

Deca prefixed means	-		10 times.
Hecto	-	-	100 —
Kilo	-	-	1,000 —
Myria	-	-	10,000 —

On the contrary, for divisors,

the word *Deci* expresses the			10th part.
Centi	-	-	100th —
Milli	-	-	1,000th —

Thus, *Decamètre* means 10 mètres.

Decimètre — the 10th part of a mètre.

Kilogramme — 1,000 grammes, &c.

The *are* is the element of square measure, being a square decamètre, equal to 3·955 English perches.

The *stère* is the element of cubic measure, and contains 35·317 cubic feet English.

The *litre* is the element of all measures of capacity. It is a cubic decimètre, and equals 2·1135 English pints. 100 litres make the hectolitre, which equals 26·419 wine gallons, or 2·838 Winchester bushels.

SYSTEME USUEL, OR BINARY SYSTEM. — This new system has the metrical standards for its basis, but their divisions are binary, that is, by 2, 4, 8, &c.; and instead of the new vocabulary, the names of the ancient weights and measures are used, annexing the term *usuel* to each. Thus the half kilogramme is called the livre usuelle, and the double mètre, the toise usuelle.

The following Tables show the proportions between the new or metrical French system and the English system: —

Comparison of FRENCH and ENGLISH WEIGHTS and MEASURES, containing the New or Metrical Weights and Measures of France, with their Proportion to those of England, both according to the Decimal System and the Système usuel.

DECIMAL SYSTEM.

Long Measures.

French.			English.
Millimètre	-	=	0·03937 inches.
Centimètre	-	=	0·3971 —
Decimètre	-	=	3·93710 —
Mètre	-	=	39·37100 —
Decamètre	-	=	32·80916 feet.
Hectomètre	-	=	328·09167 —
Kilomètre	-	=	1093·63890 yards.
Myriamètre	-	=	10936·38900 —
			or 6 miles 1 furlong 28 poles.

Solid Measures.

Décistère	-	=	3··317 cubic feet.
Stère (a cubic mètre)	-	=	35·3174 —
Décastère	-	=	353·1741 —

Measures of Capacity.

Millitre	=	0·06103 cubic inches.
Centilitre	=	0·61028 —
Décilitre	=	6·10280 —
Litre (a cubic decimètre)	=	61·02903 cubic inches, or 2·1135 wine pints.
Décalitre	=	610·28028 cubic inches, or 2·642 wine gallons.
Hectolitre	=	3·5317 cubic feet, or 26·419 wine gallons, 22 Imperial gallons, or 2·839 Winchester bushels.
Kilolitre	=	35·3171 cubic feet, or 1 tun and 12 wine gallons.
Myrialitre	=	353·17146 cubic feet.

Superficial Measures.

Centiare	=	1·1960 sq. yards.
Are (a square decamètre)	=	119·6046 —
Décare	=	1196·0460 —
Hectare	=	11960·4604 — or 2 acres 1 rood 35 perches.

Weights.

Miligramme	=	0·0154 grains.
Centigramme	=	0·1543 —
Décigramme	=	1·5434 —
Gramme	=	15·4340 —
Décagramme	=	154·3402 — or 5·64 drams avoirdupois
Hectogramme	=	3·2154 oz. Troy, or 3·527 oz. avoirdupois.
Kilogramme	=	2 lbs. 8 oz. 3 dwt. 2 grs. Troy, or 2 lbs. 3 oz. 4·652 drams avoirdupois
Myriagramme	=	26·795 lbs. Troy, or 22·0485 lbs. avoirdupois.
Quintal	=	1 cwt. 3 qrs. 25 lbs. nearly.
Millier, or Bar	=	9 tons 16 cwt. 3 qrs. 12 lbs.

SYSTEME USUEL.

Comparison of Weight.

	Grammes.	Troy Weight. Lbs.	oz.	dwt.	gr.	Avoirdupois. Lbs.	oz.	dr.
Kilogramme	1,000	= 2	8	3	2	2	3	4½
Livre usuelle	500	= 1	4	1	13	1	1	10½
Half	250	=	8	0	18·5		8	13⅛
Quarter	125	=	4	0	9·25		4	6⅝
Eighth	62·5	=	2	0	4·5		2	3¼
Once	31·3	=	1	0	2·25		1	1⅝
Half	15·6	=		10	1·125			8⅛
Quarter	7·8	=		5	0·5			4⅛
Gros	3·9	=		2	12·25			2⅛

Comparison of Linear Measure.

Mesures usuelles		English Measure. Mètres.	Feet.	Inch.	Parts.
Toise usuelle		2 =	6	6	9
Pied, or foot		$0\frac{1}{3}$ =	1	1	$1\frac{1}{3}$
Inch		$0\frac{1}{36}$ =	0	1	$1\frac{1}{6}$
Aune		$1\frac{1}{2}$ =	3	11	3
Half		$0\frac{1}{2}$ =	1	11	$7\frac{1}{8}$
Quarter		$0\frac{1}{10}$ =	0	11	$9\frac{3}{5}$
Eighth		$0\frac{3}{20}$ =	0	5	$10\frac{7}{8}$
Sixteenth		$0\frac{3}{40}$ =	0	2	$11\frac{7}{16}$
One third of an aune		$0\frac{1}{2}$ =	1	3	9
Sixth		$0\frac{1}{3}$ =	0	7	$10\frac{1}{2}$
Twelfth		$0\frac{1}{10}$ =	0	3	$11\frac{1}{4}$

Comparison of Measures of Capacity.

	Litres.	Eng. Winch. Bush.
Boisseau usuel	12·5 =	0·35474

With halves and quarters in proportion.

	Paris Pinte.	English Pint.
Litron usuel	1·074 =	$2\frac{1}{9}$

With halves and quarters in proportion.

Ancient Weights and Measures. — This subject is involved in considerable difficulty; and to enter fully into it would be quite inconsistent with our objects and limits. But the following details, abstracted from the best authorities, may be useful to such of our readers as have occasion to look into the ancient authors.

TABLE OF VARIOUS ANCIENT WEIGHTS (*according to different Authorities*).

	English Troy Grains.	
Attic obolus	8·2	Christiani.
	9·1	Arbuthnot.
Attic drachma	51·9	Chr.
	54·6	Arb.
	69	Paucton.
Lesser Mina	3,892	Chr.
Greater Mina	5,189	Chr.
	5,464	Arb.
	6,900	Pauc.
Medical Mina	6,994 gr.	Arb.
Talent = 60 minæ =	½ cwt. English.	
Old Greek drachm	146·5	Eng. Troy gr. Arb.
	62·5 =	Roman denarius, Arb.
Old Greek mina	6,425	Do.
Egyptian mina	8,326	Do.
Ptolemaic mina of Cleopatra	8,985	Do.
Alexandrian mina of Dioscorides	9,992	Do.
Roman denarius	51·9 =	⅙ Rom. oz. Chr.
	62·5 =	⅕ Rom. oz. Arb.
Denarius of Nero	54	Pauc.
Papyrius	61·7	Do.
Ounce	415·1	Chr.
	437·2	Arb.
	431·2	Pauc.
Pound of 10 oz.	4,150	Chr.
12 oz.	4,981	Chr.
	6,246	Arb.
	5,174·4	Pauc.

SCRIPTURE MEASURES OF LENGTH. — (*Arbuthnot and Hutton.*)

	Inches.
Digit	0·7425
Palm	2·97
Span	8·91
	Eng. Feet.
Lesser cubit	1·485
Sacred cubit	1·7325
	Yards.
Fathom	2·31
Ezekiel's reed	3·465
Arabian pole	4·62
Schœnus	46·2
Stadium	231
Sabbath day's journey	1,155
	Miles.
Eastern mile	1·886
Parasang	4·158
Day's journey	33·264

GRECIAN MEASURES OF LENGTH. — (*Arbuthnot and Hutton.*)

	Inches.
Dactylos	0·75546
Doron / Dochme	3·02187
Dichas	7·55468
Orthodoron	83·1015
Spithame	9·06562
Pous	12·0875
	Eng. Feet.
Pous	1·00729
Pygme	1·13203
Pygon	1·25911
Pechys	1·51093
	Eng. Paces.
Orgya	1 00729
Stadios / Dulos	100·72916
Milion	805·8333

ROMAN MEASURES OF LENGTH. — (*Arbuthnot and Hutton.*)

	Eng. Inches.
Digitus transversus	0·72525
Uncia, the ounce	0·967
Palmus minor	2·901
Pes, the foot	11·604
	Eng. Feet.
Palmipes	1·20875
Cubitus	1·4505
Gradus	2·4175
	Paces.
Passus	0·967
Stadium	120·875
Miliare	967

ROMAN DRY MEASURES. — (*Arbuthnot and Hutton.*)

	Eng. Pints.
Hemina	0·5074
Sextarius	1·0148
	Eng. Peck.
Modius	1·0141

ATTIC DRY MEASURES.

	Eng. Pints.
Xestes	0·9903
Chenix	1·486
	Winch. Bush.
Medimnus	1·0906

JEWISH DRY MEASURES (*according to Josephus*).

	Eng. Pints.
Gachal	0·1949
Cab	3·874
Gomer	7·0152
	Eng. Peck.
Seah	1·4615
	Winch. Bush.
Ephah	1·0961
Latech	5·4807
	Quarter.
Corom } Chomer }	1·3702

ROMAN MEASURES FOR LIQUIDS. — (*Arbuthnot and Hutton.*)

	Eng. Pints.
Hemina	0·59759
Sextarius	1·19518
Congius	7·1712
	Wine Gall.
Urna	3·5857
Amphora	7·1712
	Hhds.
Culeus	2·2766

ATTIC MEASURES FOR LIQUIDS.

	Eng. Pints.
Cotylus	0·5742
Xestes	1·1483
Chous	6·8900
	Wine Gall.
Metcotes	10·3350

JEWISH MEASURES FOR LIQUIDS.

	Eng. Pints.
Caph	0·8612
Log	1·1483
Cab	4·5933
	Wine Gall.
Hin	1·7225
Seah	3·4450
Bath	10·3350
	Hhds.
Coron	1·6405

WELD, OR DYER'S WEED (Ger. *Wau*; Du. *Wouw*, *Wouwe*; Fr. *Gaude*; It. *Guadarella*; Lat. *Luteola*), is an imperfect biennial, with small fusiform roots, and a leafy stem from 1 to 3 feet in height. It is a native of Britain, Italy, and various parts of Europe; and is cultivated for the sake of its stalk, flowers, and leaves, which are employed in the dyeing of yellow, whence its botanical name *Reseda luteola*. Weld requires the growth of nearly 2 summers before it comes to maturity; and the crop is liable to fail from so many causes, and is besides so exhausting, that its cultivation is by no means profitable, and is only carried on, in this country at least, to a small extent, principally in Essex. Weld is preferred to all other substances in giving the lively green lemon yellow. It is, however, expensive; and it is found, when employed in topical dyeing, to degrade and interfere with madder colours more than other yellows, and to stain the parts wanted to be kept white. Hence quercitron bark is now employed in calico printing, to the almost total exclusion of weld. It is still, however, employed in dyeing silk a golden yellow, and in paper staining. — (*London's Ency. of Agriculture*; *Bancroft on Colours*, vol. ii. pp. 95—100.; *Rees's Cyclopædia.*)

WHALEBONE, a substance of the nature of horn, adhering in thin parallel laminæ to the upper jaw of the whale. These vary in size from 3 to 12 feet in length; the breadth of the largest at the thick end, where they are attached to the jaw, is about a foot. They are extremely elastic. All above 6 feet in length is called *size bone*.

Whalebone bore anciently a very high price, when the rigid stays and the expanded hoops of our grandmothers produced an extensive demand for this commodity. The Dutch have occasionally obtained 700*l.* per ton, and were accustomed to draw 100,000*l.* annually from England for this article. Even in 1763, it brought 500*l.*; but soon after fell, and has never risen again to the same value. During the present century the price has varied between 60*l.* and 300*l.*; seldom falling to the lowest rate, and rarely exceeding 150*l.* Mr. Scoresby reckoned the price, in the 5 years ending with 1818, at 90*l.*: in 1834 it amounted to from 130*l.* to 145*l.*; and at present (1844) it varies from 280*l.* for Southern to 350*l.* for Northern. This is for what is called *size bone*, or such pieces as measure 6 feet or upwards in length; those below this standard are usually sold at half price. It may appear singular that whalebone should rise, while oil has been so decidedly lowered; but the one change, it is obvious, causes the other. Oil, being the main product of the fishery, regulates its extent; which being diminished by the low price, the quantity of whalebone is lessened, while the demand for it continuing as great as before, the value consequently rises. It is, however, probable that the present high price of bone may, in some degree, tend to revive the fishery.

It may be worth while to remark, as evincing the ignorance that at one time prevailed with respect to the whale, that, by an old feudal law, the *tail* of all whales belonged to the queen, as a perquisite, to furnish her Majesty's wardrobe with whalebone! — (*Blackstone*, vol. i. p. 233.)

WHALE (COMMON), the *Balæna mysticetus* of Linnæus, a marine animal of the cetaceous species, and the largest of all those with which men are acquainted. The whale has sometimes, it is affirmed, been found 160 feet in length; but this is most probably an exaggeration. In the Northern seas, it is at present seldom found above 60 feet long: being now, however, generally killed before it arrives at its full growth, this is no proof that the animal may not formerly have attained to a much larger size. The bodies of whales are covered, immediately under the skin, with a layer of fat or *blubber*, which, in a large fish, is from 12 to 18 inches thick. In young whales, this fatty matter resembles hog's lard; but in old ones it is of a reddish colour. This is the valuable part of the whale: and the desire to possess it has prompted man to attempt the capture of [illegible] might of a

thick viscid oil (train oil). The common whale is now rarely found, except within the Arctic circle; but at a former period it was not unfrequently met with on our coasts. There is a good account of the common whale, and of the manner in which the fishery is carried on, in Mr. John Laing's "Voyage to Spitzbergen;" one of the shortest, cheapest, and best of the innumerable books published on this hacknied subject.

The *Physeter macrocephalus*, or black-headed spermaceti whale, is chiefly found in the Southern Ocean. It usually measures about 60 feet in length, and 30 in circumference at the thickest part. The valuable part of the fish is the spongy, oily mass dug from the cavity of the head; this is crude spermaceti; and of it an ordinary sized whale will yield about 12 large barrels.

WHALE FISHERY (NORTHERN). We do not propose entering, in this article, into any details as to the mode in which the fishery is carried on; but mean to confine ourselves to a brief sketch of its history, and value in a commercial point of view.

It is probably true, as has been sometimes contended, that the Norwegians occasionally captured the whale before any other European nation engaged in so perilous an enterprise. But the early efforts of the Norwegians were not conducted on any systematic plan, and should be regarded only in the same point of view as the fishing expeditions of the Esquimaux. The Biscayans were certainly the first people who prosecuted the whale fishery as a regular commercial pursuit. They carried it on with vigour and success in the 12th, 13th, and 14th centuries. In 1388, Edward III. relinquished to Peter de Puyanne a duty of 6*l.* sterling a whale, laid on those brought into the port of Biarritz, to indemnify him for the extraordinary expenses he had incurred in fitting out a fleet for the service of his Majesty. This fact proves beyond dispute that the fishery carried on from Biarritz at the period referred to must have been very considerable indeed; and it was also prosecuted to a greater or less extent from Cibourre, Vieux Boucau, and subsequently from Rochelle and other places.*

The whales captured by the Biscayans were not so large as those that are taken in the Polar seas, and are supposed to have been attracted southward in pursuit of herrings. They were not very productive of oil, but their flesh was used as an article of food, and the whalebone was applied to a variety of useful purposes, and brought a very high price.

This branch of industry ceased long since, and from the same cause that has occasioned the cessation of the whale fishery in many other places—the want of fish. Whether it were that the whales, from a sense of the dangers to which they exposed themselves in coming southwards, no longer left the Icy Sea, or that the breed had been nearly destroyed, certain it is, that they gradually became less numerous in the Bay of Biscay, and at length ceased almost entirely to frequent that sea; and the fishers being obliged to pursue their prey upon the banks of Newfoundland and the coasts of Iceland, the French fishery rapidly fell off.

The voyages of the Dutch and English to the Northern Ocean, in order, if possible, to discover a passage through it to India, though they failed of their main object, laid open the haunts of the whale. The companions of Barentz, who discovered Spitzbergen in 1596, and of Hudson, who soon after explored the same seas, represented to their countrymen the amazing number of whales with which they were crowded. Vessels were in consequence fitted out for the Northern whale fishery by the English and Dutch, the harpooners and a part of the crew being Biscayans. They did not, however, confine their efforts to a fair competition with each other as fishers. The Muscovy Company obtained a royal charter, prohibiting the ships of all other nations from fishing in the seas round Spitzbergen, on pretext of its having been first discovered by Sir Hugh Willoughby. There can, however, be no doubt that Barentz, and not Sir Hugh, was its original discoverer; though, supposing that the fact had been otherwise, the attempt to exclude other nations from the surrounding seas, on such a ground, was not one that could be tolerated. The Dutch, who were at the time prompt to embark in every commercial pursuit that gave any hopes of success, eagerly entered on this new career, and sent out ships fitted equally for the purposes of fishing, and of defence against the attacks of others. The Muscovy Company having attempted to vindicate its pretensions by force, several encounters took place between their ships and those of the Dutch. The conviction at length became general, that there was room enough for all parties in the Northern seas; and in order to avoid the chance of coming into collision with each other, they parcelled Spitzbergen and the adjacent ocean into districts, which were respectively assigned to the English, Dutch, Hamburghers, French, Danes, &c.

The Dutch, being thus left to prosecute the fishery without having their attention diverted by hostile attacks, speedily acquired a decided superiority over all their competitors.

When the Europeans first began to prosecute the fishery on the coast of Spitzbergen, whales were everywhere found in vast numbers. Ignorant of the strength and strata-

* See *Mémoire sur l'Antiquité de la Pêche de la Baleine, par Noel*, 12mo. Paris, 1795.

gems of the formidable foe by whom they were now assailed, instead of betraying any symptoms of fear, they surrounded the ships and crowded all the bays. Their capture was in consequence a comparatively easy task, and many were killed which it was afterwards necessary to abandon, from the ships being already full.

While fish were thus easily obtained, it was the practice to boil the blubber on shore in the North, and to fetch home only the oil and whalebone. And, perhaps, nothing can give a more vivid idea of the extent and importance of the Dutch fishery in the middle of the 17th century, than the fact, that they constructed a considerable village, the houses of which were all previously prepared in Holland, on the Isle of Amsterdam, on the northern shore of Spitzbergen, to which they gave the appropriate name of *Smeerenberg* (from *smeeren*, to melt, and *berg*, a mountain). This was the grand rendezvous of the Dutch whale ships, and was amply provided with boilers, tanks, and every sort of apparatus required for preparing the oil and the bone. But this was not all. The whale fleets were attended with a number of provision ships, the cargoes of which were landed at Smeerenberg; which abounded during the busy season with well-furnished shops, good inns, &c.; so that many of the conveniences and enjoyments of Amsterdam were found within about 11 degrees of the Pole! It is particularly mentioned, that the sailors and others were every morning supplied with what a Dutchman regards as a very great luxury — *hot rolls* for breakfast. Batavia and Smeerenberg were founded nearly at the same period, and it was for a considerable time doubted whether the latter was not the more important establishment. — (*De Reste Histoire des Pêches*, &c. tome i. p. 42.)

During the flourishing period of the Dutch fishery, the quantity of oil made in the North was so great that it could not be carried home by the whale ships; and every year vessels were sent out in ballast to assist in importing the produce of the fishery.

But the same cause that had destroyed the fishery of the Biscayans, ruined that which was carried on in the immediate neighbourhood of Spitzbergen. Whales became gradually less common, and more and more timid and difficult to catch. They retreated first to the open seas, and then to the great banks of ice on the eastern coast of Greenland. When the site of the fishery had been thus removed to a very great distance from Spitzbergen, it was found most economical to send the blubber direct to Holland. Smeerenberg was in consequence totally deserted, and its position is now with difficulty discoverable.

But though very extensive, the Dutch whale fishery was not, during the first 30 years of its existence, very profitable. This arose from the circumstance of the right to carry it on having been conceded, in 1614, to an exclusive company. The expense inseparable from such great associations, the wastefulness and unfaithfulness of their servants, who were much more intent upon advancing their own interests than those of the company, increased the outlays so much, that the returns, great as they were, proved little more than adequate to defray them, and the fishery was confined within far narrower limits than it would otherwise have reached. But after various prolongations of the charter of the first company, and the formation of some new ones, the trade was finally thrown open in 1642. The effects of this measure were most salutary, and afford one of the most striking examples to be met with of the advantages of free competition. Within a few years the fishery was vastly extended; and though it became progressively more and more difficult from the growing scarcity of fish, it proved, notwithstanding these disadvantages, more profitable to the private adventurers than it had ever been to the company; and continued for above a century to be prosecuted with equal energy and success. The famous John de Witt has alluded as follows to this change in the mode of conducting the trade: —

"In this respect," says he, "it is worthy of observation, that the authorised Greenland Company made heretofore little profit by their fishery, because of the great charge of setting out their ships; and that the train oil, blubber, and whale fins were not well made, handled, or cured; and being brought hither and put into warehouses, were not sold soon enough, nor to the Company's best advantage. Whereas now that every one equips their vessels at the cheapest rate, follow their fishing diligently, and manage all carefully, the blubber, train oil, and whale fins are employed for so many uses in several countries, that they can sell them with that conveniency, that though *there are now 15 ships for 1 that formerly sailed out of Holland on that account*, and consequently each of them could not take so many whales as heretofore, and notwithstanding the new prohibition of France and other countries to import these commodities, and though there is *greater plenty of* them imported by our fishers — yet those commodities are so much raised in the value above what they were whilst there was a company, that the common inhabitants do exercise that fishery with profit, to the much greater benefit of our country than when it was (under the management of a company) carried on but by a few." — (*True Interest of Holland*, p. 63. 8vo. ed. London, 1746.)

The private ships sent by the Dutch to the whale fishery were fitted out on a principle that secured the utmost economy and vigilance on the part of every one connected with them. The hull of the vessel was furnished by an individual, who commonly took upon himself the office of captain; a sail-maker supplied the sails, a cooper the casks, &c. The parties engaged as adventurers in the undertaking. The cargo being brought to Holland and disposed of, each person shared in the produce according to his

proportion of the outfit. The crew was hired on the same principle; so that every one had a motive to exert himself, to see that all unnecessary expenses were avoided, and that those that were necessary were confined within the narrowest limits. This practice has been imitated to some extent in this and some other countries, but in none has it been carried so far as in Holland. It appears to us, that it might be advantageously introduced into other adventures.

When in its most flourishing state, towards the year 1680, the Dutch whale fishery employed about 260 ships, and 14,000 sailors.

The English whale fishery, like that of Holland, was originally carried on by an exclusive association. The Muscovy Company was, indeed, speedily driven from the field; but it was immediately succeeded by others, that did not prove more fortunate. In 1725, the South Sea Company embarked largely in the trade, and prosecuted it for 8 years; at the end of which, having lost a large sum, they gave it up. But the legislature, having resolved to support the trade, granted, in 1732, a bounty of 20*s.* a ton to every ship of more than 200 tons burden engaged in it; but this premium being insufficient, it was raised, in 1749, to 40*s.* a ton, when a number of ships were fitted out, as much certainly in the intention of catching the bounty as of catching fish. Deceived by the prosperous appearance of the fishery, parliament imagined that it was firmly established, and in 1777 the bounty was reduced to 30*s.* The effects of this reduction showed the factitious nature of the trade, the vessels engaged in it having fallen off in the course of the next 5 years from 105 to 39! To arrest this alarming decline, the bounty was raised to its old level in 1781, and of course the trade was soon restored to its previous state of apparent prosperity. The hostilities occasioned by the American war reduced the Dutch fishery to less than half its previous amount, and gave a proportional extension to that of England. The bounty, which had in consequence become very heavy, was reduced, in 1787, to 30*s.* a ton; in 1792 it was further reduced to 25*s.*; and in 1795 it was reduced to 20*s.*, at which sum it continued till 1824, when it ceased.

It appears from accounts given in Macpherson's *Annals of Commerce* (vol. iii. p. 511., vol iv. p. 130.), that the total bounties paid for the encouragement of the whale fishery, in the interval between 1750 and 1788, amounted to no less than 1,577,935*l.* It will be seen from the official account which follows, that there are no means of furnishing any accurate account of the sums paid as bounties from the year 1789 to 1813 inclusive; but it is, notwithstanding, abundantly certain that the total bounties paid during the period from 1789 to 1824 considerably exceeded 1,000,000*l.* Here, then, we have a sum of upwards of TWO MILLIONS AND A HALF laid out since 1750 in promoting the whale fishery. Now we believe that if we estimate the entire average value of the *gross* produce of the Northern whale fishery (and it is to it only that the preceding statements apply) during the last 3 or 4 years, at 100,000*l.* a year, we shall be considerably beyond the mark. But had the 2,500,000*l.* expended in bolstering up this branch of industry been laid out as capital in any ordinary employment, it would have produced 125,000*l.* a year of *nett* profit; being 25,000*l.* a year more than the total value of the produce of the fishery, without allowing any thing for the capital wasted, and ships lost in carrying it on. Whatever, therefore, may be the value of the whale fishery as a nursery for seamen, it is absurd to regard it as contributing any thing to the public wealth. The remark of Dr. Franklin, that he who draws a fish out of the sea draws out a piece of silver, is ever in the mouths of those who are clamouring for bounties and protection against competition. But we apprehend that even Franklin himself, sagacious as he was, would have found it rather difficult to show how the wealth of those is to be increased, who, in fishing up one piece of silver, are obliged to throw another of greater value into the sea. We subjoin

An Account of the Number of Ships annually fitted out in Great Britain for the Northern Whale Fishery, of the Tonnage and Crews of such Ships, and of the Bounties paid on their Account, from 1789 to 1814.

Yrs.	Ships.	Tons.	Men.	Bounties paid.
1789	161	46,599		The documents from which the amount of bounties paid in the years 1789 to 1806 could be shown, were destroyed in the fire at the late Custom-house.
1790	116	33,232	4,182	
1791	116	33,006	4,080	
1792	93	26,983	4,067	
1793	82	23,487	3,210	
1794	60	16,386	2,250	
1795	44	11,718	1,601	
1796	51	13,833	1,910	
1797	60	16,371	2,265	
1798	66	18,754	2,633	
1799	67	19,300	2,683	
1800	61	17,799	2,459	
1801				
1802				
1803				
1804				
1805				
1806				
		18,568	2,544	
		25,519	3,129	
		28,608	3,806	
		28,034	3,597	
		27,870	3,636	
		27,697	3,715	
		no documents in this office by which the these years can be rendered.		
		36,576	4,708	£ 43,799 11 0

It is not even certain whether the expenditure of 2,500,000*l.* upon bounties would really have had the effect of making the whale fishery be carried on upon a considerable scale, but for the occupation of Holland by the French, and the consequent hostilities in which she was involved with this country. These did more to promote and consolidate

the British fishery than any thing else. The war entirely annihilated that of the Dutch: and our government having wisely offered to the fishers of Holland all the immunities enjoyed by the citizens of Great Britain in the event of their settling amongst us, many availed themselves of the invitation, bringing with them their capital, industry, and skill. In consequence of this signal encouragement, the whale fishery of England was prosecuted with greater success than at any previous period; and at the termination of the late war, in 1815, there were nearly 150 valuable ships and about 6,000 seamen engaged in the Northern fishery, and about 30 ships and 800 men in that to the South.

After peace was restored, the English capitalists and others became apprehensive lest the Dutch should engage anew with their ancient vigour and success in the whale fishery. But these apprehensions were without any real foundation. The Hollanders, during the 30 years they had been excluded from the sea, had lost all that practical acquaintance with the details of the fishery, for which they had long been so famous, and which is so essential to its success. The government attempted to rouse their dormant energies by the offer of considerable premiums and other advantages to those who embarked in the trade. Three companies were in consequence formed for carrying it on; 1 at Rotterdam, 1 at Harlingen, and 1 in South Holland. But their efforts have been very limited, and altogether unfortunate. In 1826, the company of South Holland was dissolved, while that of Harlingen despatched 4 ships, and that of Rotterdam 2. In 1827, Rotterdam sent only 1 ship, and Harlingen 2. In 1828, 1 solitary ship sailed from Holland — a feeble and last effort of the company of Harlingen! and since then a ship or two has been occasionally fitted out by private adventurers, but generally without success.

Such has been the fate of the Dutch whale fishery. The attempts to revive it failed, not because the ships sent out were ill calculated for the service, but because they were manned by unskilful seamen. In the early ages of the fishery, this difficulty would have been got over, because, owing to the fewness of competitors, and the scanty supply of oil and whalebone, even a small cargo brought a high price; but at present, when the fishery is prosecuted on a very large scale and at a very low rate of profit by the English, the Americans, the Hamburghers, &c., no new competitor coming into the field could expect to maintain himself unless he had nearly equal advantages. The Dutch have, therefore, done wisely in withdrawing from the trade. Any attempt to establish it by the aid of bounties and other artificial encouragements would be one of which the ultimate success must be very doubtful, and which could lead to no really useful result. During the 20 years preceding the late French war, the fishery of Holland was gradually declining, and had, in a great measure, ceased to be profitable. It would be folly to endeavour to raise anew, and at a great expense, a branch of industry that had become unproductive at a former period, when there is no ground for supposing that it would be more productive at this moment.

We have already noticed several changes of the localities in which the whale fishery has been carried on at different periods; and within these few years others of the same kind have taken place. The Dutch fishers first began to frequent Davis's Straits in 1719; and as the whales had not hitherto been pursued into this vast recess, they were found in greater numbers than in the seas round Spitzbergen. From about this period it was usually resorted to by about 3-10ths of the Dutch ships. It was not till a comparatively late period that Davis's Straits began to be frequented by English whalers; and down to 1820, when Captain Scoresby published his elaborate and valuable work on the whale fishery, that carried on in the Greenland seas was by far the most considerable. But it will be seen from the subjoined account, that from 1826 down to 1837 the Greenland seas were nearly abandoned. This was principally a consequence of the greater abundance of whales in Davis's Straits, but it was, also, in part owing to the various discoveries made by the expeditions fitted out by government for exploring the seas and inlets to the westward of Davis's Straits and Baffin's Bay having made the fishers acquainted with several new and advantageous situations for the prosecution of their business. Since 1837, however, the few ships that have been sent out have gone mostly to the Greenland seas.

The sea in Davis's Straits is less incommoded with field ice than the Greenland and Spitzbergen seas, but it abounds with icebergs; and the fishery, when carried on in Baffin's Bay and Lancaster Sound, is more dangerous, perhaps, than any that has hitherto been attempted.

The subjoined table shows how rapidly the Northern fishery has declined of late years, and it also shows the extremely hazardous and fluctuating nature of the trade. It may now, however, be considered as all but abandoned, in so far at least as the capture of whales is concerned, the produce of the fishery, during the 3 years ending with 1842, scanty as it was, having consisted principally of seals. Nor is this to be regretted. For many years past it has partaken more of the nature of a gambling pursuit than of a branch of sober industry; and has, on the whole, been productive of a heavy loss.

The extensive use of gas, and the increased imports of vegetable oils, occasioned by the reduction of the oppressive duties with which they were formerly affected, have prevented the diminution in the supply of whale oil from having any bad effect.

Account of the Greenland and Davis' Straits Whale Fisheries carried on from Great Britain from 1814 to 1842 both inclusive, specifying the Number of Ships sent to each; the Ports whence they were sent and the Number sent from each, with the Number of Ships lost; the Produce of the Fishery in Oil and Bone, with other Particulars. — (Obtained from a private source, on which, however, every reliance may be placed.)

Years.	Ships to Greenland and Davis's Straits.		Ships sent from each Port.																		Total.	Ships lost.	Number of Whales.	Tuns of Oil.	Tons of Bone.	Price of common Oil per Tun.
	G.	D.S.	Hull.	London.	Lynn.	Grimsby.	Whitby.	Newcastle.	Berwick.	Leith.	Kirkaldy.	Dundee.	Montrose.	Aberdeen.	Peterhead.	Banff.	Kirkwall.	Greenock.	Liverpool.	Burnt-island.	Boness.						£
1814	-	-	58	20	1	1	8	5	2	10	1	8	3	13	7	2	1	1	2	-	-	143	-	-	*Old Mea.* 19,408	956	
1815	98	49	58	19	1	1	9	6	2	10	1	8	4	14	8	2	1	1	2	-	-	147	1	733	10,682	513	43
1816	101	45	55	19	1	1	11	6	2	10	1	8	4	14	8	2	1	1	2	-	-	146	-	1,350	15,590	631	33
1817	97	55	58	19	1	1	11	6	2	10	1	8	4	14	10	1	1	2	2	-	-	159	5	828	10,871	539	36
1818	94	63	64	18	1	1	12	5	2	10	2	8	4	14	12	1	1	1	2	-	-	157	2	1,208	14,482	666	43
1819	96	63	65	16	1	1	13	5	2	10	3	8	4	14	13	-	1	1	2	-	-	159	12	988	11,101	516	39
1820	102	57	68	17	1	1	11	6	2	8	3	9	5	15	15	-	1	1	3	-	-	159	3	1,595	18,745	901	39
1821	80	78	61	14	1	1	11	6	2	8	4	10	5	15	16	-	1	1	2	-	-	158	14	1,105	16,853	855	23
1822	61	60	40	16	-	-	10	4	2	5	4	10	5	14	16	-	1	1	3	-	-	121	8	630	8,663	422	26
1823	55	62	41	5	-	-	10	3	2	6	4	10	4	14	15	-	1	1	2	-	-	117	3	2,018	17,078	921	25
1824	32	79	36	4	-	-	10	3	2	6	4	10	4	14	16	-	1	1	-	-	-	111	1	761	9,658	533	26
1825	21	89	36	4	-	-	9	3	2	7	4	10	4	13	16	-	1	1	-	-	-	110	5	500	6,585	320	26
1826	5	90	32	3	-	-	5	3	1	6	4	9	4	12	15	-	1	-	-	-	-	95	5	512	7,092	388	34
1827	15	72	30	3	-	-	3	3	1	6	4	9	4	12	14	-	1	-	-	-	-	87	1	1,162	13,215	753	27
1828	14	72	30	2	-	-	4	3	1	6	4	9	4	11	14	-	1	-	-	-	-	89	3	1,197	13,969	802	25
1829	1	88	33	2	-	-	3	3	1	7	4	9	4	11	12	-	-	-	-	-	-	89	4	871	10,666	607	27
1830	0	91	33	2	-	-	2	3	1	7	6	9	4	10	13	-	-	1	-	-	-	91	19	761	2,245	119	43
1831	7	80	32	6	-	-	1	4	1	6	6	9	3	5	12	-	-	-	-	2	-	87	3	451	4,946	260	43
1832	19	62	30	3	-	-	1	4	1	6	5	9	3	6	11	-	-	-	-	2	-	81	6	1,565	12,510	676	28
1833	3	74	27	2	-	-	2	4	1	5	5	9	3	6	11	-	-	-	-	2	-	77	1	1,095	14,508	802	25
1834	7	63	27	3	-	-	2	3	1	5	5	9	3	6	11	-	-	-	-	2	-	76	3	872	8,234	441	23
1835	1	70	23	1	-	-	2	3	1	5	7	9	2	5	11	-	-	-	-	2	-	71	6	167	2,625	—	28
1836	3	58	15	1	-	-	2	3	1	5	5	9	2	4	11	-	-	-	-	2	1	61	2	70	707	—	32
1837	15	37	12	-	-	-	2	3	1	5	5	9	2	3	10	-	-	-	-	1	1	55*	2	122	1,356	65	35
1838	31	8	6	-	-	-	-	3	-	3	4	7	2	2	10	-	-	-	-	1	1	39	1	466	4,345	236	25
1839	29	12	6	-	-	-	-	3	-	3	4	7	2	2	12	-	-	-	-	1	1	41	-	115	1,411	79	25
1840	11	29	4	-	-	-	-	3	-	1	4	5	-	1	12	-	-	-	-	-	1	31	2	22	412	14	25
1841	11	8	2	-	-	-	-	2	-	-	2	4	-	-	11	-	-	-	-	-	-	19	-	52	647	22	31
1842	14	4	2	-	-	-	-	1	-	-	2	3	-	-	10	-	-	-	-	-	-	18	-	54	668	—	30

Imp. Tuns.

* This includes the 5 beset in the ice the previous year.

It is seen from this table, that there has been a singular change in the ports from which the Northern fishery has been carried on. In London were undertaken all the discoveries which led to its establishment; and the great companies formed in that city enjoyed for a lengthened period nearly a complete monopoly of the business. So late as 1780 and 1790, the metropolis sent out 4 times the number of vessels that sailed from any other port; but it was observed that her fishery was, on the whole, less fortunate than that of the new rivals which had sprung up; and her merchants were so much discouraged, that in Mr. Scoresby's time they equipped only 17 or 18 vessels. They have since wholly abandoned the trade, and do not send out a single ship!

Hull early became a rival to London, having sent out vessels at the very commencement of the fishery. Though checked at first by the monopoly of the great companies, as soon as the trade became free she prosecuted it with distinguished success. Towards the end of last century, she attained, and preserved down to 1837, the character of the first whale-fishing port in Great Britain. In 1819 she sent out 65 ships, and her imports of oil amounted in 1820 to 8,086 tuns. But such and so rapid has been the decline of the fishery in the interval, that in 1842 Hull only sent out 2 ships!

At present, the fishery, such as it is, is principally carried on from Peterhead.

WHALE FISHERY (SOUTHERN). — This consists of three distinct branches; viz., 1st, the catch of the spermaceti whale, which furnishes the valuable substance called spermaceti (see the term); 2d, that of the common black whale of the Southern seas; and, 3d, that of the sea elephant, or southern walrus.

The spermaceti whale (*Physeter macrocephalus*) is found in all tropical climates, and especially on the coasts of New Zealand and the adjoining seas. The ordinary duration of the voyage of a ship from England, employed in this department of the fishery, is about 3 years.

The common black whale of the Southern seas (*Physeter microps*) is met with in various places, but principally on the coast of Brazil: in the bays on the west coast of Africa; and in some of the bays in New South Wales, Van Diemen's Land, &c.

Sea elephants (intermediate between the walrus of the Northern seas and the seal) are principally met with in the seas round the Islands of Desolation, South Georgia, and South Shetland, the coast of California, &c. Vast numbers of these animals are annually captured; vessels frequently load entirely with them; and they are believed to furnish more oil than the common South Sea whale. The oil of the black whale and that of the sea elephant are both known in the market by the name of southern oil, and they are so very similar, that those most versed in the trade can with difficulty distinguish the one from the other. Hence ships commonly engage indifferently in either fishing as opportunity offers. The usual duration of the voyage of a ship from England in either of the last two departments, or in the two combined, varies from 12 to 18 months.

The South Sea fishery was not prosecuted by the English till about the beginning of the American war; and as the Americans had already entered on it with vigour and success, 4 American harpooners were sent out in each vessel. In 1791, 75 whale ships were sent to the South Sea; but the number has not been so great since; and

latterly it has been unprosperous and declining, in consequence principally of the competition of the colonists in Australia, who are incomparably better situated for the prosecution of this branch of industry. The *Macrocephalus*, or spermaceti whale, is particularly abundant in the neighbourhood of the Spice Islands; and Mr. Crawfurd, in his valuable work on the *Eastern Archipelago* (iii. 447.), has entered into some details to show that the fishery carried on there is of greater importance than the spice trade. Unluckily, however, the statements on which Mr. Crawfurd founded his comparisons were entirely erroneous, neither the ships nor the men employed amounting to more than 1-5th or 1-6th part of what he has represented.

We subjoin a

Statement of the Southern Whale Fishery carried on from Great Britain since 1800; exhibiting the Total Number of Ships annually absent from Great Britain on Whaling Expeditions; the Total Number of Ships that annually returned to Great Britain; and the annual Imports of Sperm and Common Oil, with the Prices of each.

Years.	Ships at Sea.	Ships returned.	Sperm Oil imported.	Common Oil imported.	Price of Sperm Oil per Ton.	Price of Common Oil per Ton.	Total Value of Imports.
			Tons.	Tons.	£	£	£
1800	64	96	1,851	2,886	70	30	172,170
1801	78	82	1,955	3,018	84	30	188,100
1802	80	56	1,196	2,018	80	30	156,780
1803	92	56	1,770	4,496	80	35	298,960
1804	91	57	1,952	4,210	78	35	299,570
1805	86	52	2,413	5,269	75	30	327,915
1806	86	58	2,538	5,774	70	26	340,804
1807	85	59	1,551	1,875	78	24	140,250
1808	85	60	1,981	2,110	95	31	227,095
1809	75	75	1,521	900	100	40	211,440
1810	65	46	1,410	765	100	42	180,180
1811	59	47	1,304	966	100	32	170,112
1812	72	42	1,767	733	80	42	200,466
1813	41	25	2,258	2,151	84	34	263,760
1814	48	29	2,015	1,067	80	40	240,920
1815	55	17	1,181	1,867	80	36	140,558
1816	54	51	2,481	2,228	95	28	262,247
1817	76	64	1,964	3,040	64	30	218,560
1818	91	85	3,548	4,257	70	36	305,102
1819	112	80	3,078	4,885	85	33	423,855
1820	137	99	4,217	5,994	74	25	515,454
1821	143	98	3,956	4,520	69	19	365,180
1822	119	61	2,611	1,920	94	22	356,934
			British. Colonial. American.	British. Colonial.			
1823*	114	57	1,811 426 - -	1,143 605	45	21	333,625
1824	96	82	3,128 1,01 - -	742 618	40	22	275,010
1825	83	54	1,351 [illegible] - -	1,101 412	48	20	209,188
1826	78	58	1,665 388 - -	814 287	55	18	200,827
1827	83	69	1,175 338 - -	965 424	50	27	245,155
1828	83	69	1,116 [illegible] -	1,156 558	52	25	275,005
1829	86	72	1,183 [illegible] - -	1,102 478	54	27	278,284
1830	104	71	1,117 [illegible] - -	1,159 [illegible]	42	23	270,014
1831	108	87	1,1[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	45	23	651,747
1832	109	90	1,[illegible] 1,[illegible] - -	902 1,[illegible]	61	28	498,501
1833	110	94	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	62	25	437,983
1834	99	87	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	65	25	496,044
1835	93	83	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	70	28	488,370
1836	82	86	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	80	32	632,008
1837	86	18	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	84	35	646,676
1838	84	41	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	84	35	741,840
1839	77	82	1,[illegible] 1,[illegible] - -	1,[illegible] 1,[illegible]	95	35	691,560
1840	74	16	2,[illegible] 1,[illegible] 1,[illegible]	1,[illegible] 1,[illegible]	104	35	885,042
1841	67	20	3,[illegible] 1,[illegible] 1,[illegible]	1,[illegible] 1,[illegible]	98	34	688,196
1842	57	16	2,[illegible] 1,[illegible] 1,[illegible]	1,[illegible] 1,[illegible]	80	40	564,480

* The ships for this and the succeeding years, as for the previous ones, do not include colonial ships, but those from Britain only.

† From this year commenced the Imperial Measure.

American Whale Fishery. — For a lengthened period, the Americans have prosecuted the whale fishery with greater vigour and success than, perhaps, any other people. They commenced it in 1690, and for about 50 years found an ample supply of fish on their own shores. But the whale having abandoned them, the American navigators entered with extraordinary ardour into the fisheries carried on in the Northern and Southern Oceans. From 1778 to 1775, Massachusetts employed annually 183 vessels, carrying 13,8.0 tons, in the former; and 121 vessels, carrying 14,026 tons, in the latter. Mr. Burke, in his famous speech on American affairs in 1774, adverted to this wonderful display of daring enterprise as follows: —

"As to the wealth," said he, "which the colonies have drawn from the sea by their fisheries, you had all that matter fully opened at your bar. You surely thought these acquisitions of value, for they seemed to excite your envy; and yet the spirit by which that enterprising employment has been exercised ought rather, in my opinion, to have raised esteem and admiration. And pray, Sir, what in the world is equal to it? Pass by the other parts, and look at the manner in which the New England people carry on the whale fishery. While we follow them among the trembling mountains of ice, and behold them penetrating into the deepest frozen recesses of Hudson's Bay and Davis's Straits; while we are looking for them beneath the Arctic circle, we hear that they have pierced into the opposite region of polar cold; that they are at the antipodes, and engaged under the frozen serpent of the South. Falkland Island, which seemed too remote and too romantic an object for the grasp of national ambition, is but a stage and resting-place for their victorious industry. Nor is the equinoctial heat more discouraging to them than the accumulated winter of both poles. We learn, that while some of them draw the line or strike the harpoon on the coast of Africa, others run the longitude and pursue their gigantic game along the coast of Brazil. No sea, but what is vexed with their fisheries; no climate that is not witness of their toils. Neither the perseverance of Holland, nor the activity of France, nor the dexterous and firm sagacity of English enterprise, ever carried this most perilous mode of hardy industry to the extent to which it has been pursued by this recent people; a people who are still in the gristle, and not hardened into manhood."

The unfortunate war that broke out soon after this speech was delivered, checked for a while the progress of the fishery; but it was resumed with renewed vigour as soon as peace was restored. The American fishery has been principally carried on from Nantucket and New Bedford in Massachusetts; and for a considerable time past the ships have mostly resorted to the Southern seas. "Although," says Mr. Pitkin, "Great Britain has, at various times, given large bounties to her ships employed in this fishery, yet the whalemen of Nantucket and New Bedford, unprotected and unsupported by any thing but their own industry and enterprise, have generally been able to meet their competitors in a foreign market."—(*Commerce of the U. States*, 2d ed. p. 46.)

We subjoin

An Account of the Arrivals of Whale Ships at the different Ports of the U. States in 1841, and of the Imports of Sperm and common Oil in that Year and 1842.

Ports of Arrival.	Arrivals in 1841.			Imports of Oil in 1841.		Imports of Oil in 1842.	
	Ships and Barques.	Brigs.	Schooners.	Sperm.	Whale.	Sperm.	Whale.
				Barrels.	*Barrels.*	*Barrels.*	*Barrels.*
New Bedford	18	7	2	54,840	49,655	71,595	51,112
Nantucket	21	2	1	39,881	5,405	26,229	600
Fairhaven	13	-	-	8,280	18,450	14,480	13,100
Dartmouth	1	-	-	2,200	-	1,150	800
Westport	3	3	-	5,180	-	2,640	140
Mattapoisett and Sippican	2	6	-	2,280	70	3,070	250
Wareham	-	3	-	1,450	220	310	20
Edgartown	2	1	-	3,160	50	1,240	2,200
Holme's Hole	1	-	-	500	1,200	2,267	18
Fall River	2	-	-	650	300	800	2,200
Newburyport	1	-	-	400	400	2,350	1,100
Plymouth	-	1	3	500	15	526	8
Salem	1	-	-	275	1,300	7,450	2,500
Boston	2	5	-	6,116	1,000	7,914	4,781
Falmouth	1	-	-	1,300	570	300	
Provincetown	-	5	1	1,025	40	1,570	165
Newport	1	2	-	2,217	25	5,960	870
Bristol	3	3	-	2,050	175	320	2,400
Warren	5	1	-	5,115	5,500	1,800	258
Providence	3	-	-	1,650	1,350		
New London	15	1	2	4,115	27,800	4,318	28,404
Stonington	3	-	-	1,500	5,000	750	6,150
Mystic	1	1	-	600	1,000	575	5,925
Sag Harbour	22	1	-	5,310	48,020	3,780	24,180
Greenport	1	-	-	1,000	6,000	750	675
New Suffolk	1	-	-	260	1,200		
Bridgeport	2	-	-	400	2,200	250	3,170
Hudson	1	-	-	300	2,500		
Poughkeepsie	1	-	-	300	2,000		
Wilmington	4	-	-	5,000	2,400		
Newark	1	-	-	40	2,400		
Cold Spring	2	-	-	-	4,250	-	1,850
Jamesport	1	-	-	150	1,750		
Wiscasset	1	-	-	300	1,200		
Portland	1	-	-	300	2,500		
New York	1	-	-	-	1,000	2,195	8,500
Somerset	-	-	-	-	-	250	
Portsmouth	-	-	-	-	-	470	1,830
Rockport	-	-	-	-	-	110	
Total	171	42	9	157,643	205,164	163,697	163,816

French Whale Fishery. — France, which preceded the other nations of Europe in the whale fishery, can hardly be said, for many years past, to have had much share in it. In 1784, Louis XVI. endeavoured to revive the fishery. With this view he fitted out 6 ships at Dunkirk on his own account, which were furnished with harpooners and a number of experienced seamen brought at a great expense from Nantucket. The adventure was more successful than could have been reasonably expected, considering the auspices under which it was carried on. Several private individuals followed the example of his Majesty, and in 1790 France had about 40 ships employed in the fishery. The revolutionary war destroyed every vestige of this rising trade. But since the peace, government has made great efforts for its renewal; and, at present, high bounties are granted to all vessels fitted out for the whale fisheries, but especially to those engaged in the sperm fishery. These, however, have not been so successful in forcing ships into this trade as might have been anticipated; for it appears from the official accounts, that in 1841, only 27 ships entered the different ports of France from the whale fisheries; while only 4 ships cleared out for the same in the course of that year!—(*Administration des Douanes* for 1841, p. 588.)

WHARF, a sort of quay, constructed of wood or stone, on the margin of a roadstead or harbour, alongside of which ships or lighters are brought for the sake of being conveniently loaded or unloaded.

There are 2 denominations of wharfs, viz. *legal quays* and *sufferance wharfs*. The former are certain wharfs in all sea-ports, at which all goods are required by the 1 Eliz. c. 11. to be landed and shipped, and they were set out for that purpose by commission from the Court of Exchequer, in the reign of Charles II. and subsequent sovereigns. Many others have been legalised by act of parliament. In some ports, as Chepstow, Gloucester, &c., certain wharfs are deemed legal quays by immemorial practice, though not set out by commission, or legalised by act of parliament.

Sufferance wharfs are places where certain goods may be landed and shipped, such as hemp, flax, coal, and other bulky goods, by special sufferance granted by the Crown for that purpose.

WHARFAGE, the fee paid for landing goods on a wharf, or for shipping them off.

The stat. 22 Chas. 2. c. 11., after providing for the establishment of wharfs and quays, makes it lawful for any person to lade or unlade goods, on paying wharfage and cranage at the rates appointed by the king in council.

WHEAT (Ger. *Weitzen*; Du. *Tarwe*; Da. *Hvede*; Sw. *Hvete*; Fr. *Froment, Bled, Blé*; It. *Grano, Formento*; Sp. and Port. *Trigo*; Rus. *Pschenzia*; Pol. *Pszenica*), a species of bread corn (*Triticum* Lin.), by far the most important of any cultivated in Europe. We are totally ignorant of the country whence this valuable grain was first derived; but it was very early cultivated in Sicily. It is raised in almost every part of the temperate zones, and in some places as high as 2,000 feet above the level of the sea.

The kinds of wheat sown are numerous, but they may be classed under 4 heads: viz. cone or bearded wheat, which, however, is now little cultivated; white wheat, of which there are innumerable varieties, the *white Dantzic* being considered one of the best; red wheat, which is seldom sown where the climate is good and early, and the land in proper condition; and spring wheat. A greater number of people are nourished by rice than by wheat; but owing to the greater quantity of gluten which the latter contains, it makes by far the best bread. Rye comes nearer to wheat in its bread-making qualities than any other sort of grain; still, however, it is very inferior to it. The finest samples of wheat are small in the berry, thin skinned, fresh, plump, and bright, slipping readily through the fingers.

Being very extensively cultivated on soils of very various qualities, and frequently with very imperfect preparation, the produce of wheat crops in Great Britain varies from about 12 to 56 bushels per acre.

The counties most distinguished for the quantity and quality of their wheat are, Kent, Essex, Suffolk, Rutland, Hertfordshire, Berkshire, Hampshire, and Herefordshire, in England; and Berwickshire, and the Lothians, in Scotland. In the northern counties it is, speaking generally, of an inferior quality; being cold to the feel, dark coloured, thick skinned, and yielding comparatively little flour. In the best wheat counties, and in good years, the weight of a Winchester bushel of wheat is from 60 to 62 lbs. In the Isle of Sheppey, in Kent (where, perhaps, the best samples of wheat sent to the London market are produced), this grain, in some favourable seasons, weighs 64 lbs. a bushel. Where the climate is colder, wetter, or more backward, or in bad seasons, the weight of the bushel of wheat is not more than 56 or 57 lbs. It is calculated that the average weight of the bushel of good English wheat is 58½ lbs.; and that the average yield of flour is 13 lbs. of flour to 14 lbs. of grain. — (See Mr. Stevenson's very valuable article on *England*, in *Brewster's Encyclopædia*, vol. viii. p. 720.; *Loudon's Ency. of Agriculture, &c.*)

For a view of the regulations with respect to the importation and exportation of wheat, &c., see Corn Laws and Corn Trade. The price of wheat in 1842 was 57*s.* 3*d.* per quarter.

WHISKY, a spirit obtained by distillation from corn, sugar, or molasses, though generally from the former. Whisky is the *national spirit*, if we may so term it, of Scotland and Ireland; but that distilled in the former is generally reckoned superior to that of the latter. — (See Spirits.)

WINE (Ger. *Wein*; Fr. *Vin*; It. and Sp. *Vino*; Port. *Vinho*; Rus. *Wino, Winogradnoe winoe*; Lat. *Vinum*; Gr. *Oinos*; Arab. *Khamr*), the fermented juice of the grape, or berries of the vine (*Vitis vinifera*).

The vine is indigenous to Persia and the Levant; but it is now found in most temperate regions. The limits within which it is cultivated in the northern hemisphere of the Old World vary from about 15° to 48° and 52°; but in North America it is not cultivated farther north than 38° or 40°. It is rarely grown at a greater altitude than 3,000 feet. From Asia the vine was introduced into Greece, and thence into Italy. The Phoceans, who founded Marseilles, carried the vine to the south of France; but it is doubtful whether it was introduced into Burgundy till the age of the Antonines.* The species of *Vitis* indigenous to North America is very different from the *Vitis vinifera*. In favourable seasons, the vine ripens in the open air in England; and in the eleventh and twelfth centuries, considerable quantities of inferior wine were made from native grapes. Vineyards are now, however, unknown in this country; but the grapes raised in hot-houses, and used in desserts, are excellent.

The vine grows in every sort of soil; but that which is light and gravelly seems best suited for the production of fine wines. It succeeds extremely well in volcanic countries. The best wines of Italy are produced in the neighbourhood of Vesuvius: the famous Tokay wine is also made in a volcanic district, as are several of the best French wines; many parts of the south of France bearing evident marks of extinct volcanoes. Hermitage

* The ancient writers give the most contradictory accounts with respect to the introduction of the vine into Gaul. — (See the learned and excellent work of Le Grand d'Aussy, *Vie Privée des Français*, tome ii. pp. 329—333.) The statement given above seems the most probable.

is grown among the *débris* of granite rocks. The most favourable situation for a vineyard is upon a rising ground or hill facing the south-east, and the situation should not be too confined;

—apertos
Bacchus amat colles.

The art of expressing and fermenting the juice of the grape appears to have been practised from the remotest antiquity. The sacred writings tell us that Noah planted a vineyard soon after the deluge — (*Gen.* ix. 20.); and a modern Latin poet ingeniously represents the vine as a gift from Heaven, to console mankind for the miseries entailed upon them by that grand catastrophe!

Omnia vastatis ergo quum cerneret arvis
Desolata Deus, nobis felicia vini
Dona dedit; tristes hominum quo munere fovit
Reliquias, mundi solatus vite ruinam!

Vanicrii Præd. Rusticum, lib. xi.

Species of Wine. — There are many varieties of vines; and this circumstance, combined with differences of soil, climate, mode of preparation, &c., occasions an extreme variety in the species of wine. But between places immediately contiguous to each other, and where even a careful observer would hardly remark any difference, the qualities of the wines, though produced by the same species of grape, and treated in the same way, are often very different. A great deal evidently depends upon the aspect of the vineyard; and it is probable that a good deal depends on peculiarities of soil. But whatever may be the cause, it is certain that there are wines raised in a few limited districts, such as Tokay, Johannisberger, Constantia, the best Burgundy, Champagne, claret, &c., that no art or care has hitherto succeeded in producing of equal goodness in other places.

Ancient Wines. — The wines of Lesbos and Chios among the Greeks, and the Falernian and Cecuban among the Romans, have acquired an immortality of renown. Great uncertainty, however, prevails as to the nature of these wines. Dr. Henderson thinks that the most celebrated of them all, the Falernian, approached, in its most essential characters, near to Madeira. In preparing their wines, the ancients often inspissated them till they became of the consistence of honey, or even thicker. These were diluted with water previously to their being drunk; and, indeed, the habit of mixing wine with water seems to have prevailed much more in antiquity than in modern times.

Modern Wines. — The principal wines made use of in this country are port, sherry, claret, Champagne, Madeira, hock, Marsala, Cape, &c.

Port, the after-dinner wine most commonly used in England, is produced in the province of Upper Douro, in Portugal; and is shipped at Oporto, whence its name. When it arrives in this country, it is of a dark purple or inky colour; has a full, rough body, with an astringent bitter-sweet taste, and a strong flavour and odour of brandy. After it has remained some years longer in the wood, the sweetness, roughness, and astringency of the flavour abate; but it is only after it has been kept 10 or 15 years in bottle, that the odour of the brandy is completely subdued, and the genuine aroma of the wine developed. When kept to too great an age, it becomes tawny, and loses its peculiar flavour. During the process of melioration, a considerable portion of the extractive and colouring matter is precipitated on the sides of the vessels in the form of crust. In some wines this change occurs much earlier than in others.

A large quantity of brandy is always mixed with the wine shipped from Oporto for England. Genuine unmixed port wine is very rarely met with in this country. We have been so long accustomed to the compounded article, that, were it possible to procure it unmixed, it is doubtful whether it would be at all suited to our taste. According to Mr. Brande's analysis, on which, however, owing to the differences in the quality of the wine, no great stress can be laid, port, as used in England, contains about 23 per cent. of alcohol. In 1841, 2,387,017 gallons of port were retained for consumption in the U. Kingdom.

Oporto Wine Company.—The quality of the wine shipped from Oporto has been materially injured by the monopoly so long enjoyed by the Oporto Wine Company. This company was founded in 1756, during the administration of the Marquis Pombal. A certain extent of territory is marked out by its charter as the only district on the Douro in which wine is to be raised for exportation: the entire and absolute disposal of the wines raised in this district is placed in the hands of the Company; who are further authorised to fix the prices to be paid for them to the cultivators, to prepare them for exportation, and to fix the price at which they shall be sold to foreigners! It is obvious that a company with such powers cannot be any thing else than an intolerable nuisance. What could be more arbitrary and unjust than to interdict the export of all wines raised out of the limits of the Company's territory? But even in its own district, its proceedings have been most oppressive and injurious. The Company annually fix, by a flat of their own, 2 rates of prices — one for the *vinho de feitoria*, or wine for exportation, and the other for *vinho de ramo*, or wine for home consumption — at which the cultivators are to be paid, *whatever may be the quality of their wines!* They have, therefore, no motive to exert superior skill and ingenuity; but content themselves with endeavouring to raise, at the least possible expense, the greatest supply of *vino de feitoria*, for which the Company allow the highest price. All emulation is thus effectually extinguished, and the proprietors who possess vineyards of a superior quality invariably adulterate their

wines with inferior growths, so as to reduce them to the average standard. "In this way," says Dr. Henderson, "the finer products of the Douro vintages have remained in a great measure unknown to us; and port wine has come to be considered as a single liquor, if I may use the expression, of nearly uniform flavour and strength; varying, it is true, to a certain extent in quality, but still always approaching to a definite standard, and admitting of few degrees of excellence. The manipulations, the admixtures — in one word, the *adulterations* — to which the best wines of the Cima do Douro are subjected, have much the same effect as if all the growths of Burgundy were to be mingled in one immense vat, and sent into the world as the only true Burgundian wine. The delicious produce of Romanée Chambertin and the Clos Vougeot, would disappear, and in their places we should find nothing better than a second-rate Beaune or Macon wine." — (*History of Ancient and Modern Wines*, p. 210.)

Not only, however, have the Oporto Wine Company deteriorated the quality, but they have also raised the price of their wines to an enormous height. Secured against the competition of their countrymen, and enjoying down to 1831, a nearly absolute monopoly of the British markets by means of the high duties on French wines, they have filled their pockets at our expense. At the very moment when the Company have been shipping wine for England at 40*l.* a pipe, they have frequently shipped the same wine to other countries at 20*l.*! — (*Fleetwood Williams on the Wine Trade.*) And the authentic Tables published by Balbi show that the price of wine has been trebled or quadrupled under the management of this corporation. — (*Essai Statistique sur le Royaume de Portugal*, tome i. p. 157.)

But though the abuses inherent in the constitution of the Company have been carried of late years to an enormous extent, it is long since its injurious effects on the commerce of this country were distinctly perceived and pointed out. So far back as 1767, the Board of Trade laid a memorial before his Majesty in council, in which they state, "With respect to many particular regulations of the Oporto Company, which we think justly objected to by the merchants as highly grievous and oppressive, we have not thought it necessary to enter into a minute description of them, being of opinion that one general and fatal objection lies against them all; viz. — that *they all contribute to establish in the Company a monopoly against your Majesty's subjects from which by treaty they have a right to be exempted.*

But notwithstanding this authoritative exposition of the injury done to the English by this monopoly, and the experience which every subsequent year afforded of its mischievous influence, such has been the inveteracy of ancient prejudice, that it was not till the sessions of 1831 that we took the only step by which we could hope to rid ourselves of its evils, as well as a host of others, by equalising the duties on French and Portuguese wines, and putting an end to the absurd and injurious preference in favour of the latter established by the Methuen treaty.

England and Brazil are the only countries to which any considerable quantity of port wine is exported. Our imports amounted, at an average of the 8 years ending with 1841, to 26,470 pipes a year; of which, however, a portion is subsequently exported; while the exports from Portugal to all other countries, Brazil inclusive, have not recently exceeded 7,000 pipes. It was supposed, that the abolition of the discriminating duty in favour of port would make its consumption in this country gradually fall off its place being filled by French and other wines; but though such a result may not improbably take place in the end, it has hitherto been hardly sensible. The falling off in the consumption of port in 1842 was wholly occasioned by the anticipation of a reduction being about to be made in the duty, and a consequent disinclination on the part of the dealers and the public to buy wine subject to the high duty.

Sherry is of a deep amber colour; when good, it has a fine aromatic odour; its taste is warm, with some degree of the agreeable bitterness of the peach kernel. When new, it tastes harsh and fiery: it is mellowed by being allowed to remain 4 or 5 years or longer in the wood; but it does not attain to its full flavour and perfection until it be kept for 15 or 20 years. It is a very strong wine, containing about 19 per cent. of alcohol. It is principally produced in the vicinity of Xeres, not far from Cadiz, in Spain. It is very extensively used in this country as a dinner wine. Dry Sherry, or *amontillado*, when genuine and old, fetches a very high price. Perhaps no wine is so much adulterated as sherry. With the exception of Marsala, the consumption of sherry has been far more influenced than that of any other wine by the reduction of the duties in 1825. In 1842, the quantity retained for home consumption amounted to 2,261,786 gallons, being *more than double* the quantity retained for consumption at an average of 1823 and 1824! — (See *post.*)

Claret, — the term generally used in England to designate the red wines, the produce of the Bordelais. Of these, Lafitte, Latour, Château-Margaux, and Haut-Brion, are so generally esteemed, that they always sell at from 20 to 25 per cent. higher than any others of the province. The first mentioned is the most choice and delicate, and is characterised by its silky softness on the palate, and its charming perfume, which partakes of the nature of the violet and the raspberry. The Latour has a fuller body, and at the same time a considerable aroma, but wants the softness of the Lafitte. The Château-Margaux, on the other hand, is lighter, and possesses all the delicate qualities of the Lafitte, except that it has not quite so high a flavour. The Haut-Brion, again, has more spirit and body than any of the preceding, but is rough when new, and requires to be kept 6 or 7 years in the wood; while the others become fit for bottling in much less time.

Among the second-rate wines, that of Rozan, in the parish of St. Margaux, approaches in some respects to the growth of the Château-Margaux; while that of Gorce, in the same territory, is little inferior to the Latour; and the vineyards of Leoville, Larose, Bran-Mouton, and Pichon-Longueville, in the canton of Pauillac, afford light wines of good flavour, which, in favourable years, have much of the excellence of the finer growths. In the Entre-deux-Mers, the wines of Canon and St. Emilion in the vicinity of Libourne, are deemed the best, being of a full body and very durable. When new, these wines are always harsh and astringent; but they acquire an agreeable softness, and are characterised by a peculiar flavour, which has been not unaptly compared to the smell of burning wax. The aroma of the first growths is seldom fully developed till after they have been kept 8 or 9 years: but the secondary qualities come to perfection a year or two sooner. The colour often grows darker as the wine advances in age, in

consequence of the deposition of a portion of its tartar: but, when well made, and thoroughly fined, it seldom deposits any crust.

(These particulars are borrowed from the valuable work of Dr. Henderson, *on Ancient and Modern Wines*, p. 184. We have given, in a previous article—(see BORDEAUX),—full and authentic details as to the trade in claret. We beg, also, to refer the reader to that article for some observations on the wine trade of France, and on the injury done to it by the restrictive system of commerce.)

There is generally a very good supply of claret in bond in the docks in London. Its price varies from about 15*l.* per hogshead for the inferior to 50*l.* and 54*l.* per hogshead for the superior growths. What are called cargo or shipping clarets may be bought at from 5*l.* to 10*l.* per hogshead. The finest case claret sells in bond at about 50*s.* per dozen; but parcels of very well flavoured wine may be bought at 25*s.*

Champagne, — so called from the province of France, of which it is the produce, — is one of the most deservedly esteemed of the French wines. The wines of Champagne are divided into the 2 grand classes of white and red wines; and each of these again into still and sparkling: but there is a great variety in the flavour of the produce of different vineyards. Sillery is universally allowed to be the best of the still wines. It is dry, of a light amber colour, has a considerable body, and a charming aroma. "Le corps," (says M. Jullien,) "le spiritueux, le charmant bouquet, et les vertus toniques dont il est pourvu, lui assurent la priorité sur tous les autres." — (*Topographie de tous les Vignobles*, p. 30.) Dr. Henderson agrees with Jullien, in considering it as one of the wholesomest of the Champagne wines. The sparkling wines are, however, the most popular, at least in this country. Of these, the wine of Ay, 5 leagues south from Rheims, is, perhaps, the best. It is lighter and sweeter than Sillery, and has an exquisite flavour and aroma. That which merely creams on the surface (*demi-mousseux*) is preferred to the full frothing wine (*grand-mousseux*). Being bright, clear, and sparkling, it is as pleasing to the eye as it is grateful to the palate.

" Cernis micanti concolor ut vitro
Latex in auras, gemmeus aspici,
Scintillet exultim; utque dulces
Naribus illecebras proponet
" Succi latentis profitor habitus!
Ut spuma motu lactea turbido
Crystallinum lætis referre
Mox oculis properet nitorem."

Hautvilliers, about 4 leagues from Rheims and 1 from Epernay, used formerly to produce wine that equalled, and sometimes surpassed, the wine of Ay. But it is no longer cultivated with the same care; so that, though still very good, it now only ranks in the 2d class.

The best of the red wines of Champagne are those of Verzy, Verzenay, Maily, Bouzy, and St. Basle. "Ils ont une belle couleur, du corps, du spiritueux, et surtout beaucoup de finesse, de sève, et de bouquet." — (*Jullien*, p. 27.) The Clos St. Thierry, in the vicinity of Rheims, produces wine which, according to Jullien, unites the colour and the aroma of Burgundy to the lightness of Champagne.

The province of Champagne produces altogether about 1,100,000 hectolitres of wine; of which, however, the finest growths make but a small part. The principal trade in wine is carried on at Rheims, Avise, and Epernay. The vaults in which the vintages are stored are excavated in a rock of calcareous tufa to the depth of 30 or 40 feet. Those of M. Moet, at Epernay, are the most extensive, and few travellers pass through the place without going to see them. The briskest wines (*grands-mousseux*) keep the worst. — (*Jullien*, p. 34.)

Burgundy. — The best wines of this province, though not so popular in England as those of Champagne, probably because they are very apt to be injured by a sea-voyage, enjoy the highest reputation. "In richness of flavour and perfume, and all the more delicate qualities of the juice of the grape, they unquestionably rank as the first in the world; and it was not without reason that the dukes of Burgundy, in former times, were designated as the *princes des vons vins*." — (*Henderson*, p. 161.) M. Jullien is not less decided: — "Les vins des premiers crus, lorsqu'ils proviennent d'une bonne année, réunissent, dans de justes proportions, *toutes les qualités qui constituent les vins parfaits*; ils n'ont besoin d'aucun mélange, d'aucune préparation pour attendre leur plus haut degré de perfection. Ces opérations, que l'on qualifie dans certains pays de *soins qui aident* à la qualité, sont toujours nuisibles aux vins de Bourgogne." — (p. 104.)

Romané-Conti, Chambertin, the Clos Vougeôt, and Richebourg are the most celebrated of the RED wines of Burgundy. Chambertin was the favourite wine of Louis XIV. and of Napoleon. It is the produce of a vineyard of that name, situated 7 miles south from Dijon, and furnishing each year from 130 to 150 puncheons, from an extent of about 65 acres. It has a fuller body and colour, and greater durability, than the Romané, with an aroma nearly as fragrant.

The white wines of Burgundy are less numerous, and, consequently, less generally known, than the others; but they maintain the highest rank among French white wines, and are not inferior to the red either in aroma or flavour.

The entire annual produce of wine in Burgundy and Beaujolais may at present be estimated, at an average, at nearly 3,500,000 hectolitres, of which about 750,000 suffice for the consumption of the inhabitants. Since the Revolution, the cultivation of the vine has been greatly extended in the province. Many of the new vineyards having necessarily been planted in comparatively unfavourable situations, a notion has been gaining ground that the wines of Burgundy are degenerating. This, however, is not the case. On the contrary, the quantity of *bons crus*, instead of being diminished, has increased considerably; though, as the supply of inferior wines has increased in a still greater degree, the fine wines bear a less proportion to the whole than they did previously to the Revolution. — (*Jullien*, p. 90.)

The principal trade in Burgundy is carried on at Dijon, Gevrey, Châlons-sur-Saône, &c.

Besides the above, France has a great variety of other excellent wines. Hermitage, Sauterne, St. Péry, &c. are well known in England; and deservedly enjoy, particularly the first, a high degree of reputation.

Account of the Quantities and Value of the Wines exported from France in 1841; distinguishing between those of the Gironde and those of other Departments, and between those exported in Casks and Bottles; and specifying the Quantities of those sent to each County and their total Value.—(*Administration des Douanes* for 1841, p. 348.)

Countries to which exported	Wine in Casks.				Wine in Bottles.			
	Of the Gironde.		Of other Departments		Of the Gironde.		Of other Departments.	
	Quantity.	Value	Quantity.	Value	Quantity.	Value	Quantity.	Value
	Litres	*Francs.*	*Litres*	*Francs.*	*Litres*	*Francs.*	*Litres.*	*Francs*
Russia	1,178,031		1,751,067		40,810		73,886	
Sweden	2,9,147		427,683		10,702		28,638	
Norway	486,634		81,856		2,334		8,181	
Denmark	1,051,747		647,963		6,379		21,575	
German League	2,186,101		1,851,676		14,086		1,002,960	
Holland	5,122,785		2,911,480		17,709		77,493	
Belgium	5,089,806		4,343,420		43,417		313,385	
Hanse Towns	11,704,716		4,630,915		71,903		520,362	
Hanover	103,164		169,680					
Mecklenburg Schwerin	935,967		180,484		1,777		32,929	
England	937,356		454,541		403,148		926,440	
Portugal	2,719		1,985		600		9,068	
Spain	30,255		1,010,100		8,239		46,698	
Austria	23,484		70,866		27,893		56,058	
Sardinian States	4,169		7,647,648		6,507		112,171	
The Two Sicilies	30		82,556		30		47,361	
Tuscany	-		413,815		-		42,088	
Roman States	-		14,097		-		12,753	
Switzerland	-		13,511,245		-		66,843	
Greece	-		12,231		-		5,117	
Turkey	1,198		129,353		188		27,816	
Egypt	-		445,302		-		16,209	
Barbary States	-		81,601		-		2,949	
Algiers	2,975		27,467,589		38		151,491	
West coast in Africa	37,734		37,185		5,036		5,117	
Mauritius	5,166,206	21,435,194	3,238,955	17,857,532	64,110	5,711,074	11,345	5,661,811
Other places in Africa	5,180		16,213		4,013		540	
India, English	164,243		109,275		560,297		26,751	
Dutch	20,316		450		48,189			
French	31,850		69,540		31,033		8,910	
China	-		3,755					
United States of America	5,686,926		3,413,800		664,163		855,551	
Haiti	50,558		434,502		7,046		23,793	
English Guiana	10,111		-		6,515		58	
Cuba and Porto Rico	572,795		854,703		72,497		99,261	
St Thomas	159,447		518,967		23,963		51,727	
Brazil	670,497		4,927,815		99,624		75,429	
Mexico	138,605		11,909		184,178		10,701	
Venezuela	79,101		19,164		23,958		3,673	
New Grenada	60,456		10,215		5,027		1,980	
Peru	9,189		17,500		26,593		8	
Chili	215,473		84,131		170,415		43,664	
Rio de la Plata	-		1,109,900				25,879	
Uruguay	1,003,666		1,242,833		147,745		20,396	
Texas	-		25,302		-		10,158	
Guadaloupe	1,158,882		1,317,015		59,636		51,418	
Martinique	973,965		3,080,578		51,132		30,101	
Bourbon	2,742,476		1,031,120		54,614		33,702	
Senegal	168,000		418,034		115,612		6,621	
Cayenne	381,709		159,173		3,167		3,173	
Fisheries	456,044		304,649		857		1,969	
Totals	47,196,303	21,435,194	80,987,650	17,857,532	2,855,537	5,711,074	5,661,811	5,661,811

Exclusive of the above, there were exported from France, in the same year, 2,607,820 litres of *eau de liqueurs*, valued at 3,911,731 francs.

The total produce of the vineyards of France is estimated at about 35,000,000 hectolitres (770,000,000 Imp. gallons), worth 540,000,000 francs (21,600,000*l.*). We beg to refer the reader to the article BORDEAUX, for an account of the influence of the French system of commercial policy on this great department of industry.

Account of the Total Quantities of Wine exported from France during each of the 24 Years ending with 1841.

Years.	Quantities.	Years.	Quantities.	Years.	Quantities.
	Hectolitres.		*Hectolitres.*		*Hectolitres.*
1818	974,304	1826	1,190,066	1834	1,393,392
1819	1,183,421	1827	1,070,275	1835	1,3[illegible]0,669
1820	1,195,291	1828	1,244,090	1836	1,305,219
1821	1,007,784	1829	1,114,736	1837	1,114,296
1822	1,035,079	1830	874,650	1838	1,451,315
1823	1,227,945	1831	805,746	1839	1,193,775
1824	906,725	1832	1,302,795	1840	1,335,580
1825	1,053,814	1833	1,337,866	1841	1,478,392

Dispute as to the comparative Merit of Champagne and Burgundy. — The question, whether the wines of Champagne or Burgundy were entitled to the preference, was agitated during the reign of Louis XIV. with extraordinary keenness. The celebrated Charles Coffin, rector of the University of Beauvais, published, during this controversy, the classical ode, partly quoted above, in which Champagne is eulogised, and its superiority vindicated, with a spirit, vivacity, and delicacy worthy of the theme. The citizens of Rheims were not ungrateful to the poet; but liberally rewarded him with an appropriate and munificent donation of the wine he had so happily panegyrised. Gréneau wrote an ode in praise of Burgundy; but, unlike its subject, it was flat and insipid, and failed to procure any recompence to its author. The different pieces in this amusing controversy were collected and published in octavo, at Paris, in 1712 — (See *Le Grand d'Aussy, Vie Privée des Français*, tom. iii. p. 39., and the *Biographie Universelle*, tom. ix. art. *Coffin* (*Charles*).) Erasmus attributes the restoration of his health to his having drunk liberally of Burgundy; and has eulogised it in the most extravagant terms. An epistle of his, quoted by Le Grand d'Aussy, shows that Falstaff and he could have spent an evening together less disagreeably than might have been supposed: — "Le premier qui enseigna l'art de faire ce vin (Bourgogne), ou qui en fit present, ne doit-il point passer plutôt pour nous avoir donné la vie que pour nous avoir gratifié d'une liqueur." — (*Vie Privée des Français*, tom. iii. p. 9.)

Consumption of French Wine in England. Discriminating Duties. — Owing to the intimate connection subsisting between England and France for several centuries after the Conquest, the wines of the latter were long in almost exclusive possession of the English market: but the extension of commerce gradually led to the introduction of other species; and in the reigns of Elizabeth and James I., the dry white wines of Spain seem to have been held in the highest estimation. This, however, was only a temporary preference. Subsequently to the Restoration, the wines of France regained their former ascendancy. In 1687 their importation amounted to 15,518; in 1688, to 14,218; and in 1689, to 11,106 tuns. It is exceedingly doubtful whether so much as a single pipe of port had ever found its way to England previously to this period — (*Henderson*, p. 313.); and it is most probable that the wines of France would have continued to preserve their ascendancy in our markets, had not their importation been artificially checked.

The trade with France had occasionally been prohibited previously to the accession of William III.; but it was not until 1693 that any distinction was made between the duties payable on French and other wines. But Louis XIV. having espoused the cause of the exiled family of Stuart, the British government, in the irritation of the moment, and without reflecting that the blow aimed at the French would infallibly recoil upon themselves, imposed, at the period above-mentioned, a discriminating duty of 8*l.* a tun on French wines, and in 1697 increased it to 33*l.*! In consequence of this enormous augmentation of duty on French wines, the merchants began to import wine from Oporto as a substitute for the red wines of Bordeaux, excluded by the high duties. It is probable, however, that these discriminating duties would have been repealed as soon as the excitement which produced them had subsided, and that the trade would have returned to its old channels, had not the stipulations in the famous commercial treaty with Portugal, negotiated by Mr. Methuen in 1703, given them permanence. Such, however, was unluckily the case: for, according to this treaty, we bound ourselves to charge in future 33⅓ per cent. higher duties on the wines of France than on those of Portugal; the Portuguese, by way of compensation, binding themselves to admit our woollens into their markets in preference to those of other countries, at a fixed and invariable rate of duty.

Though very generally regarded at the time as the highest effort of diplomatic skill and address, the Methuen treaty was certainly founded on the narrowest views of national interest, and has proved, in no common degree, injurious to both parties, but especially to England. By binding ourselves to receive Portuguese wines for *two thirds* of the duty payable on those of France, we, in effect, gave the Portuguese growers a monopoly of the British market, and thereby attracted too great a proportion of the deficient capital of Portugal to the production of wine; while, on the other hand, we

not only excluded one of the principal equivalents the French had to offer for our commodities, and proclaimed to the world that we considered it better to deal with *two* millions of poor beggarly customers, than with *thirty* millions of rich ones, but we also provoked the retaliation of the French, who forthwith excluded most of our articles from their markets!

The injurious effects of the regulations in the Methuen treaty were distinctly pointed out by Dr. Davenant and Mr. Hume. The latter, in his *Essay on the Balance of Trade*, published in 1752, says, "Our jealousy and hatred of France are without bounds. These passions have occasioned innumerable barriers and obstructions on commerce, where we are commonly accused of being the aggressors. But what have we gained by the bargain? *We lost the French market for our woollen manufactures*, and transferred the commerce of wine to Spain and Portugal, *where we buy much worse liquor at a much higher price!* There are few Englishmen who would not think their country absolutely ruined, were French wine sold in England so cheap, and in such abundance, as to supplant ale and other home-brewed liquors. But, would we lay aside prejudice, it would not be difficult to prove that nothing could be more innocent; perhaps, more advantageous. Each new acre of vineyard planted in France, in order to supply England with wine, would make it requisite for the French to take an equivalent in English goods, by the sale of which we should be equally benefited."

In consequence of the preference so unwisely given to the wines of Portugal over those of France, — a preference continued, in defiance of every principle of sound policy and common sense, down to 1831, — the imports of French wine were for many years reduced to a mere trifle; and notwithstanding their increased consumption, occasioned by the reduction of the duties in 1825, the quantity of all sorts entered for consumption in 1841 did not exceed 353,740 gallons; while the consumption of Portuguese wines amounted in the same year to 2,387,017 gallons! This is the most striking example, perhaps, in the history of commerce, of the influence of customs duties in diverting trade into new channels, and altering the taste of a people. All but the most opulent classes having been compelled, for a long series of years, either to renounce wine, or to use port, the taste for the latter has been firmly rooted; the beverage that was originally forced upon us by necessity having become congenial from habit. It is probable, however, now that the discriminating duty in favour of port is abolished, that the excellence of the French wines will ultimately regain for them some portion of that favour in the English market they formerly enjoyed.

Madeira — so called from the island of that name — is a wine that has long been in extensive use in this and other countries. Plants of the vine were conveyed from Crete to Madeira in 1421, and have succeeded extremely well. There is a considerable difference in the flavour and other qualities of the wines of Madeira: the best are produced on the south side of the island. Though naturally strong, they receive an addition of brandy when racked from the vessels in which they have been fermented, and another portion is thrown in previously to their exportation. This is said to be required to sustain the wine in the high temperature to which it is subjected in its passage to and from India and China, to which large quantities of it are sent; it being found that it is mellowed, and its flavour materially improved, by the voyage. It does not, however, necessarily follow that the wines which have made the longest voyages are always the best. Much must obviously depend on the original quality of the wine; and many of the parcels selected to be sent to India are so inferior, that the wine, when brought to London, does not rank so high as that which has been imported direct. But when the parcel sent out has been well chosen, it is very much matured and improved by the voyage; and it not only fetches a higher price, but is in all respects superior to the direct importations. Most of the adventitious spirit is dissipated in the course of the Indian voyage.

Madeira wines may be kept for a very long period. "Like the ancient vintages of the Surrentine hills, they are truly *firmissima vina*, retaining their qualities unimpaired in both extremes of climate, suffering no decay, and constantly improving as they advance in age. Indeed, they cannot be pronounced in condition until they have been kept for 10 years in the wood, and afterwards allowed to mellow nearly twice that time in bottle; and even then they will hardly have reached the utmost perfection of which they are susceptible. When of good quality, and matured as above described, they lose all their original harshness, and acquire that agreeable pungency, that bitter sweetishness, which was so highly prized in the choicest wines of antiquity; uniting great strength and richness of flavour with an exceedingly fragrant and diffusible aroma. The nutty taste, which is often very marked, is not communicated, as some have imagined, by means of bitter almonds, but is inherent in the wine." — (*Henderson*, p. 253.)

The wines of Madeira have latterly fallen into disrepute in England. The growth of the island is very limited — not exceeding 20,000 pipes, of which a considerable quantity goes to the West Indies and America. Hence, when Madeira was a fashionable wine in England, every sort of deception was practised with respect to it, and large

quantities of spurious trash were disposed of for the genuine vintage of the island. This naturally brought the wine into discredit; so that sherry has been for several years the fashionable white wine. It is difficult, however, to imagine that adulteration was ever practised to a greater extent upon Madeira than it is now practised upon sherry. It is not, therefore, improbable, that a reaction may take place in favour of Madeira. The quantity entered for home consumption in 1827 amounted to 308,295 gallons, whereas the quantity entered for home consumption in 1842 amounted to only 65,209 gallons.

Malmsey, a very rich luscious species of Madeira, is made from grapes grown on rocky grounds exposed to the full influence of the sun's rays, and allowed to remain on the vine till they are over-ripe.

The trade in Madeira wine is carried on at Funchal, the capital of the island, in lat. 32° 37′ N., lon. 17° 6′ W. *Weights and measures* same as at Lisbon.

Teneriffe wine — so called from the island of that name — resembles Madeira, and is not unfrequently substituted in its place; but it wants the full body and rich flavour of the best growths of Madeira.

German Wines. — The wines of Germany imported into England are principally produced on the banks of the Rhine and the Moselle. The Rhine wines constitute a distinct order by themselves. They are drier than the French white wines, and are characterised by a delicate flavour and aroma, called in the country *güte*, which is quite peculiar to them, and of which it would, therefore, be in vain to attempt the description. A notion prevails, that they are naturally acid; and the inferior kinds, no doubt, are so; but this is not the constant character of the Rhine wines, which in good years have no perceptible acidity to the taste, at least not more than is common to them with the growths of warmer regions. Their chief distinction is their extreme durability. The wines made in warm dry years are always in great demand, and fetch very high prices.

The Johannisberger stands at the head of the Rhine wines. It has a very choice flavour and perfume, and is characterised by an almost total want of acidity. The vineyard is the property of Prince Metternich. The Steinberger ranks next to the Johannisberger. It is the strongest of all the Rhenish wines, and in favourable years has much flavour and delicacy.

The produce of certain vineyards on the banks of the Moselle is of superior quality. The better sorts are clear and dry, with a light pleasant flavour and high aroma; but they sometimes contract a slaty taste from the strata on which they grow. They arrive at maturity in 5 or 6 years; though, when made in a favourable season, they will keep twice that time, without experiencing any deterioration. — (*Henderson*, p. 226.)

Tokay — so called from a town in Hungary near which it is produced — is but little known in England. It is luscious, possessing at the same time a high degree of flavour and aroma. It is scarce and dear; and very apt to be counterfeited.

Marsala. — The Sicilian white wine called Marsala, from the town (the ancient Lilybæum) whence it is shipped, and near which it is made, is now pretty largely consumed in England; the entries for home consumption having increased from 79,686 gallons in 1823, to 393,028 in 1842; an extraordinary increase, particularly when it is considered that during the same period the consumption of most sorts of wine has been nearly stationary. Marsala is a dry wine: the best qualities closely resembling the lighter sorts of Madeira; but the increasing demand for it seems to be owing as much to its cheapness as to any peculiarity of quality. It is, however, when good, an agreeable dinner wine. Marsala has been brought to its present state of perfection and repute by the care and exertions of 2 Englishmen, the Messrs. Woodhouse, established in Sicily, who have an extensive factory in the neighbourhood of Marsala. The wine is shipped in large quantities for America; whence a considerable quantity is again conveyed to the West Indies, where it is not unfrequently disposed of as real Madeira.

With the exception of Marsala, very little wine either of Sicily or Italy is imported into England. The wines of those countries are, indeed, without, perhaps, a single exception, very inferior to those of France. The natives bestow no care upon the culture of the vine; and their ignorance, obstinacy, and want of skill in the preparation of wine, are said to be almost incredible. In some districts, the art is, no doubt, better understood than in others; but had the Falernian, Cecuban, and other famous ancient wines, not been incomparably better than the best of those that are now produced, they never would have elicited the glowing panegyrics of Horace.

Wines of Greece and Cyprus. — The soil in most parts of Greece and of the Grecian islands is admirably fitted for the growth of the vine; and, in antiquity, they produced some of the choicest wines. But the rapacity of the Turks, and the insecurity of person and property that has always prevailed under their miserable government, has effectually prevented the careful cultivation of the vine; and has occasioned, in many places, its total abandonment. It may, however, be fairly presumed, now that Greece has emancipated herself from the iron yoke of her oppressors, that the culture of the vine will attract

some portion of that attention to which it is justly entitled; and that, at no distant period, wine will form an important article of export from Greece.

Nowhere, perhaps, has the destructive influence of Turkish barbarism and misgovernment been so apparent as in Candia and Cyprus. While these 2 renowned and noble islands were possessed by the Venetians, they supplied all Europe with the choicest dessert wines. Bacci affirms, that towards the end of the 16th century, Candia sent annually 200,000 casks of malmsey to the Adriatic; whereas at present it hardly produces sufficient to supply the wants of its few impoverished inhabitants. — (*Henderson*, p. 243.) The wines of Cyprus, particularly those produced from the vineyard called the Commandery, from its having belonged to the Knights of Malta, were still more highly esteemed than those of Crete. In the earlier part of last century, the total produce of the vintage of the island was supposed to amount to above 2,000,000 gallons, of which nearly ½ was exported; but now the wine grown and exported does not amount to ⅛th part of these quantities! The oppression of which they have been the victims, has reduced the peasantry to the extreme of indigence. The present population of the island is not supposed to exceed 60,000, — a number insufficient to have peopled one of its many ancient cities; and small as this number is, it is constantly diminishing by the inhabitants availing themselves of every opportunity of emigrating. Recently Cyprus has passed into the hands of Mehemet Ali; but unless the Pacha establishes a different government in it from what he has established in Egypt, the inhabitants will gain nothing by the change. — (See *Geog. Dict.* art. *Cyprus.*)

Cape Wines. — Of the remaining wines imported into England, those of the Cape of Good Hope form the largest proportion; the quantity annually entered for home consumption, at an average of the 3 years ending with 1842, being 422,937 Imperial gallons a year. The famous Constantia wine is the produce of 2 contiguous farms of that name, at the base of Table Mountain, between 8 and 9 miles from Cape Town. The wine is very rich and luscious; though, according to Dr. Henderson, it yields, in point of flavour and aroma, to the muscadine wines of Languedoc and Roussillon. But, with this exception, most of the Cape wines brought to England have an earthy disagreeable taste, are often acid, want flavour and aroma, and are, in fact, altogether execrable. And yet this vile trash, being the produce of a British possession, enjoys peculiar advantages in our markets; for while the duty on Cape wine is only 2*s.* 11*d.* a gallon, that on all other wines is 5*s.* 9*d.* The consequences of this unjust preference are doubly mischievous: in the first place, it forces the importation of an article of which little is directly consumed, but which is extensively employed as a convenient menstruum for adulterating and degrading sherry, Madeira, and other good wines; and, in the second place, it prevents the improvement of the wine; for, while the legislature thinks fit to give a bounty on the importation of so inferior an article, is it to be supposed that the colonists should exert themselves to produce any thing better? It is not easy to imagine a more preposterous and absurd regulation. The act enforcing it should be entitled, an act for the adulteration of wines in Great Britain, and for encouraging the growth of bad wine in the Cape colony!

Consumption of Wine in Great Britain. Duties. —We have repeatedly had occasion, in the course of this work, to call the reader's attention to the injurious operation of unequal and exorbitant duties. Perhaps, however, the trade in wine has suffered more from this cause than any other department of commerce. We have already endeavoured to point out some of the effects resulting from the inequality of the duties, or from the preference so long given to the inferior wines of Portugal and Spain over the superior wines of France. But the exorbitance of the duties was, if possible, still more objectionable than the partial principle on which they were imposed. It appears from the subjoined Table, that during the 3 years ending with 1792, when the duty on French wines was 3*s.* 9*d.*, and on Portuguese 2*s.* 6*d.* per wine gallon, the consumption in Great Britain amounted, at an average, to 7,410,947 gallons a year, producing about 900,000*l.* of revenue. It is probable, had the increase taken place *gradually*, that these duties might have been doubled without any material diminution of consumption. But in 1795 and 1796 they were raised to 8*s.* 6*d.* per gallon on French, and to 5*s.* 8½*d.* per gallon on Portuguese and Spanish wine; and the consequence of this sudden and inordinate increase, as exhibited in the Table, was, that the consumption fell from nearly 7,000,000 gallons in 1795, to 5,732,383 gallons in 1796, and to 3,970,901 in 1797! But this unanswerable demonstration of the ruinous effect of heavy and sudden additions to the duties did not prevent them being raised, in 1804, to 11*s.* 5½*d.* on French, and to 7*s.* 8*d.* on Portuguese and Spanish wine. They continued at this rate till 1825; and such was their influence, that notwithstanding the vast increase of wealth and population since 1790, and the general improvement in the style of living, the total consumption of wine, during the 3 years ending with 1824, amounted, at an average, to only 5,248,767 gallons a year; being no less than 2,162,180 gallons under the annual consumption of the 3 years ending with 1792! It may, therefore, be truly said, making allowance for the increase of population, that *the consumption of wine in Great Britain fell off more than fifty per cent. between* 1790 *and* 1824.

On Mr. Robinson (now Lord Ripon) becoming Chancellor of the Exchequer, he resolved upon the effectual reduction of the wine duties; and took, in 1825, nearly 50 per cent. from the previously existing duties; and notwithstanding the spirit duties were at the same time reduced in a still greater degree, the consumption of wine in Great Britain has been increased in ordinary years from little more than 4,150,000 to from 6,000,000 to 7,000,000 Imperial gallons, while there has been no loss of revenue. We are, therefore, justified in affirming that this measure has been very successful, and that it is a most valuable example of the superior productiveness of low duties.*

* An article in the Edinburgh Review, No. 80., contributed to bring about this measure. See also an excellent tract on the *Wine Trade*, by Mr. Warre, published in 1824.

The duties, as reduced by Mr. Robinson, were 7*s.* 3*d.* per Imperial gallon on French wines, 4*s.* 10*d.* per do. on all other foreign wines, and 2*s.* 5*d.* on those of the Cape of Good Hope. They continued on this footing till the equalisation act (1 & 2 Will. 4. *c.* 30.), which imposed a duty of 5*s.* 6*d.* per Imperial gallon on all foreign wines, and of 2*s.* 9*d.* on those of the Cape.

But the equalisation effected by this act should not have been brought about by adding any thing to the duties on port, sherry, &c., but by reducing those on French wines to their level. The subjoined Tables show that the consumption of wine in the U. Kingdom was about stationary from 1826 to 1831; and the addition of 8*d.* a gallon, that was then made to the duties on all sorts of foreign wine except French, from which 1*s.* 9*d.* was deducted, appears to have sensibly affected the consumption of 1832. Considering, indeed, the increasing wealth and population of the British empire, and the more generally diffused use of wine, the stationary amount of the quantities retained for consumption is not a little surprising. A good deal is, we believe, ascribable to adulteration. It is certain, however, that the duties are still too high; but they are principally objectionable from the mode of their assessment. The trade will never be placed on a proper footing till the duty is imposed on an *ad valorem* principle. The imposition of the same duty on inferior and cheap wines, worth 10*l.* a hogshead, as on the choicest Burgundy and Champagne, worth 50*l.* or 60*l.* a hogshead, is so utterly subversive of all principle, that one is astonished it should be maintained for an instant. Its absurdity would not be exceeded, were the same duty charged on small beer that is charged on gin! The effect of this apparently equal, but really *most unequal* duty, is to exclude all low priced wines from the English markets; and to deprive the middle classes of the gratification derivable from their use. Commercially speaking, Bordeaux is much nearer London than Paris: and but for this preposterous system, the cheap wines of the Gironde, Languedoc, and Provence might be bought here at a less price than in most parts of France. Were it necessary for the sake of revenue to continue the present system, it might be reluctantly submitted to; but it is abundantly certain, that a fairly assessed *ad valorem* duty would, by increasing the consumption of the middle classes, yield a much larger amount of revenue than is produced by the constant duty. It is said, indeed, that the imposition of an *ad valorem* duty would lead to the commission of fraud; but we have been assured, by those familiar with the customs, that such precautions might with little difficulty be adopted as would prevent any danger on this head. And though it were otherwise — though a few thousand gallons of wine were admitted for home consumption at a somewhat lower duty than they should have paid — the injury would be of the most trivial kind, and would hardly, indeed, deserve a moment's attention. In the United States, most duties are imposed on an *ad valorem* principle; and it is not alleged that any real difficulty has to be encountered in their collection.

Account of the Quantity of French and other Sorts of Wine retained for Home Consumption in Great Britain from 1789 to 1832; specifying the Produce of the Duty, and the Rates of Duty thereon.

Years.	Quantities retained for Home Consumption.			Rates of Duty.						Nett Revenue.		
	French.	Other Sorts.	Total.	French.	Madeira.	Portuguese & Spanish.	Rhenish.	Cape.	Other Sorts.	French.	Other Sorts.	Total.
	Wine Gallons.	*Wine Gallons.*	*Wine Gallons.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	£	£	£
1789	234,299	5,580,366	5,814,665	3 9	2 5½	2 5½	4 1	2 11½	3 9	36,549	684,969	721,518
1790	246,334	6,245,983	6,492,313	-	-	-	-	-	-	41,352	779,209	820,562
1791	250,859	7,407,437	7,658,296	-	-	-	-	-	-	43,417	873,351	916,769
1792	303,727	7,774,522	8,092,249	-	-	-	-	-	-	59,693	959,951	1,019,645
1793	256,160	6,634,750	6,890,910	-	-	-	-	-	-	30,308	660,377	690,686
1794	99,118	6,700,102	6,799,220	-	-	-	-	-	-	14,487	780,536	795,023
1795	118,587	6,808,534	6,927,121	6 1½	4 1½	5 8	4 6½	5 4		55,579	1,375,143	1,430,722
1796	50,881	5,681,502	5,732,383	8 6	5 8½	5 8½	7 3	6 1½	8 11	25,253	1,134,270	1,159,523
1797	Excess of exports, 4,874 gals.	5,975,775	5,970,901	-	-	-	-	-	-	36,232	1,347,432	1,383,664
1798	45,367	4,715,290	4,760,657	8 9½	5 11	5 9½	7 6½	6 3	7 0½	33,247	1,339,414	1,372,661
1799	51,196	4,726,505	4,777,631	-	-	-	-	-	-	31,316	1,661,510	1,692,826
1800	85,671	7,645,400	7,728,871	-	-	-	-	-	-	42,341	1,924,871	1,967,212
1801	141,693	6,864,617	7,006,310	8 6	5 8½	5 8½	7 3	6 1½	8 11	84,686	1,905,310	1,989,997
1802	129,980	6,226,469	6,355,749	8 10	5 11½	5 11½	7 7½	6 3½	7 1	61,514	1,870,358	1,931,872
1803	129,156	7,989,350	8,181,466	10 4	6 11½	6 10½	8 7½	6 10½	8 10½	72,103	2,069,252	2,141,356
1804	81,804	4,818,915	4,840,719	11 5½	7 7	6 11½	9 3	7 6	7 6	54,123	1,779,899	1,814,323
1805	63,983	4,501,565	4,565,551	11 5	7 8	7 8	9 4	7 7	7 7	81,386	1,922,480	2,003,866
1806	136,002	5,780,233	5,936,235	-	-	-	-	-	-	94,813	2,223,615	2,320,428
1807	160,114	5,761,223	5,922,337	-	-	-	-	-	-	89,139	2,245,058	2,334,197
1808	186,944	6,221,590	6,408,534	-	-	-	-	-	-	126,936	2,226,800	2,353,736
1809	125,266	5,682,821	5,808,087	-	-	-	-	-	-	The nett receipt of duty on French and other descriptions of wine cannot be separately stated for these years, in consequence of the destruction of the customs records by fire.		2,361,113
1810	190,917	6,614,369	6,803,276	-	-	-	-	-	-			2,313,615
1811	63,221	5,797,653	5,860,874	-	-	-	-	-	-			2,169,871
1812	77,312	5,059,178	5,136,490	-	-	-	-	-	-			1,911,352
1813	186,747	4,531,821	4,718,568	16 5	7 8	7 7	9 4½	2 6½	7 7			Customs records destroyed.
1814	36,880	4,904,783	4,941,663	11 5	7 8	7 7	9 4½	2 6½	7 7	73,185	1,959,655	2,032,840
1815	301,774	5,667,411	5,968,185	-	-	-	-	-	-	122,662	1,972,637	2,095,296
1816	126,625	4,294,182	4,420,807	-	-	-	-	-	-	76,046	1,534,252	1,610,298
1817	147,671	5,466,251	5,614,622	-	-	-	-	-	-	87,475	1,936,244	2,023,720
1818	266,424	5,873,066	6,139,490	-	-	-	-	-	-	155,370	2,086,010	2,241,380
1819	213,846	4,764,754	4,978,600	11 5½	7 8	7 7	9 5	2 6½	7 7	126,667	1,675,429	1,802,097
1820	182,175	4,837,785	5,019,960	-	-	-	-	-	-	106,892	1,711,503	1,818,396
1821	165,791	4,850,778	5,016,569	-	-	-	-	-	-	97,496	1,700,004	1,797,501
1822	177,758	4,797,401	4,975,159	-	-	-	-	-	-	104,425	1,689,588	1,794,013
1823	183,296	5,108,114	5,291,410	-	-	-	-	-	-	106,982	1,800,484	1,907,466
1824	204,201	5,275,231	5,479,732	-	-	-	-	-	-	117,202	1,850,751	1,967,953
1825	284,015	5,121,978	5,685,995	6 0	4 0	4 0	4 0	2 0	4 0	166,184	1,648,869	1,815,053
										Allowances for stock in hand		1,081,044
												794,009
1826	Imp. Gall. 365,446	Imp. Gall. 6,083,968	Imp. Gall. 6,450,814	7 3	4 10	4 10	4 10	2 5	4 10	107,992	1,162,825	1,270,118
1827	340,471	6,971,639	7,312,110	equal to the former duties per wine gall.						102,509	1,324,040	1,426,550
1828	451,341	7,129,464	7,580,623							136,084	1,370,098	1,506,182
1829	316,941	5,104,802	5,421,743	-	-	-	-	-	-	119,580	1,178,512	1,298,468
1830	266,085	5,410,686	5,676,771	-	-	-	-	-	-	95,139	1,256,468	1,351,607
1831	223,613	5,226,470	5,454,883	5 6	5 6	5 6	5 6	2 9	5 6	70,935	1,285,273	1,356,208
1832	208,490	4,995,951	5,199,303	-	-	-	-	-	-	55,368	1,321,669	1,319,643

Consumption of Wine in Ireland. Duties. — In 1790, the duties on wine consumed in Ireland were considerably below the level of those imposed in Great Britain, and the average annual quantity of all sorts retained for home consumption in that country amounted to about 1,160,000 Imperial gallons, producing about 138,000*l.* a year of revenue. Had those to whom the government of Ireland was intrusted possessed the slightest knowledge of the merest elements of finance, or of the condition of the Irish people, they would not have attempted to add to the public revenue by augmenting the duties on wine. Owing to the limited number of the middle classes in Ireland, an increase of duty could not be expected to be productive; and though it had yielded 50,000*l.*, or even 100,000*l.* a year additional revenue, that would have been no compensation for the injury it was sure to do in checking the diffusion of that taste for luxuries and enjoyments so essential to the improvement of the people. But those who had to administer the affairs of Ireland were insensible to such considerations; and never doubted that 2 and 2 make 4 in the arithmetic of the customs as well as in Cocker! Such, indeed, was their almost incredible rapacity, that in the interval between 1791 and 1814, they raised the duty on French wine from 33*l.* 7*s.* a tun to 144*l.* 7*s.* 6*d.*; and that on port from 22*l.* 4*s.* 8*d.* to 95*l.* 11*s.*! This was a much more rapid increase than had taken place in England; and as the country was far less able to bear even the same increase, the consequences have been proportionally mischievous. In 1815, the quantity of wine retained for home consumption in Ireland had declined, notwithstanding the population had been doubled, to 608,000 Imperial gallons, or to about *half* the quantity consumed in 1790; and in 1824, the consumption had fallen to 467,000 gallons, while the revenue only amounted to 185,000*l.*!

The reduction of the duties in 1825 has nearly *doubled* the consumption of wine directly imported into Ireland, and has added considerably to the revenue; but since 1814, when the duties on wine in Great Britain and Ireland were equalised, it has not been possible to state the consumption of wine in either with accuracy, on account of the transhipments from the former to the latter. It is, however, quite certain that the consumption of wine in Ireland, partly in consequence of the high duties, and partly of a change in the mode of living, does not now (1844) amount, as compared with the population, to half its amount in 1790.

Adulteration of Wine. — We have already alluded to this practice. It was prosecuted to a very great extent previously to the reduction of the duties in 1825, and is still very far from being suppressed. It has been affirmed, but we are inclined to suspect the statement of exaggeration, that at this moment more than *a third* part of all the sherry consumed in London is the produce of the *home presses!* Indeed, wines are every day offered for sale at prices at which every one conversant with the trade knows they could not be afforded were they genuine. Mr. Fleetwood Williams has given, in his pamphlet on the *Wine Trade* (1824), some curious details on this subject.

The imposition of the duties on an *ad valorem* principle, by allowing genuine wine to be sold at a low price, would put an effectual stop to the practices of the adulterators. The increase of the duties in the reigns of William and Anne first gave birth to this discreditable fraternity — (see a curious paper by Addison in the *Tatler*, No. 131.); and it will continue to flourish as long as the duties are maintained on their present footing.

The only security against being imposed upon, is to deal with respectable houses largely engaged in the trade, to whom a reputation for selling good wine is of ten times more importance than any thing they could expect to make by adulteration.

Measures. — According to the system of wine measures that prevailed down to 1826, the gallon contained 231 cubic inches; the tierce, 42 gallons; the puncheon, 84 gallons; the hogshead, 63 gallons; the pipe or butt, 126 gallons; and the tun, 252 gallons. But in the new system of measures introduced by the act 5 Geo. 4. c. 74., the Imperial standard gallon contains 277.274 cubic inches; so that the tierce = 35 (very nearly) Imperial gallons; the puncheon = 70 (very nearly) do.; the hogshead = 52½ (very nearly) do.; the pipe or butt = 105 (very nearly) do.; and the tun = 210 (very nearly) do. — (See Weights and Measures.)

A very great quantity of wine is sold to the consumer in dozens; much more, indeed, than is sold in any other way; and yet there is no regulation as to the size of bottles, — a defect which has occasioned a great deal of abuse. No one doubts the propriety of making all gallons, bushels, &c. of the same capacity; and why should not similar regulations be enforced in the case of measures so universally used as bottles?

Wine the produce of Europe may not be imported for home consumption, except in British ships, or in ships of the country of which the wine is the produce, or of the country from which it is imported, on forfeiture thereof, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

No abatement of duties made on account of any damage received by wine. — (3 & 4 *Will.* 4. c. 52.)

Wine from the Cape must be accompanied by a certificate of its production. — (See *ante*, p. 673.)

Wine exported to foreign part, from the bonded warehouses must be shipped in vessels of not less than 70 tons burden. — (3 & 4 *Will.* 4. c. 57.)

Wine for Officers of Navy. — For the quantity of duty-free wine to be allowed to officers of the navy, and the regulations under which it is to be allowed, see *ante*, p. 679.

Regulations as to mixing, bottling, &c. in Warehouses. — 1. Wines, when deposited in warehouses of [illegible] of landing and shipping, and declared in the

of being eventually deducted from the official accounts.

2. Bonded brandy may be allowed to be added to wine in the bonded stores for its preservation or improvement, and the whole to pay duty as wine upon being taken out for home consumption, provided the whole quantity of brandy contained in the wine, at the time of entry for home consumption, do not exceed 20 per cent.; and that a proper sample for the purpose of ascertaining the strength be allowed to be taken out by the proper officers.

3. Wines may be allowed to be mixed with wines of the same description as often as necessary for their preservation or improvement; provided that wine so mixed be kept separate from other wine, and that the packages containing the same be branded as *mixed wine*, and the brand or other marks of the original shipper be effaced. — *Treasury Order*, 20th of May, 1830.)

Wine may be bottled for exportation in a bonded vault appropriated for the purpose, upon giving 24 hours' notice; but no foreign bottles, corks, or packages may be used, except those in which the wine may have been imported and warehoused, unless the full duties shall have been paid on the same; and not less than 3 dozen reputed quarts, or 6 dozen reputed pint bottles, shall be exported in each package; and if any surplus or sediment remain, it is to be immediately destroyed in the presence of the officer, or the full duties paid upon it. — (3 & 4 *Will.* 4. c. 57., and *Customs Min.* 31st of Dec. 1828.)

The brands or marks on the casks into which wines or spirits may be racked at the bonded warehouses are to be effaced, and no other brand or mark to be retained thereon than those which were on the casks when originally imported. — (*Treasury Order*, 29th of June, 1830.)

We have borrowed the following comprehensive and excellent table from the valuable Circular of Messrs. Shaw and Maxwell, wine merchants, issued in 1843. We have examined it with considerable attention, and believe it to be as nearly accurate as it can be made.

... Duties, &c.

Year.	Years.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Gallons.	Duty.	Total Gallons.	Revenue.
		Spain.		Portugal.		Madeira.		Teneriffe.		Sicily.		Cape.		French.		Rhenish.			
From 1784 to 1785	av. 2	2,692,110	1s. 8½d.	613,020	1s. 10d.	-	-	-	-	-	-	-	-	97,230	5s. 2d.	31,080	5s. 2½d.	-	£625,454
— 1786 — 1794	— 9	6,150,850	3 1½	921,250	3 11	196,110	3s. 12d.	90,350	3s. 12d.	5,160	3s. 12d.	-	-	179,950	4 10	29,790	-	5,524,890	889,031
— 1795	-	3,561,170	5 0½	1,610,280	5 0½	122,150	5 0½	27,550	5 0½	2,750	6 5	-	-	96,180	7 8½	1,030	7 11½	7,021,770	1,436,722
— 1796	-	2,987,970	6 11	1,125,240	6 11	78,350	6 11	25,310	6 11	18,270	8 3	-	-	34,020	10 6½	420	9 0½	4,189,710	1,159,523
— 1797 to 1802	av. 6	4,150,580	-	1,058,820	-	107,290	-	2,930	-	-	-	-	-	55,760	-	10,710	-	5,449,710	1,723,339
— 1803	-	5,916,540	8 4	1,319,030	8 4	311,240	8 4	25,310	8 4	34,860	-	-	-	135,450	12 7½	7,770	10 2	7,147,860	2,141,356
— 1804	-	1,921,640	8 10	1,287,310	8 10	186,660	8 10	34,940	8 10	-	-	-	-	16,150	13 9	1,360	10 11	3,547,800	1,314,325
— 1805 to 1814	av. 10	3,773,020	9 1	1,464,130	9 1	534,050	9 2½	20,340	9 1	125,080	9 1	-	-	90,930	-	9,030	11 3	6,015,030	1,974,102
— 1815 — 1820	— 6	2,765,160	-	848,540	-	353,910	-	175,70	-	5,020	-	441,650	3s. 0d	158,430	-	21,490	-	4,564,140	1,931,865
1821	-	2,345,909	-	959,834	-	400,476	-	160,340	-	46,104	-	472,151	-	150,462	-	21,091	-	4,656,885	1,797,491
1822	-	2,373,210	-	967,149	-	341,926	-	149,640	-	66,765	-	538,845	-	168,732	-	19,340	-	4,646,909	1,791,013
1823	-	2,492,212	-	1,078,922	-	345,754	-	125,050	-	29,686	-	555,119	-	171,681	-	25,070	-	4,845,000	1,807,465
1824	-	2,514,343	-	1,217,034	-	297,479	-	117,428	-	27,085	-	595,299	-	187,427	-	25,976	-	5,030,091	1,967,933
1825	-	4,300,719	4 10	1,830,975	4 10	577,524	4 10	107,108	4 10	131,904	4 10	650,659	2 5	325,579	7 3	107,493	4 10	8,089,542	1,815,053
1826	-	2,833,088	-	1,622,500	-	286,775	-	174,114	-	140,318	-	631,436	-	343,707	-	166,994	-	6,058,143	1,870,419
1827	-	3,222,192	-	1,308,231	-	340,295	-	159,938	-	156,721	-	698,454	-	311,289	-	76,161	-	6,246,561	1,426,550
1828	-	3,307,721	-	2,097,648	-	274,927	-	137,553	-	186,337	-	612,230	-	421,169	-	86,905	-	7,165,576	1,586,122
1829	-	2,582,084	-	1,504,162	-	229,592	-	101,009	-	219,124	-	527,744	-	365,536	-	70,590	-	6,217,652	1,292,402
1830	-	2,369,628	-	2,081,123	-	217,158	-	101,892	-	242,513	-	555,225	-	308,291	-	65,522	-	6,434,445	1,351,607
1831	-	2,706,734	5 6	2,086,252	5 6	208,147	5 6	91,405	5 6	250,016	5 6	550,781	2 9	254,566	5 6	57,888	5 6	6,213,264	1,356,208
1832	-	2,617,405	-	2,080,299	-	150,808	-	72,805	-	254,251	-	514,262	-	248,027	-	38,197	-	5,965,542	1,319,845
1833	-	2,598,730	-	2,231,095	-	161,042	-	69,021	-	314,393	-	543,191	-	275,250	-	45,255	-	6,207,770	1,329,419
1834	-	2,780,303	-	2,270,854	-	150,369	-	62,186	-	322,648	-	524,081	-	260,650	-	50,357	-	6,420,544	1,405,520
1835	-	2,740,084	-	2,430,187	-	139,122	-	52,892	-	324,249	-	522,941	-	274,161	-	48,096	-	6,430,542	1,691,522
1836	-	2,926,359	-	2,588,113	-	135,673	-	54,584	-	403,135	-	541,511	-	332,065	-	59,454	-	6,811,212	1,795,963
1837	-	2,522,157	-	2,247,970	-	139,853	-	42,146	-	377,458	-	500,747	-	410,322	-	44,807	-	6,591,560	1,687,097
1838	-	2,789,477	-	2,437,558	-	110,264	-	36,263	-	370,610	-	535,528	-	417,881	-	57,581	-	6,980,271	1,846,056
1839	-	2,741,424	-	2,578,097	-	118,715	-	35,178	-	369,117	-	531,182	-	376,056	-	65,037	-	7,000,486	1,849,699
1840	-	2,668,254	5 9	2,500,740	5 9	112,555	5 9	29,180	5 9	385,774	5 9	456,775	2 11	341,341	5 9	60,056	5 9	6,553,995	1,672,799
1841	-	2,587,017	-	2,417,823	-	107,701	-	25,772	-	401,139	-	441,258	-	335,740	-	55,814	-	6,184,960	1,820,127
1842	-	1,788,053	-	2,261,786	-	61,491	-	21,164	-	393,028	-	370,500	-	360,092	-	55,385	-	4,815,222	1,409,205

Until 1814, duties were charged per tun, in accordance with which, our calculations have been made, and the rate per tun, and per old gallon, reduced to the rate per Imperial gallon, throughout; and, although differing at the earliest periods from other statements, will, we believe, be found perfectly correct.

The official documents of the years 1784 and 1785 are evidently so imperfect, that we do not state the "total gallons."

The years 1784 to 1820 include only England and Scotland. From 1821, Ireland is included.

The consumption of wine in Ireland was —		In 1810, 1,127,200 gallons	
In 1790, 1,117,550 gallons		1815, 608,000 —	
1800, 1,258,912 —		1824, 467,000 —	

From 1790 to 1814, duties in Ireland were raised on "French" from 3s. 2d. to 15s. 9d. per gallon, upwards of 400 per cent., and on Port, &c., from 2s. 1d. to 9s., being 450 per cent.

The population was in 1790, 5,000,000, and in 1824, 7,000,000. Duty received in 1790, 138,000*l.*; in 1824, 185,000*l.*

Prior to 1821 the quantities are calculated from the annual importations, deducting the exportations; after, and including 1821, from the custom returns of "quantities retained for home consumption.

The customs records of 1815, were destroyed by fire.

The great apparent increase in "French" in the years 1830-6-7-8, is owing to the large quantity of Maadeu (a wine resembling Port) introduced in those years.

Champagne, and various cheap sparkling wines, now form a large proportion of "French," and appear to be displacing "Rhenish."

If a reduction on other wines takes place, "Cape" will no longer be imported."

In the South of Europe, sobriety may be said to be universal; but even in those parts of the North, where wine and spirits are extremely cheap, there is but little intemperance, compared with that which still prevails in this kingdom, where the rates of the duty on spirits, and the per centage on the respective cost of each, according to quality, are as follows —

			Per Gallon.
United Kingdom	Brandy and Geneva	22s. 10d. from 500 to 1,000 per cent	
	Rum	9s. 9d. — 200 — 400	
	Liqueurs	30s. 4d.	
Ireland and Scotland	Whisky—Corn spirit	5s. 8d. about 200 per cent.	
Ireland	Whisky—Malt spirit	5s. 6d. — 350	
Scotland	Whisky—Malt spirit	4s. 4d. — 300	
England	Whisky—Corn spirit	7s. 10d. — 500	
	Whisky—Malt spirit	9s. 2d. — 600	

The consequence of such unequal, and, on brandy and Geneva especially, such enormous duties, is only what might be anticipated, extensive smuggling, illicit distillation, and every kind of fraud against the revenue, the consumer, and the honest dealer.

Many yet remember the time when few cellars in Scotland and Ireland were not filled with wine (especially claret), as well as brandy and geneva, little or none of which had paid duty. The Isle of Man was then a great smuggling depôt for these and other parts of the kingdom.

Rates of Duty per Gallon on all Wines, since 1671, and differential Duty per Cent. on French and Foreign Wines.

Years.	French.	Portuguese.	Spanish.	Rhenish.	Differential Duty per Cent. on French and Portugal Wines.
	Duty.	Duty.	Duty.	Duty.	
1671	0s. 4d.	0s. 4d.	No account	No account.	Equal.
1678	0 8	0 8	No account	No account.	Equal.
1688	1 4	1 8	1s. 8d.	1s. 8d.	French 20 per cent. less.
1693	2 1	1 8	1 8	1 8	— 25 — more.
1702	4 10	2 0	2 2	2 5	— 136 — —
1707	5 5	2 5	2 5	2 11	— 115 — —
1745	6 0	2 9	2 9	3 4	— 113 — —
1782	9 2	4 8½	4 10	5 2	— 109 — —
1786	4 10	3 1	3 1	5 2	— 55 — —
1824	15 9	9 1	9 1	11 3	— 50 — —
1825	7 3	4 10	4 10	4 10	— 50 — —
1831	5 6	5 6	5 6	5 6	Equal.
1840	5 9	5 9	5 9	5 9	Equal.

Average Annual Revenue from Wine, with the Number of Gallons consumed, the Population, and the Consumption per Individual, during the 58 Years ending with 1842.

	From	Years.	Revenue.	Gallons.	Av. Population.	Av. Consumption per Individual p. Annum.
England and Scotland.	1784 to 1794	10	£ 889,031	5,524,890	5,500,000	1¼ bottles.
	1795 — 1804	10	1,788,595	5,470,512	10,400,000	½ —
	1805 — 1814	10	1,974,102	6,015,030	12,100,000	½ —
	1815 — 1820	6	1,931,865	4,564,140	12,900,000	⅓ —
	1821 — 1824	4	1,866,750	4,792,958	21,500,000	1/5 —
England, Ireland, and Scotland.	1825 — 1840	16	1,600,843	6,608,925	25,400,000	1/4-5th —
	1841	1	1,800,127	6,184,960	26,715,000	1/4-5th —
	1842	1	1,409,205	4,815,222	26,965,000	1/5-5th —

Price of Wine in London. — The following is an account of the price of wine in bond in London, in June 1843, from the Circular of the eminent brokers Messrs. Clark, Keeling, and Co.

	£	s.	£	s.
Port, very superior old - - per pipe	38	0 to 44	0	
good do. - - -	25	0 — 30	0	
other quality do. - -	18	0 — 22	0	
1840 - - -	30	0 — 40	0	
good young wines - -	22	0 — 28	0	
other quality do. - -	18	0 — 20	0	
Hermitage, red & white (1st growths) per hhd.		None.		
2d and 3d quality - -	30	0 — 35	0	
Clarets, 1st growths - -	42	0 — 46	0	
2d quality - - -	30	0 — 34	0	
3d and 4th do. - -	17	0 — 25	0	
cargo - - -	5	0 — 8	0	
French, white, Sauterne, Barsac, &c.	22	0 — 25	0	
1st quality - - -				
2d do. - - -	18	0 — 20	0	
3d and 4th do. - -	10	0 — 16	0	
Champagne, 1st quality - - per doz.	1	0 — 2	10	
good do. and other qualities -	0	18 — 1	15	
Hock, superior old - - per aum.	40	0 — 50	0	
2d quality - - -	25	0 — 30	0	
3d and 4th do. - -	18	0 — 20	0	
Moselle, 1st quality - -	18	0 — 22	0	
2d do. - - -	10	0 — 18	0	
Sherry, very superior - - per butt	70	0 — 80	0	
1st class - - -	50	0 — 60	0	
2d and 3d do. - -	35	0 — 45	0	
4th do. and other qualities -	0	0 — 15	0	
Madeira, East India, 1st quality - per pipe	70	0 — 85	0	
Madeira, East India, good - - per pipe	50	0 to 55	0	
other qualities - - -	30	0 — 40	0	
West India, 1st quality - -	50	0 — 60	0	
do., good - - -	40	0 — 45	0	
other qualities - - -	25	0 — 30	0	
direct Lond. partic. 1st quality -	30	0 — 35	0	
good - - - -	30	0 — 40	0	
other qualities - - -	18	0 — 25	0	
Lisbon - - - -	20	0 — 24	0	
Bucellas - - - -	24	0 — 28	0	
Carcavellas - - - -	25	0 — 28	0	
Mountain, London particular - -	30	0 — 36	0	
2d and 3d quality - - -	16	0 — 18	0	
Teneriffe, London particular - -	20	0 — 22	0	
2d quality - - - -	13	0 — 14	0	
cargo - - - -	8	0 — 10	0	
Figueira, red - - - -	11	0 — 12	0	
Spanish, red - - per tun 210 gals.	11	0 — 14	0	
Sicilian, red - - - per 1410		None.		
white - - - - -		None.		
Broots or Marsala - - - -	11	0 — 14	0	
Cape, white, 1st quality - - -	13	0 — 15	0	
2d and other qualities - - -	10	10 — 11	10	
Cape, red, 1st quality - - -	12	0 — 0	0	
2d and other qualities - - -	10	0 — 11	0	
Fayal, Madeira, good - - -		None.		
cargo - - - - -		None.		

WOAD (Ger. *Waid*; Du. *Weede*; Fr. *Pastel, Guède, Vouède*; It. *Guadone, Guado, Glastro*; Sp. *Pastel, Glasto*), the *Isatis tinctoria* of botanists, a biennial plant, with a fusiform fibrous root, and smooth branchy stem, rising from 3 to 5 feet in height. Woad is indigenous to most parts of Europe; and was extensively used from a very remote period, down to the general introduction of indigo, in the dying of blue. It is still cultivated to a considerable extent in France; but in this country its cultivation is chiefly restricted to a few districts in Lincolnshire. After being bruised by machinery, to express the watery part, it is formed into balls, which ferment and fall into a dry powder, which is sold to the dyer. Woad is now seldom employed without a mixture of indigo. By itself, it is incapable of giving a bright and deep blue colour; but the colour which it does give is very durable. The best methods of conducting the fermentation and preparation of woad are still so very ill understood, that the goodness of any parcel of it can never be ascertained till it be actually used; so that it has the disadvantage of being purchased under the greatest uncertainty as to its true value. At the proper age, indigo plants yield about 30 times as much colouring matter, and of a far superior quality, as an equal weight of woad; so that there is no prospect that any improvement that may be made in its preparation will ever render it, either in goodness or cheapness, a rival of the former. — (*London's Ency. of Agriculture; Bancroft on Colours*, vol. i. p. 167.) We have previously — (see INDIGO) — given some account of the efforts made by the woad growers to prevent the use of indigo.

WOOD. See TIMBER.

WOOL (Ger. *Wolle*; Du. *Wol*; Da. *Uld*; Sw. *Ull*; Fr. *Laine*; It. and Sp. *Lana*; Port. *Lã, Lan*; Rus. *Wolna, Scherst*; Pol. *Welna*; Lat. *Lana*), a kind of soft hair or down. The term is not very well defined. It is applied both to the fine hair of animals, as sheep, rabbits, some species of goats, the vicuna, &c.; and to fine vegetable fibres, as cotton. In this article, however, we refer only to the wool of sheep, — an article which has continued, from the earliest period down to the present day, to be of primary importance, having always formed the principal part of the clothing of mankind in most temperate regions.

Species of Wool. — It has been customary in this country to divide wool into 2 great classes — long and short wools; and these again into subordinate classes, according to the fineness of the fibre.

Short wool is used in the cloth manufacture; and is, therefore, frequently called clothing wool. It may vary in length from 1 to 3 or 4 inches; if it be longer, it requires to be cut or broken to prepare it for the manufacture.

The *felting* property of wool is known to every one. The process of hat making, for example, depends entirely upon it. The wool of which hats are made is neither spun nor woven; but locks of it, being thoroughly intermixed and compressed in warm water, cohere and form a solid tenacious substance.

Cloth and woollen goods are made from wool possessing this property; the wool is carded, spun, woven, and then, being put into the fulling mill, the process of felting takes place. The strokes of the mill make the fibres cohere; the piece subjected to the operation contracts in length and breadth, and its texture becomes more compact and uniform. This process is essential to the beauty and strength of woollen cloth. But the long wool of which stuffs and worsted goods are made is deprived of its felting properties. This is done by passing the wool through heated iron combs, which takes away the laminæ or feathery part of the wool, and approximates it to the nature of silk or cotton.

Long or combing wool may vary in length from 3 to 8 inches. The shorter combing

wools are principally used for hose, and are spun softer than the long combing wools; the former being made into what is called hard, and the latter into soft worsted yarn.

The fineness of the hair or fibre can rarely be estimated, at least for any useful purpose, except by the wool sorter or dealer, accustomed by long habit to discern those minute differences that are quite inappreciable by common observers. In sorting wools, there are frequently 8 or 10 different species in a single fleece; and if the best wool of one fleece be not equal to the finest sort, it is thrown to a 2d, 3d, or 4th, or to a still lower sort, of an equal degree of fineness with it. The best English short native fleeces, such as the fine Norfolk and Southdown, are generally divided by the wool sorter into the following sorts, all varying in fineness from each other: — viz. 1. Prime; 2. Choice; 3. Super; 4. Head; 5. Downrights; 6. Seconds; 7. Fine Abb; 8. Coarse Abb; 9. Livery; 10. Short coarse or breech wool. The relative value of each varies, according to the greater demand for coarse, fine, or middle cloths.

The softness of the fibre is a quality of great importance. It is not dependent on the fineness of the fibre; and consists of a peculiar feel, approaching to that of silk or down. The difference in the value of 2 pieces of cloth made of 2 kinds of wool equally fine, but one distinguished for its softness and the other for the opposite quality, is such, that, with the same process and expense of manufacture, the one will be worth from 20 to 25 per cent. more than the other. Mr. Bakewell showed that the degree of softness depends principally on the nature of the soil on which sheep are fed: that sheep pastured on chalk districts, or light calcareous soils, usually produce hard wool: while the wool of those that are pastured on rich, loamy, argillaceous soils, is always distinguished by its softness. Of the foreign wools, the Saxon is generally softer than the Spanish. Hard wools are all defective in their *felting* properties.

In clothing wool, the colour of the fleece should always approach as much as possible to the purest white; because such wool is not only necessary for cloths dressed white, but for all cloths that are to be dyed bright colours, for which a clear white ground is required to give a due degree of richness and lustre. Some of the English fine woolled sheep, as the Norfolk and Southdown, have black or gray faces and legs. In all such sheep there is a tendency to grow gray wool on some part of the body, or to produce some gray fibres intermixed with the fleece, which renders the wool unfit for many kinds of white goods; for though the black hairs may be too few and minute to be detected by the wool sorter, yet when the cloth is stoved they become visible, forming reddish spots, by which its colour is much injured. The Herefordshire sheep, which have white faces, are entirely free from this defect, and yield a fleece without any admixture of gray hairs.

The cleanness of the wool is an important consideration. The Spanish wool, for example, is always scoured after it is shorn; whereas the English wool is only imperfectly washed on the sheep previously to its being shorn. In consequence, it is said that while a pack of English clothing wool of 240 lbs. weight will waste about 70 lbs. in the manufacture, the same quantity of Spanish will not waste more than 48 lbs. Cleanness, therefore, is an object of much importance to the buyer.

Before the recent improvements in the spinning of wool by machinery, great length and strength of staple was considered indispensable in most combing wools. The fleeces of the long woolled sheep fed in the rich marshes of Kent and Lincoln used to be reckoned peculiarly suitable for the purposes of the wool-comber: but the improvements alluded to have effected a very great change in this respect; and have enabled the manufacturer to substitute short wool of 3 inches staple, in the place of long combing wool, in the preparation of most worsted articles. A great alteration has, in consequence, taken place in the proportion of long to short wool since 1800; there having been in the interim, according to Mr. Hubbard's calculations — (see *post*) — an increase of 132,053 packs in the quantity of the former produced in England, and a decrease of 72,820 in the quantity of the latter.

Whiteness of fleece is of less importance in the long combing than in clothing wool, provided it be free from gray hairs. Sometimes, however, the fleece has a dingy brown colour, called a *winter stain*, which is a sure indication that the wool is not in a thoroughly sound state. Such fleeces are carefully thrown out by the wool sorter; being suitable only for goods that are to be dyed black. The fineness of heavy combing wool is not of so much consequence as its other qualities.

The Merino or Spanish breed of sheep was introduced into this country about the close of last century. George III. was a great patron of this breed, which was for several years a very great favourite. But it has been ascertained that, though the fleece does not much degenerate here, the carcase, which is naturally ill formed, and affords comparatively little weight of meat, does not improve; and as the farmer, in the kind of sheep which he keeps, must look not only to the produce of wool, but also to the butcher market, he has found it his interest rather to return to the native breeds of his own country, and to give up the Spanish sheep. They have, however, been of considerable service to the flocks of England; having been judiciously crossed with the Southdown, Ryeland, &c.

Deterioration or Change in the Character of British Wool.— It appears to be sufficiently established, by the evidence taken before the House of Lords in 1828, and other authorities, that a considerable deterioration, or rather, perhaps, change, has taken place in the quality of British wool, particularly during the 30 preceding years. The great object of the agriculturist has been to increase the weight of the carcase and the quantity of the wool; and it seems very difficult, if not quite impossible, to accomplish this without injuring the fineness of the fleece. Mr. Culley says, that the Herefordshire sheep, that produce the finest wool, are kept lean, and yield 1¼ lb. each; he adds, "if they be better kept, they grow large and produce more wool, but of an inferior quality." This would seem to be universally true. The great extension of the turnip husbandry, and the general introduction of a larger breed of sheep, appears, in every instance, to have lessened the value of the fleece. Speaking of the Norfolk fleeces, Mr. Fison, a wool sorter, says, that 25 years ago the weight was 2½ lbs. a fleece, and that now it is 3 lbs. or 3½ lbs. — (*Report*, p. 356.) But according to a Table furnished by the same gentleman, containing the results of his experience, it appears that of 15 tods, or 420 lbs., of clothing wool grown in Norfolk in 1790, 200 lbs. were *prime*, while, in 1828, the same quantity of Norfolk wool only yielded 14 lbs. prime! — (*Ibid.* p. 207.) The statements of other witnesses are to the same effect. — (*Ibid.* pp. 388, 640, and 644.) According to the estimate in Mr. Luccock's *Treatise on English Wool*, which has always enjoyed the highest reputation, the produce of all sorts of wool in England, in 1800, was 384,000 packs, of 240 lbs. a pack. But Mr. Hubbard, a very intelligent and extensive wool-stapler at Leeds, has shown, that, supposing Mr. Luccock's estimate of the number of sheep to be correct, the quantity of wool produced in 1828 could not, owing to the greater weight of the fleece, be estimated at less than 463,169 packs; and it is now (1844) believed to amount to fully 500,000 packs. It is, therefore, probable, notwithstanding the decline in the price of wool, that, taking into account the greater weight of the carcase, and the greater weight of the fleece, sheep produce more at present to the farmer than at any former period.

Number of Sheep in Great Britain. — It is not possible to form any accurate estimate either of the number of sheep or of the quantity of wool annually produced. With the exception of Mr. Luccock's, most of the statements put forth with respect to both these points seem much exaggerated. But Mr. L.'s estimate, which is considerably under any that had previously appeared, was drawn up with great care; and is supposed to approach near to accuracy. According to Mr. Luccock, the

Number of long woolled sheep in England and Wales in 1800, was	4,154,855	
of short woolled ditto	14,881,572	
Total number shorn		19,036,427
Slaughter of short woolled sheep per annum	4,221,748	
Carrion of ditto	211,037	
Slaughter of long woolled ditto	1,190,413	
Carrion of ditto	59,520	
Slaughter of lambs	1,640,560	
Carrion of ditto	76,928	
		7,140,156
Total number of sheep and lambs		26,147,764

In some parts of England there has been an increase in the number of sheep since 1800, and in others they have decreased. But we have been assured by competent judges, that, on the whole, the number has not materially varied in the interim.

During the last half century a very decided increase has taken place in the number of sheep in Scotland, and a very great improvement in the breed, particularly in the Highlands. In this district, many of the proprietors have let their estates in large farms to *store farmers*, who have introduced the Cheviot breed of sheep, instead of the small black-faced heath breed that was formerly the only one to be met with. We may remark, by the way, that a good deal of unmerited odium has attached to the patrons of this system; for, though it be true that, in a few instances, the peasantry were rudely ejected from their little possessions, there can be no doubt that it has, on the whole, been decidedly advantageous. Besides rendering large tracts of country more valuable to the proprietors and the public generally, the condition and habits of the peasantry have been materially improved. Instead of loitering away more than half their time, as was their former practice, they have now either become the servants of the large farmers, or have resorted to towns and villages, and been metamorphosed into industrious tradesmen, fishermen, &c. A very small proportion of the whole has emigrated; and the country is more populous at present than before the sheep farming system began.

In the *General Report of Scotland* (vol. iii. Appen. p. 6.), the number of sheep is estimated at 2,850,000; and allowing for the increase that has taken place since 1814, we may, perhaps, estimate the total number of sheep in that part of the empire at this moment at 3,500,000. And in consequence of the rapid extension, during the last dozen years, of the practice of turnip-feeding, both the weight of the carcase and of the fleece have been largely increased.

According to Mr. Wakefield, there is not a single flock of breeding sheep in the whole province of Ulster. — (*Account of Ireland*, vol. i. p. 341.) And though there be considerable flocks in Roscommon and other counties, we believe that, if we estimate the whole number of sheep in Ireland at 2,000,000, we shall be a good deal beyond the mark.

On the whole, therefore, if we are right in these estimates, the total number of sheep in Great Britain and Ireland may be taken at about 32,000,000. This estimate is 10,000,000 under that given by Dr. Colquhoun for 1812; but that learned person assigns no grounds whatever for his estimate, which is utterly inconsistent with all the really authentic information on the subject. It is curious enough to observe the German statistical writers referring to Colquhoun's statements, as if they were of standard authority. They would be about as near the mark, were they to quote the "Arabian Nights" in proof of any disputed historical fact.

Number of Sheep and Quantity of Sheep's Wool produced in England, according to Mr. Luccock's Tables, revised by Mr. Hubbard, and made applicable to 1828.

County.	1800. Number of Short Wool Sheep.	Weight of Fleece.	Number of Packs.	Number of Long Wool Sheep.	Number of Packs.	1828. Weight of Fleece.	Number of Packs of Short Wool.	Number of Packs of Long Wool.
Northumberland	538,162	5½	19,333	-	-	5½	6,167	6,166
Durham	139,385	5	5,520	-	-	5½	-	3,818
Ditto	-	9	-	67,200	2,520	5½	-	2,569
Cumberland	378,400	3½	5,615	-	-	5	7,883	
Westmoreland	293,720	3½	5,202	-	-	5	4,660	
York, West Riding	583,144	var.	6,078	-	-	5½	4,590	4,369
— East do.	546,215	5	6,150	-	-	6	-	7,696
— North do.	566,526	var.	5,659	-	-	5	5,708	1,292
Holderness	-	5	-	84,000	2,940	5	-	2,940
Other parts of Yorkshire	-	5	-	14,340	477	5	-	477
Lancaster	310,000	3½	4,422	-	-	4½	5,812	
Chester	65,000	var.	900	-	-	4½	1,218	
Derby	366,400	3	4,350	-	-	6	-	9,060
Nottingham	235,112	var.	4,112	-	-	6½	-	6,911
Lincoln	143,648	5½	2,855	-	-	6	-	3,051
Ditto, rich level	-	9	-	1,241,624	45,561	9	-	46,561
Ditto, marshes	-	8	-	87,744	3,285	8	-	3,285
Ditto, miscellaneous land	-	5	-	661,557	16,852	6	-	12,641
Rutland	-	5	-	114,000	2,850	6	-	2,850
Northampton	-	6	-	640,000	17,778	6	-	13,000
Warwick	192,962	5	2,892	-	-	6	-	8,574
Ditto	-	5	-	160,000	5,333			
Leicester	80,000	5½	771	-	-	6	-	10,013
Ditto	-	7	-	380,728	11,100			
Oxford	301,781	var.	5,503	-	-	5	-	6,385
Bucks	222,000	5	2,787	-	-	5	-	4,615
Gloucester	85,000	var.	5,000	-	-	6	-	8,275
Ditto	-	8	-	240,000	6,666	8	-	6,666
Somerset	393,000	4½	9,288	-	-	5	5,615	5,216
Worcester	220,000	4½	4,950	-	-	4½	-	6,541
Monmouth	127,000	var.	1,851	-	-	4	-	2,960
Hereford	300,000	4	4,500	-	-	4	2,275	5,555
Shropshire	422,054	4½	6,757	-	-	4	5,344	4,960
Stafford	183,120	5	1,830	-	-	4½	-	3,503
Ditto	-	7	-	3,750	113			
Bedford	204,000	5	4,250	-	-	5	-	4,250
Berks	306,000	5½	4,131	-	-	5½	4,671	
Huntingdon	130,000	6½	2,000	-	-	5½	-	4,180
Ditto	-	7	-	87,500	2,520			
Cambridge	67,744	4	1,128	-	-	4½	1,470	
Ditto	-	5	-	41,488	1,500			1,590
Suffolk	497,000	5½	5,176	-	-	4½	5,901	
Norfolk	663,298	5	5,997	-	-	4½	4,473	8,546
Ditto	-	7	-	38,500	1,143	7½	-	1,003
Essex	519,000	5	6,486	-	-	4	5,661	
Hertford	227,000	4½	5,047	-	-	5	2,885	2,585
Middlesex	45,000	4	750	-	-	5	937	
Kent	524,475	5½	7,880	-	-	4½	-	10,360
Ditto, Romney marsh	-	7	-	185,000	5,400	5½	-	5,010
Ditto, the marsh	-	7	-	100,350	3,100	5½	-	2,934
Surrey	297,000	5	5,500	-	-	5½	4,127	
Sussex, downs	316,000	5	5,500	-	-	5	5,000	
Ditto, lowlands	347,000	5	6,557	-	-	5	6,852	
Hampshire	516,000	5	6,857	-	-	5	6,457	
Isle of Wight	84,000	5½	840	-	-	4	1,016	
Wilts, downs	585,500	5½	6,064	-	-	5½	6,085	
Ditto, pasture	117,000	5	1,460	-	-	4½	1,958	
Dorset	631,240	5½	9,880	-	-	5½	9,878	
Devon	436,850	4	7,000	-	-	5	2,875	6,886
Ditto	-	8	-	193,750	6,458	8	-	6,458
Cornwall	903,000	4	5,588	-	-	7	-	5,920
Total	14,854,979		193,473	4,135,508	131,791		190,655	863,847

1800—Short fleeces		193,473	
Long fleeces		131,791	
		325,264	
Short and long, skin and lambs' wool		58,705	
		383,974	
Part of Wales not included in the above Tables		9,262	
Increase from 1800 to 1828		69,933	
		463,169	
1800—Packs of short wool		193,473	
1828—Ditto, ditto		190,655	
Decrease		2,818	

1828—Short fleeces		190,655	
Long fleeces		863,847	
		384,502	
Short and long, skin and lambs' wool		69,405	
		453,907	
Wales, taken as before		9,262	
		463,169	
1800—Packs of long wool		131,791	
1828—Ditto ditto		863,847	
Increase		732,056	

1800—Total quantity of short wool	193,475	
Ditto ditto of long wool	131,794	
		325 269
1828—Total quantity of short wool	120,655	
Ditto ditto of long wool	263,847	
		384,502
Increase of wool		59,233 fleeces.
Increase of skin and lambs' wool		10,700
Total increase		69,933

N.B. — The wool from slaughtered sheep and carrion not mentioned in this Table; but allowed for above.

British Trade in Wool. — From 1660 down to 1825, the export of wool was strictly prohibited. A notion grew up towards the end of the 17th, and continued to gain ground during the first half of last century, that the wool of England was superior to that of every other country; that long wool could not be produced anywhere else; and that if we succeeded in keeping the raw material at home, we should infallibly command the market of the world for our woollen manufactures. In consequence, innumerable statutes were passed, the enactments in some of which were the most arbitrary and severe that can be imagined, to prevent the clandestine exportation of wool. Mr. John Smith was one of the first who, in his excellent work, entitled *Memoirs of Wool* *, exposed the injustice and absurdity of this system, by proving that whatever advantages the manufacturers might gain by preventing the exportation of wool, were more than lost by the agriculturists. But in despite of Mr. Smith's reasonings, which were enforced by many later writers, and which experience had proved to be in all respects accurate, the prohibition of the exportation of wool was continued till 1825, when Mr. Huskisson happily succeeded in procuring the abolition of this miserable remnant of a barbarous policy. The improvement of machinery, by enabling short or clothing wool to be applied to most of those purposes for which long or combing wool had been exclusively appropriated, had annihilated the only apparently tenable argument on which the prohibition of exportation had ever been vindicated; and even this, it will be observed, applied only to a small proportion of the whole wool produced in England.

Down to 1802, the importation of foreign wool into Great Britain had been quite free; and, being the raw material of an important manufacture, the policy of allowing it to be imported free of duty is obvious. In 1802, however, a duty of *5s.* 3*d.* a cwt. was laid on all foreign wool imported. In 1813, this duty was raised to *6s.* 8*d.*; and in 1819, Mr. Vansittart raised it to the enormous amount of *56s.* a cwt., or to *6d.* per lb. Had English wool sufficed for all the purposes of the manufacture, such a duty would have been less objectionable; but the very reverse was the case. The use of foreign wool had become, owing to the deterioration, or rather, perhaps, to the change in the character, of British wool, and other circumstances, quite indispensable to the prosecution of the manufacture; and as our superiority over the foreigner in several departments of the trade was by no means decided, it is plain that the imposition of a duty which amounted to about 50 per cent. upon the price of a considerable quantity of the wool we were obliged to import, must, had it been persevered in, have ruined the manufacture. It occasioned, indeed, during the period of its continuance, a considerable decline of the exports of woollens, and was productive of other mischievous effects, from which the manufacture suffered for a considerable period after it was repealed.

The evidence as to the absolute necessity of employing foreign wool, taken before the Lords' committee, was as decisive as can well be imagined. Mr. Gott, of Leeds, one of the most extensive and best informed manufacturers in the empire, informed the committee, that, in his own works, he used only foreign wool. On being asked whether he could carry on an export trade to the same extent as at present, if he manufactured his cloth of British wool, Mr. G. replied, that, in certain descriptions of cloth, "*he could not make an article that would be merchantable at all for the foreign market, or even for the home market, except of foreign wool.*" We subjoin a few additional extracts from the evidence of this most competent witness.

"Can you give the committee any information with respect to the competition that now exists between foreigners and this country in woollen cloths?"—"I think the competition is very strong. In some instances the foreigner has, probably, the advantage; and in others, the superiority of the British manufacture, I think, has greatly the advantage; that would apply, I should say, particularly to the fine cloths of Great Britain compared with foreign cloths; in some descriptions of low cloths, the foreigners are nearly on a footing, and in some instances, perhaps, superior to us."

"Speaking of the finer cloths, is the competition such as to render an additional duty on the importation of foreign wool likely to injure the export trade?"—"*I have no doubt,*

* This learned and accurate work contains a great deal of information with respect to the progress of manufactures and commerce in England.

speaking on my oath, that it would be fatal to the foreign cloth trade of the country. I would say further, that it would be equally injurious to coarse manufactures of all kinds made of English wool. The competition now with foreigners is as nearly balanced as possible; and the disturbing operation of attacks of that description would necessarily enable the foreigner to buy his wool cheaper than we should do it in this country: the result would be, that foreigners would, by such a premium, be enabled to extend their manufactures, to the exclusion of British manufactures of all descriptions."

In another part of his evidence, Mr. Gott says,—"If 2 pieces of cloth at 10*s.* a yard were put before a customer, one made of British wool, the other of foreign wool, one would be sold, and the other would remain on hand: I could not execute an order with it. If any person sent to me for cloth of 7*s.* or 8*s.* a yard, and it were made of English wool, it would be sent back to me, and I should resort to foreign wool or foreign mixed with British, to execute that order."

On Mr. Gott being asked whether, in his opinion, the price of British wool would have been higher, had the duty of 6*d.* per lb. on foreign wool been continued, he answered,—"My opinion is, that the price of British wool would have been less at this time; the demand for British wool would have been very much less. *British manufactures would have been shut out of every foreign market*; and the stock of wool would have accumulated, as it will do if ever that duty be imposed again."—(*Mr. Gott's Evidence*, pp. 292, 293.)

The view taken by Mr. Gott of the effect of the importation of foreign wool on the price of British wool was supported by the concurrent testimony of all the manufacturing witnesses examined by the committee. Blankets, flannels of all sorts, baizes, carpets, bearskins, &c. are made principally of English wool; and the command of foreign wool enables the manufacturers to use a considerable quantity of English wool in the manufacture of certain descriptions of cloth, which, if made entirely of it, would be quite unsaleable. On Mr. Goodman, a wool-stapler of Leeds, being asked whether, if a duty were laid on foreign wool, it would force the use of English wool in the manufacture of cloths, from which it is now excluded, he answered,—"Certainly not: we could not get people to wear such a cloth; they want a better, finer cloth; it is so much handsomer in its wear, and so much more durable."—(*Report*, p. 241.) Mr. Francis, of Heytesbury, declared, that there was no demand for cloth made wholly of British wool; that it was principally applicable to the manufacture of blankets, baizes, &c.; and that the exclusion of foreign wool would only injure the manufacture, without raising the price of British wool.—(p. 268.) Statements to the same effect were made by Mr. Webb (p. 270.), Mr. Sheppard (p. 294.), Mr. Ireland (p. 319.), and, in short, by every one of the witnesses conversant with the manufacture.

The history of the manufacture since 1828 has completely confirmed the accuracy of the statements made by Mr. Gott and the other witnesses. Very large quantities of foreign wool have been imported during the interval; but the price of British wool has, notwithstanding, maintained its proper level; and has, in fact, been at an average considerably higher since the reduction of the duty on foreign wool than previously.

Foreign Wool imported into England.—A very great change has taken place, within the course of the present century, both as respects the quantity of foreign wool imported, and the countries whence it is derived. Previously to 1800, our average imports of wool did not much exceed 3,000,000 lbs., mostly brought from Spain, the wool of which long maintained a high character. In 1800, our imports amounted to near 9,000,000 lbs.; and they have since gone on gradually increasing, till they now amount to between 40,000,000 and 60,000,000 lbs.! Instead, however, of being principally derived from Spain, as was the case down to 1814, the greater part by far of this immense supply of foreign wool is at present furnished by Germany, the Australian colonies, and the East Indies. The late king of Saxony, when elector, introduced the breed of Merino sheep into his dominions, and exerted himself to promote the growth of this valuable race of animals. His praiseworthy efforts have been crowned with the most signal success. The Merino sheep seem to succeed better in Saxony and other German states than in Spain; and have increased so rapidly, that the Spanish wool trade has become insignificant compared with that of Germany! The importations of German wool were quite trifling during the war—amounting, in 1812, to only 28 lbs.; but since the peace they have increased beyond all precedent. In 1814, they amounted to 3,432,456 lbs.; in 1820, they were 5,113,442 lbs.; in 1825, they reached the enormous amount of 28,799,661 lbs.; but this being a year of overtrading, they declined, in 1826, to 10,545,232 lbs. Subsequently, however, they recovered from this depression, and, in 1836, amounted to 31,766,194 lbs. They have since, however, sunk considerably, principally in consequence of the rapidly increasing imports of colonial wool.

The breed of sheep that was carried out to New South Wales and Van Diemen's Land has succeeded remarkably well; and Australia promises, at no distant day, to be the principal wool-growing country of the world. The imports into Great Britain

have increased with extraordinary rapidity. In 1833, they amounted to 3,516,869 lbs., in 1839 to 10,128,774 lbs., and in 1842 to 12,959,671 lbs.! The imports from India only began in 1833, when they amounted to the inconsiderable quantity of 3,721 lbs.; but such has been their increase in the interval, that in 1842 they amounted to 4,246,083 lbs.! The imports from Spain sunk in 1842 to only 670,239 lbs.

Account of the Quantities of Sheep and Lambs' Wool imported into the U. Kingdom during each of the 8 Years ending with 1842, specifying the Countries whence it was imported, and the Quantities brought from each.

Countries.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Russia - -	4,024,710	5,414,013	6,114,945	3,769,102	7,966,594	1,517,998	6,131,578	4,566,534
Denmark - -	366,443	1,331,826	516,227	430,055	636,625	615,581	278,996	671,778
Germany - -	23,798,186	31,796,194	19,295,472	17,580,864	13,837,305	11,813,964	10,938,775	15,615,369
France - -	104,333	1,486,465	147,339	208,730	83,141	48,150	14,650	7,917
Portugal - -	689,306	1,630,307	510,975	697,328	1,081,871	574,915	670,021	655,756
Spain and the Balearic Islands - -	1,692,752	2,814,137	2,714,817	1,814,877	2,409,631	1,266,915	1,084,600	670,239
Italy and the Italian Islands - -	1,051,035	2,824,896	1,314,607	1,238,894	1,872,057	1,668,541	1,591,254	936,570
Turkey - -	1,281,855	2,473,078	2,277,225	2,602,015	1,145,582	655,964	442,565	509,852
Cape of Good Hope -	191,641	331,974	405,911	422,305	29,214	731,741	1,079,210	1,265,768
East India Com. terri-tories and Ceylon	233,848	1,086,393	1,893,741	1,807,866	2,103,546	3,141,370	3,009,664	4,246,083
British settlements in America - -	4,211,501	4,986,245	7,060,553	7,837,449	10,128,774	9,721,215	11,370,980	12,959,671
States of the Rio de la Plata - -	567,330	1,078,416	6,047,951	1,140,678	476,751	616,751	5,105,537	1,140,105
Chili - -	303,124	845,216	527,217	436,011	1,353,569	983,290	923,852	1,210,653
Peru - -	918,653	1,215,122	1,314,751	2,592,088	2,119,571	2,770,570	3,144,162	1,572,095
All other countries	2,553,764	5,414,542	1,635,453	1,150,698	1,265,241	1,140,992	908,949	1,425,569
Totals -	42,171,539	64,270,477	58,570,708	52,501,555	57,570,923	49,850,984	48,170,974	45,881,659

An Account of the Total Quantities of Foreign Sheep and Lambs' Wool imported, exported, and retained for Consumption in the U. Kingdom; specifying the Quantities of such Wool imported under different Rates of Duty, with its Total Amount and the Total Duty thereon; and the Quantities of Wool imported from British Possessions, re-exported, and retained for Consumption, in the undermentioned Years.

	Foreign Wool.											British Possessions.		
			Quantities retained for Home Consumption.											
Years	Quantities imported into the United Kingdom.	Quantities re-exported from the United Kingdom.	Charged with Duty at					Total.		Total.		Quantities imported into the United Kingdom.	Quantities re-exported from the United Kingdom.	Quantities retained for Home Consumption.
			6d. per lb. (Wool of the Value of 1s. per lb. or under.)	1d. per lb. (Wool of the Value of 1s. per lb.)	2s. 6d. per Cwt. (Wool of the Value of 1s. per lb. or under, Tares & Trimmings.)									
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	£	s.	d.	Lbs.	Lbs.	Lbs.
1826	14,748,344	884,651	4,013	13,448,000	3,111,331	-	-	16,559,357	824,617	9	1	1,340,268	-	1,340,268
1827	19,512,729	760,100	8,500	15,109,716	4,394,413	-	-	19,512,629	1,206,866	4	2	561,349	-	561,349
1828	20,551,810	873,881	1,558	14,991,137	4,467,736	-	-	19,460,431	1,114,594	16	8	1,225,859	-	1,225,859
1829	17,871,673	496,386	4,593	16,274,174	4,292,165	-	-	20,570,932	78,776	1	1	1,872,741	-	1,872,741
1830	21,363,123	5,501,122	2,964	17,357,257	3,951,155	-	-	21,311,376	1,100,120	8	0	2,052,141	-	2,052,141
1831	21,199,437	1,491,961	55	16,155,983	3,917,198	-	-	20,073,236	1,115,144	2	11	2,744,292	-	2,744,292
1832	23,667,740	344,016	1,150	13,629,870	1,951,548	-	-	15,582,567	1,172,892	2	3	3,191,101	9,954	3,181,147
1833	24,431,127	437,114	5,617	20,340,598	3,747,503	-	-	24,093,719	1,257,855	1	8	3,614,910	98,041	3,516,869
1834	24,604,447	747,050	6,265	23,741,122	11,158,255	-	-	34,905,642	1,720,312	0	8	3,220,985	62,512	3,158,473
1835	37,179,178	4,037,955	6,247	26,837,586	10,195,726	-	-	37,039,559	1,857,136	8	0	4,042,356	43,743	3,998,613
1836	51,817,137	611,747	36,043	36,698,259	12,535,135	-	-	49,269,437	2,463,591	11	11	6,147,241	-	6,147,241
1837	34,949,246	1,811,331	8,811	22,373,896	10,567,141	-	-	33,049,848	1,118,164	9	3	9,429,252	19,091	9,410,161
1838	47,498,573	1,777,342	318	32,227,700	13,481,612	-	-	45,709,630	1,963,615	0	11	10,167,183	197,548	9,969,635
1839	41,967,998	647,299	5,456	28,729,811	13,393,511	-	-	42,128,778	1,790,950	5	1	13,878,411	7,251	13,871,160
1840	36,565,224	1,013,175	4,954	21,274,756	12,273,304	-	-	33,553,014	1,512,688	12	2	13,829,262	2,360	13,826,902
1841	39,432,868	2,256,837	3,760	22,257,178	14,425,092	-	-	36,686,030	1,654,211	15	7	11,528,214	16,310	11,511,904
	to 5 July					from 5 July								
1842	47,414,127	1,531,316	731	17,098,241	8,308,816	22,054	25,661,102	94,618	5	3	18,047,212	106,175	18,500,779	

Price of Southdown Wool per lb. from 1784 to 1840, both inclusive.

Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.
	s. d.		s. d.		s. d.		s. d.		s. d.		s. d.
1784	0 8½	1796	1 6	1808	1 0	1819	1 7	1830	0 10		
1785	0 9	1797	1 5	1809	1 0	1820	1 5	1831	1 1		
1786	0 9	1798	1 5	1810	1 6	1821	1 3	1832	1 0		
1787	0 11	1799	1 9	1811	1 5	1822	1 3	1833	1 5		
1788	1 0	1800	1 5	1812	1 8	1823	1 3½	1834	1 4½		
1789	1 0	1801	1 7	1813	1 11	1824	1 2	1835	1 6		
1790	1 0½	1802	1 7	1814	2 2	1825	1 4	1836	1 5		
1791	0 11½	1803	1 8	1815	1 11	1826	0 10	1837	1 2		
1792	1 0	1804	1 10	1816	1 6	1827	0 9	1838	1 5		
1793	0 11½	1805	2 3	1817	2 2	1828	0 8	1839	1 2½		
1794	1 1	1806	1 10	1818	2 6	1829	0 6	1840	1 1		
1795	1 3	1807	2 0								

Prices of Wool in the London Market, February, 1844.

			£	s.	d.	£	s.	d.
Spanish —								
Leonese	-	per lb	0	1	8 to	0	1	10
Segovia	-	—	0	1	7 —	0	1	8
Soria	-	—	0	1	7 —	0	1	8
Cuenca	-	—	0	1	6 —	0	1	10
Xerville	-	—	0	1	2 —	0	1	6
German —								
Saxon	-	—	0	1	8 —	0	5	0
German — *continued.*								
Silesian	-	per lb.	0	1	8 to	0	5	0
Odessa	-	—	0	1	2 —	0	2	9
Australian —								
clothing	-	—	0	1	4 —	0	1	11
combing	-	—	0	1	6½ —	0	1	10
handwashed	-	—	0	1	4 —	0	2	3
lambs'	-	—	0	1	4 —	0	1	10

		£ s. d.	£ s. d.
Van Diemen's Land —			
clothing	per lb.	0 1 2	to 0 1 6
combing	—	0 1 3	— 0 1 10½
hand washed	—	0 1 5	— 0 2 0
Cape —			
average and good	—	0 1 3	— 0 1 9
low and in grease	—	0 0 8½	— 0 1 1
East India —			
good	—	0 0 7½	— 0 0 9½
East India — *continued.*			
2d quality	per lb.	0 0 7	to 0 0 7½
inferior	—	0 0 5	— 0 0 6
British fleeces —			
Kent	—	0 1 4	
Leicester	—	0 1 2	— 0 1 7½
Lincoln	—	0 1 2	— 0 1 8½
South Down	—	0 1 2	— 0 1 3

WOOLLEN MANUFACTURE, the art of forming wool into cloth and stuffs. This has always ranked as an important branch of national industry; and, until surpassed by the cotton manufacture, was decidedly the most important of all the manufactures carried on in England.

Rise and Progress of the British Woollen Manufacture. Exports. — There can be no doubt that the arts of spinning wool, and manufacturing the yarn into cloth, were introduced into England by the Romans, the inhabitants being previously clothed only in skins. From the period of the Romans quitting England, down to the 10th century, there are no notices of the manufacture; and those relating to the period from the 10th to the 13th century are but few and imperfect. It is certain, however, that the manufacture of broad cloths was established soon after the year 1200, if not previously. — (*Smith's Memoirs of Wool*, i. 17.) But the woollen manufactures of Flanders being at this period, and long afterwards, in a comparatively advanced state, English wool was exported in large quantities to Bruges and other Flemish cities, whence fine cloths and other products were brought back in exchange. Edward III. took the most judicious measures for improving the English manufacture by inviting over Flemish weavers, fullers, dyers, and others, and protecting them from the assaults of the rabble. Shortly after the first immigration of Flemings, or in 1337, an act was passed, prohibiting the wear of any cloths made beyond sea, and interdicting the export of English wool. — (*Ibid.* i. 25.) But in these turbulent times such restraining acts were little better than a dead letter; and this, indeed, was soon after repealed. — (*Ibid.* i. 32. 39.) From this remote period the manufacture has always been regarded as of primary importance, and has been the object of the especial solicitude of the legislature. It may be doubted, however, whether it has derived any real advantage from the numberless statutes that have been passed in the view of contributing to its advancement. With the exception, indeed, of the prohibition of the export of English wool, which was finally put a stop to in 1660, the other acts, being mostly intended for the regulation of the manufacture, could not be otherwise than mischievous; and the benefit derived by the manufacturers from the prohibition was more apparent than real; inasmuch as it occasioned a diminished growth of wool, at the same time that it was impossible to prevent its clandestine exportation. Mr. Smith has proved that the manufacture made a far more rapid progress during the reign of Elizabeth, when wool might be freely carried out of the kingdom, than it ever did during any equal period subsequent to the restriction on exportation. Foreign wool began to be imported in small quantities in the 13th century.

At first, the manufacture seems to have been pretty equally distributed over the country. In an insurrection that took place in 1525, more than 4,000 weavers and other tradesmen are said to have assembled out of Lancham, Sudbury, and other towns in Suffolk. The manufacture had been previously introduced into Yorkshire. In 1533 an act was passed (34 & 35 Hen. 8. c. 10.), reciting, "that the city of York afore this time had been upholden principally by making and weaving of coverlets, and the poor thereof daily set on work in spinning, carding, dyeing, weaving, &c.;" that the manufacture, having spread into other parts, was "thereby debased and discredited;" and enacting, as a remedy for this evil, that henceforth "none shall make coverlets in Yorkshire, but inhabitants of the city of York!" This may be taken as a fair specimen of the commercial legislation of the time. Indeed, it was enacted, nearly at the same period, that the manufacture should be restricted, in Worcestershire, to Worcester and 4 other towns. Worsted goods, so called from Worsted, now an inconsiderable town in Norfolk, where the manufacture was first set on foot, were produced in the reign of Edward II., or perhaps earlier; but Norwich soon after became, and, notwithstanding the competition and superior advantages of Bradford, is still, a principal seat of this branch of the manufacture. In an act of Henry VIII. (33 Hen. 8. c. 16.) worsted yarn is described as "the private commodity of the city of Norwich." In 1614 a great improvement took place in the woollen manufacture of the west of England, by the invention of what is called medley or mixed cloth, for which Gloucestershire is still famous. During the reign of Charles II., there were many, though unfounded, complaints of the decay of the manufacture; and, by way of encouraging it, an act was passed (30 Car. 2. st. i. c. 3.), ordering that all persons should be buried in woollen shrouds! This act, the provisions of which were subsequently enforced, preserved its place on the statute book for more than 130 years!

Towards the end of the 17th century, Mr. Gregory King and Dr. Davenant — *Davenant's Works*, Whitworth's ed. ii. 233.) — estimated the value of the wool shorn in England at 2,000,000*l.* a year; and they supposed that the value of the wool (including that imported from abroad) was quadrupled in the manufacture; making the entire value of the woollen articles annually produced in England and Wales, 8,000,000*l.*, of which about 2,000,000*l.* were exported. In 1700 and 1701, the official value of the woollens exported amounted to about 3,000,000*l.* a year. Qwing to the vast increase of wealth and population, the manufacture must have been very greatly extended during last century; but the increase in the amount of exports was comparatively inconsiderable. At an average of the 6 years ending with 1789, the official value of the exports was 3,544,160*l.* a year, being only about 540,000*l.* above the amount exported in 1700. The extraordinary increase of the cotton manufacture soon after 1780, and the extent to which cotton articles then began to be substituted for those of wool, though it did not occasion any absolute decline of the manufacture, no doubt contributed powerfully to check its progress. In 1802, the official value of the exports rose to 7,321,012*l.*, being the largest amount they ever reached till 1833, when they amounted to 7,777,952*l.* They have not, however, been so high since; and though there be no reason for supposing that the manufacture, taken as a whole, has sensibly declined during the last few years, it certainly has not increased, and may be regarded as in a stationary state.

Value of the Manufacture. Number of Persons employed. — The most discordant estimates have been given as to both these points. For the most part, however, they have been grossly exaggerated. In a tract published in 1739, entitled *Considerations on the Running* (Smuggling) *of Wool*, the number of persons engaged in the manufacture is stated at 1,500,000, and their wages at 11,737,500*l.* a year. Dr. Campbell, in his *Political Survey of Great Britain*, published in 1774, observes, — "Many computations have been made upon this important subject, and, amongst others, one about 30 years since, which, at that time, was thought to be pretty near the truth. According to the best information that can be obtained, there may be from 10,000,000 to 12,000,000 sheep in England, some think more. The value of their wool may, one year with another, amount to 8,000,000*l.*; the expense of manufacturing this may probably be 9,000,000*l.*, and the total value 12,000,000*l.* We may export annually to the value of 3,000,000*l.*, though one year we exported more than 4,000,000*l.* In reference to the number of persons who are maintained by this manufacture, they are probably upwards of 1,000,0000. Sanguine men will judge these computations too low, and few will believe them too high." — (ii. 158.) But the moderation displayed in this estimate was very soon lost sight of. In 1800, the woollen manufacturers objected strenuously to some of the provisions in the treaty of union between Great Britain and Ireland, and were allowed to urge their objections at the bar of the House of Lords, and to produce evidence in their support. Mr. Law (afterwards Lord Ellenborough), the counsel employed by the manufacturers on this occasion, stated, in his address to their Lordships, on information communicated to him by his clients, that 600,000 packs of wool were annually produced in England and Wales, worth, at 11*l.* a pack, 6,600,000*l.*; that the value of the manufactured goods was 3 times as great, or 19,800,000*l.*; that not less than 1,500,000 persons were immediately engaged in the operative branches of the manufacture; and that the trade collaterally employed about the same number of hands. — (*Account of the Proceedings of the Merchants, Manufacturers, &c.*, p. 34.)

It is astonishing that reasonable men, conversant with the manufacture, should have put forth such ludicrously absurd statements. We have already seen that the quantity of wool produced in England and Wales, in 1800, did not really amount to 400,000 packs; and the notion that *three* out of the *nine* millions of people then in the country were directly and indirectly employed in the manufacture, is too ridiculous to deserve notice, though it was generally acquiesced in at the time. — (See *Middleton's Survey of Middlesex*, 2d ed. p. 644.; *Adolphus's British Empire*, iii. 236, &c.)

Mr. Stevenson, who is one of the very few writers on British statistics to whose statements much deference is due, has given the following estimate of the value of the woollen manufactured goods annually produced in England and Wales, and of the interest, &c. of the capital, and the number of persons employed in the manufacture: —

Total value of manufactured articles - - - - -		£18,000,000
Value of raw material - - - - -	£6,000,000	
Interest on capital, sum to replace its wear and tear, and manufacturers' profits - - - - -	2,400,000	
Wages of workmen - - - - -	9,600,000	
		£18,000,000

Number of people employed, 480,000, or perhaps 500,000.

But even this estimate requires to be materially modified. Taking Scotland into account, and allowing for the increase of population and of exportation since Mr. Stevenson's estimate was made, the total value of the various descriptions of woollens

annually produced in Great Britain may, at present, be moderately estimated at from 23,000,000*l.* to 25,000,000*l.*, or 24,000,000*l.* at a medium. We have further been assured by the highest practical authorities, that Mr. Stevenson's distribution of the items is essentially erroneous; and that, assuming the value of the manufacture to be 24,000,000*l.*, it is made up nearly as follows: —

Total value of manufactured articles - - - - -		£24,000,000
Raw material, 110,000,000 lbs. British wool, at 1*s.* 3*d.* per lb., and 50,000,000 do. foreign, at 2*s.* - - - - -	11,600,000*	
Wages - - - - - - - - -	7,500,000	
Oil, dye stuffs, soap, &c. - - - - - -	1,200,000	
Profits, sum to replace wear and tear of capital, &c. -	4,200,000	
		£24,000,000

At present, the average wages of the people employed may be taken at about 24*l.* a year, making the total number employed 312,500. And, however small this may look as compared with former estimates, we believe it is fully up to the mark, if not rather beyond it.

Most of the innumerable statutes formerly passed for the regulation of the different processes of the manufacture have been repealed within these few years; and the sooner every vestige of the remainder disappears from the statute book, the better.

I. Account of the Quantity of the Different Descriptions of British Woollen Manufactures exported from the U. Kingdom in the Year 1842, and of their Total Declared Value; specifying the Quantities and Value of those sent to each Country.

Countries to which exported.	Cloths of all Sorts.	Napped Coatings, Duffels, &c.	Kerseys.	Baizes of all Sorts.	Stuffs, Woollen or Worsted.	Flannel.	Blankets and Blanketing.	Carpets and Carpeting.	Woollens mixed with Cotton.	Stockings Woollen or Worsted.	Sundries: Hosiery Rugs, Coverlids Tapes, &c.	Declared Value of British Woollen Manufactures exported from U. Kingdom.
	Pieces.	Pieces.	Pieces.	Pieces.	Pieces.	Yards.	Yards.	Yards.	Yards.	Doz. Pr.	£	£
Russia -	690	85	302	-	62,040	5,274	700	5,584	174,075	211	185	117,659
Sweden -	440	12	602	-	15,043	1,345	1,500	7,765	12,441	71	503	24,109
Norway -	276	163	48	18	5,051	2,754	1,500	1,138	4,940	934	673	18,586
Denmark -	59	3	56	-	251	540	60	1,120	-	25	374	1,523
Prussia -	107	-	-	-	248	59	-	1,400	480	-	1	814
Germany -	12,640	4,020	4,574	855	640,048	646,470	25,215	93,268	651,264	1,558	19,864	953,560
Holland -	1,296	631	325	14,262	18,281	12,150	1,218	5,874	214,629	14,5	2,231	339,165
Belgium -	658	934	180	33	81,864	125,023	1,098	25,551	66,565	5,576	2,318	172,740
France -	878	102	332	-	31,967	30,896	1,700	19,585	618,070	130	1,024	92,142
Portugal, Azores, and Madeira -	8,173	51	24	2,139	37,138[b]	8,169	1,482	3,480	55,575	1,596	1,562	137,027
Spain and the Canaries -	1,123	10	586	234	17,986	14,184	11,596	4,642	13,951	403	741	49,341
Gibraltar -	4,240	12	205	27	10,221	5,656	1,000	5,274	155,678	1,695	1,572	84,356
Italy -	1,501	-	1,915	6	109,741	3,092	3,744	21,885	504,525	1,887	5,966	230,727
Malta -	1,345	14	80	1	6,227	5,815	3,000	6,283	16,910	265	476	17,170
Ionian Islands -	97	-	4	4	251	1,397	500	300	8	2	197	901
Morea and Greek Islands -	1	-	-	-	663	-	-	180	-	-	6	777
Turkey and Continental Greece -	653	14	71	7	17,492	2,744	500	9,656	31,337	425	1,197	35,501
Syria and Palestine -	58	-	-	-	356	-	110	-	-	-	-	900
East Indies and China -	25,567	-	373	7	99,167	84,143	25,350	9,717	99,496	5,677	12,560	562,005
Settlements in Australia -	2,737	140	756	173	12,193	106,088	119,250	23,466	178,995	6,170	6,884	66,466
New Zealand -	18	-	9	14	15	1,044	33,500	1,650	922	73	759	3,667
Cape of Good Hope -	2,145	1,058	710	394	9,415	45,204	54,000	2,013	49,258	568	2,913	8,174
Other parts of Africa -	961	-	75	59	6,045	8,319	6,150	21	54,765	954	3,316	56,598
British colonies in North America -	16,993	1,048	2,218	1,747	91,437	372,258	230,801	171,468	619,099	25,419	24,019	425,122
British West Indies -	3,419	15	865	190	24,592	48,783	65,341	7,256	163,112	2,521	9,496	89,417
Foreign West Indies -	1,610	-	56	588	13,951	3,933	83,500	1,042	38,601	103	3,609	33,745
United States of America -	22,729	60	5,097	7	185,055	55,465	537,565	179,272	1,095,665	61,516	25,483	575,147
Brazil - -	8,617	-	1,103	2,034	64,717	16,140	100,181	6,574	114,615	4,081	6,531	258,508
Mexico and the States of South America -	56,09	-	5,094	1,985	124,509	44,651	60,806	77,200	866,865	9,687	11,553	648,496
Isles of Guernsey, Jersey, Alderney, and Man - -	3,03	10	8	141	5,561	98,950	36,984	29,634	-	16	1,184	40,51
Total -	161,675	8,433	29,447	24,877	1,979,499	1,619,496	1,592,591	763,702	6,250,010	137,068	152,679	5,185,045

II. Account of the Total declared Value of the Woollen Manufactures, exclusive of Woollen and Worsted Yarn, exported from the U. Kingdom in each Year since 1820.

Years.	Value.	Years.	Value.	Years.	Value.
	£		£		£
1820	5,866,138	1829	5,069,741	1838	7,639,334
1821	6,462,896	1830	4,567,603	1837	4,655,977
1822	6,488,167	1831	4,739,666	1838	5,793,169
1823	5,856,566	1832	5,231,015	1839	6,271,643
1824	6,043,051	1833	5,845,479	1840	5,327,853
1825	6,185,648	1834	6,291,582	1841	5,748,675
1826	4,966,670	1835	5,736,871	1842	5,185,045
1827	5,245,649	1836	6,540,511		

* We inadvertently underrated the value of the raw material in the former edition of this work. The mistake was pointed out by Mr. Youatt in his excellent work on sheep (p. 236.), which embodies a great deal of most valuable information respecting the woollen manufacture.

III. Account of the Quantity and declared Value of the Woollen and Worsted Yarn exported in each Year from 1820.

Years.	Quantities.	Declared Value.	Years.	Quantities.	Declared Value.	Years.	Quantities.	Declared Value.
	Lbs.	£		Lbs.	£		Lbs.	£
1820	5,924	810	1828	4,867,292	586,243	1836	9,546,177	958,690
1821	9,121	1,917	1829	5,053,558	723,648	1837	9,515,718	955,098
1822	12,515	2,539	1830	5,109,783	722,430	1838	8,098,598	844,333
1823	6,443	1,127	1831	5,972,153	836,131	1839	8,930,141	925,320
1824	14,049	2,184	1832	6,201,466	835,267	1840	8,706,644	852,937
1825	20,961	11,457	1833	6,107,178	816,804	1841	8,903,951	879,148
1826	1,31,332	22,234	1834	13,861,811	258,511	1842	-	632,203
1827	2,05,143	37,592	1835	9,307,156	869,091			

The stationary, or rather declining, amount of the exports of woollen manufactures in the second of the above tables, strikingly contrasts with the rapid increase in the exports of yarn, as exhibited in the third. We believe, too, that the contrast would have been still greater had we been able to insert the returns for 1843; for, though the exports of manufactured woollens in that exceeded those of the preceding year, the increase in the export of yarn was comparatively much greater.—(See the valuable circular of Messrs. Gibson, Ord, and Co., Manchester, 19th January, 1844.)

This different progress of the exports of manufactured goods and yarn depends, no doubt, on various causes; but principally, we believe, on the change, previously noticed, that has taken place in the character of our wool, which fits it much better than formerly for being made into worsted yarn, which is almost the only description of yarn that is exported. The operation of this change is evinced in a still more striking manner by comparing the export of cloth, properly so called, with that of stuffs, in the undermentioned years: —

	1816.	1826.	1841.	1842.
Exports of cloth, pieces - - -	638,308	384,508	257,746	161,675
stuffs, pieces - - -	260,708	1,138,588	1,718,017	1,979,492

It is obvious that this continued and rapid fall on the one hand, and continued and equally rapid increase on the other, must be occasioned by the operation of some powerful and permanent cause; and none such can be assigned other than the decreasing suitableness of British wool for being made into cloth; and its increasing suitableness for being made into worsted yarn and stuffs. We do not think that the existing duty on wool has much influence either one way or other.

Latterly the stuff trade has been in a state of unexampled prosperity. This has been mainly occasioned by the change of fashion in this and other countries, by which stuffs made of a mixture of cotton and worsted have been largely substituted for cloths; and the home and foreign demand for them proportionally increased. In so far, indeed, as the extraordinary extension of the stuff trade depends on this change, it cannot, perhaps, be regarded as resting on any very solid foundation. But it is on the whole abundantly obvious that the export trade in cloth has seriously declined; and that it is only in the stuff trade, and in the production of yarn, that we have any very decided superiority over foreigners. —(For an account of the recent history of the woollen trade, see the 2d vol. of *Bischoff's History of the Woollen and Worsted Manufactures*; a useful work formed on the plan of *Smith's Memoirs of Wool*, but less learned and able.)

Shoddy Trade. — The greater number, perhaps, of our readers may never have heard of that branch of the woollen manufacture called the *shoddy trade*, which has grown up of late years, and is now of very considerable value and importance. It is principally carried on at Dewsbury in Yorkshire, in the centre of the clothing district. Shoddy cloth is fabricated either wholly or partly of old wool; and instead of being neglected, or used only as manure, old woollen rags are now everywhere carefully collected, and conveyed to Dewsbury. After being subjected to various processes, they are torn to pieces by the aid of powerful machinery, and reduced to their original state of wool; and this wool, being respun, either with or without an admixture of fresh wool, is again made into cloth! Formerly, shoddy cloth was used only for padding and such like purposes; but now, blankets, flushings, druggets, carpets and table covers, cloth for pilot and Petersham great coats, &c., are either wholly or partly made of shoddy. The clothing of the army, and the greater part of that of the navy, consists principally of the same material, which, in fact, is occasionally worn by everybody. Large quantities of shoddy cloth are exported. Great improvements have been effected of late years, not only in the fabric of the cloth, but also in the dyes: this is especially seen in the cloth for soldiers' uniforms, which is no longer of a brick-dust colour, but makes a much nearer approach to scarlet. The beautiful woollen table covers are made wholly of shoddy, being printed by *aqua fortis* from designs drawn in London and Manchester, and cut on holly and other blocks on the spot. The analogy between this manufacture and that of paper is so striking, that it must force itself on the attention of every

one; the vilest and most worthless materials being converted in both into the most beautiful and useful fabrics. The shoddy trade is, in fact, one of the greatest triumphs of art and civilisation. Though of comparatively recent origin, it is rapidly extending itself. It is most active in summer, and is much more languid in winter. — (See *Geog. Dict.* art. *Dewsbury.*)

WRECK, in navigation, is usually understood to mean any ship or goods driven ashore, or found floating at sea in a deserted or unmanageable condition. But in the legal sense of the word in England, *wreck* must have come to land; when at sea, it is distinguished by the barbarous appellations of *flotsam*, *jetsam*, and *lagan*. — (See FLOTSAM.)

In nothing, perhaps, has the beneficial influence of the advance of society in civilisation been more apparent than in the regulations with respect to the persons and property of shipwrecked individuals. In most rude and uncivilised countries, their treatment has been cruel in the extreme. Amongst the early Greeks and Romans, strangers and enemies were regarded in the same point of view. — (*Hostis apud antiquos, peregrinus dicebatur.* — *Pomp. Festus*; see also *Cicero de Offic.* lib. i. c. 12.) Where such inhospitable sentiments prevailed, the conduct observed towards those that were shipwrecked could not be otherwise than barbarous; and in fact they were, in most instances, either put to death or sold as slaves. But as law and good order grew up, and commerce and navigation were extended, those who escaped from the perils of the sea were treated in a way less repugnant to the dictates of humanity: and at length the Roman law made it a capital offence to destroy persons shipwrecked, or to prevent their saving the ship; and the stealing even of a plank from a vessel shipwrecked or in distress, made the party liable to answer for the whole ship and cargo. — (*Pand.* 47. 9. 3.)

During the gloomy period which followed the subversion of the Roman empire, and the establishment of the northern nations in the southern parts of Europe, the ancient barbarous practices with respect to shipwreck were every where renewed. Those who survived were in most countries reduced to servitude; and their goods were every where confiscated for the use of the lord on whose manor they had been thrown. — (*Robertson's Charles V.*, i. note 29.) But nothing, perhaps, can so strongly evince the prevalence and nature of the enormities, as the efforts that were made, as soon as governments began to acquire authority, for their suppression. The regulations as to shipwreck in the Laws of Oleron are, in this respect, most remarkable. The 35th and 38th articles state, that "pilots, in order to ingratiate themselves with their lords, did, like faithless and treacherous villains, sometimes willingly run the ship upon the rocks, &c.;" for which offence they are held to be accursed and excommunicated, and punished as thieves and robbers. The fate of the lord is still more severe. "He is to be apprehended, his goods confiscated and sold, and himself fastened to a post or stake in the midst of his own mansion house, which being fired at the four corners, all shall be burned together; the walls thereof be demolished; the stones pulled down; and the site converted into a market place, for the sale only of hogs and swine, to all posterity." The 31st article recites, that when a vessel was lost by running on shore, and the mariners had landed, they often, instead of meeting with help, "were attacked by people more barbarous, cruel, and inhuman, than mad dogs; who, to gain their monies, apparel, and other goods, did sometimes murder and destroy these poor distressed seamen. In this case, the lord of the country is to execute justice, by punishing them in their persons and their estates; and is commanded to plunge them in the sea till they be half dead, and then to have them drawn forth out of the sea and stoned to death."

Such were the dreadful severities by which it was attempted to put a stop to the crimes against which they were directed. The violence of the remedy shows better than any thing else how inveterate the disease had become.

The law of England, like that of other modern countries, adjudged wrecks to belong to the king. But the rigour and injustice of this law was modified so early as the reign of Henry I., when it was ruled, that if any person escaped alive out of the ship, it should be no wreck. And after various modifications, it was decided, in the reign of Henry III., that if goods were cast on shore, having any marks by which they could be identified, they were to revert to the owners, if claimed any time within a year and a day. By the statute 27 Edw. 3. c. 13., if a ship be lost and the goods come to land, they are to be delivered to the merchants, paying only a reasonable reward or SALVAGE (which see) to those who saved or preserved them. But these ancient statutes, owing to the confusion and disorder of the times, were very ill enforced; and the disgraceful practices previously alluded to continued to the middle of last century. A statute of Anne (12 Ann. st. 2. c. 18.), confirmed by the 4 Geo. 1. c. 12., in order to put a stop to the atrocities in question, orders all head officers and others of the towns near the sea, upon application made to them, to summon as many hands as are necessary, and send them to the relief of any ship in distress, on forfeiture of 100*l.*; and in

case of any assistance given, salvage is to be assessed by 3 justices, and paid by the owners. Persons secreting any goods cast ashore, are to forfeit treble their value; and if they wilfully do any act by which the ship is lost or destroyed, they are guilty of felony without benefit of clergy. But even this statute seems not to have been sufficient to accomplish the end in view; and in 1753, a new statute (26 Geo. 2. c. 19.) was enacted, the preamble of which is as follows: — "Whereas, notwithstanding the good and salutary laws now in being against plundering and destroying vessels in distress, and against taking away shipwrecked, lost, or stranded goods, many wicked enormities have been committed, to the disgrace of the nation, and the grievous damage of merchants and mariners of our own and other countries, be it," &c.: and it is then enacted, that the preventing of the escape of any person endeavouring to save his life, or wounding him with intent to destroy him, or putting out false lights in order to bring any vessel into danger, shall be capital felony. By the same statute, the pilfering of any goods cast ashore is made petty larceny.

By statute 1 & 2 Geo. 4. c. 75. it is enacted, that any person or persons wilfully cutting away, injuring, or concealing any buoy or buoy rope attached to any anchor or cable belonging to any ship, whether in distress or otherwise, shall be judged guilty of felony, and may, upon conviction, be transported for 7 years.

We regret, however, to have to state that the plunder of shipwrecked property is still by no means uncommon on the British coasts. The late committee on shipwrecks state, that "there is on many parts of the coast a want of that moral principle which should inculcate a just regard for the rights of such property. It is looked upon as a chance gift, which every one has a right to scramble for as he can, notwithstanding the laws which have been passed, from the earliest period, to prevent or punish such depredations. The plunder of shipwrecked property on the coasts has been carried on to an enormous extent, and this seems to have arisen from there having been no persons on the spot, when a wreck had taken place, to look after the property." The committee state, that the establishment of the coast-guard has done much to repress these abuses. The latter, however, cannot legally interfere, except when the castaway articles are subject to customs duties; and the committee suggest that all abandoned property should be vested in the government in trust for those to whom it may belong, as is done in France and Holland. — (*Report of Committee* of 1843, p. viii.)

(For an account of the sums to be paid to those assisting in the saving of wreck, see art. SALVAGE in this Dictionary; see also the chapter on Salvage in Abbott's (Lord Tenterden's) work on the *Law of Shipping*.)

Number of Shipwrecks.—The loss of property by shipwreck is very great. It appears from an examination of *Lloyd's List* from 1793 to 1829, that the losses in the British mercantile navy only amounted, at an average of that period, to about 557 vessels a year, of the aggregate burden of about 66,000 tons, or to above 1-40th part of its entire amount in ships and tonnage. The following account of the casualties of British shipping in 1829 is taken from *Lloyd's List*: —

On Foreign Voyages — 157 wrecked; 284 driven on shore, of which 224 are known to have been got off, and probably more; 21 foundered or sunk; 1 run down; 35 abandoned at sea, 8 of them afterwards carried into port; 12 condemned as unseaworthy; 6 upset; 1 of them righted; 27 missing, 1 of them a packet, no doubt foundered. *Coasters and Colliers* — 109 wrecked; 297 driven on shore, of which 121 known to have been got off, and probably more; 67 foundered or sunk, 4 of them raised, 6 run down; 13 abandoned, 5 of them afterwards carried in; 3 upset, 2 of them righted; 16 missing, no doubt foundered. During the year, 4 steam vessels were wrecked; 4 driven on shore, but got off; and 2 sunk.

We are glad, however, to have to state that it would appear from the returns given in the Report of the Commons' Committee of 1843, on Shipwrecks (Appen. p. 52.), that these casualties are less frequent now than formerly. At all events, it would seem that at an average of the 3 years ending with 1835, when the mercantile navy comprised about 24,500 ships, 610 were annually lost, whereas, at an average of 1841 and 1842, when the mercantile navy had increased to about 28,700 ships, the annual loss amounted to 611 ships; the average burden of the lost ships being in both cases, as near as can be ascertained, 210 tons. Hence, if we estimate the value of the ships and cargoes at 20*l.* a ton, the loss of property in 1841 and 1842, from shipwreck only, will have been 2,566,200*l.* a year! The loss of life is not exactly known, but it may be taken at from 1,450 to 1,500 individuals a year.

These heavy losses might be materially diminished by building better and stronger ships, to which nothing, probably, would contribute so much as allowing them to be built in bond, as previously suggested (*antè*, p. 1111.). No doubt, however, the carelessness, ignorance, and incapacity of the masters is the great source of loss; and nothing, certainly, would do so much to obviate this as to make the obtaining of a certificate of fitness, after undergoing an examination by some public board, indis-

pensable to enable any individual to be appointed to the command of a ship (*antè*, p. 824.).

During the last war with France, 32 ships of the line went to the bottom, besides 7 fifty-gun ships, 86 frigates, and a vast number of smaller vessels. And the losses sustained by the navies of France, Spain, Holland, Denmark, &c. must have very greatly exceeded those of ours. Hence, as Mr. Lyell has observed, it is probable that a greater number of monuments of the skill and industry of man will, in the course of ages, be collected together in the bed of the ocean, than will be seen at one time on the surface of the continents. — (*Principles of Geology*, 2d edit. vol. ii. p. 265.)

Y.

YARD, a long measure used in England, of 3 feet, or 36 inches. — (See WEIGHTS AND MEASURES.)

YARN (Ger. *Garn*; Du. *Garen*; Fr. *Fil*; It. *Filato*; Sp. *Hilo*; Port. *Fio*; Rus. *Prusha*), wool, cotton, flax, &c. spun into thread.

Z.*

ZAFFER, or ZAFRE. After the sulphur, arsenic, and other volatile parts of cobalt have been expelled by calcination, the residuum is sold, mixed or unmixed with fine sand, under the above name. When the residuum is melted with siliceous earth and potash, it forms a kind of blue glass, known by the name of smaltz — (see SMALTZ), — of great importance in the arts. When smaltz is ground very fine, it receives in commerce the name of *powder blue*. Zaffer, like smaltz, is employed in the manufacture of earthenware and China, for painting the surface of the pieces a blue colour. It suffers no change from the most violent fire. It is also employed to tinge the crystal glasses, made in imitation of opaque and transparent precious stones, of a blue colour. It is almost wholly brought from Germany. The duty of 1*s.* a cwt. produced in 1840 233*l.*, showing that 4,660 cwt. had been entered for consumption.

ZEA, INDIAN CORN, or MAIZE. See MAIZE.

ZEDOARY (Ger. *Zittwer*; Fr. *Zédoaire*; It. *Zedoaria*; Sp. *Cedoaria*; Arab. *Judwar*; Hind. *Nirbisi*), the root of a plant which grows in Malabar, Ceylon, Cochin-China, &c., of which there are 3 distinct species. It is brought home in pieces of various sizes, externally wrinkled, and of an ash colour, but internally of a brownish red. Those roots which are heavy and free from worms are to be chosen; rejecting those which are decayed and broken. The odour of zedoary is fragrant, and somewhat like that of camphor; the taste biting, aromatic, and bitterish, with some degree of acrimony. It was formerly employed in medicine; but is scarcely ever used by modern practitioners. — (*Milburn's Orient. Com.*)

ZINC, or SPELTER (Ger. *Zink*; Fr. *Zinc*; It. *Zinco*; Sp. *Zinco*, *Cinck*; Rus. *Schpiauter*; Lat. *Zincum*), a metal of a brilliant white colour, with a shade of blue, composed of a number of thin plates adhering together. When this metal is rubbed for some time between the fingers, they acquire a peculiar taste, and emit a very perceptible smell. It is rather soft; tinging the fingers, when rubbed upon them, with a black colour. The specific gravity of melted zinc varies from 6·861 to 7·1, the lightest being esteemed the purest. When hammered, it becomes as high as 7·1908. This metal forms, as it were, the limit between the brittle and the malleable metals. Its malleability is by no means to be compared with that of copper, lead, or tin: yet it is not brittle, like antimony or arsenic. When struck with a hammer, it does not break, but yields, and becomes somewhat flatter; and by a cautious and equal pressure, it may be reduced to pretty thin plates, which are supple and elastic, but cannot be folded without breaking. When heated to about 400°, it becomes so brittle that it may be reduced to powder in a mortar. It possesses a certain degree of ductility, and may, with care, be drawn out into wire. Its tenacity is such, that a wire whose diameter is equal to $\frac{1}{10}$th of an inch, is capable of supporting a weight of about 26 lbs. Zinc has never been found in a state of purity. The word zinc occurs for the first time in the writings of Paracelsus, who died in 1541; but the method of extracting it from its ores was not known till the early part of last century. — (*Thomson's Chemistry.*) The compounds of zinc and copper are of great importance. — (See BRASS.)

Manufacture of Zinc, &c. — There used to be 2 smelting-houses for the preparation of zinc near Bristol, and 3 near Swansea, but they have been all abandoned, with the exception of 1 of the latter. The material used by the English manufacturer is blende, or black jack (sulphuret of zinc); it is commonly found with lead, and is procured of the best quality in Flintshire and the Isle of Man. Besides its employment in the manufacture of brass, bell metal, and other important compounds, zinc has of late years

been formed into plates, and applied to many purposes for which lead was formerly used, such as the roofing of buildings, the manufacture of water-spouts, dairy pans, &c. Foreign zinc, being less brittle, is better fitted for rolling than that of England.

The duties on spelter, which were formerly prohibitory, were reduced in 1832 to 2*l.* a ton on that formed into plates, or cakes, and to 10*s.* on what is crude; the duty on the latter being farther reduced in 1842 to 1*s* per ton. In consequence of these reductions, considerable quantities are now imported, partly for home use, and partly for re-exportation to India and China. Foreign zinc is principally made in Upper Silesia; whence it is conveyed by an internal navigation to Hamburg. The freight from the latter to Hull and London is nominal merely; the wool-ships being glad to take it as ballast. Hainault near Namur, has also some part of the spelter trade. A good deal of spelter is shipped from Hamburg, for France and America.

Zinc is produced in the province of Yunan, in China; and previously to 1820, large quantities of it were exported from that empire to India, the Malay Archipelago, &c. But about that time the free traders began to convey European spelter (principally German) to India; and being, though less pure, decidedly cheaper than the Chinese article, it has entirely supplanted the latter in the Calcutta market: latterly, indeed, it has begun to be imported even into Canton. — (See TUTENAG.) In 1840 the exports of foreign spelter from this country for India and China amounted to 50,585 cwts.; in addition to which considerable quantities were exported from Amsterdam, Rotterdam, &c. We subjoin an

Account of the Zinc or Spelter imported, exported, and retained for Home Consumption, and the Duties thereon, in 1841 and 1842.

Years.	Imports.	Exports.	Retained for Consumption.	Duty.
	Cwt.	Cwt.	Cwt.	£
1841	130,182	28,194	73,317	7,705
1842	121,440	28,900	55,740	5,866

THE END.

London:
Printed by A. SPOTTISWOODE,
New-Street-Square.

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PRINTED FOR LONGMAN, BROWN, AND CO.

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